A
COMPENDIUM OF
CITATION &
RESEARCH AWARDS

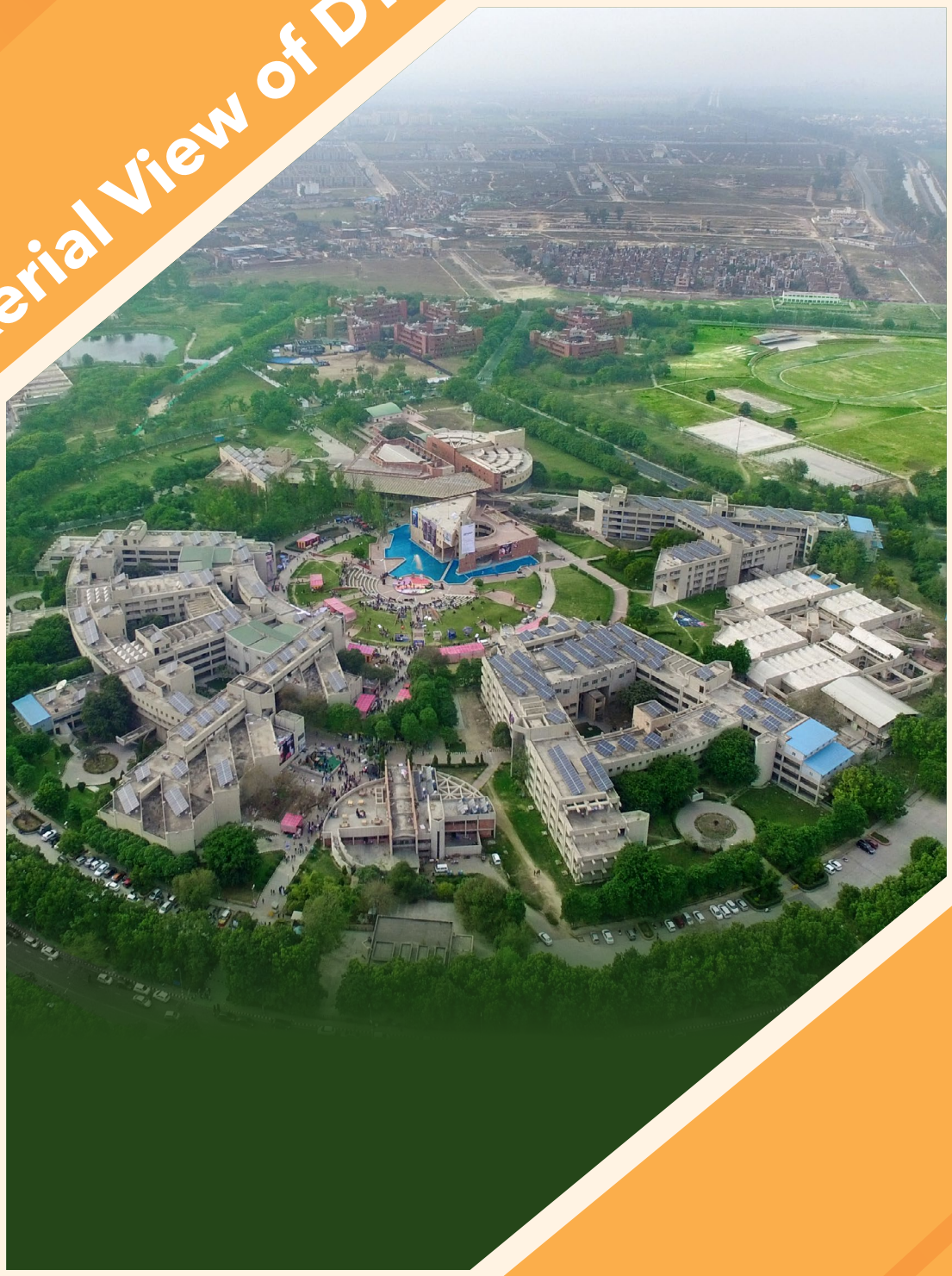
6th RESEARCH EXCELLENCE AWARDS

1st JANUARY, 2022 TO
31st DECEMBER, 2022

DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)

Aerial View of DTU



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(Formerly Delhi College of Engineering)

DTU Main Gate

Research at the UNIVERSITY

The Delhi Technological University (DTU) was established through Act 6 of 2009 by the legislative assembly of the National Capital Territory (NCT) of Delhi which provided for reconstitution of the erstwhile Delhi College of Engineering (established as Delhi Polytechnic in 1941 following the recommendations of Wood and Abott Committee 1938), to cater to the needs of industries for trained technical manpower with practical experience and sound theoretical knowledge.

DTU has shown discernible excellence in technical education, research and innovations for more than eight decades now. It is a non-affiliating teaching–cum–research university established to impart quality teaching at undergraduate and postgraduate level, facilitate and promote scientific enquiry using state of art equipments for research, protection of intellectual property rights, technology business incubation, product innovation and extension work in science, technology, management, and allied areas.

The university offers undergraduate programmes in fifteen engineering disciplines, one in Business Administration and one in Economics. The university currently offers twenty-five M. Tech. programmes, five M.Des. programmes, six MBA programmes and four M.Sc. programmes also. More than 1450 students are pursuing Ph.D. degree in various departments of the university. The university is committed to promote research through the scientific priorities right from the undergraduate level onwards. It has made significant contributions through the published research in scholarly journals, intellectual property rights (IPR), and through incubation & innovation.

The faculty members of various departments of the university are involved in carrying out a large number of industrial consultancy and sponsored projects from the government departments, such as DKDF AICTE, DST, DBT, UGC, CSIR, ICMR, DRDO to name a few and private organization. The university provides financial support to the faculty and students for presenting research papers in national and international conferences besides bearing all expenses incurred in patenting of any IP generated by the faculty and students. University supports many inter disciplinary student teams for innovative product development and participation in international design competitions. The university currently houses thirty-five startup units. It is named as a nodal centre for incubation at Delhi supported by the Govt. of NCT of Delhi.

The thrust areas of research at the university include clean energy technologies, solar PV related technologies, electric vehicles and related technologies, smart grids, material testing, fracture mechanics, rock and geo-mechanics, structural dynamics, CFD, environmental monitoring, future automobile solutions, metro technology and systems, nano-scale devices, biosensors, robotics and machine vision, new and smart materials, conducting polymers, computer aided design, physics of plasma, VLSI design and embedded system, machine learning, software quality and testing, intelligent power systems, information security and network management and other, knowledge and innovation management and socially relevant technologies.

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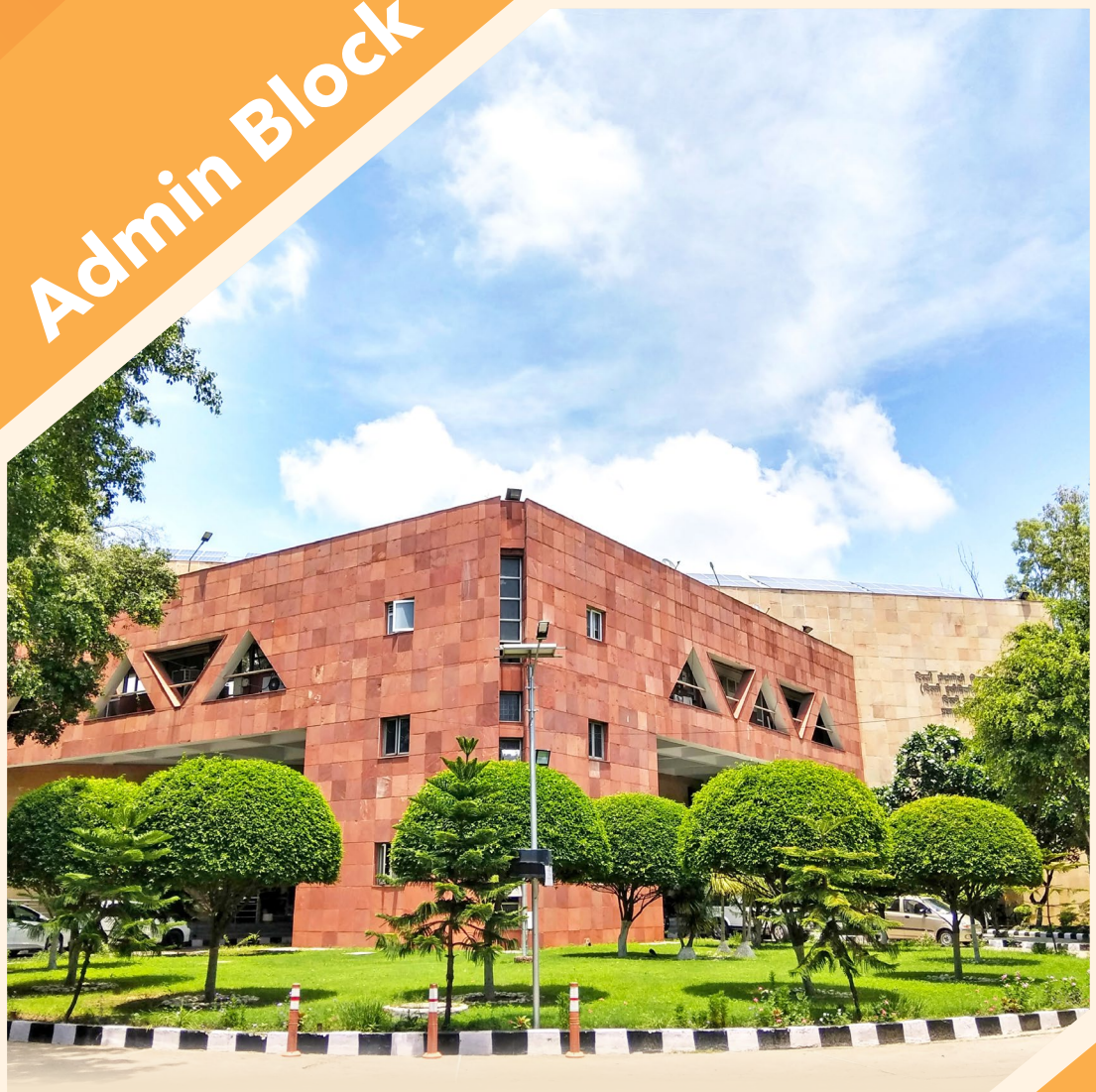
Admin Block



From the Desk of the VICE CHANCELLOR

Delhi Technological University (DTU), formerly Delhi College of Engineering has an illustrious history spanning over 82 years. This premier institution is well known worldwide for its outstanding education, research and innovations. DTU currently offers various inter-disciplinary and industry relevant programs in Science, Engineering, Technology, Management and Allied areas at both the undergraduate and postgraduate level.

In this university we have been actively promoting research and innovations by providing research and innovation environment to the students and faculty that meets the international and global standards. DTU is committed to support excellence in research and recognizing those who have achieved this.

The university instituted Research Excellence Awards in 2017. The purpose of the awards is to encourage and promote research culture among students and faculty members in all the disciplines of the university and to celebrate the individual excellence in research. The first research excellence awards were presented to 82 research papers meeting the eligibility criteria for the awards in the year 2018. In 6th edition of these awards, this year 385 research papers are being awarded under various categories.

In addition to research award, university has instituted Citation Award for the researchers of the university whose research work have been cited by world scientific community in the year 2021. In this 1st addition of these awards, 18 researchers are being felicitated under different categories.

The h-index of Delhi Technological University was 34 in 2016, 44 in 2017, 60 in 2018, 69 in 2019, 79 in 2020, 87 in 2021 and currently the h index of university is 108, as reported by Scopus. The total number of publications from DTU were 1900 for year 2022, while the cumulative citations of research papers were 299978 as per Scopus.

I heartily congratulate all the 2023 research excellence and citation award recipients in various disciplines for their outstanding achievement in research. I am sure that their contributions will help excel the university and nation in the years to come.

Dated: 06.04.2023
Prof. Jai Prakash Saini
Vice-Chancellor, DTU

PROF. JAI PRAKASH SAINI

VICE CHANCELLOR

Prof. Pragati Kumar

DEAN
Industrial Research and Development (IRD)

Prof. Roli Purwar

ASSOCIATE DEAN
Industrial Research and Development (IRD)

PREFACE

Research excellence awards, the brainchild of Prof. Yogesh Singh, the third Vice Chancellor of DTU was a unique initiative among the institutions of higher learning in the country at the time of its inception in 2017 in Delhi Technological University. This initiative has led to a phenomenal growth in the research and development profile of the university during the last five years. These awards are given based on authors original contributions published and indexed as per the notification issued by the university. The awards are presented to the faculty members of the university annually under three categories namely Outstanding, Premier and Commendable Research Excellence Award.

The citation awards are based on the authors profile on Scopus. There are three categories of citation awards namely (i) Cumulative Citation (ii) Highly Cited Paper (iii) Yearly Citation award (Early Research Impact and Influence Award).

This compendium of citation and research award is a collection of publication details of researcher of DTU along with their brief biosketch who have been given research excellence/ citation awards. It shall be helpful in inspiring young researchers and students who pursue research in the university.

We are thankful to scrutiny committee members namely Prof. Neeta Pandey, Prof. Anil Kumar, Prof. C P Singh, Prof. Raju Sarkar, Prof. Yasha Hasija, Prof. Anjana Gupta, Prof. Dinesh Vishwakarma, Prof. Rishu Chaujar, Prof. Mini Sreejeth, Dr. Pravin Kumar, Dr. Anil Kumar, Dr. Rajeev Mishra, Dr. Harikesh, Dr. Nidhi Maheswari, Dr. Amrish Panwar, Dr. Sonal Tukral, Dr. Pawan Singh Mehra for the evaluating the applications of research excellence award and for their valuable suggestions.

We are grateful to the scrutiny committee members Prof. Neeta Pandey, Prof. Pravir Kumar, Prof. Ram Singh, Prof. Ruchika Malhotra, Prof. Dinesh Vishwakarma, Dr. Anil Kumar, Dr. M Jayasimhadri, Dr. Harikesh, for the evaluating the applications of citation awards and for their valuable suggestions.

We congratulate all the members of academic fraternity on receiving the research excellence awards. We hope it will inspire the academic fraternity to work for excellence in research.

Prof. Pragati Kumar (Dean-IRD)
Prof. Roli Purwar (Associate Dean-IRD)

DELHI TECHNOLOGICAL UNIVERSITY

Established under Govt. of Delhi Act 6 of 2009
(Formerly Delhi College of Engineering)
BAWANA ROAD, SHAHBAD DAULATPUR, DELHI-42

No. F.DTU/IRD/Award/2021/01 Date: 22.01.2021

NOTIFICATION

In exercise of the powers conferred under sub-section (1) of Section 23 of the Delhi Technological University Act, 2009 (Delhi Act 6 of 2009), the Board of Management of Delhi Technological University in its 40th meeting held on 22.01.2021 vide agenda number 40.6 approved the Constitution of Award consisting of a Certificate/Citation for impact and influence measured in terms of citations earned by the researchers of Delhi Technological University for their published research work. The guidelines are as under:

The certificate of merit shall be awarded to the researchers of Delhi Technological University in the recognition of the impact and influence of the published research work and to motivate individual excellence in research.

1. Definitions:

i. **"University"** shall mean Delhi Technological University (DTU), Delhi.
ii. **Faculty Member of the University:** An individual who is a full-time faculty member of the University.
iii. **University Student:** An individual who is registered for any degree in the Delhi Technological University.
iv. **Researcher:** An individual who is either a faculty member of the university or a student involved in the research.
v. **Call of applications:** first week of January each year
vi. **Assessment year:** year for which the researchers will be assessed
vii. **Citation year:** year for which the citations shall be counted (assessment year**-2)
viii. **Referred years:** shall be (assessment year -1) & (assessment year -2)

2. Cumulative Citation Award

The cumulative citation award shall be considered annually by a committee constituted for the purpose of evaluation of the proposals from the eligible researchers of the university. The awards in each of the following categories shall be considered once in the lifetime of the researcher.

1. **Category 1: Platinum**

Any researcher of the university obtaining cumulative citations as reported upto 31st December of the citation year *(assessment year-2**)* either more than 5000* or, 10%* of the total cumulative citations of the university in referred years (cumulative sum of citations in citation year & citation year+1), whichever is higher, on Scopus.

2. **Category 2: Gold**

   Any researcher of the university obtaining cumulative citations as reported upto 31st December of the citation year either more than 2500* or, 5%* of the total cumulative citations of the university in referred years, whichever is higher, on Scopus.

3. **Category 3: Silver**

   Any researcher of the university obtaining cumulative citations as reported upto 31st December of the citation year either more than 1250* or, 2.5%* of the total cumulative citations of the university in referred years, whichever is higher, on Scopus.

If a researcher receives an award in any of the above categories, he/she may be awarded in the next higher category as and when he/she becomes eligible for the same. In one calendar year, the faculty will receive only a higher category award corresponding to maximum citations. Once a researcher has received an award in a higher category, he/she will not be eligible for an award in the lower category.

3. Highly Cited Paper Award

This award shall be granted annually to the papers published in journals by the researchers satisfying the following conditions:

1. The paper should be in affiliation with DTU as first/second/corresponding author and,
2. Any researcher of the university obtaining cumulative citations as reported upto 31st December of the assessment year minus one with citations more than twice* the h-index of DTU, on Scopus, as on 31st December of the assessment year minus one and,
3. The paper should be SCI/SCIE/SSCI indexed and,
4. There are no Article Processing Charges (APC) paid for publishing the paper. This excludes journals that charge extra page charges and colour print charges.

A particular paper shall be awarded once in the lifetime of a researcher.

4. Yearly Citation Award

The yearly citation award shall be considered annually by a committee constituted for the purpose of evaluation of the proposals from the eligible researchers of the university.

Early Research Impact and Influence Award

1. Any researcher of the university, obtaining total citations *(assessment year-2**)* above 200* in the citation year as reported on Scopus and,
2. The researcher should be on the roll of the university in the citation year (i.e. assessment year-2).

* ***The number may change from time-to-time as approved by Vice Chancellor and recommended by Dean IRD.***

** ***For example, the award is to be granted in the year 2021, then the assessment year will be 2021 and the citation year shall be 2019 and the period shall be 1st January 2019 to 31st December 2019. The referred years shall be 2020 & 2019.***

NOTES:

i. All the publications considered for the count of total citations must be authored by the researcher claiming the award, otherwise, he/she will be debarred for participation in the award for three years.

ii. All information will be taken from Scopus (or any other agency as decided by the university from time-to-time) for evaluation of the citations.

iii. In case of Highly Cited Paper Award, if there are multiple corresponding authors in a given journal publication and the applicant is neither first nor second author, then the author occurring first amongst the corresponding authors shall be considered for this award.

iv. In case of Highly Cited Paper Award, if multiple applications for the same journal paper are received, then the application of author occurring first in the author list shall be considered for this award. However, other authors affiliating to Delhi Technological University shall be eligible for the certificate of merit.

v. The current/present impact factor, indexing (SCI, SCI expanded & SSCI) and similar information will be taken from Clarivate analytics for evaluation of the papers. Further, the undertaking regarding Article Processing Charges levied by the journal shall be taken by the applicant.

vi. Power to remove difficulties: If any difficulty arises in giving effect to the provisions of these guidelines, the Vice Chancellor may make such provisions, not inconsistent with the provisions in these guidelines, as appear to be necessary or expedient for removing the difficulty.

(Prof. Samsher)
Registrar

Copy to:

1. PS to the Hon'ble Vice Chancellor, DTU for kind information
2. All Deans
3. Registrar, DTU
4. Dean IRD
5. Associate Dean, IRD
6. All HoDs for vide circulation among the faculty and students of their department
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DELHI TECHNOLOGICAL UNIVERSITY

Established under Govt. of Delhi Act 6 of 2009
(Formerly Delhi College of Engineering)
BAWANA ROAD, SHAHBAD DAULATPUR, DELHI-42

No. F.DTU/IRD/2020/09/2534 Date: 21.07.2020

NOTIFICATION

In exercise of the powers conferred under sub-section (1) of Section 23 of the Delhi Technological University Act, 2009 (Delhi Act 6 of 2009), the Board of Management of Delhi Technological University in its 37th meeting held on 29.05.2020 vide agenda number 37.5 approved the revision in the Guidelines of Award to the Researchers of Delhi Technological University notified vide notification no: F.DTU/Council/BOM-AC/Notification/31/2018/2443 dated 12.09.2018. The revised guidelines are as under:

Guidelines for the Award for Published Paper of the Researchers of Delhi Technological University

The cash awards will be given to researchers in the recognition of importance of the published research work and to motivate the individual excellence in research. The publications considered must be listed in Science Citation Index (SCI) or SCI expanded. The awards will be granted for the journal papers published in each year (1st January – 31st December, published along with Digital Object Identifier (DOI), pagination and year of publication). Only the first author and/ or the corresponding author shall be eligible to apply for the award. A notice will be circulated annually and the entry form consisting published research papers qualifying the selection criteria will be submitted to concern section. The publication made in the journals, which seeks publication fee (article processing charges or open access charges), shall not be considered for cash awards (irrespective of the listing in the publication societies/ houses/ presses specified in the following lists). Amongst the researchers, if one or more of the authors are found with zero contribution, the paper shall not be considered for the award.

1. DEFINITIONS:

i. **"University"** shall mean Delhi Technological University (DTU), Delhi.
ii. **Paper:** Any publication appearing in journal entitled "....." excluding letters to the editor and the editorials. The publication must be electronically available online with Digital Object Identifier (DOI).
iii. **Faculty Member of the University:** An individual who is a regular faculty member of the University.
iv. **University Student:** An individual who is registered for any degree in the Delhi Technological University.
v. **Researcher:** An individual who is either a faculty member of the university or a student involved in the research.

vi. **Author:** An individual who conforms to all of the following criteria:

a) Made a significant intellectual contribution to the theoretical development, system or experimental design, prototype development, and/or the analysis and interpretation of data associated with the work contained in the article;
b) Contributed to drafting the article or reviewing and/or revising it for intellectual content;
c) Approved the final version of the article as accepted for publication, including references.
d) Contributors who do not meet all of the above criteria (a to c) may be present in the acknowledgment section of the article.
e) Omitting an author who contributed to the article or including a person who did not fulfill all of the above requirements is considered a breach of publishing ethics.
f) **First Author:** An individual who is either a faculty member of the university or a university student and his name appears first in the list of authors on the title page of the paper.
g) **Corresponding Author:** An individual who is either a faculty member of the university or a university student and his name appears first in the list of corresponding authors on the title page of the paper. As a proof of corresponding author, the researcher must provide the screen shot of the tool box of the paper submission system (say, Editorial Manager/ Scholar One) where the name of the author appears on the login page and the title of the paper claimed is listed. If there are more than one corresponding authors then the author whose name appears first on the paper submission system, shall be treated as the corresponding author for the purpose of the award.

2. AWARD CATEGORIES & SELECTION CRITERIA:

A) Outstanding Research Awards

A cash prize of Rs. 5,00,000/- will be awarded along with the certificate of merit.

Selection Criteria: The paper must be a Science Citation Index (SCI)/ Social Science Citation Index (SSCI)/ SCI expanded journal paper of impact factor at least two, and published in the following:

- Nature Journal
- Science
- Harvard Business Review

B) Premier Research Awards

A cash prize of Rs. 1,00,000/- will be awarded along with the certificate of merit.

Selection Criteria: The paper must be a journal paper of impact factor at least 3.0, for Institute of Electrical and Electronics Engineers (IEEE) Transactions and one for all others indexed in SCI/ SSCI or SCI expanded and published in the following:

1. Proceedings of Royal Society
2. American Mathematical Society
3. American Physical Society
4. American Society for Civil Engineers (ASCE)
5. American Society for Mechanical Engineers (ASME)
6. IEEE Transactions (TRIF≥3.0)
7. Association for Computing Machinery (ACM) Transactions
8. Institute of Civil Engineering Publishing, London
9. Institute of Mechanical Engineering, London
10. American Society of Testing Materials (ASTM)
11. Nature Publishing Group

In addition to the above list, the journals with impact factor equal to or more than thirty (30) will be also be considered for the award.

C) Commendable Research Awards

A cash prize of Rs. 50,000/- will be awarded along with the certificate of merit.

Selection Criteria: The paper must be a journal paper of impact factor at least one, indexed in SCI/ SSCI or SCI expanded and published in the following:

1.IEEE Transactions (TRIF<3)
2.IEEE Journals
3.Springer
4.Elsevier (Science Direct)
5.Oxford University Press
6.Pergamon-Elsevier Science Ltd
7.Cambridge University Press
8.Wiley-Blackwell
9. Blackwell Publishing
10.John Wiley & Sons
11.Institute of Engineering and Technology (IET)
12.Biomedical Central Ltd
13.Massachusetts Institute of Technology (MIT) Press
14.Indiana University Press
15.American Meteorological Society
16.American Physiological Society
17.American Society for Microbiology
18.American Chemical Society
19.American Institute of Physics
20.Institute of Physics (IOP) Publishing Ltd.
21.Massachusetts Medical Society
22.IOS Press
23.Princeton University Press
24.Society of Industrial and Applied Mathematics
25.Proceedings of National Academy of Sciences of USA

In the commendable award category, an author shall be eligible for the cash prize for not more than three papers however the university authors of all the papers shall be eligible for the certificate.

In addition to the above list, SCI/SSCI and SCI expanded indexed journal not included in the above list having impact factor equal to or more than five shall also be considered for the award.

3. REGULATIONS FOR DIVISION & DISTRIBUTION OF AWARD PRIZE

Case 1: If all the authors are amongst faculty member of the university, then first author will decide the individual author's contribution for the purpose of distribution of prize amount.

Case 2: If the authors are amongst the faculty member of the university and the university students, then faculty member of the university (whose name appears first in the paper) will decide the individual author's contribution for the purpose of distribution of prize amount.

Case 3: If the first author, corresponding author and other authors are the university students, then the Head of Departments of the first/ corresponding student's department (whose name appears first in the paper) will decide the individual author's contribution in consultation with the first author for the purpose of distribution of prize amount.

Case 4: If one (or more) of the author/s is/are external to the university, then the prize amount will be divided by total number of authors and the equal part (one share) of the total prize amount will be disbursed to the university contributors. The prize amount of the external author will be subtracted from the total prize amount.

Case 5: A faculty member of the university or a university student shall be permitted to claim cash prize for a maximum of three papers as author or co-author in the category of commendable research award.

Annexure 1 will be referred for evaluating the research papers for granting of award to the researchers of DTU and Annexure 2 will be referred for calculation of cash prize for distribution amongst researchers/authors of DTU.

Power to remove difficulties: If any difficulty arises in giving effect to the provisions of these guidelines, the Vice Chancellor may, make such provisions, not inconsistent with the provisions in these guidelines, as appear to be necessary or expedient for removing the difficulty.

The guidelines shall be implemented for the period of 1st January to 31st December of the respective calendar year.

(Prof. Samsher)
Registrar

Copy to:

1. PS to the Hon'ble Vice Chancellor, DTU for kind information
2. All Deans
3. Registrar DTU
4. Associate Dean, IRD
5. All HoDs for vide circulation among the faculty and students of their department
6. Head Computer Centre with a request to upload on website
7. Guard File

8/c

Annexure 1

Guidelines for Evaluation of Published Paper for Research Award

1. The current/present impact factor, indexing (SCI, SCI expanded & SSCI) and other information will be taken from Clarivate analytics for evaluation of the papers. Thus, the current/present statistics including payment and indexing information of the journals will be taken for the purpose of verification by the screening/scrutiny committee.
2. The final publication date of the paper with volume and issue number (acceptance date or date on which the paper was published online will not be considered) will be considered for verifying the year of publication and pagination of the research paper under consideration.

7k

Annexure 2

Formula for Distribution of Awards to the Authors/Researchers

The Research Excellence Awards have been constituted in the university recently and have been effective from AY 2017. The competent authority is pleased to approve the formula for distribution of Award Money for Research Excellence Awards (F.No. DTU/IRD/597/2018/1865 dated 18/12/2018) from 2018 onwards to the Authors/Researchers of the DTU as under:

A is the total award money and there are N authors. The value of Z shall be decided by the principal author and shall be such that $0.5 \leq Z \leq 1$,

- Case 1: When there is no external author, then the minimum amount credited to each of the author shall be as,

  A*Z/N

- Case 2: When there are external authors, then the minimum amount credited to each of the author shall be as,

  (A-Y*(A/N))*Z/(N-Y)

  Where Y number of authors are external to the university

Calculations sheets are enclosed.

CITATION AWARD

Cumulative Citation Award: GOLD

S. No.	Name of Researcher	Name of Department
1.	Prof. D. Kumar	Applied Chemistry
2.	Prof. A. S. Rao	Applied Physics
3.	Dr. M. Jayasimhadri	Applied Physics
4.	Prof. Anil Kumar Haritash	Environmental Engineering
5.	Dr. Anil Kumar	Mechanical Engineering

Cumulative Citation Award: SILVER

S. No.	Name of Researcher	Name of Department
1.	Prof. Rishu Chaujar	Applied Physics
2.	Prof. Pravir Kumar	Biotechnology
3.	Prof. Data Ram Bhaskar	Electrical Engineering
4.	Prof. Neeta Pandey	Electronics & Communication Engineering
5.	Prof. O. P. Verma	Electronics & Communication Engineering
6.	Prof. Rajiv Kapoor	Electronics & Communication Engineering
7.	Prof. Ruchika Malhotra	Software Engineering

Highly Cited Paper Award

S. No.	Name of Researcher	Name of Department	Details of Highly Cited Paper
1.	Prof. D. Kumar	Applied Chemistry	Kumar, D., Sharma, R.C., Advances in conductive polymers, European Polymer Journal, 1998, 34(8), 1053–1060

S. No.	Name of Researcher	Name of Department	Details of Highly Cited Paper
2.	Dr. Saurabh Agrawal	Delhi School of Management	Agrawal S., Singh R. K., Murtaza Q., A literature review and perspectives in reverse logistics, Resources, Conservation and Recycling, 2015, 97, 76 - 92
3.	Prof. Dinesh Kumar Vishwakarma	Information Technology	Yadav A., Vishwakarma D. K., Sentiment analysis using deep learning architectures: a review, Artificial Intelligence Review, 2020,53(6), 4335–4385
4.	Prof. Ruchika Malhotra	Software Engineering	Malhotra R., A systematic review of machine learning techniques for software fault prediction, Applied Soft Computing, 2015, 27, 504 - 518

Yearly Citation Award: Early Research Impact and Influence Award

S. No.	Name of Researcher	Name of Department
1.	Prof. D. Kumar	Applied Chemistry
2.	Prof. Roli Purwar	Applied Chemistry
3.	Prof. A. S. Rao	Applied Physics
4.	Dr. M. Jayasimhadri	Applied Physics
5.	Dr. Mohan Singh Mehata	Applied Physics
6.	Prof. Rishu Chaujar	Applied Physics
7.	Prof. Pravir Kumar	Biotechnology
8.	Prof. Rahul Katarya	Computer Science and Engineering
9.	Prof. Data Ram Bhaskar	Electrical Engineering
10.	Prof. Neeta Pandey	Electronics & Communication Engineering
11.	Prof. O. P. Verma	Electronics & Communication Engineering
12.	Prof. Rajiv Kapoor	Electronics & Communication Engineering
13.	Prof. Anil Kumar Haritash	Environmental Engineering
14.	Prof. Dinesh Kumar Vishwakarma	Information Technology
15.	Dr. Virender Ranga	Information Technology
16.	Dr. Anil Kumar	Mechanical Engineering
17.	Prof. Ruchika Malhotra	Software Engineering

Details for Published Papers for

PREMIER RESEARCH AWARDS

1ST JANUARY, 2022 – 31ST DECEMBER, 2022

S. No.	Authors	Papers Title	Journal with Publication Details
DEPARTMENT OF APPLIED MATHEMATICS			
1.	**Dhirendra Kumar** R. K. Agrawal Puneet Kumar	Bias-Corrected Intuitionistic Fuzzy C-Means with Spatial Neighbourhood Information Approach for Human Brain MRI Image Segmentation	*IEEE Transactions on Fuzzy Systems,* vol.30, no.3, pp. 687- 700, 2022 **Impact Factor: 12.253**
2.	**Goonjan Jain** D. K. Lobiyal	Word Sense Disambiguation using Cooperative Game Theory and Fuzzy Hindi WordNet based on ConceptNet	*ACM Transactions on Asian and Low-Resource Language Information Processing* vol.21, no.4, pp.1-25, 2022 **Impact Factor: 1.471**
3.	**Ruchika Lochab** Vivek Kumar Aggarwal	A comparative study of high-resolution methods for nonlinear hyperbolic problems	*Journal of Applied Mathematics and Mechanics (ZAMM),* vol.102, no. 7, e202100462,2022. **Impact Factor:1.759**
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING			
1.	**Anil Singh Parihar** Gaurav Jain Shivang Chopra Suransh Chopra	Attention-Net: An Ensemble Sketch Recognition Approach Using Vector Images	*IEEE Transactions on Cognitive and Developmental Systems* vol.14, no.1, pp.136 - 145, 2022 **Impact Factor: 4.546**
2.	**Anil Singh Parihar** Anubha Kabra Anu Agarwal	Potent Real-Time Recommendations Using Multimodel Contextual Reinforcement Learning	*IEEE Transactions on Computational Social Systems* vol.9, no.2, pp.581 - 593, 2021 **Impact Factor: 4.747**
DEPARTMENT OF ELECTRICAL ENGINEERING			
1	**Mayank Kumar**	Time-Domain Characterization and Detection of Open-Circuit Faults for the H-Bridge Power Cell	*IEEE Transactions on Power Electronics* vol. 37, no.2, pp.2152-2164, 2021 **Impact Factor: 5.967**
2	**Narendra Kumar II** Aman Sharma	Design and Analysis of Nonlinear Controller for a Standalone Photovoltaic System Using Lyapunov Stability Theory	*Journal of Solar Energy Engineering* vol.144, no.1, pp. 011003, 2022 **Impact Factor: 2.376**

S. No.	Authors	Papers Title	Journal with Publication Details
3	**Rupam Singh** Bharat Bhushan	Evolving Intelligent System for trajectory tracking of Unmanned Aerial Vehicles	*IEEE Transactions on Automation Science and Engineering* vol.*19* no. 3, pp.1971 – 1984, 2022 **Impact Factor: 6.636**
4	**Shubham Gupta** Vinod Kumar Yadav Madhusudan Singh	Optimal Allocation of Capacitors in Radial Distribution Networks Using Shannon's Entropy	*IEEE Transactions on Power Delivery* vol. 37no. 3, pp. 2245 - 2255, 2022 **Impact Factor:4.825**
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING			
1	**Bhawna Rawat** Poornima Mittal	A comprehensive analysis of different 7T SRAM topologies to design a 1R1W bit interleaving enabled and half select free cell for 32 nm technology node	*Proceedings of the Royal Society A: Mathematical, Physical, and Engineering Sciences* vol. 478, no. 2259, pp. 20210745, 2022 **Impact Factor: 3.213**
2	**Manjeet Kumar** Pankaj Ashish Kumar Rama Komaragiri	STSR: Spectro-Temporal Super-Resolution Analysis of a Reference Signal Less Photoplethysmogram for Heart Rate Estimation During Physical Activity	*IEEE Transactions on Instrumentation & Measurement* vol. 71, pp.1-10, 2022 **Impact factor: 5.332**
3	**Manjeet Kumar** Prashant Mani Tripathi Ashish Kumar Rama Komaragiri	Multilevel Classification and Detection of Cardiac Arrhythmias with High-Resolution Superlet Transform and Deep Convolution Neural Network	*IEEE Transactions on Instrumentation & Measurement* vol. 71, pp.1-13,2022 **Impact factor: 5.332**
4	**Sudipta Majumdar,** Amit Kumar Gautam Harish Parthasarathy	State and Parameter Estimation of Non uniform Transmission Line using Kronecker Product Based Modeling	*IEEE Transactions on Power Delivery* vol.37no. 5, pp.4291-4302, 2022 **Impact Factor: 4.825**
DEPARTMENT OF ENVIRONMENTAL ENGINEERING			
1.	**Rajeev Kumar Mishra** Abhinav Pandey Govind Pandey	Applying the indexing system for assessment of effectiveness of the exhaust emission compliance certification process for passenger cars	*Proceedings of the Royal Society A* vol.478, no.2266, pp.20220315, 2022 **Impact Factor:3.213**
2.	**Rajeev Kumar Mishra** Abhinav Pandey Govind Pandey	Investigating exhaust emission from in-use passenger cars: an exploratory analysis and policy outlook	*Journal of Environmental Engineering* vol. 148, no. 7, pp. 04022035, 2022 **Impact Factor:1.75**

S. No.	Authors	Papers Title	Journal with Publication Details
DEPARTMENT OF INFORMATION TECHNOLOGY			
1.	**Dinesh Kumar Vishwakarma** Ashima Yadav	A Language-independent Network to analyze the impact of COVID-19 on the World via Sentiment Analysis	*ACM Transactions on Internet Technology* vol. 22, no. 1, pp. 1-30, 2022 **Impact Factor: 3.989**
DEPARTMENT OF MECHANICAL ENGINEERING			
1.	**Rajesh Kumar** Mohd Asjad Siddiqui Abdul Khaliq	Thermodynamic and Comparative Analysis of Ejector Refrigeration Cycle and Absorption Refrigeration Cycle Integrated Wet Ethanol-Fueled HCCI Engine for Cogeneration of Power and Cooling	*Journal of Thermal Science and Engineering Applications* vol. 14, no. 4, pp.041003, 2022 **Impact Factor: 1.879**

Details for Published Papers for

COMMENDABLE RESEARCH AWARDS

1ST JANUARY, 2022 – 31ST DECEMBER, 2022

S. No.	Authors	Paper Title	Journal with Publication details
DEPARTMENT OF APPLIED CHEMISTRY			
1.	**Atul Varshney** Anil Kumar	A_2B corroles: fluorescent signalling system for Hg^{2+} ion	*Journal of Chemical Sciences* vol.134, no. 4. Article no. 124, 2022 **Impact Factor:1.573**
2.	Namit Dey **Deenan Santhiya** Asmita Das	Bio-Inspired Synthesis of Hollow Mesoporous Bioactive Glass Nanoparticles Using Calcium Carbonate as Solid Template	*Chemistry Select* vol. 7, no.12, e202200392, 2022. **Impact Factor 2.307**
3.	Himansh Goel **Deenan Santhiya**	Effect of pH on bio-inspired synthesis of L-Lysine templated bioactive glass hybrid xerogels for tailored textural and rheological properties.	*Materials Chemistry and Physics* vol.281, pp.125828, 2022 **Impact Factor: 4.778**
4.	Himansh Goel **Deenan Santhiya**	Role of Trigonella foenum-graecum leaf extract in tailoring the synthesis and properties of bioactive glass nanoparticles.	*Sustainable Materials and Technologies* vol.33, e00485,2022 **Impact Factor 10.681**
5	**Deepti Chauhan** S.G. Warkar Anil Kumar	An efficient adsorbent for the removal of Zn2+ Cd2+ and Hg2+ from the real industrial effluents	*International Journal of Environmental Science and Technology* vol. 19, no. 3, pp.1483-1494, 2022 **Impact factor 3.519**
6.	**Deepali Ahluwalia** Anil Kumar Sudhir G. Warkar Milind M. Deshmukh Arijit Bag	Uncovering the geometrical aspects of intramolecular hydrogen bond in meta-benziporphodimethenes through molecular tailoring approach	*Computational and Theoretical Chemistry* vol.1209, pp.113631, 2022 **Impact factor: 2.292**
7.	**Deeksha** Chandra Mauli Pandey D. Kumar	Highly Sensitive Enzymatic Biosensor Based on PolyanilineWrapped Titanium Dioxide Nanohybrid for Fish Freshness Detection	*Applied Biochemistry and Biotechnology* vol.194, no.8, pp.3765–3778, 2022 **Impact Factor: 3.094**

S. No.	Authors	Paper Title	Journal with Publication details
8.	**Manish Jain** Arjun Tyagi Jawad Iqbal Yogendra Kr. Meena	Modeling and optimization of neodymium ion separation by liquid membrane using Artificial Neural Network coupled with Genetic Algorithm	*Chemical Engineering Research and Design* vol.187, pp.151-163, 2022 **Impact Factor: 4.119**
9.	**Manish Jain** Leela Gautam Sudhir G. Warkar	A review on carboxylic acid cross-linked polyvinyl alcohol: Properties and applications	*Polymer Engineering & Science* vol.62, no. 2, pp.225-246, 2022. **Impact Factor: 2.573**
10.	**Manjot Kaur** Deenan Santhiya	Fabrication of soy film with in-situ mineralized bioactive glass as a functional food for bone health	*Food Bioscience* vol.47, pp.101767, 2022 **Impact Factor 5.318**
11.	**Poonam Singh** Jigyasa Pathak	Synthesis and characterization of ternary layered double hydroxide containing zinc/copper/nickel and its PANI composite	*Polymer Composites* vol.43, no.11, pp.7836-7844, 2022 **Impact Factor: 3.53**
12.	**Radha Sachan**, Sudhir G. Warkar Roli Purwar	Photocrosslinked Poly (ε-caprolactone) – Polydimethy lsiloxane – Poly (ε-caprolactone) Triblock Copolymeric Films: Structural, Thermal and Shape Memory Properties	*Chemistry Select* vol.7, no.33, e202201340, 2022. **Impact Factor: 2.307**
13.	**Ram Singh** Deepak Mishra Atiya Fatima Prashant Kumar Nupur S Munjal Brajendra K Singh	Synthesis of Benzothiazole Linked Triazole Conjugates and Their Evaluation Against Cholinesterase Enzymes	*Chemistry Select* vol.7, no.46, e202203060,2022. **Impact factor:2.307**
14.	**Ram Singh** Poonam, Geetika Bhasin, Richa Srivastava	Oxadiazoles: moiety to synthesis and utilize	*Journal of the Iranian Chemical Society* vol.19, pp.665–677, 2022 **Impact Factor:2.271**
15.	**Raminder Kaur** Surya Tanwar	Fabrication and investigation on influence of metal oxide nanoparticles on thermal, flammability and UV characteristics of polyethylene glycol based phase change materials	*Journal of Energy Storage* vol.54, pp.105318, 2022 **Impact Factor:8.907**
16.	**Ritika Kubba** Anil Kumar Omprakash Yadav Suman Maji Natalia Fridman	Synthesis, structural characterizations, electrochemical properties and DFT calculations of highly fluorescent phosphorus(V) corroles	*Journal of Molecular Structure* vol.1269, pp.133780,2022 **Impact Factor:3.841**

S. No.	Authors	Paper Title	Journal with Publication details
17.	**Ritu Malik** Sudhir G. Warkar Reena Saxena	Biopolymer-Based Biomatrices – Organic Strategies to Combat Micronutrient Deficit for Dynamic Agronomy	*Chemistry Select* vol.7, no.16, e202200006, 2022 **Impact Factor: 2.307**
18.	**Roli Purwar** Priya Bansal Radhika Batra Reetu Yadav	Electrospun polyacrylonitrile nanofibrous membranes supported with montmorillonite for efficient PM2.5 filtration and adsorption of Cu (II) ions	*Journal of Applied Polymer Science* vol.139, no.5, pp. 51582,2022 **Impact factor:3.05**
19.	**Roli Purwar** Radhika Batra Priya Bansal Reetu Yadav Senthilguru Kulanthaivel Prashant Mishra	Enhancement of functional properties by blending cocoon extracted Antheraea mylitta silk fibroin with polyvinyl alcohol for applications in biomedical field	*Journal of Applied Polymer Science* vol.139, no.14, pp.51913, 2022 **Impact Factor: 3.05**
20.	**Roli Purwar** Reetu Yadav Radhika Batra Priya Bansal	N-type silk fibroin/TiO_2 nanocomposite transparent films: electrical and optical properties	*Polymer International* vol.71, no.1, pp.74-85, 2022 **Impact Factor: 3.213**
21.	**Sudhir G Warkar** Khusbu	Controlled release and release kinetics studies of boron through the functional formulation of carboxymethyl tamarind kernel gum-based superabsorbent hydrogel	*Polymer Bulletin* vol.79, pp.2287-2303,2022 **Impact Factor: 2.517**
DEPARTMENT OF APPLIED MATHEMATICS			
1.	**Anu Kumari** Satyabrata Adhikari	Structural physical approximation of partial transposition makes possible to distinguish SLOCC inequivalent classes of three-qubit system	*European Physical Journal D* *vol.*76, no.4, article no. 73, 2022 **Impact Factor: 1.611**
2.	**Anu Kumari** Satyabrata Adhikari	Structured Negativity: A physically realizable measure of entanglement based on structural physical approximation	*Annals of Physics* vol.446, pp.169113,2022 **Impact Factor: 3.036**
3.	**Anjana Gupta** Mamata Sahu	Two different approaches for consistency of intuitionistic multiplicative preference relation using directed graph	*Soft Computing* vol.26, no. 10, pp.4653–4671, 2022 **Impact factor: 3.732**
4.	**Dhirendra Kumar** Inder Khatri Aaryan Gupta Rachana Gusain	Kernel picture fuzzy clustering with spatial neighborhood information for MRI image segmentation	*Soft Computing,* vol.26, no. 22, pp.12717–12740, 2022 **Impact Factor: 3.732**

S. No.	Authors	Paper Title	Journal with Publication details
5.	**Dhirendra Kumar** Puneet Kumar R. K. Agrawal	Fuzzy k-plane clustering method with local spatial information for segmentation of human brain MRI image	*Neural Computing and Applications* vol.34, pp. 4855–4874, 2022 **Impact Factor: 3.732**
6.	**Kamaljeet Gangania** S. Sivaprasad Kumar	Bohr-Rogosinski Phenomenon for $\mathcal{S}^*(\psi)$ and $\mathcal{C}(\psi)$	*Mediterranean Journal of Mathematics* vol,19, pp.161,2022 **Impact Factor-1.400**
7.	**Kamaljeet Gangania** S. Sivaprasad Kumar	$\mathcal{S}^*(\phi)$ and $\mathcal{C}(\phi)$-Radii for some Special functions	*Iranian Journal of Science and Technology. Transaction A. Science* vol.46, pp. 955-966, 2022 **Impact Factor-1.553**
8.	**Kamaljeet Gangania** S. Sivaprasad Kumar	Bohr Radius for some classes of Harmonic Mappings	*Iranian Journal of Science and Technology. Transaction A. Science* vol.46, no. 3, pp. 883-890, 2022 **Impact Factor-1.553**
9.	**Kartikay Khari** Vivek Kumar	An efficient numerical technique for solving nonlinear singularly perturbed reaction diffusion problem	*Journal of Mathematical Chemistry* vol. 60, no. 7, pp.1356–1382, 2022. **Impact Factor: 2.413**
10.	**Nav Shakti Mishra** Naokant Deo	Convergence estimates of certain gamma type operators	*Mathematical Methods in the Applied Sciences* vol. 45, no. 7, pp.3802-3816, 2022 **Impact Factor 3.007**
11.	**Nilam,** Kanica Goel	Stability analysis of a logistic growth epidemic model with two explicit time-delays, the nonlinear incidence and treatment rates	*Journal of Applied Mathematics and Computing* vol.68, no. 3, pp.1901–1928, 2022 **Impact Factor:2.196**
12.	**Nilam** Anil Kumar Rajak	A Fractional-Order Epidemic Model with Quarantine Class and Nonmonotonic Incidence: Modeling and Simulations	*Iranian Journal of Science and Technology. Transaction A, Science* vol.46, no. 4, pp.1249–1263, 2022 **Impact Factor: 1.553**
13.	**Nilam** Swati	Fractional order SIR epidemic model with Beddington–De Angelis incidence and Holling type II treatment rate for COVID-19	*Journal of Applied Mathematics and Computing* vol.68, no. 6. pp.3835–3859, 2022. **Impact Factor: 2.196**
14.	**Radhika Kavra** Anjana Gupta Sangita Kansal	Systematic study of topology control methods and routing techniques in wireless sensor networks.	*Peer-to-Peer Networking and Applications* vol.15, no. 4, pp. 1862-1922, 2022 **Impact Factor: 3.488**
15.	**R Srivastava** Gifty Malhotra H.C. Taneja	Pricing of the geometric Asian options under a multifactor stochastic volatility model	*Journal of Computational and Applied Mathematics* vol.406, pp.113986,2022 **Impact Factor: 2.872**

S. No.	Authors	Paper Title	Journal with Publication details
16.	**Rohit Kumar** Satyabrata Adhikari	Detection of d1⊗d2 Dimensional Bipartite Entangled State: A Graph Theoretical Approach	*Physica Scripta* vol.97, no. 12, pp.125101, 2022 **Impact Factor: 3.081**
17.	**Sanjay Kumar** Anjana Gupta Gurjit Singh Walia	Reversible data hiding: A contemporary survey of state-of-the-art, opportunities and challenges	*Applied Intelligence* vol.52, pp.7373-7406, 2022 **Impact Factor: 4.760**
18.	**Satyabrata Adhikari** Pranav Kairon Mukhtiyar Singh	Coherence based inequality for the discrimination of three-qubit GHZ and W class	*Quantum Information Processing* vol.21, no. 5, pp. 173, 2022 **Impact Factor:1.965**.
19.	**Shruti Aggarwal** Satyabrata Adhikari	Search for an efficient entanglement witness operator for bound entangled states in bipartite quantum systems	*Annals of Physics* vol.444, pp. 169043, 2022 **Impact Factor: 3.036**
20.	**Vivek Kumar Aggarwal** Kartikay Khari	Finite element analysis of the singularly perturbed parabolic reaction-diffusion problems with retarded argument	*Numerical Methods for Partial Differential Equations* vol.38, no.4, pp. 997–1014, 2022 **Impact Factor: 3.5**
DEPARTMENT OF APPLIED PHYSICS			
1.	**Abhishek Bhardwaj** Amrish K. Panwar	Effect of carbon shell over $NaCrO_2$ core by C_2H_2 decomposition to enhance electrochemical properties for rechargeable Sodium-ion batteries	*Applied Surface Science* vol.573, pp. 151449, 2022 **Impact Factor: 7.392**
2.	**Anchali Jain** Amrish K. Panwar Pawan K. Tyagi	Effect of Cr doping on $Li_2ZnTi_3O_8$ as alternative anode material to enhance electrochemical properties of lithium-ion batteries	*Applied Physics A* vol.128, no. 4, article no. 302,2022 **Impact Factor: 2.983**
3.	**Anu** A.S. Rao Nisha Deopa	Structural and luminescence characteristics of thermally stable Dy^{3+} doped oxyfluoride strontium zinc borosilicate glasses for photonic device applications	*Optics & Laser Technology* vol.154, pp.108328, 2022 **Impact Factor: 4.939**
4.	**Anshu** Suresh C. Sharma Jyotsna Sharma	In the existence of a transverse dc electric field, the kinetic theory of current-driven electrostatic ion cyclotron waves excitation in a magnetized dusty plasma	*Contributions to Plasma Physics* vol.62, no. 9, e202200073, 2022 **Impact Factor: 1.608**
5.	**A. S. Rao** Pooja Rohilla	Linear and non-linear photoluminescence studies of Ho3+/ Yb3+ co-doped titanate phosphors for photonic applications	*Journal of Alloys and Compounds* vol.928, pp.167156, 2022 **Impact Factor: 6.371**

S. No.	Authors	Paper Title	Journal with Publication details
6.	**A. S.Rao** Ravita	Tunable photoluminescence studies of KZABS: RE3+ (RE3+ = Tm3+, Tb3+ and Sm3+) glasses for w-LEDs based on energy transfer	*Journal of Luminescence* vol.251, pp. 119194, 2022 **Impact Factor: 4.171**
7.	**A.S.Rao** Kartika Maheshwari	Photoluminescence downshifting studies of thermally stable Dy3+ ions doped phosphate glasses for photonic device applications	*Optical Materials* vol.129, pp. 112518, 2022 **Impact Factor: 3.754**
8.	**Bharti Singh** Vishal Singh Deshraj Meena Ashutosh Trivedi	Investigating the role of chalcogen atom in the piezoelectric performance of PVDF/TMDCs based flexible nanogenerator" Energy	*Energy* vol.239 Part B, pp.122125, 2022 **Impact Factor: 8.85**
9.	**Bharti Singh** Shilpa Rana Vishal Singh	Tailoring the Output Performance of PVDF-Based Piezo–Tribo Hybridized Nanogenerators via B, N-Codoped Reduced Graphene Oxide	*ACS Applied Electronics Materials* vol.4, no.12, pp.5893–5904, 2022 **Impact Factor: 4.49**
10.	**Bhavya Kumar** Rishu Chaujar	Numerical simulation of analog metrics and parasitic capacitances of GaAs GS-GAA FinFET for ULSI switching applications	*The European Physical Journal Plus* vol.137, no. 1, pp. 110, 2022 **Impact Factor:3.758**
11.	**Bhavya Kumar** Rishu Chaujar	Numerical Study of JAM-GS-GAA FinFET: A Fin Aspect Ratio Optimization for Upgraded Analog and Intermodulation Distortion Performance	*Silicon* vol.14, no. 1, pp. 309-321, 2022 **Impact Factor:2.941**
12.	**Deepali** M. Jayasimhadri	UV-excited blue- to green-emitting Tb3+-activated sodium calcium metasilicate colour tunable phosphor for luminescence devices	*Luminescence* vol.37, no. 9, pp. 1465-1474, 2022 **Impact Factor: 2.61**
13	**Deepak Kumar** M. K. Singh Mohan Singh Mehata	Exploration of grown cobalt-doped zinc oxide nanoparticles and photodegradation of industrial dye	*Materials Research Bulletin* vol.150, pp.111795, 2022 **Impact Factor: 5.6**
14	**Harpreet Kaur** Vishesh Tiku Aditya Prasad Y. Abhishek Singh M. Jayasimhadri Vishnu Vikesh Jaiswal P. Koteswara Rao D. Haranath	Luminescent and colorimetric properties of the sol–gel derived mono-phase Dy3+ doped silicate-based phosphor for w-LED applications	*Journal of Sol Gel Science and Technology* vol.101, pp. 443-452, 2022 **Impact Factor: 2.606**

S. No.	Authors	Paper Title	Journal with Publication details
15	**Jyoti** Suresh C. Sharma Neha Pathak R. P. Sharma	Beam-driven whistler mode nonlinear saturation and turbulence in the magnetopause	*Physics of Plasmas* vol. 29. no.9 pp. 092104,2022 **Impact Factor: 2.357**
16	**Kailash Chandra**, Vinod Singh Pawan Kumar Kulriya Saurabh Kumar Sharma	Structural magnetic properties correlation in Ge doped frustrated $Ho_2Ti_2O_7$ pyrochlore	*Journal of Magnetism and Magnetic Materials (JMMM)* vol.561, pp.169694, 2022 **Impact Factor:3.097**
17	**Km. Komal** Mukhtiyar Singh Bharti Singh Govind Gupta	Improved resistive switching of RGO and SnO2 based resistive memory device for non-volatile memory application	*Journal of Alloys and Compounds* vol.923, pp.166196,2022 **Impact Factor:6.37**
18	**Mansha Kansal** Suresh C. Sharma	Exploration of Novel Hafnium Oxide (HfO2) Based Plasma-Assisted Gate All Around Carbon Nanotube FET (GAA-CNTFET) for High Sensing Applications	*ECS Journal of Solid-State Science and Technology* vol.11, no. 10, pp.101002, 2022 **Impact Factor: 2.483**
19	**Mansha Kansal** Suresh C. Sharma	Performance Evaluation & Linearity Distortion Analysis for Plasma-Assisted Dual-Material Carbon Nanotube Field Effect Transistor with a SiO2-HfO2 Stacked Gate-Oxide Structure (DM-SGCNFET)	*Silicon* vol.14, pp.12381-12391, 2022 **Impact Factor: 2.941**
20	**Megha Sharma** Rishu Chaujar	Design and Investigation of Recessed-T-Gate Double Channel HEMT with InGaN Back Barrier for Enhanced Performance	*Arabian Journal for Science and Engineering* vol.47, pp.1109–1116, 2022 **Impact Factor:2.807**
21	**Megha Sharma** Rishu Chaujar	Ultrascaled 10 nm T-gate E-mode InAlN / AlN HEMT with polarized doped buffer for high power microwave applications	*International Journal of RF and Microwave Computer-Aided Engineering* vol.32, no.4, e23057, 2022 **Impact Factor:1.987**
22	**M. Jayasimhadri** Vikas Deepali	Structural and spectroscopic analysis of thermally stable Dy3+ activated Na4Ca4Si6O18 phosphor for optoelectronic device applications	*Journal of Materials Science: Materials in Electronics* vol.33, pp.19218-19230, 2022 **Impact Factor: 2.779**
23	**M. Jayasimhadri** Vikas	Thermally stable red luminescence from Eu3+ -activated telluro zinc phosphate glass under near-ultraviolet light excitation for photonic applications	*Luminescence* vol.37, no. 12, pp. 2059-2066, 2022. **Impact Factor: 2.613**

S. No.	Authors	Paper Title	Journal with Publication details
24	**M. Jayasimhadri** Mukesh K. Sahu	Structural and color tunable properties in Sm3+/Eu3+-doped Ca3Bi(PO4)3 phosphor for solar cell and w-LED applications	*Journal of Materials Science: Materials in Electronics* vol.33, no. 8, pp. 5201-5213, 2022 **Impact Factor: 2.779**
25	**Mohan Singh Mehata** V. S. Meena	Thermally grown indium (In) thin-film for creating ohmic contact and In-bumps for HgCdTe-based IR detectors	*Applied Surface Science* vol.596, pp.153501, 2022 **Impact Factor:7.392**
26	**Mohan Singh Mehata** N. Fatma S. Pant	Reinvestigation on photoluminescence of 7-hydroxyflavone in aqueous medium: Proficient fluorescence enhancement	*Journal of Photochemistry & Photobiology A: Chemistry* vol.431, pp. 114014, 2022 **Impact Factor:5.141**
27	**Mohan Singh Mehata** V. Sharma	Photoluminescence turn-off based dual analytes (Hg^{2+} and Pb^{2+}) sensor in aqueous medium using 3-marcaptoproponic acid protected Mn^{2+} doped ZnSe quantum dots	*Chemical Physics Letters* vol.787, pp.139270, 2022 **Impact Factor:2.719**
28	**Mohit Kumar** A.S. Rao Sumandeep Kaur	Downshifting analysis of Sm3+/Eu3+ co-doped LiBiAlBSi glasses for red emission element of white LEDs	*Chemical Physics Letters* vol.788, pp. 139303, 2022 **Impact Factor: 2.719**
29	**Mukhtiyar Singh** Rajesh Kumar Ankush Vij	Electronic, thermoelectric, and optical studies of cubic Hf1-xTixO2: An attempt to enhance the key parameters	*Journal of Solid-State Chemistry* vol.307, pp.122829, 2022 **Impact Factor: 3.656**
30	**Mukhtiyar Singh** Rajesh Kumar Ankush Vij Ramesh Kumar	A first-principle study of electronic, thermoelectric, and optical properties of sulfur doped c -HfO_2	*Physica Scripta* vol.97, no.7, pp.075813, 2022 **Impact Factor: 3.08**
31	**Mukhtiyar Singh** Ramesh Kumar Ramesh K. Bibiyan	Pressure-induced topological phase transition in XMR material YbAs: a first-principles study	*The European Physical Journal Plus* vol.137, no.5, pp. 633, 2022 **Impact Factor: 3.758**
32	**Mukesh Kumar Sahu** M. Jayasimhadri D. Haranath	Temperature - dependent photoluminescence and optical thermometry performance in $Ca_3Bi(PO_4)_3$:Er^{3+} phosphors	*Solid State Sciences* vol.131, pp. 106956, 2022 **Impact Factor: 3.752**
33	**Mukesh Kumar Sahu** M. Jayasimhadri Swati Bishnoi G. Swati D. Haranath	Thermally stable Mn^{2+}-activated zinc silicate nanophosphor for speedy recognition of high-contrast latent fingermarks	*International Journal of Applied Ceramic Technology* vol.19, no.1, pp. 488-497, 2022 **Impact Factor: 2.328**

S. No.	Authors	Paper Title	Journal with Publication details
34	**Nitin K. Puri** Nikita Jain Savita Sharma	Investigation of charge transport mechanism in hydrothermally synthesized reduced graphene oxide (rGO) incorporated zinc oxide (ZnO) nanocomposite films	*Journal of Materials Science: Materials in Electronics* vol.33, pp.1307-1323, 2022 **Impact Factor:2.779**
35	**Nitin K. Puri** Ritika Khatri	Electrochemical biosensor utilizing dual-mode output for detection of lung cancer biomarker based on reduced graphene oxide-modified reduced-molybdenum disulfide multi-layered nanosheets	*Journal of Materials Research* vol.37, no. 8, pp.1451–1463, 2022. **Impact Factor:2.909**
36	**Pooja Rohilla** A. S. Rao	Synthesis optimisation and efficiency enhancement in Eu3+ doped barium molybdenum titanate phosphors for w-LED applications.	*Materials Research Bulletin* vol.150, pp. 111753, 2022 **Impact Factor: 5.6**
37	**Prateek Sharma** Mrityunjay Kr. Singh Mohan Singh Mehata	Sunlight-driven MoS2 nanosheets mediated degradation of dye (crystal violet) for the wastewater treatment	*Journal of Molecular Structure* vol.1249, pp.131651, 2022 **Impact Factor :3.848**
38	**Priyanka** Rinku Sharma Manoj Kumar	Effects of impurity factor on the physical and transport properties for Ga1-xAlxAs quantum wire in the presence of Rashba spin-orbit interaction	*Physica B: Condensed Matter* vol.629, pp.413649,2022 Impact factor: 2.98
39	**Rashi Mann** Rishu Chaujar	TCAD investigation of ferroelectric based substrate MOSFET for digital application	*Silicon* vol.14, no. 9, pp.5075–5084, 2022 **Impact Factor 2.941**
40	**Ravindra Kumar Sinha** P Agarwal K Kishor	Ultrasensitive dual-band terahertz metasurface sensor based on all InSb resonator	*Optics Communications* vol.522, pp.128667, 2022 Impact Factor: 2.33
41	**Ravindra Kumar Sinha** Varnam Sherawat Renuka Bakolia	Impact of thermal and refractive index tuning on the bandgap and band edges of a silicon photonic crystal waveguide with sensing applications	*Optics Communications* vol.518, pp.128348, 2022 **Impact Factor: 2.335**
42	**Rajesh Kumar** Mukhtiyar Singh Deshraj Ramesh Kumar Ankush Vij	Carrier concentration mediated enhancement in thermoelectric performance of various polymorphs of hafnium oxide: a plausible material for high temperature thermoelectric energy harvesting application	*Journal of Physics D: Applied Physics* vol.55, no.49, pp.495302, 2022 **Impact Factor: 3.409**

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43	**Rajat Bajaj** A.S.Rao G. Vijaya Prakash	Photoluminescence down-shifting studies of thermally stable Eu^{3+} ions doped borosilicate glasses for visible red photonic device applications	*Journal of Non- Crystalline Solids* vol.575, pp. 121184,2022 **Impact Factor: 4.45**
44	**Rajat Bajaj** Pooja Rohilla Sumandeep Kaur A. S. Rao Aman Prasad A.V.S. Yeswanth	Down-shifting photoluminescence studies of thermally stable Dy^{3+} ions doped borosilicate glasses for optoelectronic device applications	*Journal of Materials Science: Materials in Electronics* vol.33, no. 8, pp. 4782-4793,2022 **Impact Factor: 2.8**
45	**Ravita** A. S. Rao	Effective senstization of Eu^{3+} visible red emission by Sm^{3+} in thermally stable potassium zinc alumino borosilicate glasses for photonic device applications	*Journal of Luminescence* vol.224, pp.118689, 2022 **Impact Factor:4.171**
46	**Ravita** A. S. Rao	Color tunable photoluminescence in KZABS: Tm3+ glasses under different sources of excitation for photonic applications	*Journal of Non-Crystalline Solids* vol.585, pp.121532, 2022 **Impact factor:4.458**
47	**Renuka Bokolia** Ankita Banwal	Thermometric sensing performance in Erbium modified SrBi2-xNb2ErxO9 ferroelectric ceramic for optoelectronic devices	*Ceramics International* vol.48, no. 23, pp.34405-34414, 2022. **Impact Factor :5.532**
48	**Renuka Bokolia** Ankita Banwal	Enhanced upconversion luminescence and optical temperature sensing performance in Er3+ doped BaBi2Nb2O9 ferroelectric ceramic	*Ceramics International* vol.48, no.2, pp.2230-2240,2022 **Impact Factor :5.532**
49	**Rishu Chaujar** Mekonnen Getnet	Sensitivity Analysis of Biomolecule Nano-Cavity Immobilization in Dielectric Modulated Triple Hybrid Metal Gate-All-Around Junctionless NWFET Biosensor for Detecting Various Diseases	*Journal of Electronic Materials* vol.51, no. 5, pp. 2236-2247, 2022 **Impact Factor:2.047**
50	**Rishu Chaujar** Gaurav Mangal Aman Tyagi	Numerical investigation and temperature-based analysis of the analog performance of fully gate-covered junctionless FinFET	*Computers and Electrical Engineering Journal* vol.101, pp. 108071,2022 **Impact Factor:4.152**
51	**Rishu Chaujar** Mridul Prakash Kashyap Harshal Gudaghe	Compatibility of a Truncated Fin-FinFET as a k-modulated Biosensor with Optimum parameters for Pre-emptive Diagnosis of Diseases	*Computers and Electrical Engineering Journal* vol.100, pp. 107850,2022 **Impact Factor:4.152**

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52	**Rinku Sharma** Arun Goyal	Excitation energies, transition data of SXR, HXR, EUV and far-UV spectral lines with partition function, thermodynamic parameters and level population for W LXVII and W XLIX	*Journal of Electron Spectroscopy and Related Phenomena* vol.246, pp.147009, 2022 **Impact Factor: 1.993**
53	**Rinku Sharma** Arun Goyal	Strongly coupled plasma effect on excitation energies of O-like ions and photoionization of F-like ions	*Indian Journal of Physics* vol.96, no.6, pp.1829–1840, 2022 **Impact Factor: 1.947**
54	**Rinku Sharma** Arun Goyal	Study of contribution of doubly excited 3d10 configurations in excitation energies and SXR transition data of Fe-like ions	*Indian Journal of Physics* vol.96, no.8, pp. 2263–2283, 2022 **Impact Factor: 1.947**
55	**Richa Sharma** Komal Verma Sahil Goel	Influence of calcination and sintering temperature on the microstructure, dielectric, ferroelectric and piezoelectric properties of the lead-free KNN ceramics	*Journal of Materials Science: Materials in Electronics* vol.33, pp.26067–26085, 2022 **Impact Factor:2.779**
56	**Richa Paijwar** Rinku Sharma Alok K. Singh Jha	Relativistic atomic structure calculations of KIX with plasma parameters	*Physics of Plasmas* vol.29, no.9, pp. 092702, 2022 **Impact factor: 2.357**
57	**Samriti Sharma** Rishu Chaujar	Impact of tunnel gate process variations on analog/radio frequency (microwave) and small signal parameters of hetero-material tunneling interfaced charge plasma junctionless tunnel field effect transistor	*International Journal of Circuit Theory and Applications* vol.50, no. 10, pp.3626-3641 2022 **Impact Factor: 2.378**
58	**Samriti Sharma** Rishu Chaujar	RF, linearity and intermodulation distortion analysis with small-signal parameters extraction of tunable bandgap arsenide/antimonide tunneling interfaced JLTFET	*Microsystem Technologies* vol.28, pp.2659–2667, 2022 **Impact Factor: 2.012**
59	**Samriti Sharma** Rishu Chaujar	Influence of source electrode metal work function on polar gate prompted source hole plasma in arsenide/antimonide tunneling interfaced junctionless TFET	*Journal of Micromechanics and Microengineering* vol.32, no.4, pp.044004, 2022 **Impact Factor: 2.282**
60	**Sangeeta** Mukhtiyar Singh Ramesh Kumar	Realizing high thermoelectric performance in p-type RbZn4P3 Zintl compound: a first-principles investigation	*Journal of Materials Science* vol.57, no.23, pp. 10691–10701, 2022 **Impact Factor: 4.682**

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61	**Sandeep Sharma** A.S. Rao Kamal Kishore	Energy transfer dynamics in thermally stable Sm3+/ Eu3+ co-doped AEAlBS glasses for near UV triggered photonic device applications	*Journal of Non-Crystalline Solids* vol.580, pp. 121392,2022 **Impact Factor: 4.458**
62	**Shruti Sharma** Suresh C. Sharma	Effect of Plasma Control Parameters on the Growth of Nitrogen - Doped Nanocene - Vertical Graphene Hybrid: Theoretical Investigations	*Plasma Chemistry and Plasma Processing* vol.42, no.2, pp. 413-433, 2022 **Impact Factor: 3.337**
63	**Suresh C. Sharma** Umang Sharma	Investigations on plasma pre-treatment of catalyst film and catalyzed growth of carbon nanotubes	*IEEE Trans on Plasma Science* vol.50, no. 4, pp. 888-898, 2022 **Impact Factor:1.368**
64	**Suresh C. Sharma** Umang Sharma	Impact of plasma process parameters on the growth of vertically aligned carbon nanotube array and its optimization as field emitters	*The European Physical Journal Plus* vol.137, no.7, pp. 823, 202 **Impact Factor:3.911**
65	**Suresh C. Sharma** Mansha Kansal	Plasma-based Nano architectonics for Vertically Aligned Dual -Metal Carbon Nanotube Field Effect Transistor (VA-DMCNFET) Device: Effect of Plasma Parameters on Transistor Properties	*Applied Physics A Material Science & Processing* vol. 128, Article no.28, 2022. **Impact Factor:2.983**
66	**Vinod Singh** Umang Berwal Rinku Sharma	Key role of Tb3+ doping on structural and photoluminescence properties of Gd2Ti2O7 pyrochlore oxide	*Ceramics International* vol.48, no.15, pp. 22266-22275,2022. **Impact Factor:5.532**
67	**Vinod Singh** Sakshi Sharma	Carbon Nanotubes in Emerging Photovoltaics: Progress and Limitations	*IEEE Journal of Photovoltaics* vol. 12, no. 1, pp. 167 – 178,2022 **Impact Factor:4.401**
68	**Vinod Singh** Ashok Kumar Ramesh Kumar Priya Pradeep Kuma Umang Berwal Jasveer Singh Kailash Chandra Pawan K. Kulriya and Kedar Singh	Hydrogen induced structural modifications in size selected Pd-Carbon core-shell NPs: Effect of carbon shell thickness, size and pressure	*International Journal of Hydrogen Energy* vol. 47, no. 25, pp. 12642-12652,2022 **Impact Factor:7.139**
69	**Vineet Sharma** Mohan Singh Mehata	A parallel investigation of un-doped and manganese ion-doped zinc selenide quantum dots at cryogenic temperature and application as an optical temperature sensor	*Materials Chemistry and Physics* vol. 276, pp. 125349, 2022 **Impact factor: 4.778**

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70	**Vidhi** Ankita Anu, A.S. Rao	Spectroscopic characterizations of Dy^{3+} ions doped phosphate glasses for epoxy-free white LED applications.	*Optical Materials* vol. 132, pp. 112863, 2022 **Impact Factor:3.754**
71	**Vikas** M. Jayasimhadri Divi Haranath	Spectroscopic Investigations of Dy3+ doped Tungstate Tellurite Glasses for Solid-State Lighting Applications	*International Journal of Applied Glass Science* vol.13, no.4, pp. 645-654, 2022 **Impact Factor: 2.087**
72	**Yash Pathak** Bansi Dhar Malhotra Rishu Chaujar	Detection of biomolecules in dielectric modulated double metal below ferroelectric layer FET with improved sensitivity	*Journal of Materials Science: Materials in Electronics* vol.33, no.17, pp. 13558–13567, 2022 **Impact Factor:2.779**
73	**Yash Pathak** Bansi Dhar Malhotra Rishu Chaujar	Analog/RF Performance and Effect of Temperature on Ferroelectric Layer Improved FET device with Spacer	*Silicon* vol.14, pp.12269-12280, 2022 **Impact Factor:2.941**
74	**Yasha Tayal** Sumandeep Kaur A.S. Rao	Photoluminescence characteristics of Sm^{3+}/Eu^{3+} co-doped LPZABS glasses for solar cell Applications	*Solid State Sciences* vol.125, pp.106834,2022 **Impact Factor: 3.059**
DEPARTMENT OF BIOTECHNOLOGY			
1	**Asmita Das** Priyanka Rawat	Differential expression of disparate transcription factor regime holds the key for NK cell development and function modulation	*Life Sciences* vol.297, pp. 120471, 2022 **Impact Factor:6.78**
2	**Bansi D. Malhotra** Niharika Gupta Keshav Todi	Graphitic carbon nitride-based nanoplatforms for biosensors: design strategies and applications	*Materials Today Chemistry* vol.24, pp.100770, 2022 **Impact Factor:8.3**
3	**Debleena Guin** Saroj Yadav Priyanka Singh, Pooja Singh, Sarita Thakran Samiksha Kukal Neha Kanojia Priyanka Rani Paul Bijay Pattnaik Viren Sardana, Sandeep Grover Yasha Hasija Luciano Saso Anurag Agrawal Ritushree Kukreti	Human genetic factors associated with pneumonia risk, a cue for COVID-19 susceptibility	*Infection, Genetics and Evolution* vol.102, pp.105299,2022 **Impact Factor:4.393**

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4	**Jai Gopal Sharma** Neelesh Kumar Prabhat Mittal Rina Chakrabarti	Evaluation of UV–B protective properties of leaves and seeds of Achyranthes aspera in Asian catfish Clarias batrachus (Linn.)	*Photochemical & Photobiological Sciences* vol.21, no.8, pp.1341–1356 2022 **Impact Factor:4.328**
5	**Lakhan Kumar** Mohita Chugh Jai Gopal Sharma Navneeta Bharadvaja Saroj Kumar Krishna Kumar	Remediation of petrorefinery wastewater contaminants: A review on physicochemical and bioremediation strategies	*Process Safety and Environmental Protection* vol.159, pp. 362-375, 2022 **Impact Factor: 7.926**
6	**Mehar Sahu** Rahul Tripathi Rashmi K. Ambasta Pravir Kumar Niraj Kumar Jha Saurabh Kumar Jha	Cross talk mechanism of disturbed sleep patterns in neurological and psychological disorders	*Neuroscience and Biobehavioral Reviews* vol.140, pp.104767, 2022 **Impact Factor: 9.052**
7	**Navneeta Bharadvaja** Shaubhik Anand	Potential Benefits of Nutraceuticals for Oxidative Stress Management	*Revista Brasileira de Farmacognosia* vol.32, no.2, pp.211–220 2022 **Impact Factor:2.464**
8	**Navneeta Bharadvaja** Neha Nanda	Algal bioplastics: current market trends and technical aspects	*Clean Technologies and Environmental Policy* vol.24, no.9, pp.2659–2679 2022 **Impact Factor:4.7**
9	**Navneeta Bharadvaja** Ayushi Verma	Plant-Mediated Synthesis and Characterization of Silver and Copper Oxide Nanoparticles: Antibacterial and Heavy Metal Removal Activity	*Journal of Cluster Science* vol.33, no.4, pp.1697–1712,2022 **Impact Factor:3.447**
10	**Navneet Chaudhary** Damini Verma Jai Gopal Sharma Pratima R.Solanki	A novel bioinspired carbon quantum dots based optical sensor for ciprofloxacin detection	*Materials Letters* vol.308, pp.131090,2022 **Impact Factor:3.5**
11	**Neha Tiwari** Megha Bansal Deenan Santhiya Jai Gopal Sharma	Insights into microbial diversity on plastisphere by multi-omics	*Archives of Microbiology* vol.204, no.4, pp.216, 2022 **Impact Factor:2.667**
12	**Neha Tiwari** Deenan Santhiya Jai Gopal Sharma	Biodegradation of micro sized nylon 6, 6 using Brevibacillus brevis a soil isolate for cleaner ecosystem	*Journal of Cleaner Production* vol.378, p.134457. 2022 **Impact factor: 11.072**
13	**Pravir Kumar** Divya Yadav	Restoration and targeting of aberrant neurotransmitters in Parkinson's disease therapeutics	*Neurochemistry International* vol. 156, pp.105327,2022 **Impact Factor: 4.297**

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14	**Rahul Tripathi** Rohan Gupta Mehar Sahu Devesh Srivastava Ankita Das Rashmi K. Ambasta Pravir Kumar	Free radical biology in neurological manifestations: mechanisms to therapeutics interventions	*Environmental Science and Pollution Research* vol. 29, pp. 62160–62207, 2022 **Impact Factor :5.19**
15	**Rajkumar Chakraborty** Yasha Hasija Gourab Bhattacharje Joydeep Baral Bharat Manna Jayati Mullick Basavaraj S. Mathapati Priya Abraham Madhumathi J Amit Ghosh Amit Kumar Das	In-silico screening and in-vitro assay show the antiviral effect of Indomethacin against SARS-CoV-2	*Computers in Biology and Medicine* vol.47, pp. 105788, 2022 **Impact Factor:6.689**
16	**Raksha Anand** Lalit Mohan Navneeta Bharadvaja	Disease Prevention and Treatment Using β-Carotene: the Ultimate Provitamin A	*Revista Brasileira de Farmacognosia* vol.32, no.4, pp. 491–501, 2022 **Impact Factor: 2.464**
17	**Rohan Gupta** Mehar Sahu Rahul Tripathi Rashmi Kumar Ambasta Pravir Kumar	Protein S-sulfhydration: Unravelling the prospective of hydrogen sulfide in the brain, vasculature and neurological manifestation	*Ageing Research Reviews* vol. 76, pp.101579; 2022 **Impact Factor:11.788**
18	**Rohan Gupta** Rashmi K Ambasta Pravir Kumar	Multifaced role of protein deacetylase sirtuins in neurodegenerative disease	*Neuroscience & Biobehavioral Reviews* vol. 132; pp.976-997,2022. **Impact Factor:9.052**
19	**Smita Rastogi Verma** Vidushi Aggarwal, Sushant Sunder	Diseaseassociated dysbiosis and potential therapeutic role of Akkermansia muciniphila, a mucus degrading bacteria of gut microbiome	*Folia Microbiologica* vol. 67, pp.811–824, 2022 **Impact factor: 2.629**
20	**Smita Kumari** Sudhanshu Sharma Dia Advani Akanksha Khosla Pravir Kumar Rashmi K. Ambasta	Unboxing the molecular modalities of mutagens in cancer	*Environmental Science and Pollution Research* vol. 29, pp. 62111–62159, 2022 **Impact Factor:5.19**

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21	**Sudhanshu Sharma** Dia Advani Ankita Das Nishtha Malhotra Akanksha Khosla Vanshika Arora Ankita Jha Megha Yadav Rashmi Kumar Ambasta Pravir Kumar	Pharmacological intervention in oxidative stress as a therapeutic target in neurological disorders	*Journal of Pharmacy and Pharmacology* vol. 74, pp.461-484, 2022 **Impact factor:3.765**
22	**Vidushi Aggarwal** Shipra Solanki Bansi D. Malhotra	Applications of metal–organic framework-based bioelectrodes	*Chemical Science* vol.13, pp. 8727-8743, 2022 **Impact Factor:9.969**
23	**Yasha Hasija** Sidharth Bhasin Megh Nadar	Epicatechin analogues may hinder human parainfluenza virus infection by inhibition of hemagglutinin neuraminidase protein and prevention of cellular entry	*Journal of Molecular Modeling* vol.28, pp.319, 2022 **Impact Factor: 2.17**
24	**Yasha Hasija** Jaishree Meena	Application of explainable artificial intelligence in the identification of Squamous Cell Carcinoma biomarkers	*Computers in Biology and Medicine* vol.146, pp. 105505, 2022 **Impact Factor: 6.69**
25	**Yasha Hasija** Rajkumar Chakraborty	Predicting protein intrinsically disordered regions by applying natural language processing practices	*Soft Computing* vol.26, pp.12343–12353, 2022 **Impact Factor: 3.72**
DEPARTMENT OF CIVIL ENGINEERING			
1	**Deepak Singh** Munendra Kumar	Energy dissipation of flow over the type-B Piano Key Weir	*Flow Measurement and Instrumentation* vol.83, pp.102-109, 2022 Impact Factor: 2.65
2	**Geeta Devi** Munendra Kumar	Experimental study of the local scour around the two piers in the tandem arrangement using ultrasonic ranging transducers	*Ocean Engineering* vol. 266, pp. 1-20,2022 **Impact factor: 4.372**
3	**Geeta Devi** Munendra Kumar	Characteristics assessment of local scour encircling twin bridge piers positioned side by side (SbS)	*Sadhana* vol.47, no.3, pp. 109, 2022 **Impact factor: 1.214**
4	**Manvendra Verma** Nirendra Dev	Effect of Liquid to Binder Ratio and Curing Temperature on the Engineering Properties of the Geopolymer Concrete	*Silicon* vol.14, pp.1743–1757, 2022 **Impact Factor: 2.941**

S. No.	Authors	Paper Title	Journal with Publication details
5	**Manvendra Verma** Nirendra Dev	Effect of SNF -Based superplasticizer on physical, mechanical and thermal properties of geopolymer concrete	*Silicon* vol.14, pp.965–975, 2022 **Impact Factor: 2.941**
6	**Manvendra Verma**, Nirendra Dev	Effect of ground granulated blast furnace slag and fly ash ratio and the curing conditions on the mechanical properties of geopolymer concrete	*Structural Concrete* vol.23, no.4, pp.2015-2029,2022 **Impact factor:2.793**
7	**Meenakshi Singh** Ashutosh Trivedi Sanjay Kumar Shukla	Evaluation of geosystem reinforcement in unpaved road using moving wheel test	*Geotextile and Geomembrane* vol.50, no.4, pp. 581-589,2022 **Impact Factor: 5.839**
8	**Mohit Aggarwal** S Anbukumar T Vijaya Kumar	Heavy metals concentrations and risk assessment in the sediment of Ganga River between Kanpur and Prayagraj, U.P., India	*Sadhana* vol.47, no.4, pp.1-11,2022. **Impact Factor: 1.214**
9	**Munendra Kumar** Deepak Singh	Hydraulic Design and Analysis of Piano Key Weirs: A Review	*Arabian Journal of Science and Engineering* vol.47, pp. 5093–5107, 2022 **Impact Factor: 2.807**
10	**Nerusupalli Dinesh Kumar Reddy** Ashok Kumar Gupta Anil Kumar Sahu	A novel soil liquefaction prediction model with intellectual feature extraction and classification	*Advances in Engineering Software* vol.173, pp. 103233, 2022 **Impact Factor:4.255**
11	**Nitin Lamba** Ritu Raj Poonam Sing	Mechanical characteristics of high strength concrete incorporating recycled CFRP fibers	*Journal of Applied Polymer Science* vol. 139, no.47, e53183 2022 **Impact Factor: 3.057**
12	**Parvesh Kumar** Amit Kumar Shrivastava	Experimental and numerical analysis of deformation behaviour of tunnels under static loading conditions	*Sustainable Energy Technologies and Assessments* vol.52, pp.102057, 2022 **Impact Factor:7.632**
13	**Raju Sarkar** Badal Mohanty	An assessment of historical and future coastal dynamic response along the Odisha coast	*Environmental Earth Sciences* vol.81, no.13, pp. 353, 2022 **Impact Factor:3.119**
14	**Raju Sarkar** Swadesh Pal Tamal Kanti Saha	Exploring the forms of wetland modification and investigating the causes in lower atreyee river floodplain area	*Ecological Informatics* vol 67, pp.101494,2022 **Impact Factor:4.498**
15	**Raju sarkar** Dhruv Bhardwaj Sunil Saha Anik Saha Tushar Kanti Hembram	Prediction of spatial landslide suspectibilty applying the novel ensembles of CNN,GLM and random forest in the indian Himalayan region	*Stochastic Environment Research and Risk Assessment* vol.36, no.10, pp. 3597-3616,2022 **Impact Factor:3.821**

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16	**Rahul Kumar**, Nirendra Dev	Mechanical and Microstructural Properties of Rubberized Concrete After Surface Modification of Waste Tire Rubber Crumb	*Arabian Journal for Science and Engineering* vol.47, no.4, pp. 4571–4587, 2022 **Impact Factor: 2.807**
17	**Rahul Kumar Meena** Ritu Raj S. Anbukumar	Effect of wind load on irregular shape tall buildings having different corner configuration	*Sadhana* vol.47, no.3, pp.126,2022 **Impact Factor:1.21**
18	**Rahul Kumar** Nirendra Dev	Assessment of mechanical and impact resistance properties of rubberized concrete after surface modification of rubber crumb	*Iranian Journal of Science and Technology, Transaction of Civil Engineering* vol.46, pp.2855–2871, 2022 **Impact Factor: 1.461**
19	**Rahul Kumar** Nirendra Dev	Effect of acid and freeze thaw on durability of modified rubberized concrete with optimum rubber crumb content	*Journal of Applied Polymer Science* vol.139, no.21, pp.52191,2022 **Impact Factor: 3.057**
20	**Ritu Raj** Rahul Kumar Meena S. Anbukumar	Effect of wind load on irregular shape tall buildings having different corner configuration	*Sadhana* vol.47, no.3, pp.126, 2022 **Impact Factor:1.214**
21	**Shilpa Pal** Indrajeet Singh Nirendra Dev	Impedance based damage assessment of concrete under the combined effect of impact and temperature using different piezo configurations	*Sensors and Actuators: A. Physical* vol.345, pp. 113763,2022 **Impact Factor 4.291**
22	**Shambalid Ahady** Nirendra Dev Anubha Mandal	Sustainable energy retrofit plan for enhancing energy efficiency of residential apartments in arid climate: case of Afghanistan	*Sadhana* vol.47, no.3, pp.131, 2022. **Impact factor:1.214**
23	**Shambalid Ahady** Nirendra Dev Anubha mandal	Urban residential buildings energy consumption pattern and efficiency	*Iranian Journal of Science and Technology, Transaction of Civil Engineering* vol. 46 no.5, pp. 3963–3978, 2022 **Impact factor: 1.461**
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING			
1	**Aastha Maheshwari** Rajesh Kumar Yadav Prem Nath	Data Congestion Control Using Offloading in IoT Network	*Wireless Personal Communications* vol.125, no.3, pp. 2147–2166, 2022 **Impact Factor:2.017**
2	**Aditi Sharma** Kapil Sharma Akshi Kumar	MEmoR: A Multimodal Emotion Recognition using Affective Biomarkers for Smart Prediction of Emotional Health for People Analytics in Smart Industries	*Image and Vision Computing* vol.123, pp.104483, 2022 **Impact Factor: 3.860**.

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3	**Akshi Kumar** Nitin Sachdeva	A Bi-GRU with attention and CapsNet hybrid model for cyberbullying detection on social media.	*World Wide Web-Internet and Web Information Systems* vol.25, no.4, pp. 1537–1550, 2022 **Impact Factor: 3.000**
4	**Akshi Kumar** Nitin Sachdeva	Multimodal cyberbullying detection using capsule network with dynamic routing and deep convolutional neural network	*Multimedia Systems* vol.28, pp. 2043–2052,2022 **Impact Factor: 2.60**
5	**Anurag Goel** Angshul Majumdar	Sparse Subspace Clustering Friendly Deep Dictionary Learning for Hyperspectral Image Classification	*IEEE Geoscience and Remote Sensing Letters* vol. 19, pp.1-5, 2022 **Impact Factor:5.343**
6	**Anurag Goel** Angshul Majumdar	K-Means Embedded Deep Transform Learning for Hyperspectral Band Selection	*IEEE Geoscience and Remote Sensing Letters* vol.19, pp.1-5, 2022. **Impact Factor:5.343**
7	**Anil Singh Parihar** Disha Varshney Kshitija Pandya Ashray Aggarwal	A comprehensive survey on video frame interpolation techniques	*The Visual Computer* vol.38, pp. 295–319, 2022 **Impact Factor: 2.835**
8	**Anil Singh Parihar** Shashank Kumar Savya Khosla	S-DCNN: stacked deep convolutional neural networks for malware classification	*Multimedia Tools and Applications* vol.81, pp. 30997–31015, 2022 **Impact Factor: 2.577**
9	**Aruna Bhat** Raju Kumar	A study of machine learning-based models for detection, control, and mitigation of cyberbullying in online social media	*International Journal of Information Security* vol.21, pp. 1409–1431, 2022 **Impact Factor: 2.427**
10	**Aruna Bhat** Monika	Automatic Twitter Crime Prediction Using Hybrid Wavelet Convolutional Neural Network with World Cup Optimization	*International Journal of Pattern Recognition and Artificial Intelligence* vol.36, no.5 pp.2259005, 2022 **Impact Factor:1.261**
11	**Ashish Girdhar** Himani Kapur Vijay Kumar	Classification of white blood cell using convolution neural network	**Biomedical Signal Processing and Control** vol., pp 103156, 2022 **Impact Factor:5.076**
12	**Indu Singh** Rajni Jindal	Detecting malicious transactions in database using hybrid metaheuristic clustering and frequent sequential pattern mining	*Cluster Computing Journal* vol.25, pp. 3937-3959, 2022 **Impact Factor: 2.303**
13	**Irfan Alam** Manoj Kumar	A novel protocol for efficient authentication in cloud-based IOT devices	*Multimedia Tools and Applications* vol.81, pp.13823-13843, 2022 **Impact Factor: 2.577**

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14	**Manisha Saini** Seba Susan	Diabetic retinopathy screening using deep learning for multi-class imbalanced datasets	*Computers in Biology and Medicine* vol. 149, pp.105989, 2022 **Impact Factor:6.698**
15	**Manpreet Kaur**, Rajesh Kumar Yadav	EC Analysis of Multi-Antenna System over 5G and Beyond Networks and its Application to IRS-Assisted Wireless Systems	*Wireless Personal Communications* vol. 124, pp. 1861–1881, 2022 **Impact Factor: 2.017**
16	**Manpreet Kaur** Rajesh Kumar Yadav Sandeep Kumar Puspraj Rahul	Performance Analysis of CSS Over α–η–μ and α–κ–μ Fading Channel Using Clustering-Based Technique	*Wireless Personal Communications* vol.126, no.4, pp. 3595–3610, 2022 **Impact Factor: 2.017**
17	**Manpreet Kaur** Sandeep Kumar Poonam Yadav Rajesh Kumar	A survey on IRS NOMA integrated communication networks	*Telecommunication Systems* vol.80, no.2, pp.277–302, 2022 **Impact Factor: 2.33**
18	**Minni Jain** Aman Jaswani Ankita Mehra Laqshay Mudgal	EDGly: detection of influential nodes using game theory	*Multimedia Tools & Applications* vol.81, pp.1625–1647, 2022 **Impact Factor: 2.577**
19	**Minni Jain** Ashima Suvarna Amita Jain	An evolutionary game theory based approach for query expansion	*Multimedia Tools & Applications* vol.81, pp.1971–1995, 2022 **Impact Factor: 2.577**
20	**Minni Jain** Anubha Kabra Arushi Sharma	Ceasing hate with MoH: Hate Speech Detection in Hindi-English Code-Switched Language	*Information Processing & Management* vol. 59, no.1, pp. 102760, 2022 **Impact Factor: 7.466**
21	Pawan Singh Mehra	E-FUCA: enhancement in fuzzy unequal clustering and routing for sustainable wireless sensor network	*Complex & Intelligent Systems* vol.8, no.1, pp. 393–412, 2022 **Impact Factor: 6.7**
22	**Pawan Singh Mehra** Rajat Kumar Rathore Deepti Mishra Om Pal Ahmad Sobrihashim Azrulhizam Shapi'i T.Ciano Meshal Shutaywi	Real-world model for bitcoin price prediction	*Information Processing & Management* vol. 59, no. 4, pp.102968 2022 **Impact Factor: 7.46**
23	**Pratima Sharma** Rajni Jindal Malaya Dutta Borah	A Review of Blockchain-Based Applications and Challenges	*Wireless Personal Communications an International Journal* vol no. 123, pp. 1201-1243, 2022 **Impact Factor:2.01**

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24	**Pratima Sharma**, Rajni Jindal Malaya Dutta Borah	Blockchain-based cloud storage system with CP-ABE-based access control and revocation process	*Journal of Supercomputing* vol. no. 78, pp. 7700-7728, 2022 **Impact Factor:2.5**
25	**Pratima Sharma** Rajni Jindal Malaya Dutta Borah	A review of smart contract-based platforms, applications, and challenges	*Cluster Computing* vol.26, pp. 395–421, 2022 **Impact Factor:2.3**
26	**Prerna Sharma** Kapil Sharma	Fetal state health monitoring using novel Enhanced Binary Bat Algorithm	*Computers and Electrical Engineering* vol.101, pp.108035, 2022 **Impact Factor: 4.152**
27	**Puneet Kansal** Manoj Kumar Om Prakash Verma	Classification of resource management approaches in fog/ edge paradigm and future research prospects: a systematic review	*The Journal of Supercomputing* vol.78, no.11, pp.13145-13204, 2022 **Impact Factor:2.557**
28	**Rahul Katarya** Aakansha Gupta	Deep embedding for mental health content on social media using vector space model with feature clusters	*Concurrency and Computation: Practice and Experience* vol. 34, no.13, e6930, 2022 **Impact Factor: 1.831**
29	**Rahul Katarya** Polipireddy Srinivas	hyOPTXg: OPTUNA hyper-parameter optimization framework for predicting cardiovascular disease using XGBoost	*Biomedical Signal Processing and Control,* vol. 73, pp.103456, 2022 **Impact Factor: 5.076**
30	**Rahul Katarya** Rajat Saini	Enhancing the wine tasting experience using greedy clustering wine recommender system	*Multimedia Tools and Applications* vol.81, pp. 807–840, 2022 **Impact Factor: 2.577**
31	**Rajeev Kumar** Aridaman Singh Nandan Samayveer Singh Neeraj Kumar	An Optimized Genetic Algorithm for Cluster Head Election Based on Movable Sinks and Adjustable Sensing Ranges in IoT-Based HWSNs	*IEEE Internet of Things Journal* vol. 9, no. 7, pp.5027-5039, 2022 **Impact Factor: 9.471**
32	**Rajeev Kumar** Samayveer Singh, Aridaman Singh Nandan, Aruna Malik, Lalit K. Awasthi, Neeraj Kumar	A GA-Based Sustainable and Secure Green Data Communication Method Using IoT-Enabled WSN in Healthcare	*IEEE Internet of Things Journal* vol. 9, no. 10, pp.7481-7490, 2022 **Impact Factor: 9.471**
33	**Rajeev Kumar** Neeraj Kumar Ki-Hyun Jung	Enhanced interpolation-based AMBTC image compression using Weber's law	*Multimedia Tools Applications* vol.81, no.15, pp.20817-20828,2022 **Impact Factor: 2.577**

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34	**Rajesh K. Yadav** Rasmi Mishra	Cluster-Based Classical Routing Protocols and Authentication Algorithms in WSN: A Survey Based on Procedures and Methods	*Wireless Personal Communications* vol.123, pp. 2777-2833, 2022 **Impact Factor: 2.017**
35	**Rajni Jindal** Sanjay Patidar Neetesh Kumar	IoT Streamed Data Handling model using Delta Encoding	*International Journal of Communication System* vol.35, no.13, e5243,2022 **Impact Factor:1.882**
36	**Ravi Sharma** Kapil Sharma	An optimal nuclei segmentation method based on enhanced multi-objective GWO	*Complex & Intelligent Systems* vol.8, pp.569–582,2022 **Impact Factor:6.859**
37	**Sanjay Kumar** Ankit Panda	Identifying influential nodes in weighted complex networks using an improved Vote Rank approach	*Applied Intelligence* vol .52, pp. 1838–1852, 2022 **Impact Factor: 5.091**
38	**Sanjay Kumar** Aaryan Gupta Inder Khatri	CSR: A community based spreaders ranking algorithm for influence maximization in social networks	*World Wide Web- Internet and Web Information Systems* vol .25, pp. 2303–2322, 2022 **Impact Factor: 3.0**
39	**Sanjay Kumar** Abhishek Mallik B. S. Panda	Link prediction in complex networks using node centrality and light gradient boosting machine	*World Wide Web- Internet and Web Information Systems* vol.25, pp.2487–2513, 2022 **Impact Factor: 3.0**
40	**Satya Sai Naga Himabindu Gadde** Rajat Rao Divyashikha Sethia	A self-attention hybrid emoji prediction model for code mixed language: (Hinglish)	*Social Network Analysis and Mining* vol.12, no.1, pp.137, 2022 **Impact Factor:3.071**
41	**Utkarsh Agrawal,** Vasudha Rohatgi, Rahul Katarya	Normalized Mutual Information-based equilibrium optimizer with chaotic maps for wrapper-filter feature selection	*Expert Systems with Applications* vol.207, pp.118107,2022 **Impact Factor: 8.665**
DELHI SCHOOL OF MANAGEMENT			
1	**Asha Thomas** Vikas Gupta	Tacit knowledge in organizations: bibliometrics and a framework-based systematic review of antecedents, outcomes, theories, methods and future directions	*Journal of Knowledge Management* vol. 26, no. 4, pp. 1014-1041, 2022 **Impact Factor: 8.689**
2	**Pradeep Kumar Suri** Sushil	Effectiveness of strategy implementation and e-governance performance	*Evaluation and Program Planning* vol 92, pp. 102063,2022 **Impact Factor: 1.886**

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3	**Saurabh Agrawal** Abhishek Sahu Girish Kumar	A conceptual framework for the implementation of Industry 4.0 in legal informatics	*Sustainable Computing: Informatics and Systems* vol.33, pp. 100650, 2022 **Impact factor :4.**
4	**Vikas Gupta** Namita Jain Asha Thomas Mario Ossorio Daniele Porcheddu	Stimulating CSR learning collaboration by the mentor universities with digital tools and technologies – an empirical study during the COVID-19 pandemic	*Management Decision* vol. 60, no. 10, pp. 2824-2848, 2022 **Impact Factor: 5.534**
5	**Yashdeep Singh** Pradeep Kumar Suri	An empirical analysis of mobile learning app usage experience	*Technology in Society* vol.68, pp. 101929,2022 **Impact Factor: 6.879**
DEPARTMENT OF ELECTRICAL ENGINEERING			
1	**Aakash Kumar Seth** Mukhtiar Singh	Modified repetitive control design for two stage off board Electric Vehicle charger	*ISA Transactions (Elsevier),* vol. 128, pp. 343-356, 2022 **Impact Factor:5.911**
2	**Ajishek Raj** Data Ram Bhaskar Pragati Kumar Raj Senani	Extension of recently proposed two-CFOA-GC all pass filters to the realisation of first order universal active filters	*AEU-International Journal of Electronics and Communications* vol.146, pp.154119, 2022 **Impact Factor: 3.169**
3	**Ajishek Raj** Data Ram Bhaskar Pragati Kumar Raj Senani	New Very-Low-Frequency Third-Order Quadrature Sinusoidal Oscillators Using CFOAs	*Circuits, Systems, and Signal Processing* vol.41, no.8, pp. 4293–4323, 2022 **Impact Factor: 2.311**
4	**Alka Singh** Hemant Saxena Jitendra Nath Rai Manoj Badoni	PV integrated grid synchronization technique using modified SOGI-FLL and zero- crossing detector	*Electrical Engineering* vol.104, pp.1361–1372, 2022 **Impact Factor:1.671**
5	**Ankita Arora** Alka Singh	Design and analysis of Quadratic Bernstein Functional Blending Neural Network for shunt compensation and Phase Locked Loop	*Electrical Engineering* vol.104, no.5,pp.3631-3647,2022 **Impact Factor:1.63**
6	**Astitva Kumar** M Rizwan Uma Nangia	A New Approach to Design and Optimize Sizing of Hybrid Microgrids in Deregulated Electricity Environment	*CSEE Journal of Power and Energy Systems* vol. 8, no. 2, pp.569-579, 2020 **Impact Factor:6.014**
7	**Astitva Kumar** M Rizwan Uma Nangia	A hybrid optimization technique for proficient energy management in smart grid environment	*International Journal of Hydrogen Energy* vol.47, no.8, pp. 5564-5576,2022 **Impact Factor:7.139**

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8	**Avdhesh Kumar** Rachana Garg Priya Mahajan	Performance improvement of grid-integrated PV system using novel robust least mean logarithmic square control algorithm	*Electrical Engineering* *vol.*104, no.5, pp.3207–3224, 2022 **Impact Factor:1.63**
9	**Chaudhry Indra Kumar** Raghav Shekhar	Design of highly reliable radiation hardened 10T SRAM cell for low voltage applications	*Integration: The VLSI Journal* vol. 87, pp. 176-181, 2022 **Impact Factor:1.345**
10	**Data Ram Bhaskar** Ajishek Raj Raj Senani	Three new CFOA-based SIMO-type universal active filter configurations with unrivalled features	*AEU - International Journal of Electronics and Communications* vol.153, pp. 154285, 2022 **Impact Factor: 3.169**
11	**Data Ram Bhaskar** Garima Pragati Kumar	OTRA-based positive/negative grounded capacitance multiplier	*Analog Integrated Circuits and Signal Processing* vol.111, no.3, pp. 469–481, 2022 **Impact Factor:1.321**
12	**Data Ram Bhaskar** Garima Pragati Kumar	Single operational transresistance amplifier-based grounded resistance-controlled synthetic inductor configuration	*International Journal of Circuit Theory and Applications* vol.50, no. 7, pp. 2642-2652, 2022 **Impact Factor: 2.378**
13	**Monika Verma** Mini Sreejith Madhusudan Singh	Application of hybrid metaheuristic technique to study influence of core material and core trench on performance of Surface Inset PMSM	*Arabian Journal of Science and Engineering,* vol.47, pp. 3037-3053, 2022 **Impact Factor:2.334**
14	**Neha Khanduja** Bharat Bhushan	Hybrid State of Matter Search Algorithm and its Application to PID Controller Design for Position Control of Ball Balancer System	*Iranian Journal of Science and Technology, Transactions of Electrical Engineering* vol46, no.3, pp.785-804,202 **Impact Factor:1.376**
15	**Praveen Bansal** and Alka Singh	Nonlinear adaptive normalized Huber control algorithm for 5-level distribution static compensator	*Electrical Engineering,* vol.104, no.3, pp.1635-1648, 2022 **Impact Factor:1.63**
16	Rajesh Kumar	A Lyapunov-stability-based context-layered recurrent pi-sigma neural network for the identification of nonlinear systems	*Applied Soft Computing* vol,122, pp.108836, 2022 **Impact Factor: 8.26**
17	**Ravi Choudhary** J. N. Rai	Cascade FOPI-FOPTID controller with energy storage devices for AGC performance advancement of electric power systems	*Sustainable Energy Technologies and Assessments* vol 53, pp. 102671,2022 **Impact Factor:7.632**
18	**Rupam Singh** Bharat Bhushan	Adaptive control using stochastic approach for unknown but bounded disturbances and its application in balancing control	*Asian Journal of Control* vol. 24, no.3, pp.1304-1320, 2022 **Impact Factor:2.444**

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19	**Upma Singh** M. Rizwan	Enhancing wind power forecasting from meteorlogical parameters using machine learning models	*Journal of Renewable and Sustainable Energy* vol.14, no.6, pp.63302, 2022 **Impact Factor:2.417**
20	**Vinod Kumar Yadav** Ranjana Yadav Rupendra Kumar Pachauri Santosh Ghosh	A novel reconfiguration technique for improvement of PV reliability	*Renewable Energy* vol.182, pp.508-520, 2022 **Impact Factor: 8.634**
DEPARTMENT OF ELECTRONICS & COMMUNICATION			
1	**Akanksha Srivastava** Gurjit Kaur	Cooperation and Energy Harvesting based Spectrum Sensing Schemes for Green Cognitive Radio Networks	*Transactions on Emerging Telecommunications Technologies* vol.34, no.3, e4714, 2022 **Impact Factor: 3.31**
2	**Anurag Chauhan** Prateek Tomar	First-Principles Study of Enhanced Absorption in Van der Waals Heterostructure of MoS2/ Cd0.90Zn0.10Te0.93Se0.07 in the Visible Region	*Journal of Electronic Materials* vol.51, no.11, pp.6595–6602, 2022 **Impact Factor: 2.047**
3	**Arvind Ganesh**, Jaskeerat Singh Mayall Kshitij Goel Sonam Rewari	Subthreshold Analytical Model of Asymmetric Gate Stack Triple Metal Gate all Around MOSFET (AGSTMGAAFET) for Improved Analog Applications	*Silicon*, vol. 14, no. 8, pp.4063 -4073,2022 **Impact Factor: 2.941**
4	**Ashish Raturi** Poornima Mittal Sudhanshu Choudhary	Electronic and optical properties of lithium niobate (LiNbO 3) under tensile and compressive strain for optoelectronic applications: Insights from DFT-computations	*Materials Science in Semiconductor Processing* vol. 144, pp. 106606, 2022 **Impact Factor: 4.644**
5	**Ashish Raturi** Poornima Mittal Sudhanshu Choudhary	Tuning the electronic and optical properties of SrTiO3 for optoelectronic and photocatalytic applications by plasmonic-metal doping: a DFT-computation	*Optical and Quantum Electronics* vol.54, no.10,pp.634, 2022 **Impact Factor: 2.794**
6	**Bhawna Rawat** Poornima Mittal	A Reliable and Temperature Variation Tolerant 7T SRAM Cell with Single Bitline Configuration for Low Voltage Application	*Circuits, Systems and Signal Processing* vol. 41, pp. 2779-2801, 2022 **Impact Factor: 2.311**
7	**Chhavi Dhiman** Neha Sharma S. Indu	Pedestrian Intention Prediction for Autonomous Vehicles: A Comprehensive Survey	*Neurocomputing* vol.508, pp. 120-152, 2022 **Impact Factor: 5.719**

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8	**Chhavi Dhiman** Himanshu Makijia Dinesh Kumar Vishwakarma Kuldeep Singh, Gurjit Singh Walia	A Sparse Coded Composite Descriptor for Human Activity Recognition	*Expert Systems,* vol.39, no.1, e12805. 2022 **Impact Factor: 2.587**
9	**Damyanti Singh** Neeta Pandey Kirti Gupta	A Novel Low-Power Nonvolatile 8T1M SRAM Cell	*Arabian Journal for Science and Engineering* vol.47, No.3, pp. 3163-3179, 2022 **Impact factor:2.807**
10	**Damyanti Singh** Neeta Pandey Kirti Gupta	A novel read decoupled 8T1M nvSRAM cell for near threshold operation	*Microelectronics Journal* vol.126, pp..105496, 2022 **Impact Factor:1.992**
11	**Dheeraj Singh** Deva Nand Atul Kumar	A Novel CFDITA-Based Design of Grounded Capacitance Multiplier and Its Transpose Structure	*Circuits, System and Signal Processing* vol41, no.10, pp. 5319 - 5339, 2022 **Impact Factor:2.311**
12	**Dushyant Singh Chauhan** Gurjit Kaur Dinesh Kumar	Development of multi diagonal based OCDMA system for free space optical communication system	*Optical and Quantum Electronics* vol. 54, no.5, pp.325,2022 **Impact Factor :2.794**
13	**Dushyant Singh Chauhan** Gurjit Kaur Dinesh Kumar	Design of novel MIMO UOWC link using gamma–gamma fading channel for IoUTs	*Optical and Quantum Electronics* vol. 54, no.8, pp.512,2022 **Impact factor:2.794**
14	**Enock Osoro Omayio** S. Indu J. Panda	Historical manuscript dating: traditional and current trends	*Multimedia Tools and Applications* vol. 81, no.22, pp.31573–31602, 2022 **Impact Factor:2.577**
15	**Garima Singh** Gurjit Kaur	Development of a Mathematical Model for Multi-user Coded-Cooperation Based Cognitive Radio System and Its Outage Probability Analysis	*Wireless Personal Communication* vol.123, pp. 2413-2430, 2022 **Impact Factor:2.017**
16	**Garima Singh** Gurjit Kaur	Modeling and Simulation of Molecular Communication Based Nanonetwork Using Finite Shaped Spherical Receiver	*Wireless Personal Communication* vol.123, pp.3065–3079, 2022 **Impact Factor:2.017**
17	**Gaurav Saxena** Priyanka Jain Y. K. Awasthi	Four-element penta band MIMO antenna for multiple wireless application including dual-band circular polarization characteristics	*International Journal of Microwave and Wireless Technologies* vol. 14, no.4, pp. 465 – 476,2022 **Impact Factor: 1.064**

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18	**Garima Varshney** Neeta Pandey Rajeshwari Pandey	Design and implementation of OTA based fractional-order oscillator	*Analog Integrated Circuits and Signal Processing* vol.113, no.1,pp.93-103, 2022 **Impact Factor:1.321**
19	**Gurjit Kaur** Akanksha Srivastava Yaman Parasher Prabhjot Singh	Machine learning-based predictive modelling for failure management of optical spatial mode division multiplexing system	*International Journal of Communication Systems,* vol.35, no. 17, e5337, 2022 **Impact Factor: 1.88**
20	**Kamakshi Rautela** Dinesh Kumar Vijay Kumar	A Systematic Review on Breast Cancer Detection Using Deep Learning Techniques	*Archives of Computational Methods in Engineering,* vol.29, no.7, pp.4599-4629,2022 **Impact Factor: 8.171**
21	**Kamakshi Rautela** Dinesh Kumar Vijay Kumar	Dual-modality synthetic mammogram construction for breast lesion detection using U-DARTS	*Biocybernetics and Biomedical Engineering,* vol.42, no.3,pp.1041-1050,2022 **Impact Factor: 3.503**
22	**Kriti Suneja** Neeta Pandey Rajeshwari Pandey	Systematic Realization of CFOA Based Rössler Chaotic System and Its Applications	*Arabian Journal for Science and Engineering,* vol.47, pp.13799–13810,2022 **Impact Factor: 2.807**
23	**Manjeet Kumar** Shilpa Garg Richa Yadav	DCT Interpolation Based Design of Two-Dimensional FIR Fractional Order Digital Differentiator	*Multidimensional Systems and Signal Processing,* vol. 33, Pp.1367–1386, 2022 **Impact factor: 2.030**
24	**Manjeet Kumar** Pankaj Ashish Kumar Rama Komaragiri	Reference Signal Less Fourier Analysis Based Motion Artifact Removal Algorithm for Wearable Photoplethysmography Devices to Estimate Heart Rate during Physical Exercises	*Computers in Biology and Medicine* vol. 141, pp.105081,2022 **Impact factor: 6.698**
25	**Manjeet Kumar** Prashant Mani Tripathi Ashish Kumar Rama Komaragiri	A Review on Computational Methods for Denoising and Detecting ECG Signals to Detect Cardiovascular Diseases	*Archives of Computational Methods in Engineering* vol. 29, pp.1875–1914 2022 **Impact Factor:8.171**
26	**Munindra** Deva Nand	Nonlinearity Analysis of Quantum Capacitance and its Effect on Nano-Graphene Field Effect Transistor characteristics"	*Journal of Electronic Materials* vol. 51, no.8, pp.4616-4624, 2022 **Impact Factor:2.047**
27	**Neeta Pandey** Garima Varshney Shahram Minaei	CIM applications in fractional domain: Fractional-order universal filter & fractional-order oscillator	*AEU - International Journal of Electronics and Communications* vol.156, pp.154408, 2022 **Impact Factor:3.169**

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28	**Neeta Pandey** Ranjana Sivaram Kirti Gupta	On improving the performance of dynamic positive-feedback source-coupled logic (D-PFSCL) through inclusion of transmission gates	*Microprocessors and Microsystems* vol.90, pp. 104521, 2022 **Impact Factor:3.503**
29	**N. Jayanthi** Utkarsh Bajaj Dishant Shahi Rohan Soni Tarun Anand	Speech and gesture analysis: a new approach	*Multimedia tools and applications,* vol.81, no.15, pp.20763–20779, 2022 **Impact Factor: 2.577**
30	**Piyush Jain** N. Jayanthi M. Lakshmanan	Closed Form Expressions of AC and SER for Double GG Fading Distribution under EGC Scheme in FSO Communication System	*Wireless Personal Communications* vol.127, pp. 2935–2954,2022 **Impact Factor: 2.017**
31	**Poornima Mittal** Bhawna Rawat Nishant Kumar	Tetra-variate scrutiny of diverse multiplexer techniques for designing a barrel shifter for low power digital circuits	*Microprocessors and Microsystems* vol. 90, pp.104491, 2022. **Impact Factor: 3.503**
32	**Rajiv Kapoor** Rohini Goel Avinash Sharma	An intelligent railway surveillance framework based on recognition of object and railway track using deep learning	*Multimedia Tools and Applications* vol. 81, no.15,pp.21083–21109, 2022 **Impact Factor:2.577**
33	**Richa Sharma** N. S. Raghava Asok De	Design and Analysis of Circular Microstrip Patch Antenna for White Space TV Band Application	*Wireless Personal Communication* vol.126,no.4, pp.3333–3344 2022 **Impact Factor :2.017.**
34	**Sachin Taran** Himanshu Pant Hitesh Kumar Dhanda	Sleep apnea detection using electrocardiogram signal input to FAWT and optimize ensemble classifier	*Measurement* vol.189, pp. 110485, 2022 **Impact Factor:5.131**
35	**S Indu** Lava Bhargava Manjari Gupta	Deep neural network learning for power limited heterogeneous system with workload classification	*Computing* vol. 104, pp.95-122, 2022 **Impact Factor: 2.42**
36	**Snehlata Yadav** Sonam Rewari Rajeshwari Pandey	Junctionless Accumulation Mode Ferroelectric FET (JAM-FE-FET) for High Frequency Digital and Analog Applications	*Silicon* vol.14, pp. 7245–7255, 2022 **Impact Factor: 2.941**
37	**Sonam Rewari** Amit Das Binod Kumar Kanaujia R. S. Gupta	Recent Technological Advancement in Surrounding Gate MOSFET for Biosensing Applications - a Synoptic Study	*Silicon* vol. 14, no. 10, pp. 5133-5143, 2022 **Impact Factor:2.91**
38	**Sumit Kale** Madduri Sai Chandu	Dual Metal Gate Dielectric Engineered Dopant Segregated Schottky Barrier MOSFET With Reduction in Ambipolar Current	*Silicon* vol.14, no.3, pp.935–941, 2022 **Impact factor: 2.941**

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39	**Sumit Kale** N. K. Hema Latha Lokesh K. Bramhane	Design and Proposal of Double Pocket Schottky Barrier TFET with Dielectric Modulation for Biosensors Applications	*Silicon* vol.14, pp.10957–10966, 2022 **Impact factor: 2.941**
40	**Sumit Kale** Rahul Singh Shweta Kaim Rani MedhaShree Anil Kumar	Dielectric Engineered Schottky Barrier MOSFET for Biosensor Applications: Proposal and Investigation	*Silicon* vol.14, no. 8, pp. 4053–4062, 2022 **Impact factor: 2.941**
41	**Sudarshan Kumar** Asok De	Design and analysis of sinusoidally modulated substrate integrated waveguide and filter	*International Journal of RF and Microwave Computer-Aided Engineering* vol. 32, no.1, e22912, 2022 **Impact Factor 1.987**
42	**Yashna Sharma** Anuj Dhawan	Active near-field plasmonic switches based on Sierpiński-fractal nanoantennas on VO2 films	*Journal of Optics* vol.24, no.6, pp. 065001, 2022. **Impact Factor: 2.516**
DEPARTMENT OF ENVIRONMENTAL ENGINEERING			
1	**Abhinav Pandey** Rajeev Kumar Mishra Govind Pandey	An in situ exploratory analysis of diesel cars' emission: way forward on policy evaluation	*Environmental Science and Pollution Research* vol.29,no.56, pp.84434-84450,2022 **Impact Factor:5.190**
2	**A.K. Haritash** Harsh Pipil Shivani Yadav Harshit Chawla Sonam Taneja Manisha Verma Nimisha Singla	Comparison of TiO2 catalysis and Fenton's treatment for rapid degradation of Remazol Red Dye in textile industry effluent	*Rendiconti Lincei. Scienze Fisiche e Naturali* vol.33, no.1,pp.105–114, 2022 **Impact Factor:2.03**
3	**Chitrakshi** Anil Kumar Haritash	Appraisal of hydrochemistry and suitability assessment for water in an agriculture dominated aquatic ecosystem of Rajasthan, India	*Rendiconti Lincei. Scienze Fisiche e Naturali* vol.33, pp.851-866, 2022. **Impact Factor:2.03**
4	**Harsh Pipil** A. K. Haritash Krishna R. Reddy	Spatio-temporal variations of quality of rainwater and stormwater and treatment of stormwater runoff using sand–gravel filters: case study of Delhi, India	*Rendiconti Lincei. Scienze Fisiche e Naturali* vol. 33, pp.135–142,2022 **Impact Factor: 1.810**
5	**Kulvendra Patel** S. K. Singh	A life cycle approach to environmental assessment of wastewater and sludge treatment processes	*Water and Environment Journal* vol. 36, no. 3, pp.412-424, 2022 **Impact Factor: 1.977**

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6	**Rachna Garg** S. K. Singh	Treatment technologies for sustainable management of wastewater from iron and steel industry-a review	*Environmental Science and Pollution Research* vol. 29, no. 50, pp. 75203–75222,2022 **Impact factor: 5.190**
7	**Rajeev Kumar Mishra** Amit Krishan Anwar Khursheed	Evaluation of water quality using water quality index, synthetic pollution index, and GIS technique: A case study of the river Gomti, Lucknow, India	*Environmental Science and Pollution Research* vol.29, no.54, pp. 81954-81969, 2022 **Impact Factor:5.190**
8	**Rajeev Kumar Mishra** Shailendra Kumar Yadav BR Gurjar	Ultrafine Particle Number Concentration and its size distribution during Diwali festival in megacity Delhi, India: Are 'Green Crackers' Safe?	*Journal of Environmental Management* vol.317, pp.115459, 2022. **Impact Factor: 8.91**
9	**Riki Sarma** S. K. Singh	A Comparative Study of Data-driven Models for Groundwater Level Forecasting	*Water Resources Management* vol. 36, no. 8, pp. 2741-2756, 2022 **Impact Factor: 4.426**
10	**Saurav Kumar Ambastha** Anil Kumar Haritash	Emission of respirable dust from stone quarrying, potential health effects, and its management	*Environmental Science and Pollution Research* vol.29, pp.6670–6677 2022 **Impact Factor: 5.190.**
11	**Shailendra Kumar Yadav** Rajeev Kumar Mishra Bhola Ram Gurjar	Assessment of the effect of the judicial prohibition on firecracker celebration at the Diwali festival on air quality in Delhi, India	*Environmental Science and Pollution Research* vol.29, pp.86247–86259 2022 **Impact Factor: 5.190**
12	**S. K. Singh** Ali Reza Noori	Groundwater quality assessment and modelling utilizing water quality index and GIS in Kabul Basin, Afghanistan	*Environmental Monitoring and Assessment* vol. 194, no.10, pp. 673, 2022 **Impact Factor: 3**
DEPARTMENT OF HUMANITIES			
1	**Khyati Kathuria** Nand Kumar	Pandemic-induced fear and government policy response as a measure of uncertainty in the foreign exchange market: Evidence from (a) symmetric wild bootstrap likelihood ratio test	*Pacific Economic Review* vol.27, no.4, pp. 361-379, 2022. **Impact Factor: 1.467**
2	**Nand Kumar** Khyati Kathuria	Are Exports and Imports of India's trading partners cointegrated? Evidence from Fourier bootstrap ARDL procedure	*Empirical Economics* vol.62, no.3,pp.1177-1191, 2022 **Impact Factor: 2.647**

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DEPARTMENT OF INFORMATION TECHNOLOGY			
1	**Akshay Mool** Jeebananda Panda Kapil Sharma	Optimizable Face Detection and Tracking model with Occlusion resolution for high quality videos	*Multimedia Tools and Applications* vol.81, no.8, pp.10391–10406 2022 **Impact Factor: 2.577**
2	Bindu Verma	A two-stream convolutional neural network with bi-directional GRU model to classify dynamic hand gesture	*Journal of Visual Communication and Image Representation* vol.87, pp. 103554, 2022. **Impact Factor: 2.8**
3	**Deepak Dagar** Dinesh Kumar Vishwakarma	A literature review and perspectives in deepfakes: generation, detection, and applications	*International Journal of Multimedia Information Retrieval* vol.11, no.3, pp.219–289, 2022 **Impact Factor: 2.553**
4	**Deepika Varshney** Dinesh Kumar Vishwakarma	A unified approach of detecting misleading images via tracing its instances on web and analyzing its past context for the verification of multimedia content	*International Journal of Multimedia Information Retrieval* vol.11,no.3,pp. 445-459, 2022 **Impact Factor: 2.55**
5	**Dinesh Kumar Vishwakarma** Mohammad Sabih	A Novel Framework for detection of motion and appearance-based Anomaly using Ensemble Learning and LSTMs	*Expert Systems with Applications* vol.192, pp.116394, 2022 **Impact Factor: 8.665**
6	**Dinesh Kumar Vishwakarma** Mohammad Sabih	Crowd anomaly detection with LSTMs using optical features and domain knowledge for improved inferring	*Visual Computer* vol.38, no.5,pp. 1719–1730, 2022 **Impact Factor: 2.84**
7	**Dinesh Kumar Vishwakarma** Konark Jain	Three-dimensional human activity recognition by forming a movement polygon using posture skeletal data from depth sensor	*ETRI Journal* vol.44, no.2, pp. 286–299, 2022 **Impact Factor: 1.62**
8	**Parminder Pal Singh Bedi** Kapil Sharma Manju Bala	Extractive Summarization using Concept space and keyword phrase	Expert Systems vol.39, no.10, e13110,2022 **Impact Factor: 2.812**
9	**Priyanka Meel** Chahat Raj	ARCNN framework for multimodal infodemic detection	*Neural Networks* vol. 146, pp.36-68, 2022 **Impact Factor: 9.657**
10	**Priyanka Meel** Chahat Raj	People lie, actions Don't! Modeling infodemic proliferation predictors among social media users	*Technology in Society* vol. 68, pp. 101930, 2022 **Impact Factor: 6.879.**
11	**Ritu Agarwal** Om Prakash Verma	Robust copy-move forgery detection using modified Super Pixel based FCM Clustering with Emperor Penguin optimization and block feature matching	*Evolving Systems* vol.13,no.1,pp.27-41, 2022 **Impact Factor: 2.347**

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12	**Srishti Vashishtha** Seba Susan	Neuro-fuzzy network incorporating multiple lexicons for social sentiment analysis	*Soft Computing* vol.26, no.9,pp. 4487–4507, 2022 **Impact Factor: 3.732**
13.	**Swati Sharda** Kapil Sharma Mukhtiar Singh	A complete consumer behaviour learning model for real-time demand response implementation in smart grid	*Applied Intelligence* vol. 52, no. 1, pp.835-845, 2021 **Impact Factor: 5.086**
14	**Virender Ranga** Aditi Zear Kriti Bhushan	Partition detection and recovery by UAVs in damaged WSANs using N-angle clustering	*International Journal of Communication Systems* vol.35, no.11, e5190, 2022 **Impact Factor: 2.047**
DEPARTMENT OF MECHANICAL ENGINEERING			
1	**Abhishek Sahu** Saurabh Agrawal Girish Kumar	Integrating Industry 4.0 and circular economy: a review	*Journal of Enterprise Information Management* vol.35, no.3, pp. 885-917, 2022 **Impact Factor: 5.661**
2	**Anil Kumar** Geetam Richhariya Bhim Charan Meikap	Review on fabrication methodologies and its impacts on performance of dye-sensitized solar cells	*Environmental Science and Pollution Research* vol.29,no.11, pp.15233–15251, 2022 **Impact Factor: 5.19**
3	**Anil Kumar** Mukul Sharma Deepali Atheaya	Exergy, drying kinetics, and performance assessment of Solanum lycopersicum (tomatoes) drying in an indirect type domestic hybrid solar dryer (ITDHSD) system	*Journal of Food Processing and Preservation* vol. 46, no. 11, e16988,2022 **Impact Factor: 2.609**
4	**Anil Kumar** Om Prakash Samsher Kumaresh Dey Ankesh Aman	Exergy and Energy Analysis of Sensible Heat Storage based Double Pass Hybrid Solar Air Heater	*Sustainable Energy Technologies and Assessments* vol. 49, pp.101714, 2022 **Impact Factor: 7.632**
5	**Anand Kushwah** Anil Kumar Amit Pal Manoj Kumar Gaur	Performance Analysis of Heat Exchanger- Evacuated Tube Assisted Drying System (HE-ETADS) Under Unload Condition	*Sustainable Energy Technologies and Assessments* vol.53, pp. 102589, 2022 **Impact Factor: 7.632**
6	**Anand Kushwah** Anil Kumar Manoj Kumar Gaur	Drying kinetics, performance, and quality assessment for banana slices using heat pump–assisted drying system (HPADS)	*Journal of Food Process Engineering* vol. 45, no.3, e13964, 2022 **Impact Factor: 2.889**
7	**Ashok Kumar Singh** Samsher	Optimum Techno-Eco Performance Requisites for Vacuum Annulus Tube Collector Assisted Double Slope Solar Desaltification Unit Integrated Modified Parabolic Concentrator	*Environmental Science and Pollution Research* vol. 29,no.23, pp.34379–34405, 2022 **Impact Factor: 5.190**

S. No.	Authors	Paper Title	Journal with Publication details
8	**Ashok Kumar Singh** Samsher	Techno-Environ-Economic-Energy-Exergy-Matrices Performance Analysis of Evacuated Annulus Tube with Modified Parabolic Concentrator Assisted Single Slope Solar Desalination System	*Journal of Cleaner Production* vol. 332, pp.129996, 2022 **Impact Factor: 11.072**
9	**Ashish Kumar** R. C Singh Rajiv Chaudhary	Investigation of Nano-Al2O3 and Micro-coconut Shell Ash (CSA) Reinforced AA7075 Hybrid Metal–Matrix Composite Using Two-Stage Stir Casting	*Arabian Journal for Science and Engineering* vol. 47, no. 12, pp. 15559-15573, 2022 **Impact Factor:2.807**
10	**Bharat Sanga** Reeta Wattal D. S. Nagesh	Weld joint characterization in ultrasonic welding of phosphor bronze sheets	*Engineering Science and Technology, an International Journal* vol. 30, pp.101040, 2022 **Impact Factor:5.155**
11	**Deepak Kumar** Pushpendra Singh Qasim Murtaza R S Walia	Comparative investigation on thermally sprayed Al2O3, Al2O3–13%(TiO2) and Al2O3–40%(TiO2) composite coatings from room to 400 °C temperature	*Surface Topography: Metrology and Properties* vol.10, no. 1, pp.015043,2022 **Impact Factor:2.185**
12	**Faizan Khalid** Rajesh Kumar	Development and assessment of a new solar-based trigeneration system using hydrogen for vehicular application in a self-sustained community	*International Journal of Hydrogen Energy* vol.47, no. 62, pp26082-26090, 2022 **Impact Factor:7.13**
13	**Girish Kumar**, Krishna Choudhary Rishi Sahai Ajith Tom James Weon Keun Song	Investigation and analysis of implementation challenges for autonomous vehicles in developing countries using hybrid structural modelling	*Technological Forecasting and Social Change* vol.185, pp.122080, 2022 **Impact Factor: 10.884**
14	**Girish Kumar** Pushpal Tayal Ashwin Chauhan Chirag Wadhawa Ajith Tom James Jasmin Panchal	Analysis of human resource management challenges in implementation of industry 4.0 in Indian automobile industry	*Technological Forecasting and Social Change* vol.176, pp.121483, 2022 **Impact Factor: 10.884**
15	**Girish Kumar** Aman Pundhir Saurabh Tiwari Rubal Sharma Ajith Tom James Jasmin James	Identification and evaluation of barriers in implementation of electric mobility in India	*Research in Transportation Business & Management* vol.43, pp.100757, 2022 **Impact Factor: 4.286**

S. No.	Authors	Paper Title	Journal with Publication details
16	**Hussam Sadique** Qasim Murtaza Samsher	Heat transfer augmentation in microchannel heat sink using secondary flows: A review	*International Journal of Heat and Mass Transfer* vol.194, pp.123063,2022 **Impact Factor:5.431**
17	**Husain Mehdi** R. S. Mishra Neeraj Kant Abdul Wahab Hashmi, Prabhujit Mohapatra Ravi Kumar	Mechanical Properties and Microstructure Evolution Of AA6082/Sic Nanocomposite Processed by Multi-Pass FSP	*Transactions of the Indian Institute of Metals* vol.75, no.8, pp. 2077–2090, 2022 **Impact Factor:1.391**
18	**Khushbu Yadav** Naveen Kumar Rajiv Chaudhary	Effect of synthetic and aromatic amine antioxidants on oxidation stability, performance, and emission analysis of waste cooking oil biodiesel	*Environmental Science and Pollution Research* vol.29, pp.27939-27953, 2022 **Impact Factor- 5.19**
19	**Kirat Singh** Naveen Kumar	Study of combustion, performance and emissions characteristics of oxygenated constituents and methanol fumigation in the inlet manifold of a diesel engine	*Sustainable Energy Technologies and Assessments* vol. 49, pp. 101748,2022 **Impact Factor- 7.632**
20	**Mohmad Iqbal** A. K. Madan	CNC Machine-Bearing Fault Detection Based on Convolutional Neural Network Using Vibration and Acoustic Signal	*Journal of Vibration Engineering & Technologies* vol.10, no. 5, pp.1613-1621, 2022 **Impact Factor:2.33**
21	**Naman Goyal** Akshansh Aggarwal Anil Kumar	Financial feasibility of concentrated solar power with and without sensible heat storage in hot and dry Indian climate	*Journal of Energy Storage* vol. 52, pp. 105002, 2022 **Impact Factor: 8.907**
22	**Naman Goyal** Akshansh Aggarwal Anil Kumar	Concentrated Solar Power Plants: A Critical Review of Regional Dynamics and Operational Parameters	*Energy Research & Social Science* vol. 83, 102331, 2022 **Impact Factor 8.514**
23	**Narendra Kumar** Girish Kumar Rajesh Kumar Singh	Analysis of barriers intensity for investment in big data analytics for sustainable manufacturing operations in post-COVID-19 pandemic era	*Journal of Enterprise Information Management* vol. 35,no. 1, pp. 179-213, 2022 **Impact Factor: 5.661**
24	**Niranjan Sahoo** Anil Kumar Samsher	Review on energy conservation and emission reduction approaches for cement industry	*Environmental Development* vol. 44, pp.100767, 2022 **Impact Factor :4.69**
25	**N. Yuvaraj** Jayanta Ghosh Roy Vipin	Enhancement of Microstructural and Mechanical Properties of Ultrasonic Vibration-Assisted Cold Metal Transfer Welding of 304 Stainless Steel	*Journal of Materials Engineering and Performance* vol. 10, no.10, pp. 8497-8511, 2022 **Impact Factor:2.036**

S. No.	Authors	Paper Title	Journal with Publication details
26	**Piu Jain** Suresh Garg Gayatri Kansal	Implementation of mass customization for competitive advantage in Indian industries: an empirical investigation	*The International Journal of Advanced Manufacturing Technology* vol.121, pp.737–752, 2022 **Impact factor 3.56**
27	**Pravin Kumar** Rajesh Kumar Singh	Application of Industry 4.0 technologies for effective coordination in humanitarian supply chains: a strategic approach	*Annals of Operations Research* vol.319,pp. 379-411, 2022 **Impact Factor: 4.82**
28	**Pravin Kumar** Rajesh Kumar Singh	Strategic framework for developing resilience in Agri-Food Supply Chains during COVID 19 pandemic	*International Journal of Logistics Research and Applications* vol.25, no.11, pp.1401-1424, 2022 **Impact Factor: 5.992**
29	**Preety Rani** R.S. Mishra	Influence of Nano-Sized Al2O3 Nanoparticles and Multipass FSW on Microstructure and Mechanical Characteristics of Dissimilar Welded Joints of AA6061 and AA5083	*Transactions of the Indian Institute of Metals* vol.75,pp. 2817–2827, 2022 **Impact Factor: 1.391**
30	**Preety Rani** R.S. Mishra	Influence of Reinforcement with Multi-Pass FSW on the Mechanical and Microstructural Behavior of Dissimilar Weld Joint of AA5083 and AA6061	*Silicon* vol. 14,pp.11219–11233, 2022. **Impact Factor: 2.941**
31	**Prem Shanker Yadav** Raghvendra Gautam	Numerical and experimental analysis on spray characteristics of biodiesel (waste cooking oil) using pressure swirl atomizer	*Environmental Progress & Sustainable Energy* vol.41,no.3, e13761.2022 **Impact Factor: 2.824**
32	**Qasim Murtaza** Arsalan Syed Mohammed Anuj Aditya Shyam Lodhi	Techno-economic feasibility of hydrogen based electric vehicle charging station: A case study	*International Journal of Energy Research* vol.46, no.10, pp.4145-14160, 2022 **Impact Factor: 4.672**
33	**Raghvendra Gautam** Bhupendra Singh Chauhan Hee Chang Lim	Influence of variation of injection angle on the combustion, performance and emissions characteristics of Jatropha Ethyl Ester	*Energy* vol.254, pp.124436., 2022 **Impact Factor: 8.857**
34	**Rajesh Kumar** Kaushalendra Kumar Singh	Energy, Exergy, Environmental and Economic Analyses of Natural Refrigerants for Cascade Refrigeration	*Arabian Journal for Science and Engineering* vol.47,pp. 15797–15821, 2022 **Impact Factor: 2.807**

S. No.	Authors	Paper Title	Journal with Publication details
35	**Rashi Koul** Naveen Kumar R. C. Singh	Comparative analysis of ternary blends of renewable Diesel, diesel and ethanol with diesel	*Sustainable Energy Technologies and Assessments* vol.50,pp. 101828,2022 **Impact Factor:7.632**
36	**Rashi Koul** Naveen Kumar R. C. Singh	Comparative analysis of renewable diesel and biodiesel produced from Jatropha oil	*Environmental Progress and Sustainable Energy* vol.41,no.5, e13832,2022 **Impact Factor:2.824**
37	**Ravi Butola** Chandra Pratap Anurag Shukla Prakash Chandra	Fabrication and Characterization of AA6063/B4C Metal Matrix Surface Nanocomposite Using Friction Stir Processing	*ECS Journal of Solid State Science and Technology* vol.11, no.3, pp. 033010, 2022 **Impact Factor: 2.483**
38	**Ravi Butola** Priyansh Singh	Review—Parametric Study and Various Strategies of Aluminium Metal Matrix Composites Fabricated by Friction Stir Processing	*ECS Journal of Solid State Science and Technology* vol.11, no.9, pp. 093001, 2022 **Impact Factor: 2.483**
39	**Ravindra Kumar** Anil Kumar Amit Pal	Overview of hydrogen production from biogas reforming: Technological advancement	*International Journal of Hydrogen Energy* vol.47, no.82,pp.34715-35122, 2022 **Impact Factor :7.139**
40	**Ravi Kant** Anil Kumar	Review on essential oil extraction from aromatic and medicinal plants: Techniques, Performance and economic analysis	*Sustainable Chemistry and Pharmacy* vol.30, pp.100829, 2022 **Impact Factor: 5.464**
41	**Sachin Rana** Mohammad Zunaid Rajesh Kumar	Enhancement of thermal energy storage in a phase change material heat exchanger having elliptical and circular tubes with & without fins	*Journal of Energy Storage* vol.56, pp.105856, 2022 **Impact Factor: 8.907**
42	**Sanjay Kumar** Anoop Kumar Pandouria Vikrant Tiwari	Experimental study of dynamic fracture behaviour of Al7075-T651 under different loading rates.	*Materials Today Communications* vol. 33, pp.104529, 2022 **Impact Factor:3.662**
43	**Sanjeev Kumar** Amit Pal	Multi - objective - parametric optimization of diesel engine powered with fuel additive 2-ethylhexyl nitrate-algal biodiesel	*Sustainable Energy Technologies and Assessments* vol. 53, pp.102518, 2022 **Impact Factor: 7.632**
44	**Shrikant Vidya** Reeta Wattal P. Venkateswara Rao	Experimental Investigation on Machinability and Geometric Tolerance in Die-Sinking EDM of Microholes and Channels	*MAPAN, Journal of Metrology Society of India* vol.37,no.2,pp. 399-407, 2022 **Impact Factor: 1.446**

S. No.	Authors	Paper Title	Journal with Publication details
45	**Sumit Jain** R.S. Mishra	Microstructural and mechanical behavior of micro-sized SiC particles reinforced friction stir processed/ welded AA7075 and AA6061	*Silicon* vol.14, pp.10741–10753, 2022 **Impact Factor:2.941**
46	**Uma Gautam** Vipin	Effect of Process Parameter on Tensile Strength and Hardness of SS304 Processed by Microwave Radiation	*Transactions of The Indian Institute of Metals* vol.75,no.3,pp. 653–662, 2022 **Impact Factor: 1.4**
DEPARTMENT OF SOFTWARE ENGINEERING			
1	**Ruchika Malhotra** and Shweta Meena	Defect prediction model using transfer learning	*Soft Computing* vol.26,no.10,pp. 4713–4726, 2022 **Impact Factor: 3.732**
UNIVERSITY SCHOOL OF MANAGEMENT & ENTREPRENEURSHIP			
1	**Aashima** Rajesh Sharma Mehak Nanda Chinmay Jani	The burden of chronic kidney disease in Asia, 1990–2019: Examination of estimates from global burden of disease 2019 study	*Nephrology* vol.*27,*no.7,pp. 610-620, 2022 **Impact Factor: 2.358**
2	**Deepti Aggrawal** Yogesh K. Dwivedi Adarsh Anand Gunjan Bansal Gareth H. Davies Parisa Maroufkhani	Modelling product lines diffusion: a framework incorporating competitive brands for sustainable innovations	*Operations Management Research* vol.15, pp. 760–772, 2022 **Impact Factor: 7.032**
3	**Mehak Nanda** Rajesh Sharma Aashima Sumaira Mubarik Kai Zhang	Type-2 Diabetes Mellitus (T2DM): Spatial-temporal Patterns of Incidence, Mortality and Attributable Risk Factors from 1990 to 2019 among 21 World Regions	*Endocrine* vol.77, no.3, pp.444–454, 2022 **Impact Factor: 3.925**
4	Rajesh Sharma	Mapping of global, regional and national incidence, mortality and mortality-to-incidence ratio of lung cancer in 2020 and 2050	*International Journal of Clinical Oncology* vol.27,no.4, pp. 665-75, 2022 **Impact Factor: 3.85**
5	Rajesh Sharma	A comparative examination of colorectal cancer burden in European Union, 1990–2019: Estimates from Global Burden of Disease 2019 Study	*International Journal of Clinical Oncology* vol.27, no.8, pp.1309–1320, 2022 **Impact Factor: 3.85**
6	**Rajesh Sharma** Chinmay Jani	Mapping incidence and mortality of leukemia and its subtypes in 21 world regions in last three decades and projections to 2030	*Annals of Hematology* vol.101, no.7, pp.1523-1534, 2022 **Impact Factor: 4.030**

Department of Applied Chemistry

Biography

ATUL VARSHNEY

Department of Applied Chemistry

Mr. Atul Varshney, a research scholar currently pursuing Ph. D degree in the area of Porphyrin Chemistry in the Department of Applied Chemistry, Delhi Technological University, Delhi, India. He has done his graduation and post-graduation in inorganic chemistry as specialization from D. S. College, Aligarh. He joined DTU in the year 2016 as a JRF under the supervision of Prof. Anil Kumar. So far, he has published seven research papers in reputed international journals and has attended several national and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Atul Varshney** and Anil Kumar; A2B corroles: fluorescent signalling system for Hg2+ ion, *J. Chem*. Sci. (2022) 134:124

Biography

DEENAN SANTHIYA

Department of Applied Chemistry

Deenan Santhiya is an Assistant professor at the Discipline of Applied Science, Department of Applied Chemistry, Delhi Technological University (formerly Delhi College of Engineering), Delhi, India. She received her Master's and Doctorate degree from the Materials Engineering Department, Indian Institute of Science, Bangalore. She has received Prof. R.M. Mallya Processing Award for the best Ph.D thesis of the year 2002. She has successfully completed a DST project entitled "Topical delivery of therapeutic loaded bioglass assembly for bone regeneration" (2019-2022). Also Mentor for the DST WOS B Kiran Division project entitled "Fabrication of collagen-bioactive glass corona through oral delivery for bone regeneration." She has published independent reputed research articles affiliated with Delhi Technological University. Her research interests are in the field of Nano Biotechnology, Gene delivery applications and microbial remediation of nano/micro plastics.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	06

1. Neha Tiwari, **Deenan Santhiya** and Jai Gopal Sharma Biodegradation of micro sized nylon 6, 6 using Brevibacillus brevis a soil isolate for cleaner ecosystem, *Journal of Cleaner Production* 378 2022, 134457 (Impact Factor 11.072)
2. Himansh Goel, and **Deenan Santhiya** Role of Trigonella foenumgraecum leaf extract in tailoring the synthesis and properties of bioactive glass nanoparticles, *Sustainable Materials and Technologies* 33 2022, e0043 (Impact Factor 10.681)
3. Manjot Kaur and **Deenan Santhiya** Fabrication of soy film with in-situ mineralized bioactive glass as a functional food for bone health, *Food Bioscience* 47 2022, 101767 (Impact Factor 5.318)
4. Neha Tiwari, Megha Bansal and **Deenan Santhiya**, and Jai Gopal Sharma Insights into microbial diversity on plastisphere by multi-omics, *Archives of Microbiology* 204(4) 2022,:216 (Impact Factor 2.667)
5. Namit Dey, **Deenan Santhiya** and Asmita Das Bio-Inspired Synthesis of Hollow Mesoporous Bioactive Glass Nanoparticles Using Calcium Carbonate as Solid Template,*ChemistrySelect* 7(12) 2022 e202200392 (Impact Factor 2.307)
6. Himansh Goel and **Deenan Santhiya** Effect of pH on bio-inspired synthesis of L-Lysine templated bioactive glass hybrid xerogels for tailored textural and rheological properties, *Materials Chemistry and Physics* 281 2022, 125828 (Impact Factor 4.778)

Biography

D. KUMAR

Department of Applied Chemistry

Dr. D. Kumar is working as a professor in the department of Applied Chemistry, Delhi Technological University, Delhi. He has worked as Head of Department of Biotechnology, Department of Applied Chemistry At Delhi technological University,Delhi. He has received Several fellowships and awards including the UGC Research Award. Prof. D. Kumar has visited countries namely United kingdom, Belgium, Malaysia, and Japan for Research & Development activities. He has been awarded national / international projects including the international project, viz, India -Japan Collaborative research Project twice under DST-JSPS bilateral programme. He has Guided 13 Ph.D., 83 M.E/MTech projects and published over 100 papers in the journal of international repute including Biomaterials,Sensor and Actuators, synthetic Metals, Canadian Journal of Chemistry, European Polymer Journal, Journal of Applied Polymer Science, International Journal of Adhesion & Adhesives and Material Science & Engineering C etc. in the areas of conducting polymers, sensors, conductive adhesive, smart hydrogels, helical materials and organic solar cells, toughening of thermosetting polymers, self-healing and blast mitigating polymer coatings. Kumar is a life member of Indian science congress Associations, India and former member of societies like American chemical society, USA and Royal society of Chemistry, London etc.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: GOLD
Highly Cited Paper Award:Kumar, D., Sharma, R.C., Advances in conductive polymers, European Polymer Journal, 1998, 34(8), 1053–1060
Early Research Impact & Influence Award

Biography

DEEPTI CHAUHAN

Department of Applied Chemistry

Dr Deepti Chauhan is currently working in Uttar Pradesh Higher Education Department as Assistant Professor on permanent basis. She has completed her UG and PG in Chemistry from University of Delhi and Ph.D. (2k18/PhD/AC/05) from Delhi Technological University.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **C. Deepti**, K. Anil and W. Sudhir. G. "An efficient adsorbent for the removal of Zn2+ Cd2+ and Hg2+ from the real industrial effluents" *International Journal of Environmental Science and Technology*, 19, 1483–1494, 2022. Impact factor 3.519 (2021)

Biography

DEEPALI AHLUWALIA

Department of Applied Chemistry

Dr. Deepali Ahluwalia completed her Ph.D. in Chemistry from the Department of Applied Chemistry, Delhi Technological University. Her research work revolves around the computational studies of porphyrinoid systems. She has worked on more than 10 research articles during her Ph.D. tenure, 7 of which have already been published in eminent journals. She has also published 3 book chapters in co-authorship with her supervisors and colleagues. She has taught B.Tech and M.Sc Physical Chemistry courses (MSCH-105, MSCH-202c and MSCH-207d) at DTU as a Guest lecturer and is currently placed as a Postdoctoral research associate at Department of Chemistry, Ashoka University, Sonipat, Haryana.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **A. Deepali**, K. Anil*, G. W. Sudhir, M. D. Milind, and B. Arijit, Uncovering the geometrical aspects of intramolecular hydrogen bond in meta-benziporphodimethenes through molecular tailoring approach, Computational and Theoretical Chemistry, Vol. 1209, pp. 113631-113638, 2022. Impact factor: 2.292. https://doi.org/10.1016/j.comptc.2022.1136

Biography

DEEKSHA

Department of Applied Chemistry

Deeksha is pursuing Ph.D. degree in Department of Applied Chemistry, Delhi Technological University since 1st August 2018 under the supervision of Prof. D.Kumar. She has received a gold medal in M.Sc. degree in Polymer science Technology from MLSU,Udaipur in 2016 . She completed her graduation from Delhi University in 2014. Her research interest includes Polymer synthesis, Composites and blends, Nanocomposites synthesis, Sensors and Conducting Polymer based Biosensors.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **D. Thakur**, C. Pandey, and D. Kumar, "Highly Sensitive Enzymatic Biosensor Based on Polyaniline-Wrapped Titanium Dioxide Nanohybrid for Fish Freshness Detection," Applied Biochemistry and Biotechnology, vol. 194, 08/01, 2022. Impact factor : 3.094.

Biography

MANISH JAIN

Department of Applied Chemistry

Dr. Manish Jain is an Assistant Professor in the Department of Applied Chemistry, in the discipline of Polymer Science and Chemical Technology, Delhi Technological University, Delhi. He received his master's degree (in Polymer Science and Technology) and doctorate degree (in Chemical Engineering) from the Indian Institute of Technology, Delhi. He has 13 years of research experience as a research scholar, postdoctoral fellow, and assistant professor. His area of interest is membrane based separation processes and their applications in the fields of water treatment, petroleum processing, renewable energy production, and as a novel separation process. He has in-depth knowledge of mathematical modeling, designing, optimization, scale-up, and feasibility analysis of membrane-based processes. Dr. Manish has 19 publications in reputed and high-impact journals, and also presented his work at several national and international conferences. Dr. Manish is currently handling one funded research project as Principal Investigator and supervising four Ph.D. students. He is a fellow of the Indian Institute of Chemical Engineers, and an invitee member of its Executive Committee for Northern Regional Centre.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. A. Tyagi, J. Iqbal, Y.K. Meena, **M. Jain**, Modeling and optimization of neodymium ion separation by liquid membrane using Artificial Neural Network coupled with Genetic Algorithm, Chemical Engineering Research and Design 187 (2022) 151-163. https://doi.org/10.1016/j.cherd.2022.08.053. Impact Factor: 4.119

2. L. Gautam, S.G. Warkar, S.I. Ahmad, R. Kant, **M. Jain**, A review on carboxylic acid crosslinked polyvinyl alcohol: Properties and applications, Polymer Engineering and Science 62-2 (2021) 225-246. https://doi.org/10.1002/pen.25849. Impact Factor: 2.573

Biography

MANJOT KAUR

Department of Applied Chemistry

Ms. Manjot Kaur is currently pursuing her PhD degree in Department of Applied Chemistry, Delhi Technological University, Delhi, India under supervision of Dr. Deenan Santhiya. She has received her master's degree (M.Tech, Polymer Technology) from Department of Applied chemistry, DTU. She has received her bachelor's degree (B.Tech, Biotechnology) from Kurukshetra University, Kurukshetra. She has been awarded DST WOS-B project as Principal Investigator under "Women Scientist Scheme", KIRAN DIVISION, DST for three years 2019-2022, having received a grant of Rs. 27 Lakh. Her research interests are in the field of oral delivery of Bioactive compounds, functional food, edible and active packaging.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kaur, M**., & Santhiya, D. (2022). Fabrication of soy film with in-situ mineralized bioactive glass as a functional food for bone health. *Food Bioscience*, *47*, 101767.

Biography

POONAM SINGH

Department of Applied Chemistry

Dr. Poonam Singh is an Assistant Professor in the Department of Applied Chemistry, in the discipline of Polymer Science and Chemical Technology, Delhi Technological University, Delhi. She received her master's degree in Chemistry and doctorate degree in Materials Chemistry from Delhi University. She has 10 years of research experience as a research scholar and assistant professor. Her areas of interest are Material Chemistry, Nanochemistry, Novel nanomaterials for energy research & applications, Nanomaterials for catalyst, Multifunctional materials, Inorganic chemistry. Dr. Poonam Singh has 20 publications in reputed and high-impact journals, and also presented her work at several national and international conferences. Dr. Poonam Singh has successfully handled one research project awarded from UGC BSR as Principal Investigator and is supervising 6 Ph.D. students.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Pathak, J., & **Singh, P**. (2022). Synthesis and characterization of ternary layered double hydroxide containing zinc/copper/nickel and its PANI composite. *Polymer Composites*, *43*(11), 7836-7844.
2. Lamba, N., Raj, R., & **Singh, P.** (2022). Mechanical characteristics of high strength concrete incorporating recycled CFRP fibers. *Journal of Applied Polymer Science*, *139*(47), e53183.

Biography

RADHA SACHAN

Department of Applied Chemistry

Radha Sachan did her Bachelor in Chemical Technology - Paint Technology. After working in chemical industries for almost 7 years she returned to academia. She did her Masters in Polymer Technology from Delhi Technology University and is currently pursuing Ph. D. from Delhi Technological University in Discipline of Polymer Science and Technology. Her research interest includes structure-property relationship of polymeric material. Recently, she had joined Harcourt Butler Technical University, Kanpur as Assistant Professor in Department of Paint Technology, School of Chemical Technology.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R. Sachan**, S. G. Warkar, R. Purwar*, "Photocrosslinked Poly(ε-caprolactone) – Polydimethylsiloxane – Poly(ε-caprolactone) Triblock Copolymeric Films: Structural, Thermal and Shape Memory Properties", ChemistrySelect, Vol. 7, Issue 3, e202201340, Impact Factor: 2.307

Biography

RAM SINGH

Department of Applied Chemistry

Professor (Dr.) **Ram Singh** belongs to a village Chandauli of the Sitamarhi district, Bihar, India. He did his schooling from Sainik School Tilaiya. He received his B.Sc., M.Sc., and Ph.D. from University of Delhi in 1996, 1998, and 2003 respectively. He worked at CEMDE and Department of Chemistry, University of Delhi, before joining Delhi Technological University (DTU) in July 2010. At present, he is Professor in the Department of Applied Chemistry, DTU. He is working at the interface of chemistry, biology and biomaterials science. He has published over 95 research papers in refereed journals, authored 10 books, 25 book chapters, 31 Modules for ePG Pathshala and contributed to more than 90 conferences. He has supervised 06 PhDs and 12 PG students. His research has been funded by DST, CSIR, and DRDO. He is on the Editorial Advisory Board of various journals of repute and Life Member of various societies.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Deepak Mishra; P. Kumar; Atiya Fatima; N. S. Munjal; B. K. Singh; and **Ram Singh**; Multistep Synthesis of Novel Benzothiazole Linked Triazole Conjugates and Their Evaluation Against Cholinesterase Enzymes; *ChemistrySelect*, 7 (46), e202203060, December 13, 2022. [ISSN: 2365-6549 (online) IF = 2.307 (2021)]

2. Poonam, Geetika Bhasin, Richa Srivastava, and **Ram Singh**; Oxadiazoles: Moiety to Synthesis and Utilize; *Journal of the Iranian Chemical Society*, 19, 665-677, 2022. [ISSN: 1735-207X (Print) 2.271 (2021)].

Biography

RAMINDER KAUR

Department of Applied Chemistry

Dr. Raminder Kaur is Assistant professor in the Department of Polymer Science and Chemical Technology (Applied Chemistry Department), Delhi Technological University (formerly Delhi College of Engineering), Delhi, India. She received her doctorate degree in Chemical Engineering from Indian Institute of Technology, Delhi (IITD). She has received her M.Tech degree in Polymer Technology from Department of Chemical Engineering, Panjab University, Chandigarh, Punjab and her B.Tech degree in Chemical Engineering from Beant College of Engineering and Technology, Gurdaspur, Punjab. Her research interests include Reaction Engineering, Bio-based Polymeric Materials and Composites, Conducting Polymers, Pollution Abatement Technologies. She has published over 30 research papers in international journals, one book chapter and about 60 papers in national and international conferences. She has worked/presently working

on a different research project funded by CSIR, DRDO and DTU. She has received 'Research Excellence Award' from DTU for 2017, 2018, 2019 and 2021. She is a fellow of IEChE, The Society of Polymer Science, India and Asian Polymer Association, MATERIALS RESEARCH SOCIETY OF INDIA, SOCIETY FOR MATERIALS CHEMISTRY, INDIAN SOCIETY OF ANALYTICAL SCIENTISTS and Reviewer of many journals of international repute.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Tanwar, S., & **Kaur, R.** (2022). Fabrication and investigation on influence of metal oxide nanoparticles on thermal, flammability and UV characteristics of polyethylene glycol based phase change materials. *Journal of Energy Storage*, *54*, 105318.

Biography

RITIKA KUBBA

Department of Applied Chemistry

Ms. Ritika Kubba, a research fellow currently pursuing Ph. D degree in the area of Porphyrin Chemistry in the Department of Applied Chemistry, Delhi Technological University, Delhi, India. She has done her graduation and postgraduation in Chemistry from Hindu College, University of Delhi and Miranda House, University of Delhi respectively. She has qualified GATE 2018 in Chemical Sciences and joined Ph.D. in DTU in the year 2018, under the supervision of Prof. Anil Kumar. So far, she has published four research papers and two book chapters in reputed international journals and has attended several national and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R. Kubba**, O. Yadav, S. Maji, N. Fridman, A. Kumar, Synthesis, structural characterizations, electrochemical properties and DFT calculations of highly fluorescent phosphorus (V) corroles, J. Mol. Struct. 1269 (2022) 133780

Biography

RITU MALIK

Department of Applied Chemistry

Ritu Malik has completed her graduation and post-graduation from Kurukshetra University, Haryana India. She is presently pursuing her Ph.D. under the supervision of Prof. Sudhir Warkar and Prof. Reena Saxena. Her research interest includes the synthesis of Superabsorbent Hydrogels and their agronomical applications. She is presently working as an assistant professor at DU.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. S. G. Warkar*, R. Saxena and **R. Malik**, "Biopolymer-Based Biomatrices–Organic Strategies to Combat Micronutrient Deficit for Dynamic Agronomy[1]. *Chemistry Select*, 7(16), e202200006, 2022. Impact Factor: 2.307

Biography

ROLI PURWAR

Department of Applied Chemistry

Prof. Roli Purwar is working as Professor in the discipline of Polymer Science and Chemical Technology, Department of Applied Chemistry, Delhi Technological University (DTU). In addition to academics, she holds the position of Associate Dean-Industrial Research and Development. She obtained her Bachelor of Engineering in Textile Technology from Sri Vaishnav Institute of Technology and Science, Indore in the year 2000. She did M.Tech in Fiber Science and Technology in the year 2001 and completed her PhD in Technical Textiles from IIT Delhi in the year 2006. She worked as Research Associate in the Department of Industrial Research and Development, IIT Delhi on projects funded by the Department of Biotechnology, Govt. of India and M/S Lockheed Matrin, USA. Here she developed several technologies which were transferred to Industries. She joined Delhi Technological University as Assistant Professor in the year 2010. Dr. Purwar has published several research papers in Indian and International peer reviewed journals. Two patents (1 Indian, 1 US patent) are in her Credit. She has guided 7 PhD, 11 M.Tech and 20 B .Tech thesis projects. Her current research area includes polymer processing, fiber technology, antimicrobial textiles, wound dressing materials, polymeric membranes for decontamination.

Award Summary and Publications Details

Citation Award
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. Radhika Batra, Priya Bansal, Reetu Yadav, **Roli Purwar**, S Kulanthaivel, P Mishra, Enhancement of functional properties by blending cocoon extracted Antheraea mylitta silk fibroin with polyvinyl alcohol for applications in biomedical field, Journal of Applied Polymer Science, 139 (14) (2022)51913, Impact Factor: 3.05

2. Reetu Yadav, Radhika Batra, Priya Bansal, **Roli Purwar**, N-type silk fibroin/TiO2 nanocomposite transparent films: electrical and optical properties, Polymer International, 71 (1), (2022) 74-85, Impact Factor: 3.213

3. Priya Bansal, Radhika Batra, Reetu Yadav, **Roli Purwar**, Electrospun polyacrylonitrile nanofibrous membranes supported with montmorillonite for efficient PM2. 5 filtration and adsorption of Cu (II) ions, Journal of Applied Polymer Science, 139 (5), (2022) 582, Impact factor:3.05

4. Radha Sachan, SG Warkar, **Roli Purwar**, Photocrosslinked Poly (epsilon-caprolactone)-Polydimethylsiloxane-Poly (epsilon-caprolactone) Triblock Copolymeric Films: Structural, Thermal and Shape Memory Properties, CHEMISTRYSELECT 7 (33)(2022) e202201340.Impact Factor:2.307

Biography

SUDHIR G WARKAR

Department of Applied Chemistry

Dr. Sudhir G. Warkar is Professor in the Department of Applied Chemistry, Delhi Technological University (formerly Delhi College of Engineering), Delhi. He received his Doctorate Degree in Chemistry from Delhi Technological University and Master's Degree in Chemistry from Postgraduate Department of Chemistry, Nagpur University. He has over 26 years of teaching experience at UG and PG level. His areas of interest are biopolymer-based superabsorbent hydrogels and its applications in the fields of agriculture, water enrichment, drug delivery and biodegradable polymers. He has published 40 research papers in SCI and Scopus indexed Journals and presented his research work in a number of international journals. He has to his credit 20 Conference proceedings in International Conferences. Dr. Warkar has also delivered Online Guest Lecture for Global Classroom Session in University of Malaysia on "Recent Advances in Polymers". He has also delivered a Scientific talk in an Online Seminar on the Scientific Academic Institute of India, as a Special Speaker organized by DDE Science Branch, Directorate of Education, GNCT of Delhi. He is a Life member of Indian Society of Technical Education and Indian Society of Analytical Scientists - Delhi Chapter. He is also the Reviewer of many journals of international repute. Dr. Warkar has handled various responsibilities in DTU as Head of Department of Applied Chemistry, Chairman Board of Studies, Member Academic Council, Associate Dean (Student Welfare), Associate Dean (Continuing Education), Chairman Department Research Committee, Chairman Board of Studies, Dy. Coordinator Admission B.Tech. Evening etc.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	06

1. Khushbu, **Sudhir G, Warkar*** and Nandkishore Thombre, Controlled release and release kinetics studies of boron through the functional formulation of carboxymethyl tamarind kernel gum based superabsorbent hydrogel, Polymer Bulletin (2022) 79:2287–2303. https://doi.org/10.1007/s00289-021-03634-9. Impact Factor: 2.517

2. D Chauhan, A Kumar and **S.G. Warkar**, An efficient adsorbent for the removal of Zn2+ Cd2+ and Hg2+ from the real industrial effluents, International Journal of Environmental Science and Technology (2022) 19:1483–1494 https://doi.org/10.1007/s13762-021-03615-5. Impact Factor: 2.86

3. Deepali Ahluwalia, Anil Kumar,*, **Sudhir G. Warkar**, Milind M. Deshmukh,*, Arijit Bag, Uncovering the geometrical aspects of intramolecular hydrogen bond in meta-benziporphodimethenes through molecular tailoring approach, Computational and Theoretical Chemistry 1209 (2022) 11363. https://doi.org/10.1016/j.comptc.2022.113631. Impact Factor: 2.292

4. Radha Sachan, Prof. **Sudhir G. Warkar** and Prof. Roli Purwar, Photocrosslinked Poly(ϵ-caprolactone) – Polydimethylsiloxane – Poly(ϵ-caprolactone) Triblock Copolymeric Films: Structural, Thermal and Shape Memory Properties, ChemistrySelect, Wiley, 2022, Vol 7, Issue 33. https://doi.org/10.1002/slct.202201340. Impact factor: 2.307

5. Leela Gautam, **Sudhir G. Warkar**, Syed Ishraque Ahmad, Ravi Kant and Manish Jain, A review on carboxylic acid cross-linked polyvinyl alcohol: Properties and applications, Polymer Engineering and Science, Wiley, 2022;1–22. DOI: 10.1002/pen.25849. Impact factor: 2.573

6. Ritu Malik, Reena Saxena,* and **Sudhir G. Warkar*** Biopolymer-Based Biomatrices – Organic Strategies to Combat Micronutrient Deficit for Dynamic Agronomy, ChemistrySelect 2022, 7, e202200006 (1 of 14) doi.org/10.1002/slct.202200006. Impact factor: 2.30

Department of Applied Mathematics

Biography

ANU KUMARI

Department of Applied Mathematics

Ms. Anu Kumari has done her Ph.D. under the supervision of Dr. Satyabrata Adhikari from DTU. She has done her PhD in Quantum Information Theory. Her thesis explores methods related to detection and classification of entangled states. She holds M Sc in Mathematics and B Sc(H) in Mathematics both from Delhi University. Her research was supported by the Council of Scientific and Industrial Research (CSIR), India. She has four published papers in SCI/SCIE indexed journals.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **A. Kumari** and S. Adhikari, "Structural physical approximation of partial transposition makes possible to distinguish SLOCC inequivalent classes of three-qubit system", European Physical Journal D 76, 73, 2022. Impact Factor: 1.611 DOI: 10.1140/epjd/s10053-022-00398-3
2. **A. Kumari** and S. Adhikari, "Structured Negativity: A physically realizable measure of entanglement based on structural physical approximation", Annals of Physics 446, 169113, 2022. Impact Factor: 3.036 DOI: 10.1016/j.aop.2022.169113

Biography

ANJANA GUPTA

Department of Applied Mathematics

Dr. Anjana Gupta is working as a Professor (2016 - Present) in the Department of Applied Mathematics, DTU. She has a teaching experience of more than 22 years and research experience of 20 years with more than 40 publications in very reputed journals like Soft Computing, IEEE transactions on fuzzy systems, Expert systems with applications, Wireless Networks and many in international conferences. She has completed her M.Phil. and Ph.D. from the University of Delhi. Her interest area is the Optimization technique, fuzzy logic, Multi-Criteria decision-making, and computing with words. She has organized and participated in workshops and many national and international conferences and has also delivered invited talks in the training program. Furthermore, eight Ph.D. thesis has been completed under her supervision.

Award Summary and Publications Details

Category Detail	No.of Publications
COMMENDABLE RESEARCH AWARD	03

1. M. Sahu, **A. Gupta**, "Two different approaches for consistency of intuitionistic multiplicative preference relation using directed graph", Soft Computing, Vol. 26, no. 10, pp. 4653-4671, 2022. Impact factor: 3.732
2. R. Kavra, **A. Gupta**, S. Kansal, "Systematic study of topology control methods and routing techniques in wireless sensor networks", Peer-to-Peer Networking and Applications, Vol. 15, no. 4, pp. 1862-1922, 2022. Impact Factor: 3.488
3. S. Kumar, **A. Gupta**, GS. Walia, "Reversible data hiding: A contemporary survey of state-of-the-art, opportunities and challenges", Applied Intelligence, Vol. 52, pp. 7373-7406, 2022. Impact factor: 5.019

Biography

DHIRENDRA KUMAR

Department of Applied Mathematics

Dr. Dhirendra Kumar is working as an Assistant Professor in the Department of Applied Mathematics, Delhi Technological University, Delhi, India. He received his B.Sc. degree from Banaras Hindu University, Varanasi, in the year 2011. He had completed M.Sc. in computer science from the same university in the year 2013. He received M. Tech. in Computer Science and Technology from Jawaharlal Nehru University in 2015. He has earned a Ph.D. degree from Jawaharlal Nehru University, New Delhi in the year 2021. His research interests include medical image segmentation, signal processing, pattern recognition, and image classification.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	02

1. **Kumar, Dhirendra,** Ramesh Kumar Agrawal, and Puneet Kumar. "Bias-corrected intuitionistic fuzzy c-means with spatial neighborhood information approach for human brain MRI image segmentation." IEEE Transactions on Fuzzy Systems 30, no. 3 (2020): 687-700. Impact Factor: 12.253.
2. **Kumar, Dhirendra**, Inder Khatri, Aaryan Gupta, and Rachana Gusain. "Kernel picture fuzzy clustering with spatial neighborhood information for MRI image segmentation." Soft Computing 26, no. 22 (2022): 12717- 12740. Impact Factor: 3.732..
3. Kumar, Puneet, **Dhirendra Kumar**, and Ramesh Kumar Agrawal. "Fuzzy kplane clustering method with local spatial information for segmentation of human brain MRI image." Neural Computing and Applications 34, no. 6 (2022): 4855-4874. Impact Factor: 3.732.

Biography

GOONJAN JAIN

Department of Applied Mathematics

Dr. Goonjan Jain joined the Department of Applied Mathematics of Delhi Technological University (DTU) in 2017 as Assistant Professor. She has six years of teaching and administrative experience. Before joining academia, she worked in Infosys as a Systems Engineer from 2009 – 2012. She received Ph.D. degree in Natural Language Processing (2015-2020) and MTech degree in Computer Science and Technology (2013-2015) from Jawaharlal Nehru University (JNU), Delhi. She was awarded Junior Research Fellowship by UGC (2015) and CSIR (2013). She completed her B.E. from Vaish College of Engineering, Rohtak, Haryana (2004-2008). Her research interests include Natural Language Processing, Artificial Intelligence, Graph Theory, and Game Theory. She has published many research papers in reputed international journals like Natural Language Engineering and proceedings of international conferences like COLING (2020). She is a lifetime member of the Computer Society of India (CSI) and Indian Society for Technical Education (ISTE)

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **G. Jain** and D. K. Lobiyal, "Word Sense Disambiguation using Cooperative Game Theory and Fuzzy Hindi WordNet based on ConceptNet," ACM Transactions on Asian and Low-Resource Language Information Processing, Vol. 21, No. 4, pp. 79.1 – 79.25, 2022. Impact Factor: 1.471.

Biography

KAMALJEET GANGANIA

Department of Applied Mathematics

Mr. Kamaljeet has submitted his PhD thesis from Department of Applied Mathematics (DTU) Delhi. He is an active researcher and has published/communicated 17 research articles in SCIE indexed international journals in the area of Geometric Function Theory. His area of research is univalent function theory, and harmonic univalent function theory. He completed his masters and graduation from University of Delhi. Currently, he is teaching as an Asst. Professor, Guest Faculty in Shayam Lal College, University of Delhi.

Award Summary and Publications Details

Category Detail	No.of Publications
COMMENDABLE RESEARCH AWARD	04

1. **K. Gangania** and S.S. Kumar, "Bohr-Rogosinski phenomenon for $\mathcal{S}^*(\psi)$ and $\mathcal{C}(\psi)$", Mediterranean Journal of Mathematics, Vol 19, pp. 161, 2022 Imapact Factor-1.400
2. **K. Gangania** and S.S. Kumar, "On Certain Generalizations of $\mathcal{S}^*(\psi)$", Computional Methods and Function Theory, Vol 22, pp. 215–227, 2022. Impact Factor-1.155
3. **K. Gangania** and S.S. Kumar, "Bohr radius for some classes of Harmonic mappings", Iranian Journal of Science and Technology Transaction: A Science, Vol 46, pp. 883–890, 2022 Impact Factor-1.553
4. **K. Gangania** and S.S. Kumar, "$\mathcal{S}^*(\psi)$ and $\mathcal{C}(\psi)$-radii for some special functions", Iranian Journal of Science and Technology Transaction: A Science, Vol 46, pp.955–966, 2022. Impact Factor-1.553

Biography

KARTIKAY KHARI

Department of Applied Mathematics

Dr. Kartikay joined his PhD program in July 2017 in the Department of Applied Mathematics of Delhi Technological University, Delhi under the supervision of Dr. Vivek Kumar Aggarwal. He has worked in the area of numerical methods for singularly perturbed differential and delay differential equations. He has already published several research papers in the joint authorship with his research supervisor Dr. Vivek Kumar Aggarwal. Also, He has presented his research work at several national/international conferences.

Award Summary and Publications Details

Category Detail	No.of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Kartikay Khari**, Vivek Kumar, "An efficient numerical technique for solving nonlinear singularly perturbed reaction diffusion problems. *J Math Chem* 60, 1356–1382 (2022). https://doi.org/10.1007/s10910-022-01365-4. Impact Factor: 2.413.
2. **Khari, K.**, & Kumar, V. (2022). Finite element analysis of the singularly perturbed parabolic reaction-diffusion problems with retarded argument. *Numerical Methods for Partial Differential Equations*, 38(4), 997-1014.

Biography

NAV SHAKTI MISHRA

Department of Applied Mathematics

Ms Nav Shakti Mishra completed her PhD degree from Department of Applied Mathematics (DTU) Delhi. She is an active researcher and has published five research articles in SCIE indexed international journals. She has also successfully presented her work in national and international conferences. She completed her masters in Mathematics and Statistics from Dr. Ram Manohar Lohia Avadh University, UP where she is a recipient of The Chancellor's gold medal, ES Chandershekhar gold medal for securing first rank. She is also awarded the Young Researcher award for her research work.

Award Summary and Publications Details

Category Detail	No.of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Nav Shakti Mishra** and Naokant Deo, "Convergence estimates of certain gamma type operators", Mathematical Methods in the Applied Sciences, 45, no. 7, pp. 3802- 3816, 2022. Impact Factor 3.007

Biography

NILAM

Department of Applied Mathematics

Dr. Nilam is a faculty member in the Department of Applied Mathematics at Delhi Technological University since February 2011. She holds a doctorate from IIT Roorkee and her research interests include Mathematical Modeling and Simulation, Differential Equations, Dynamics of Infectious Diseases, and Control Theory in Diabetes. With over 17 years of extensive experience in teaching and research, Dr. Nilam is highly regarded in her field for her exceptional knowledge, skill, and dedication to academic excellence.

Award Summary and Publications Details

Category Detail	No.of Publications
COMMENDABLE RESEARCH AWARD	03

1. Goel, K., Kumar, A. & **Nilam**. Stability analysis of a logistic growth epidemic model with two explicit time-delays, the nonlinear incidence and treatment rates. J. Appl. Math. Comput. 68, 1901–1928 (2022). https://doi.org/10.1007/s12190- 021-01601-1

2. Swati, **Nilam**. Fractional order SIR epidemic model with Beddington–De Angelis incidence and Holling type II treatment rate for COVID-19. J. Appl. Math. Comput. 68, 3835–3859 (2022). https://doi.org/10.1007/s12190-021-01658-y

3. Rajak, A.K., **Nilam** A Fractional-Order Epidemic Model with Quarantine Class and Nonmonotonic Incidence: Modeling and Simulations. Iran J Sci Technol Trans Sci 46, 1249–1263 (2022). https://doi.org/10.1007/s40995-022-01339-w

Biography

RADHIKA KAVRA
Department of Applied Mathematics

Ms. Radhika Kavra is currently a research scholar under the guidance of Prof. Anjana Gupta and Prof. Sangita Kansal in Department of Applied Mathematics, Delhi Technological University, Delhi. She has completed her B.Sc. (Hons.) Mathematics from Vivekananda college, Delhi University and M.Sc. from IIT Roorkee, Uttarakhand. Her research area is Graph and Optimization.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R. Kavra**, A. Gupta, S. Kansal, "Systematic study of topology control methods and routing techniques in wireless sensor networks", *Peer-to-Peer Networking and Applications*, Vol. 15, no. 4, pp. 1862-1922, 2022. Impact Factor: 3.488

Biography

R. SRIVASTAVA

Department of Applied Mathematics

Dr. R Srivastava is currently working as Professor in Dept. Of Applied Mathematics, Delhi Technological University, and having a teaching experience of 32 years. He has obtained the M.Sc. degree in Mathematics with Gold Medal from Gorakhpur University, Gorakhpur, and Ph.D. degree in Mathematics from Gorakhpur University, Gorakhpur, UP. He has guided the Ph.D. in Information Theory, and Financial Mathematics Current area of interest of research is Financial Mathematics.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Gifty Malhotra, **R. Srivastava**, H. C. Taneja, "Pricing of the geometric Asian options under a multifactor stochastic volatility model" *Journal of Computational and Applied Mathematic*s 406 (2022) 113986. Impact Factor: 2.872

Biography

ROHIT KUMAR

Department of Applied Mathematics

Rohit Kumar is working as Assistant Professor in the Department of Applied Mathematics, DTU from February 2017. He has more than 7 years of undergraduate teaching experience. His research interest is in Quantum Information Theory and Graph Theory. He completed his post-graduation in Mathematics from Indian Institute of Technology, Delhi. He is pursuing Ph.D. from Delhi Technological University. He has qualified several competitive exams like NET, JRF, JAM, GATE.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, R.** and Adhikari, S. (2022) "Detection of dimensional bipartite entangled state: A graph theoretical approach," Physica Scripta, 97(12), p. 125101. Available at: https://doi.org/10.1088/1402-4896/aca22c.

Biography

RUCHIKA

Department of Applied Mathematics

Ms. Ruchika joined her PhD program in July 2017 in the Department of Applied Mathematics of Delhi Technological University, Delhi under the supervision of Dr. Vivek Kumar Aggarwal. She is working in the area of computational methods to approximate hyperbolic conservation laws using fuzzy logic. She has already published six research papers in joint authorship with her research supervisor Dr. Vivek Kumar Aggarwal. Also, she has presented her research work at several national/international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **Ruchika Lochab**, Vivek Kumar, "A comparative study of high-resolution methods for nonlinear hyperbolic problems", Journal of Applied Mathematics and Mechanics ZAMM, 102: 1-27, 2022. Impact Factor: 1.759.

Biography

SANJAY KUMAR

Department of Applied Mathematics

Mr. Sanjay Kumar joined his PhD program in July 2018 in the Department of Applied Mathematics of Delhi Technological University, Delhi. He is working in the area of Reversible Data Hiding. He received his M.Sc degree in Mathematics from Chaudhary Charan Singh University(formerly Meerut University), Meerut.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sanjay Kumar**, Anjana Gupta, and Gurjit Singh Walia, "Reversible data hiding: A contemporary survey of state-of-the-art, opportunities and challenges", Applied Intelligence, Vol. 52, No. 1, pp. 7373-7406. Impact Factor: 4.760.

Biography

SATYABRATA ADHIKARI

Department of Applied Mathematics

Dr. Satyabrata Adhikari is working as Assistant Professor (under UGC-Faculty Recharge Programme) in the Department of Applied Mathematics, DTU. His research interest is in Quantum Information Theory. He obtained his Ph.d degree from Bengal Engineering and Science University, Shibpur (now it is renamed as IIEST) . After Ph.D, he availed a post doctoral fellowship from S. N. Bose National Centre for Basic Sciences, Kolkata, India; Korean Advanced Institute of Science and Technology, South Korea and Institute of Physics, Bhubaneswar, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. Pranav Kairon, Mukhtiyar Singh, **Satyabrata Adhikari**, Coherence based inequality for the discrimination of three-qubit GHZ and W class, Quantum Information Processing 21, 173 (2022). Impact Factor:1.965.
2. Kumari, A., & **Adhikari, S**. (2022). Structural physical approximation of partial transposition makes possible to distinguish SLOCC inequivalent classes of three-qubit system. The European Physical Journal D, 76(4), 73.
3. Kumari, A., & **Adhikari, S**. (2022). Structured negativity: A physically realizable measure of entanglement based on structural physical approximation. Annals of Physics, 446, 169113.
4. Kumar, R., & **Adhikari**, S. (2022). Detection of d 1⊗ d 2 dimensional bipartite entangled state: a graph theoretical approach. Physica Scripta, 97(12), 125101.
5. Aggarwal, S., & **Adhikari, S.** (2022). Search for an efficient entanglement witness operator for bound entangled states in bipartite quantum systems. Annals of Physics, 444, 169043.

Biography

SHRUTI AGGARWAL

Department of Applied Mathematics

Ms. Shruti Aggarwal is pursuing PhD in the area of Quantum Information Theory from the Department of Applied Mathematics, Delhi Technological University. She received her bachelor's as well as master's in mathematics from University of Delhi. She qualified JRF and joined DTU under CSIR fellowship in the year 2019. Her research work is primarily based on characterization of entanglement in higher dimensional bipartite as well as multipartite quantum systems. So far, she has published two research papers in reputed SCI journals. She has also presented her work in national and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Shruti Aggarwal**, Satyabrata Adhikari, "Search for an efficient entanglement witness operator for bound entangled states in bipartite quantum systems", Annals of Physics, Vol. No. 444, pp. 169043, 2022. Impact Factor: 3.036.

Biography

VIVEK KUMAR AGGARWAL

Department of Applied Mathematics

Dr Vivek Kumar Aggarwal is an Assistant Professor at the Department of Applied Mathematics, Delhi Technological University, Delhi, India. He received his master's and doctorate (in Mathematics) degree from the Indian Institute of Technology, Roorkee, India and the Indian Institute of Technology, Kanpur, India, respectively. He has received full funding from the Brazilian Govt. to attend ICM 2018 during Aug. 1-9, 2018 held in Rio, Brazil. Also, he got a visiting position in Friedrich-Alexander-Universität Erlangen-Nürnberg during June - Sept. 2017. His research interests are in computational methods for differential equations. He has published 36 research papers in national, international journals and conferences. He has guided 06 PhD students and currently, he is supervising 01 PhD students.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	02

1. Lochab, R., & **Kumar, V**. (2022). A comparative study of high-resolution methods for nonlinear hyperbolic problems. ZAMM-Journal of Applied Mathematics and Mechanics/Zeitschrift für Angewandte Mathematik und Mechanik, 102(7), e202100462.

2. **Vivek Kumar**, Günter Leugering "Finite element analysis of the singularly perturbed parabolic reaction-diffusion problems with retarded argument", Numer Methods Partial Differential Eq. 2022;38:997–1014. Impact Factor: 3.5.

3. Khari, K., & **Kumar, V.** (2022). An efficient numerical technique for solving nonlinear singularly perturbed reaction diffusion problem. Journal of Mathematical Chemistry, 60(7), 1356-1382.

Department of Applied Physics

Biography

ABHISHEK BHARDWAJ

Department of Applied Physics

Mr. Abhishek Bhardwaj is a research scholar in the Department of Applied Physics, DTU, working under the supervision of Dr. Amrish K. Panwar on the topic: Structural, Morphological, and Electrochemical Studies of Layered Cathode Materials for Na-Ion Batteries.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Abhishek Bhardwaj** and Amrish K. Panwar. "Effect of carbon shell over NaCrO2 core by C2H2 decomposition to enhance electrochemical properties for rechargeable Sodium-ion batteries." Applied Surface Science 573 (2022): 151449. Impact factor: 7.392

Biography

ANCHALI JAIN

Department of Applied Physics

Ms. Anchali Jain is research scholar in the Department of Applied Physics, DTU, working under the supervision of Dr. Amrish K. Panwar.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **Anchali Jain**, Amrish K Panwar, Pawan K Tyagi, "Effect of Cr doping on Li2ZnTi3O8 as alternative anode material to enhance electrochemical properties of lithium-ion batteries", 128 (4), 302, 2022. Impact factor: 2.983

Biography

ANU

Department of Applied Physics

Ms. Anu received her B.Sc. and M.Sc. degrees in Physics from Kurukshetra University, Haryana, India, in 2015 and 2017, respectively. She is currently pursuing Ph.D. in the field of glass and phosphor materials at Delhi Technological University, Delhi, India. Her research interests include photonic, white LEDs, laser and optoelectronic device applications of glass and phosphor materials.

Award Summary and Publications Details

Category Title	No. of Publications
PREMIER RESEARCH AWARD	01

1. **Anu**, N. Deopa and A.S. Rao, "Structural and luminescence characteristics of thermally stable Dy3+ doped oxyfluoride strontium zinc borosilicate glasses for photonic device applications", Optics and Laser Technology, Vol 154, No. 108328 (1-15), 2022. Impact Factor: 4.939

Biography

ANSHU

Department of Applied Physics

Miss Anshu is currently pursuing her Ph.D. degree in the Department of Applied Physics, at Delhi Technological University, Delhi, India. She is currently working on the topic "theoretical modelling of electrostatic waves in a magnetized dusty plasma". Her research interests include the modelling and simulation of waves and instabilities using different analytical methods in a magnetized and dusty plasma. She received her master's degree in Physics from the Department of Physics and Astrophysics, University of Delhi, Delhi, India. She received her bachelor's degree (B.Sc. (H)) in Physics from Miranda House, University of Delhi, Delhi, India.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **Anshu**, J. Sharma and S. C. Sharma, "In the existence of a transverse dc electric field, the kinetic theory of current driven electrostatic ion cyclotron waves excitation in a magnetized dusty plasma," Contributions to Plasma Physics, vol. 62, no. 9, p. e202200073, 2022. Impact Factor: 1.608

Biography

A. S. RAO

Department of Applied Physics

Prof. A.S. Rao is working as a Professor & Head of the Department of Applied Physics, Delhi Technological University, New Delhi. Prof. Rao received his Ph.D. degrees in Physics in the year 1993 from S.V. University, Tirupati, Andhra Pradesh. He has a total of 30 years of teaching and research experience in his career. He received three best teacher awards for three consecutive academic years i.e., 2008-09, 2009-10 and 2010-11 from K L University, Vijayawada, Andhra Pradesh, before joining DTU. He has guided 15 students for Ph.D. and 4 students for M.Phil. and 4 students for M. Tech degrees. Currently he is guiding 12 students for the Ph.D. program. Besides this, he is also acting as mentor for Post-Doctoral fellows. He has handled nearly 2.5 crore worth of sponsored projects (as PI, Co-PI and Mentor) funded by ISRO and DST. He has published nearly 176 research papers in Scopus Indexed SCI International Journals of repute and nearly 160 papers in national and international conferences. He has delivered invited & oral talks in India and abroad. Prof. Rao is acting as a resource person for academic talks in various Indian universities/colleges. Prof. Rao received Five times Commendable Research Award for Excellence in Research from DTU. His research interests are photoluminescence studies of rare earth doped glasses, phosphors and nanophosphors for photonic and bio-photonic applications; measurement of trace gases and aerosols to understand the radiation budget and global warming process. He is a lead guest editor for "American Journal of Physics and Applications". He received an invitation from "Materials Science Research India", and "Journal of Modern Mechanical Engineering and Technology" Journals to act as an Editorial Board member. His h-index as reported by Google Scholar is 41 and i-h index is 96.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award : GOLD
Early research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	13

1. Ravita, **A.S. Rao**, Tunable photoluminescence studies of KZABS : RE3+ (RE3+ = Tm3+, Tb3+ and Sm3+) glasses for w-LEDs based on energy transfer, J. Lumin. 251, 119194 (2022). Impact Factor: 4.171.
2. P. Rohilla, **A.S. Rao**, Linear and non-linear photoluminescence studies of Ho3+/Yb3+ co-doped titanate phosphors for photonic applications, J. Alloys Compd. 928, 167156 (2022). Impact Factor: 6.371.
3. K. Maheshwari, **A.S. Rao**, Photoluminescence downshifting studies of thermally stable Dy3+ ions doped phosphate glasses for photonic device applications, Opt. Mater. (Amst). 129, 112518 (2022). Impact Factor: 3.754.
4. Vidhi, Ankita, Anu, **A.S. Rao**, Spectroscopic characterizations of Dy3+ ions doped phosphate glasses for epoxy-free white LED applications, Opt. Mater. (Amst). 132, 112863 (2022). Impact Factor: 3.754.
5. Anu, N. Deopa**, A.S. Rao**, Structural and luminescence characteristics of thermally stable Dy3+ doped oxyfluoride strontium zinc borosilicate glasses for photonic device applications, Opt. Laser Technol. 154, 108328 (2022). Impact Factor: 4.939

6. Ravita, **A.S. Rao**, Color tunable photoluminescence in KZABS: Tm3+ glasses under different sources of excitation for photonic applications, J. Non. Cryst. Solids. 585, 121532 (2022). Impact Factor: 4.458.
7. R. Bajaj, A. Prasad, A.V.S. Yeswanth, P. Rohilla, S. Kaur, **A. S. Rao**, Down-shifting photoluminescence studies of thermally stable Dy3+ ions doped borosilicate glasses for optoelectronic device applications, J. Mater. Sci. Mater. Electron. 33, 4782–4793 (2022).Impact Factor: 2.8.
8. Yasha Tayal, **A.S. Rao**, Sumandeep Kaur, Photoluminescence characteristics of Sm3+/Eu3+ co-doped LPZABS glasses for solar cell applications, Solid State Sci. Vol. 125, pp. 106834 - 106844 (2022) Impact Factor: 3.752.
9. P. Rohilla, **A.S. Rao**, Synthesis optimisation and efficiency enhancement in Eu3+ doped barium molybdenum titanate phosphors for w-LED applications, Mater. Res. Bull. 150, 111753 (2022). Impact Factor: 5.6.
10. S. Sharma, **A. S. Rao**, and K. Kishore, "Energy transfer dynamics in thermally stable Sm3+ /Eu3+ co-doped AEAlBS glasses for near UV triggered photonic device applications," Journal of Non-Crystalline Solids, vol. 580, p. 121392, 2022. Impact Factor: 4.458.
11. M. Kumar, **A.S. Rao**, S. Kaur, Downshifting analysis of Sm3+ / Eu3+ co-doped LiBiAlBSi glasses for red emission element of white LEDs, Chem. Phys. Lett. 788, 139303 (2022). Impact Factor: 2.719.
12. Ravita, **A.S. Rao**, Effective sensitization of Eu3+ visible red emission by Sm3+ in thermally stable potassium zinc alumino borosilicate glasses for photonic device applications, J. Lumin. 244, 118689 (2022). Impact Factor: 4.171.
13. R. Bajaj, **A.S. Rao**, G.V. Prakash, Photoluminescence down-shifting studies of thermally stable Eu3+ ions doped borosilicate glasses for visible red photonic device applications, J. Non. Cryst. Solids. 575, 121184 (2022). Impact Factor: 4.458.

Biography

BHARTI SINGH

Department of Applied Physics

Dr. Bharti Singh is currently working as an Assistant Professor in Department of Applied Physics, Delhi Technological University. Before joining DTU in the year 2017, she worked as a postdoctoral fellow in the prestigious Max Planck Institute for Polymer Research, Germany, where she gained the expertise of synthesizing high quality 2D monolayer transition metal dichalcogenides, graphene and heteroatom doped graphene for various applications. She has also been awarded several prestigious fellowships which includes, DST-Inspire Faculty award, UGC start up research grant. During her Ph.D at IIT Delhi she has published her work in reputed journals and has also been awarded the "Distinction in Doctoral Research" for her research work in the field of copper oxide based non-volatile memory. She has published several journal and conference papers in the field of memory devices, gas sensing and piezoelectric energy harvesting, as well as three book chapters. She has supervised more than 20 B. Tech, M. Tech and M.Sc. project students and presently guiding 05 Ph. D students at DTU. Her current research interest includes synthesis of two dimensional layered materials and their vDW heterostructures by CVD and hydrothermal technique for piezoelectric energy harvesting applications.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. V. Singh, D. Meena, H. Sharma, A. Trivedi, and **B. Singh**, "Investigating the role of chalcogen atom in the piezoelectric performance of PVDF/TMDCs based flexible nanogenerator," Energy, vol. 239, p. 122125, 2022. Impact Factor: 8.85
2. S. Rana, V. Singh, and **B. Singh,** "Tailoring the Output Performance of PVDF-Based Piezo–Tribo Hybridized Nanogenerators via B, N-Codoped Reduced Graphene Oxide," ACS Applied Electronic Materials, vol. 4, no. 12, pp. 5893-5904, 2022. Impact Factor: 4.49
3. K. Komal, G. Gupta, M. Singh, and **B. Singh**, "Improved resistive switching of RGO and SnO2 based resistive memory device for non-volatile memory application," Journal of Alloys and Compounds, p. 166196, 2022.

Biography

BHAVYA KUMAR

Department of Applied Physics

Bhavya Kumar received his B.Sc. degree in Physics (Hons.) from Delhi University, Delhi, India, in 2013 and his M.Sc. degree in Physics from Panjab University, Chandigarh, India, in 2017. He is currently pursuing a Ph.D. degree with the Department of Applied Physics at Delhi Technological University (Formerly Delhi College of Engineering), New Delhi, India. He has authored or co-authored around 16 papers in different reputed international journals and conferences. He is currently investigating new channel materials that can further improve the performance of nanoscale devices and the effects of various structural properties on FinFET's overall performance. His research interests include modeling and simulation study of nanoscale semiconductor devices and their ULSI switching applications. He was awarded the Commendable Research Award for excellence in research in 2022 by Delhi Technological University. He is a student member of IEEE.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **B. Kumar** and R. Chaujar, "Numerical simulation of analog metrics and parasitic capacitances of GaAs GS-GAA FinFET for ULSI switching applications," Eur. Phys. J. Plus, vol. 137, pp. 110, 2022.
2. **B. Kumar** and R. Chaujar, "Numerical Study of JAM-GS-GAA FinFET: A Fin Aspect Ratio Optimization for Upgraded Analog and Intermodulation Distortion Performance," Silicon, vol. 14, no. 1, pp. 309–321, 2022.

Biography

DEEPALI

Department of Applied Physics

Ms. Deepali is currently pursuing her doctoral degree in the Department of Applied Physics, Delhi Technological University (DTU), Delhi, India. She has received her graduation and post-graduation (B.Tech+M.Tech) degree in Nanotechnology from Amity University, Noida, India. She has completed her Bachelor's thesis on energy harvesting application from Amity University and Master's thesis on Density Functional Theory (DFT) from National Physical Laboratory, Delhi, India. She developed her interest in experimental as well as theoretical research during her bachelor and master's thesis. Her area of interest includes electronic and optical properties of semiconducting materials for optoelectronic device applications. She is currently working on luminescent materials focusing on w-LED and solar cell applications at Luminescent Materials Research Lab (LMRL), DTU. She has published two papers and attended various national and international conferences related to her research.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Deepali,** M. Jayasimhadri, "UV-excited blue- to green-emitting Tb3+-activated sodium calcium metasilicate colour tunable phosphor for luminescence devices", Luminescence. Vol. 37, pp. 1465-1474, 2022. Impact Factor: 2.61
2. **Deepali,** M. Jayasimhadri, "Structural and spectroscopic analysis of thermally stable Dy3+ activated Na4Ca4Si6O18 phosphor for optoelectronic device applications", Luminescence. Vol. 33, pp. 19218-19230, 2022. Impact Factor: 2.77

Biography

DEEPAK KUMAR

Department of Applied Physics

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, D**., Singh, M. K., & Mehata, M. S. (2022). Exploration of grown cobalt-doped zinc oxide nanoparticles and photodegradation of industrial dye. Materials Research Bulletin, 150, 111795.

Biography

HARPREET KAUR

Department of Applied Physics

Dr. Harpreet Kaur has done her Ph.D. degree in the department of Applied Physics department, Delhi Technological University (DTU), Delhi, India under the supervision of Dr. M. Jayasimhadri in 2021. She has published 12 research papers in scientifically reputed SCI/SCIE indexed journals and attended several national and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Harpreet Kaur**, Vishesh Tiku, Aditya Prasad, Y. Abhishek Singh, Vishnu Vikesh Jaiswal, P. Koteswara Rao, M. Jayasimhadri*, D. Haranath, "Luminescent and colorimetric properties of the sol–gel derived mono-phase Dy3+ doped silicate-based phosphor for w-LED applications", Journal of Sol-gel science and Technology, Vol. 101, pp. 443-452, 2022. Impact Factor: 2.606.

Biography

JYOTI

Department of Applied Physics

Jyoti is currently working as a Senior Research fellow (SRF) in the Plasma and Nano Simulation Lab in the Department of Applied Physics, Delhi Technological University, Delhi. She has completed her M.Sc. in Physics from MDU Rohtak, Haryana. She has published 2 research papers and one conference paper based on her Ph.D research work. She has also attended various international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Jyoti**, Suresh C. Sharma, Neha Pathak, and R. P. Sharma, "Beam-driven whistler mode nonlinear saturation and turbulence in the magnetopause", Physics of Plasmas 29(9), 092104 (2022). Impact factor: 2.357

Biography

KAILASH CHANDRA

Department of Applied Physics

Kailash Chandra is currently pursuing PhD under the supervision of Prof. Vinod Singh in Department of Physics, DTU Delhi from January 2019. The title of my research work is "Structural and magnetic properties of pyrochlore structure materials" In this work, pyrochlore oxides were synthesized using conventional solid-state methods and characterized their magnetic properties at low temperatures ranging 2-300K. In this research area, I have published two research papers in reputed journals of magnetism. I have also presented (Oral & Poster) two papers in international conferences organized by the physics department of ARSD College (Delhi University) and Jamia Millia Islamia, New Delhi, India. Past, I did my Masters in Physics from University of Rajasthan, Jaipur (Rajasthan) and M.Tech (Solid State material) from Indian Institute Technology (IIT Delhi). I have qualified GATE - 2013 with All India Rank of 216 and percentile of 96.58. I have also qualified CSIR NET-JRF with All India Rank- 153. And also selected in various competitive exams like, BARC, JEST, TIFR and MPPSC etc.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Kailash Chandra**, Vinod Singh, Saurabh K. Sharma, and Pawan K. Kulriya. "Structural magnetic properties correlation in Ge doped frustrated Ho2Ti2O7 pyrochlore." Journal of Magnetism and Magnetic Materials 561 (2022): 169694

2. Singh, V., Kulriya, P. K., Kumar, A., Kumar, R., Kumar, P. P., Berwal, U., ... & Singh, K. (2022). Hydrogen induced structural modifications in size selected Pd-Carbon core-shell NPs: Effect of carbon shell thickness, size and pressure. International Journal of Hydrogen Energy, 47(25), 12642-12652.

Biography

KM. KOMAL

Department of Applied Physics

Ms. Km Komal is currently working as a CSIR - Senior Research fellow (SRF) in the Department of Applied Physics, Delhi Technological University, Delhi. Her research interest includes structural, optical and electrical properties of metal oxide-2D material based composites for non-volatile resistive memory device applications. She has completed her M.Sc. in Physics from Jawaharlal Nehru University (JNU), New Delhi. After completing her M.Sc., she has cleared the prestigious CSIR, NET-JRF exam. She has presented her work in various National and International conferences and workshops related to her research area.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **K. Komal**, G. Gupta, M. Singh, and B. Singh, "Improved resistive switching of RGO and SnO2 based resistive memory device for non-volatile memory application," Journal of Alloys and Compounds, p. 166196, 2022.

Biography

MANSHA KANSAL

Department of Applied Physics

Miss Mansha Kansal is currently pursuing her Ph.D. degree in the Department of Applied Physics, at Delhi Technological University, Delhi, India. She is currently working on the Analytical Modelling and Numerical Simulation of Plasma-Assisted Gate All Around Carbon Nanotube Field Effect Transistor. Her research interests include modeling and numerical simulation study of Plasma-Assisted Carbon Nanotube based devices. She received her Master's degree in Physics from the Department of Physics and Astrophysics, University of Delhi, Delhi, India and her Bachelor's degree (B.Sc. (H)) in Physics from Hindu College, University of Delhi, Delhi, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **M. Kansal** and S. C. Sharma, "Plasma-based Nanoarchitectonics for Vertically Aligned Dual-Metal Carbon Nanotube Field Effect Transistor (VA-DMCNFET) Device: Effect of Plasma Parameters on Transistor Properties", Applied Physics A, vol. 128, no. 28, pp. 1-11, 2022. Impact Factor: 2.983
2. **M. Kansa**l and S. C. Sharma, "Performance Evaluation & linearity distortion analysis for plasma-assisted dual-material carbon nanotube field effect transistor with a SiO2-HfO2 Stacked Gate-Oxide Structure (DM-SGCNFET)", Silicon, vol. 14, issue 18, pp. 12381–12391, 2022. Impact Factor: 2.941
3. **M. Kansal** and S. C. Sharma, "Exploration of Novel Hafnium Oxide (HfO2) Based Plasma-Assisted Gate All Around Carbon Nanotube FET (GAA-CNTFET) for High Sensing Applications", ECS Journal of Solid State Science and Technology, vol. 11, no. 10, 101002, 2022. Impact Factor: 2.483

Biography

MEGHA SHARMA

Department of Applied Physics

Megha Sharma received her B.Sc. degree from Delhi University in 2013 and her M.Sc. degree in physics in 2017. She is currently pursuing her Ph.D. at Delhi Technological University, Department of Applied Physics in New Delhi, India. She has authored or coauthored around 11 papers in different reputed international journals and conferences. Her research focuses on the modelling and simulation of III–V compound semiconductor materials and devices for future high-speed with high-power applications. She is currently working on the performance of double heterostructure gallium nitride high electron mobility transistors (GaN HEMT) for high radio frequency and microwave applications. She is a student member of IEEE.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **M. Sharma** and R. Chaujar, "Ultrascaled 10 nm T-gate E-mode InAlN/AlN HEMT with polarized doped buffer for high power microwave applications," Int. J. RF Microw. Comput. Aided Eng., vol. 32, no. 4, pp. 23057, 2022, DOI:10.1002/mmce.23057.
2. **M.Sharma** and R.Chaujar, "Design and Investigation of Recessed-T-Gate Double Channel HEMT with InGaN Back Barrier for Enhanced Performance," Arab J Sci Eng, vol. 47, pp. 1109–1116, 2022, DOI: 10.1007/s13369-021-06157

Biography

M. JAYASIMHADRI

Department of Applied Physics

Dr. Jayasimhadri Mula is an Assistant Professor in the Department of Applied Physics, Delhi Technological University, Delhi, India. He has more than 17 years of teaching and research experience. He has received M.Sc. and Ph.D. from Sri Venkateswara University (SVU), Tirupati, Andhra Pradesh, India. He has worked as a Postdoctoral Research Associate for around four years (2006-2010) in the prestigious institutes (Pohang University of Science and Technology & Changwon National University) at South Korea and also visited twice (2012 & 2016) Changwon National University, South Korea as a Visiting Research Professor. He has received several awards and honors in recognition of his outstanding contribution in Physical Sciences. To name a few, Junior Scientist of the Year by National Environmental Science academy, FCT Postdoctoral Fellowship from Portuguese Government, Brain Korea (BK21) Postdoctoral Fellowship from South Korea Government, Young Scientist in Physical Sciences by SERB-DST, Government of India, Outstanding

Scientist Award by VIFRA, Bharat Vikas Award by ISR India and Commendable Research Award for Excellence in Research by DTU for the last consecutive Five years. Moreover, He was placed in the list of world's top 2% scientists in the fields of Applied Physics and Materials, which was published by Stanford University in the years 2020 and 2021 and 2022. He is a member/Associate member/Life Member of many International and National scientific societies. To mention a few, The American Ceramic Society, Vijnana Bharti (VIBHA), Indian Laser Association, The Optical Society of India, The Indian Science Congress Association, The Indian society of technical education, International society of Research and Development, Luminescence Society of India, MRSI etc. Six students have completed their Ph.D. Degrees under his supervision and also handled sponsored research projects worth more than Fifty Lakhs. His research interest includes Optical/Fluorescent Spectroscopy and Development of Rare Earth doped Materials for Optoelectronic Applications/Luminescent Devices. He has published more than 130 research papers in Internationally reputed Scopus Indexed Journals and also presented more than 105 research papers work in several national and international conferences. His h-index as reported by Google Scholar is 41; i10-index: 85, and Citations are more than 4700.

Award Summary and Publications Details

Citation Award
Early research Impact & Influence Award
Cumulative Citation Award : Gold

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	08

1. Deepali, **M. Jayasimhadri**, "Structural and spectroscopic analysis of thermally stable Dy3+ activated Na4Ca4Si6O18 phosphor for optoelectronic device applications" Journal of Materials Science: Materials in Electronics, vol. 33, pp. 19218-30, 2022. (Impact Factor: 2.779)
2. Vikas, **M. Jayasimhadri**, "Thermally stable red luminescence from Eu3+ -activated telluro zinc phosphate glass under near-ultraviolet light excitation for photonic applications" Luminescence, vol. 37, pp. 2059-2066, 2022. (Impact Factor: 2.613)
3. Mukesh K Sahu, **M. Jayasimhadri**, "Structural and color tunable properties in Sm3+/Eu3+- doped Ca3Bi(PO4)3 phosphor for solar cell and w-LED applications" Journal of Materials Science: Materials in Electronics, vol. 33, pp. 5201-5213, 2022. (Impact Factor: 2.779)
4. Vikas, **M. Jayasimhadri**, D. Haranath, "Spectroscopic investigations of Dy3+ doped tungstate-tellurite glasses for solid state lighting applications" International Journal of Applied Glass Science, vol. 13, pp. 645-654, 2022. (Impact Factor: 2.087)
5. Deepali, **M. Jayasimhadri**, "UV excited blue to green emitting Tb3+-activated sodium calcium metasilicate color tunable phosphor for luminescent devices" Luminescence, vol. 37, pp. 1465-1474, 2022. (Impact Factor: 2.613)
6. Mukesh K. Sahu, **M. Jayasimhadri**, D. Haranath, "Temperature-dependent photoluminescence and optical thermometry performance in Ca3Bi(PO4)3: Er3+ phosphors" Solid State Sciences, vol. 131, pp. 106956. (Impact Factor: 3.752)
7. Harpreet Kaur, Vishesh Tiku, Aditya Prasad, Y Abhishek Singh, Vishnu Vikesh Jaiswal, P Koteswara Rao, **M. Jayasimhadri**, D. Haranath, "Luminescent and colorimetric properties of the sol–gel derived mono-phase Dy3+ doped silicate-based phosphor for wLED applications" Journal of Sol-Gel Science and Technology, vol. 101, pp. 443-452, 2022. (Impact Factor: 2.606)
8. Mukesh K Sahu, Swati Bishnoi, G. Swati, **M. Jayasimhadri**, D. Haranath "Thermally stable Mn2+ activated zinc silicate nanophosphor for speedy recognition of high contrast latent fingermarks" International Journal of Applied Ceramic Technology, vol. 19, pp. 488-497, 2022. (Impact Factor: 2.328

Biography

MOHAN SINGH MEHATA

Department of Applied Physics

Dr. Mohan Singh Mehata received his Ph.D. from Kumaun University (1995-2002). He is a recipient of a research fellowship of Michigan Technological University, USA (2003), DST Young Scientist fellowship (2004), Postdoctoral Fellowships of Hokkaido University (2004 & 2005), UCOST-Young Scientist Award (2007), Japan Society for the Promotion of Science (JSPS, Japan) Postdoctoral Fellowship (2007-09), Research Associate of Carnegie Mellon University, USA (2009-10), Visiting Professor of Chinese Academy of Science (CAS, China, 2014 & 2015) and Visiting Professor of National Chiao Tung University, Taiwan (2019). He is a recipient of the research excellence award of DTU from the beginning (2018) to the present year. He is the author and co-author of more than 120 research papers and conference proceedings, including 10 as a single author and three in Nature Publishing Group (NPG). He has filed/published four patents and has a research collaboration with Japan, Russia, Taiwan, China, Germany and USA. He received more than two crore rupees for his research, which includes five major research projects of DST (2004-07), DAE-BRNS (2012-16), DST (2012- 17), DST-RFBR (2017-19) and SERB (2016-20). His current research interest is to develop and explore semiconductor/metal nanoparticles/quantum dots and 2D materials with a view to their applications as Sensors, photocatalysts, optoelectronic devices, OLEDs, QLEDs, etc.

Award Summary and Publications Details

Citation Award
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	09

1. V.S. Meena, **M.S. Mehata***Thermally grown indium (In) thin-film for creating Ohmic contact and In-bumps for HgCdTe-based IR detectors. Applied Surface Sciences 596 (2022) 153501. Impact Factor=7.392.
2. S. Husain, N. Pandey, N. Fatma, S. Pant, **M.S. Mehata***Spectral characteristics of 3,5- diaminobenzoic acid in pure and mixed solvents: Experimental and theoretical study, Journal of Molecular Liquid. Impact Factor= 6.633.
3. N. Fatma, S. Pant, **M. S. Mehata*,** Reinvestigation on photoluminescence of 7- hydroxyflavone in aqueous medium: Proficient fluorescence enhancement. Journal of Photochemistry & Photobiology A: Chemistry 431 (2022) 114014. Impact Factor= 5.141.
4. D. Kumar, A.K. Singh, **M.S. Mehata***, Exploration of grown cobalt-doped zinc oxide nanoparticles and photodegradation of industrial dye. Materials Research Bulletin 150 (2022) 111795. Impact Factor=5.60.
5. V. Sharma, **M.S. Mehata***, A parallel investigation of un-doped and manganese iondoped zinc selenide quantum dots at cryogenic temperature and application as an optical temperature sensor. Materials Chemistry and Physics, 276 (2022) 125349. Impact Factor=4.778.
6. B. Bisht, P. Dey, A.K. Singh, S. Pant, **M.S. Mehata***, Spectroscopic Investigation on the Interaction of Direct Yellow-27 with Protein (BSA). Methods and Applications in Fluorescence 10 (2022) 044009. Impact Factor = 3.849.

7. P. Sharma, M.K. Singh, **M.S. Mehata***Sunlight-driven MoS2 nanosheets mediated degradation of dye (crystal violet) for wastewater treatment. Journal of Molecular Structure, 1249 (2022) 131651. Impact Factor = 3.841.
8. V. Sharma, **M. S. Mehata***Photoluminescence turn-off based dual analytes (Hg2+ and Pb2+) sensor in aqueous medium using 3-marcaptoproponic acid protected Mn2+ doped ZnSe quantum dots. Chemical Physics Letters 787 (2022) 13927. Impact Factor=2.719.
9. N. Pandey, N. Tiwari, S. Pant, **M.S. Mehata***, Solvatochromism and estimation of ground and excited state dipole moments of 6-aminoquinoline. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 267 (2022) 12049. Impact Factor = 4.831.

Biography

MOHIT KUMAR

Department of Applied Physics

Mr. Mohit Kumar is a research scholar in the Department of Applied Physics, at Delhi Technological University, New Delhi under the supervision of Prof. A.S.Rao. He holds a Master's degree from Gurukula Kangri University, Haridwar, Uttarakhand and Diploma in Radiological Physics (Dip.R.P.) from Bhabha Atomic Research Centre (BARC), Mumbai. He has authored many research papers in International Journals and Conferences of repute.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Mohit Kumar**, A.S. Rao, and Sumandeep Kaur, "Downshifting analysis of Sm3+/Eu3+ co-doped LiBiAlBSi glasses for red emission element of white LEDs", Chemical Physics Letters, Vol.788, pp. 139303, 2022. Impact Factor: 2.719.

Biography

MUKHTIYAR SINGH

Department of Applied Physics

Dr Mukhtiyar Singh is currently working as Assistant Professor at Department of Applied Physics, Delhi Technological University. He is working in interdisciplinary areas of condensed matter physics with broad research interest in first principles-based designing of new materials and understanding their properties using state-of-the-art density functional theory (DFT). His current research focussed on 2D materials for thermoelectric energy harvesting and Spintronics, Quantum Materials and AI assisted novel material discovery.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	07

1. R. Kumar, A. Vij and **M. Singh**, "Electronic, thermoelectric, and optical studies of cubic Hf1-xTixO2: An attempt to enhance the key parameters", Journal of Solid State Chemistry, Vol. 307, pp. 122829, 2022. Impact Factor: 3.656.
2. **M. Singh**, R. Kumar and R. K. Bibiyan, "Pressure-induced topological phase transition in XMR material YbAs: a first-principles study", European Physical Journal Plus, Vol. 137, no. 5, pp. 633, 2022. Impact Factor: 3.758.
3. R. Kumar, R. Kumar, A. Vij and **M. Singh**, "A first-principles study of electronic, thermoelectric, and optical properties of sulfur doped c-HfO2", Physica Scripta, Vol. 97, no. 7, pp. 075813, 2022. Impact Factor: 3.081.
4. Sangeeta, R. Kumar and **M. Singh,** "Realizing high thermoelectric performance in p type RbZn4P3 Zintl compound: a first-principles investigation", Journal of Materials Science, Vol. 57, no. 23, pp. 10691–10701, 2022. Impact Factor: 4.682.
5. R. Kumar, R. Kumar, **M. Singh**, D. Meena and A. Vij, "Carrier concentration mediated enhancement in thermoelectric performance of various polymorphs of hafnium oxide: a plausible material for high temperature thermoelectric energy harvesting application", Journal of Physics D: Applied Physics, Vol. 55, no. 49, pp. 495302, 2022. Impact Factor: 3.409.
6. P. Kairon, **M. Singh**, S. Adhikari, "Coherence-based inequality for the discrimination of three-qubit GHZ and W class", Quantum Information Processing, Vol. 21, no. 5, pp. 173, 2022. Impact Factor: 1.965.
7. Km. Komal, G. Gupta, **M. Singh**, B. Singh, "Improved resistive switching of RGO and SnO2 based resistive memory device for non-volatile memory application", Journal of Alloys and Compounds, Vol. 923, pp. 166196, 2022. Impact Factor: 6.371. Electronic, thermoelectric, and optical studies of cubic Hf1-xTixO2: An attempt to enhance the key

Biography

NITIN K. PURI

Department of Applied Physics

Prof. Nitin K. Puri is currently working as Professor in the discipline of Engineering Physics, Department of Applied Physics, Delhi Technological University. He is associated with DTU from the last 12.5 years and has a teaching and research experience of more than seventeen years. He has his doctorate degree in Experimental Atomic Physics from Cyclotron Laboratory, Panjab University, Chandigarh. He has worked as an Engineer in the R & D division in HongHua Company Ltd, China. He has been awarded "Gurukul Academic Awards-2022" for Teaching and Research Excellence by Institute for Social Reforms and Higher Education Charitable Trust (NITI Aayog-NGO Darpan), Govt. of India. He has also been awarded various research grants of approximately Rupees One Crore from different funding agencies viz: SERB-DST, BRNS, and UGC-DAE (Govt. of India). He has supervised about 37 M.Tech./4 M.Sc. students, 7 Ph.D. students, and

currently 2 M.Sc. students and 7 Ph.D. students are pursuing their research under his supervision. He has delivered many invited talks and has more than 120 research publications in peer-reviewed journals and conferences of national and international repute. He is also working as Associate Dean in Centre for Extension and Field Outreach, DTU. He had worked as Vice-Chairman and Chairman of Working Group-III for International Nuclear Security Education Network (INSEN) at International Atomic Energy Agency (IAEA), Vienna. His current research interests are 2D-nanomaterials based devices for healthcare, environment, and energy harvesting applications.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. R. Khatri and **N. K. Puri**, "Electrochemical biosensor utilizing dual-mode output for detection of lung cancer biomarker based on reduced graphene oxide-modified reduced molybdenum disulfide multi-layered nanosheets," Journal of Materials Research, vol. 37, pp. 1451-1463, 2022.
2. N. Jain, S. Sharma, and **N. K. Puri**, "Investigation of charge transport mechanism in hydrothermally synthesized reduced graphene oxide (rGO) incorporated zinc oxide (ZnO) nanocomposite films," Journal of Materials Science: Materials in Electronics, pp. 1-17, 2021.

Biography

POOJA ROHILLA

Department of Applied Physics

Ms. Pooja Rohilla is pursuing her doctoral degree in the Department of Applied Physics at Delhi Technological University (DTU), Delhi, India. She graduated from Maharishi Dayanand University (MDU), Rohtak, and her Master's degree from DCRUST, Murthal. She has got a DST- INSPIRE scholarship for her bachelor's and master's degrees. Her area of interest includes rare earth-doped phosphors and glasses for photonic applications. She has published seven research papers and attended various national and international conferences related to her research.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. 1. **P. Rohilla**, A.S. Rao, "Synthesis optimisation and efficiency enhancement in Eu3+ doped barium molybdenum titanate phosphors for w-LED applications", Mater. Res. Bull. 150, 111753, 2022. Impact Factor: 5.6

Biography

PRATEEK SHARMA

Department of Applied Physics

Dr. Prateek Sharma has completed his Ph.D. degree from Delhi Technological University (DTU), Delhi, India. He pursued his bachelors in B.Sc. (Honours) Physics from Atma Ram Sanatan Dharam College, University of Delhi and masters in M.Sc. Physics from YMCA University of Science and Technology, Faridabad. He did his major project during master's on Thermoelectric devices (Peltier device) and the university allocated the grant of 2 Lakh for the project. His area of research includes the optical, electric, and electrochemical studies and their applications in sensors and optoelectronic devices for clean environment. He had hands-on experience in nanomaterials especially in 2D materials and quantum dots. Main research focus holds Fluorescence spectroscopy and Electrochemistry. He received the Commendable Research Award for two consecutive years (2020 & 2021) for research excellence. Currently, he has published four research papers in internationally reputed SCI/SCIE journals and presented his research work in several national and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Prateek Sharma**, Mrityunjay Kumar Singh and Mohan Singh Mehata, Sunlight-driven MoS2 nanosheets mediated degradation of dye (crystal violet) for the wastewater treatment, Journal of Molecular Structure 1249 (2022) 131651. Impact Factor [3.848]

Biography

PRIYANKA

Department of Applied Physics

Miss Priyanka is currently pursuing her Ph.D. degree in the Department of Applied Physics, at Delhi Technological University, Delhi, India. She is currently working on the transport and Optical Properties for Nanostructure under the influence of Rashba Spin Orbit Interaction. Her research interests include theoretical study of nanostructures like quantum dot, quantum wire and quantum well under the presence of external applied fields. She received her master's degree in Physics from the Maharshi Dayanand University, India and her bachelor's degree (B.Sc. (H)) in Physics from Swami Shraddhanand College, University of Delhi, Delhi, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Priyanka**, Rinku Sharma, and Manoj Kumar, "Effects of impurity factor on the physical and transport properties for Ga1-xAlxAs quantum wire in the presence of Rashba spin-orbit interaction", Physica B: Condensed Matter, Volume 629, 15 March 2022, 413649, Impact factor: 2.98

Biography

RASHI MANN

Department of Applied Physics

Rashi Mann received her B.Sc. degree in Physics from Kurukshetra University, Kurukshetra, India, in 2015 and her M.Sc. degree in Physics from Deenbandhu Chhotu Ram University of Science and Technology, Haryana, India, in 2017. She is currently pursuing a Ph.D. degree with the Department of Applied Physics at Delhi Technological University (Formerly Delhi College of Engineering), New Delhi, India. She has authored or co-authored around 6 papers in different reputed international journals and conferences. She is currently investigating new ferroelectric materials that can further improve the performance of NCFET devices and the effects of various structural properties on NCFET's overall performance and its application. Her research interests include modeling and simulation study of nanoscale semiconductor devices and their ULSI switching applications. She is a student member of IEEE.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. R. Mann and R. Chaujar, "TCAD investigation of ferroelectric based substrate MOSFET for digital application," Silicon, vol. 14, pp. 5075–5084, 2022. Impact Factor 2.941.

Biography

RAVINDRA KUMAR SINHA

Department of Applied Physics

Prof R. K. Sinha has completed M.Sc. Physics from IIT Kharagpur in 1984and Ph.D. in the area of Fiber Optics and Optoelectronics in 1989. He did his Post-Doctoral Research at Osaka and Kobe university in Japan and at IISc Bangalore during 1989-1991. He has worked at BITS Pilani, REC (now NIT) Hamirpur H.P. and DCE/DTU. He has established TIFAC-CORE in Fiber Optics and Optical Communication and executed B.Tech. Engineering Physics, M.Tech.(MOCE) and M.Tech. (NST)) at DTU Delhi. Prof Sinha has published 376 research papers in Journals and Conference Proceedings and 06 book chapters and 02 books, filed 05 patents, supervised 22 sponsored projects and 19 Doctoral thesis. He is the Fellow of International Society of Optics and Photonics (SPIE), Fellow of IETE and Fellow of OSI. He has served as Director of CSIR-CSIO Chandigarh, CEERI Pilani and IMTECH Chandigarh. Currently he is Vice Chancellor of Gautam Buddha University. He has mentored over 39 Technology development and transfer to the Industry. He is recipient of Gold-Skoch Award for Defence Technology 2020, CSIR Technology Award 2018, Fulbright-Nehru Fellowship 2013 as International Educational Administrator, Royal Academy of Engineering (UK)Fellowship 2008, JSPS (Japan) Fellowship and EPFL (Switzerland) Fellowship 2009 besides several awards for his research work.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. VarnamSherawat, RenukaBokolia and **Ravindra Kumar Sinha**, "Impact of thermal and refractive index tuning on the bandgap and band-edges of a silicon photonic crystal waveguide with sensing applications", Optics Communications, Vol. 518,pp.128348,2022. Impact Factor: 2.335

2. Pooja Agarwal, Kamal Kishorand **Ravindra Kumar Sinha**, "Ultrasensitive dual-band terahertz metasurface sensor based on all InSb resonator", Optics Communications, Vol. 522,pp.128667,2022. Impact Factor: 2.335

Biography

RAJESH KUMAR

Department of Applied Physics

Mr. Rajesh Kumar is currently working as a full time research scholar in the Department of Applied Physics, Delhi Technological University. He has completed his masters from Department of Physics, Kurukshetra University, Kurukshetra. His research interest is in first principle based thermoelectric and optical properties of oxide materials. He has authored five papers in various reputed journals.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **R. Kumar**, R. Kumar, M. Singh, D. Meena and A. Vij, "Carrier concentration mediated enhancement in thermoelectric performance of various polymorphs of hafnium oxide: a plausible material for high temperature thermoelectric energy harvesting application", Journal of Physics D: Applied Physics, Vol. 55, no. 49, pp. 495302, 2022. Impact Factor: 3.409.

2. **R. Kumar**, A. Vij and M. Singh, "Electronic, thermoelectric, and optical studies of cubic Hf1-xTixO2: An attempt to enhance the key parameters", Journal of Solid State Chemistry, Vol. 307, pp. 122829, 2022. Impact Factor: 3.656.

3. **R. Kumar**, R. Kumar, A. Vij and M. Singh, "A first-principle study of electronic, thermoelectric, and optical properties of sulfur doped c-HfO2", Physica Scripta, Vol. 97, no. 7, pp. 075813, 2022. Impact Factor: 3.081

Biography

RAJAT BAJAJ

Department of Applied Physics

Rajat Bajaj is pursuing Ph.D under the supervision of Prof. A. S. Rao, Department of Applied Physics, Delhi Technological University and Prof. Vijaya Prakash, Department of Physics, Indian Institute of Technological, Delhi. He has completed his M.Tech and B.Tech in Nanotechnology from Sri Guru Granth Sahib World University. Sri Fatehgarh Sahib, Punjab. He did his major thesis "Removal of Paraphenylene Diamine (Kaala Patthar) Dye Using Zinc Peroxide-Charcoal as Adsorbent '' at National Physical Laboratory, New Delhi. He also got an award for developing the dye used during elections at NPL Lab. He has hands-on experience in nanophosphors, wLEDs and glasses. His main focus holds nanophosphors for Nano-bio photonics applications. and wLEDs. During his Ph.D. tenure, he published 8 research papers at Material and Atmospheric Science Research Laboratory (MASRL), DTU and 2 in M. Tech at Nanoscience Lab, S.G.G.S. World University.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **R. Bajaj**, A. Prasad, AVS Yeswanth, P. Rohilla, S. Kaur, A.S. Rao, Down-shifting photoluminescence studies of thermally stable Dy3+ ions doped borosilicate glasses for optoelectronic device applications, Journal of Materials Science: Materials in Electronics, Vol. 33, pp. 4782-4793, 2022. Impact Factor: 2.8
2. **R. Bajaj**, A.S. Rao, G. Vijaya Prakash, Photoluminescence down-shifting studies of thermally stable Eu3+ ions doped borosilicate glasses for visible red photonic device applications, Journal of Non-Crystalline Solids Vol. 575, pp. 121184, 2022. Impact Factor: 4.45

Biography

RAVITA

Department of Applied Physics

Dr. Ravita is currently working as an assistant professor (temporary basis) in the Department of Physics, Chaudhary Bansi Lal University (CBLU), Bhiwani, Haryana. She completed her Ph.D. at Delhi Technological University (DTU), Delhi, in November 2022. Her Ph.D. thesis title is "Preparation and Characterization of Rare Earth Ion Doped Luminescent Materials for Optoelectronic Device Applications". She was awarded DST INSPIRE Fellowship in 2018 and CSIR JRF in June 2019. She received her post-graduation (M.Sc.) degree in Physics from DCRUST, Murthal, Haryana. She has been awarded a gold medal in post-graduation. She has completed her master's dissertation on "Effect of annealing on the structural properties of Fe2O3 ferrite nanoparticles". She developed her interest in experimental research during her master's and doctoral thesis. Her area of interest includes photoluminescent properties of rare earth ion doped host lattice suitable for various photonic applications. She is currently working on rare earth doped up-conversion nanoparticles focusing on bio-imaging applications. She has published nine papers and attended various national and international conferences related to her research.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **Ravita**, A. S. Rao "Effective Sensitization of Eu3+ Visible Red emission by Sm3+ in thermally stable Potassium Zinc Alumino Borosilicate Glasses for Photonic Device Applications" Journal of Luminescence, 244 (2022) 118689 (I.F. = 4.171)
2. **Ravita**, A. S. Rao "Color tunable photoluminescence in KZABS: Tm3+ glasses under different sources of excitation for photonic applications" Journal of Non-Crystalline Solids, 585 (2022) 121532 (I.F. = 4.458)
3. **Ravita**, Rao, A. S. (2022). Tunable photoluminescence studies of KZABS: RE3+ (RE3+= Tm3+, Tb3+ and Sm3+) glasses for w-LEDs based on energy transfer. Journal of Luminescence, 251, 119194.

Biography

RENUKA BOKOLIA

Department of Applied Physics

Dr. Renuka Bokolia is currently working as an Assistant Professor in the Department of Applied Physics at Delhi Technological University, Delhi, India. She received her B.Sc degree in Physics (Hons.) from Kirori Mal College, Delhi University, and her M.Sc. degree in Physics with a specialization in Laser and Spectroscopy from the Department of Physics and Astrophysics, Delhi University. She obtained her Ph.D. from the Department of Physics and Astrophysics, Delhi University in the year 2018 under the guidance of Prof. K. Sreenivas. She has authored or co-authored around 25 research papers in several reputed international journals and conferences. Presently, she has been guiding three Ph.D. students and has guided several B. Tech, M. Tech, and M. Sc. students. Her research interests include the development and characterization of upconversion photoluminescence phosphors, ferroelectric ceramics, multiferroics, and magnetic materials for potential applications in the areas of bio-imaging, three-dimensional displays, solid-state lasers, and luminescence thermometry.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. A. Banwal and **R. Bokolia**, "Enhanced upconversion luminescence and optical temperature sensing performance in Er3+ doped BaBi2Nb2O9 ferroelectric ceramic," Ceram. Int., vol. 48, no. 2, pp. 2230–2240, 2022. Impact Factor 5.532.
2. A. Banwal and **R. Bokolia,** "Thermometric sensing performance in Erbium modified SrBi2- xNb2ErxO9 ferroelectric ceramic for optoelectronic devices," Ceram. Int., vol. 48, no. 23, pp. 34405–34414, 2022. Impact Factor 5.53
3. Sherawat, V., **Bokolia, R**., & Sinha, R. K. (2022). Impact of thermal and refractive index tuning on the bandgap and band-edges of a silicon photonic crystal waveguide with sensing applications. Optics Communications, 518, 128348.

Biography

RISHU CHAUJAR

Department of Applied Physics

Dr. Rishu Chaujar is presently working as a Professor in Department of Applied Physics and Coordinator, Vinod Dham Centre of Semiconductor Research, DTU; and is involved in teaching the B.Tech, M.Sc. and M.Tech courses. Her doctoral research involves modeling, design and simulation of Sub-100nm gate engineered Grooved Gate/Concave MOSFET for RFIC design and wireless applications, FinFETs, Tunnel FETs, Nanowires, HEMT structures modeling for high performance sensing, biomedical and wireless applications; and Solar Cell Modeling and Design. She has authored or co-authored more than 330 papers in various reputed international and national journals and conferences. She has supervised around 18 M.Tech/M.Sc. students and 8 Ph.D students. She has been awarded the PREMIER RESEARCH AWARD in 2018 and COMMENDABLE RESEARCH AWARD for excellence in research, Delhi Technological University, for the five consecutive years from 2018- 2022. She has also been awarded the Excellence in Teaching Award, Delhi Technological University in 2020. She has supervised several National and International research projects. She has also been awarded with the prestigious SERB-POWER Fellowship. She is a reviewer of various reputed international journals. She is a Fellow of IETE, a Life member of NASI and members of various international professional societies.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: SILVER
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	13

1. Megha Sharma and **Rishu Chaujar**, "Design and Investigation of RecessedT-Gate Double Channel HEMT with InGaN Back Barrier for Enhanced Performance", Arabian Journal for Science and Engineering, 47, 1109-1116, 2022. (IF: 2.334)
2. Megha Sharma and **Rishu Chaujar**, "Ultrascaled 10 nm T-gate E-mode InAlN/AlN HEMT with polarized doped buffer for high power microwave applications", International Journal of RF and Microwave Computer &-Aided Engineering, Vol.32, Issue 4, April 2022.
3. Bhavya Kumar and **Rishu Chaujar**, "Numerical Study of JAM-GS-GAA FinFET: a Fin Aspect Ratio Optimization for Upgraded Analog and Intermodulation Distortion Performance", Silicon, 14, 309-321, 2022. (IF: 2.67)
4. Bhavya Kumar and **Rishu Chaujar**, "Numerical simulation of analog metrics and parasitic capacitances of GaAs GS-GAA FinFET for ULSI switching applications.", European Physical Journal Plus, 137, Article No.110, 2022.
5. Samriti Sharma and **Rishu Chaujar**, "RF, linearity and intermodulation distortion analysis with small-signal parameters extraction of tunable bandgap arsenide/antimonide tunneling interfaced JLTFET", Microsystem Technologies, 28, pages 2659–2667 (2022).

6. Samriti Sharma and **Rishu Chaujar**, "Influence of Source Electrode Metal Work Function on Polar Gate Prompted Source Hole Plasma in Arsenide/Antimonide Tunneling Interfaced Junctionless TFET", Journal of Micromechanics and Microengineering, Vol.32, No.4, 044004, 2022.
7. Samriti Sharma and **Rishu Chaujar**, "Impact of Tunnel Gate Process variations on Analog/RF (Microwave) and Small Signal Parameters of Heteromaterial Tunneling Interfaced Charge Plasma Junctionless TFET", International Journal of Circuit Theory and Applications, Volume50, Issue10 October 2022, Pages 3626-3641 (2022)
8. Mekonnen Getnet and **Rishu Chaujar**, "Sensitivity Analysis of Biomolecule Nano-Cavity Immobilization in Dielectric Modulated Triple Hybrid Metal Gate-AllAround Junctionless NWFET Biosensor for Detecting Various Diseases", Journal of Electronic Materials, 51, pp. 2236–2247 (2022).
9. Mridul Prakash Kashyap, Harshal Gudaghe and **Rishu Chaujar**, "Compatibility of a Truncated Fin-FinFET as a k-modulated Biosensor with Optimum parameters for Pre-emptive Diagnosis of Diseases", Computers and Electrical Engineering, Vol.100, 107850, May 2022
10. Yash Pathak, B.D. Malhotra and **Rishu Chaujar**, "Detection of biomolecules in dielectric modulated double metal below ferroelectric layer FET with improved sensitivity", Journal of Materials Science: Materials in Electronics, 33, pages13558–13567 (2022).
11. Rashi Mann and **Rishu Chaujar**, "TCAD investigation of Ferroelectric based substrate MOSFET for digital application", 14, pages5075–5084 (2022) Silicon, Elsevier (2022). (IF: 2.67).
12. Gaurav Mangal, Aman Tyagi and **Rishu Chaujar**, "Numerical Investigation of temperature based analog performance of fully gate covered Junctionless FinFET", Computers and Electrical Engineering, Volume 101, July 2022, 108071.
13. Yash Pathak, B.D. Malhotra and **Rishu Chaujar**, "Analog/RF Performance and Effect of Temperature on Ferroelectric layer Improved FET device with Spacer" Silicon, 14, pages12269–12280 (2022).

Biography

RINKU SHARMA

Department of Applied Physics

Prof. Rinku Sharma is working as a Professor in the Department of Applied Physics and is presently Dean Academic-Post Graduate Studies. She is involved in teaching the B.Tech., M.Tech. and M.Sc. courses. Her past affiliations include Head of Department of Applied Physics at DTU and Assistant Professor, Head of department of Applied Sciences and Director in Guru Tegh Bahadur Institute of Technology affiliated to GGSIP University. Prof. Rinku Sharma did her masters in Experimental Nuclear Physics in 1994 and Doctorate in Atomic, Molecular and LASER Physics from the Department of Physics and Astrophysics, University of Delhi in the year 1999. Prof. Rinku has experience of more than 29 years in the field of Education and Research. Her research interests mainly include collisions in Intense Short Laser Pulses, Atomic structure calculations for multi-electron atoms and ions using Configuration Interaction Technique, Electron impact Excitation Collision Strengths and Rate Coefficients having application in Astrophysics, Plasma Physics and Nuclear Fusion Reactors, THz Radiation Emission and linear and non-linear properties of low dimensional structures such as Quantum dots. Prof. Rinku Sharma has authored or co-authored more than 100 papers in various reputed international and national journals and conferences. She has supervised many B.Tech., M.Sc. and Ph.D. students. She has been awarded Commendable Research Award for excellence in research, Delhi Technological University, 2018, 2019, 2020 & 2021. She was also the Co-Principal Investigator of Research Projects funded by DST & DRDO. She is a member of many professional societies.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	06

1. **R. Sharma** and A. Goyal, "Strongly coupled plasma effect on excitation energies of O-like ions and photoionization of F-like ions", Indian J Phys, vol. 96, pp. 1829–1840, 2022. Impact factor: 1.947
2. **R. Sharma** and A. Goyal, "Study of contribution of doubly excited 3d10 configurations in excitation energies and SXR transition data of Fe-like ions", Indian J Phys, vol. 96, pp.2263- 2283, 2022. Impact factor: 1.947
3. **R. Sharma** and A. Goyal, "Excitation energies, transition data of SXR, HXR, EUV and far-UV spectral lines with partition function, thermodynamic parameters and level population for W LXVII and W XLIX", Journal of Electron Spectroscopy and Related Phenomena, vol. 246, pp.147009, 2021. Impact factor: 1.99
4. Priyanka, **Sharma, R.**, & Kumar, M. (2022). Effects of impurity factor on the physical and transport properties for Ga1-xAlxAs quantum wire in the presence of Rashba spin-orbit interaction. Physica B: Condensed Matter, 629, 413649.
5. Berwal, U., Singh, V., & **Sharma, R**. (2022). Key role of Tb3+ doping on structural and photoluminescence properties of Gd2Ti2O7 pyrochlore oxide. Ceramics International, 48(15), 22307-22316.
6. Paijwar, R., **Sharma, R.**, & Jha, A. K. S. (2022). Relativistic atomic structure calculations of KIX with plasma parameters. Physics of Plasmas, 29(9), 092702.

Biography

RICHA SHARMA

Department of Applied Physics

Dr. Richa Sharma is currently working as an Assistant Professor in the Department of Applied Physics at Delhi Technological University, Delhi, India. She received her B.Sc degree in Physics (Hons.) from Kalindi College, Delhi University, and her M.Sc. degree in Physics with a specialization in Electronics from the Department of Physics and Astrophysics, Delhi University. She obtained her Ph.D. from the Department of Physics and Astrophysics, Delhi University in the year 2016 under the guidance of Prof. R. P. Tandon. She has authored or co-authored around 10 research papers in several reputed international journals and conferences. Presently, she has been guiding three Ph.D. students and has guided several B. Tech, M. Tech, and M. Sc. students. Her research interests include the development and characterization of ferroelectric ceramics, multiferroics, and piezoelectric materials for potential applications in the area of energy storage.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Verma, K., Goel, S., & **Sharma, R**. (2022). Influence of calcination and sintering temperature on the microstructure, dielectric, ferroelectric and piezoelectric properties of the lead-free KNN ceramics. *Journal of Materials Science: Materials in Electronics*, 1-19.

Biography

RICHA PAIJWAR

Department of Applied Physics

Ms. Richa is currently working as a Research Scholar in the Atomic and Molecular Physics and Terahertz Radiation Emission and Advance Simulation Lab in the Department of Applied Physics in Delhi Technological University, Delhi. Her research title is "Atomic Structure Calculation and processes in highly charged ions". She completed her M.Sc. in Biophysics from Jamia Millia Islamia, Delhi in 2018. She has published 3 research papers. She has presented two posters in an international conference based on her Ph.D. research work. She has also attended various workshops and conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Richa Paijwar**, Rinku Sharma, Alok K. Singh Jha, "Relativistic atomic structure calculations of KIX with plasma parameters", Physics of Plasmas 29, 109901 (2022). Impact factor: 2.357.

Biography

SAMIRTI SHARMA

Department of Applied Physics

Dr. Samriti Sharma has completed her Ph.D. in Applied Physics from Delhi Technological University. Her research area involves modeling, design, and simulation of - compound semiconducting hetero-material based tunnelling interface Junctionless Tunnel FET device for Analog/RF and wireless applications. She has published research papers in international journals (Springer, Elsevier, and IOPscience etc.) and conference proceedings.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **S. Sharma** and R. Chaujar, "Influence of source electrode metal work function on polar gate prompted source hole plasma in Arsenide/Antimonide Tunneling Interfaced Junctionless TFET", Journal of Micromechanics and Microengineering, vol. 32, No. 4, pp. 044004, 2022. Impact Factor: 2.282.
2. **S. Sharma**, S and R. Chaujar, "RF, linearity and intermodulation distortion analysis with small-signal parameters extraction of tunable bandgap arsenide/antimonide tunneling interfaced JLTFET", Microsystem Technologies, vol. 28, pp. 2659–2667, 2022. Impact Factor: 2.012.
3. **S. Sharma** and R. Chaujar, "Impact of tunnel gate process variations on analog/radio frequency (microwave) and small signal parameters of hetero material tunneling interfaced charge plasma junctionless tunnel field effect transistor", International Journal of Circuit Theory and Applications, vol. 50, No. 10, pp. 3626-3641, 2022. Impact Factor: 2.378

Biography

SANGEETA

Department of Applied Physics

Sangeeta is currently working as a full-time research scholar in the Department of Applied Physics, Delhi Technological University, Delhi. She has completed her Bachelor of Science and Master of Science in Physics with specialization in Condensed Matter Physics from Kurukshetra University, Kurukshetra, Haryana. She does research in Theoretical Condensed Matter Physics with a primary focus on understanding the thermoelectric properties of Zintl compounds, Heusler alloys, and some low-dimensional materials using first-principles calculations. She has published 02 research papers in the International reputed journals.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sangeeta**, R. Kumar and M. Singh, "Realizing high thermoelectric performance in ptype RbZn4P3 Zintl compound: a first-principles investigation", Journal of Materials Science, Vol. 57, no. 23, pp. 10691–10701, 2022. Impact Factor: 4.682

Biography

SANDEEP SHARMA

Department of Applied Physics

Mr. Sandeep Sharma is currently pursuing his Ph.D. degree in the Department of Applied Physics, at Delhi Technological University, Delhi, India. He is currently working on the topic "Enhancement in Luminescent Properties of Rare Earth Doped Barium Strontium Alumino Borosilicate Glasses for Photonic Applications". His research interests include the synthesis of rare earth doped glasses and study of their photonic properties. He received his master's degree in Physics from the Department of Physics and Astrophysics, University of Delhi, Delhi, India. He has secured AIR 15 in CSIR-UGC NET (Physical Science) June 2021. He has also done Masters in Education and Psychology. He received his bachelor's degree (B.Sc. (H) in Physics and B.ed from University of Delhi, Delhi, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **S. Sharma**, A. S. Rao, and K. Kishore, "Energy transfer dynamics in thermally stable Sm3+/ Eu3+ co-doped AEAlBS glasses for near UV triggered photonic device applications," Journal of Non-Crystalline Solids, vol. 580, p. 121392, 2022. Impact Factor: 4.458

Biography

SHRUTI SHARMA

Department of Applied Physics

Shruti Sharma is currently working as Research Fellow in the Department of Applied Physics, Delhi Technological University, Delhi. Her research area is CNT-Graphene Hybrid. She has completed her M.Sc. in Physics from Deenbandhu Chhotu Ram University of Science and Technology (D.C.R.U.S.T.), Sonepat, Haryana.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Shruti Sharma** and Suresh C. Sharma, "Effect of Plasma Control Parameters on the Growth of Nitrogen-Doped Nanocone-Vertical Graphene Hybrid: Theoretical Investigations", Plasma Chemistry and Plasma Processing 42, 413-433 (2022). https://doi.org/10.1007/s11090-022-10229-3. Impact Factor : 3.337.

Biography

SURESH C. SHARMA

Department of Applied Physics

Dr. Suresh C. Sharma is working as a professor with the department of applied physics Delhi Technological University, Delhi. He has been assigned the administrative responsibilities of Dean (Acad-PG). He was awarded the young scientist project as a principal investigator by the Department of Science and Technology, Govt. of India for two-year duration (1997-99). In addition, he has been a JSPS (Invitation)Postdoctoral Fellow and visiting Researcher from May 2004 to October 2005 with the centre for atomic and molecular technologies (CAMT), Osaka University, Japan. Besides, he was awarded Senior Research Associate under the scientist pool scheme by CSIR, Govt of India for 3 years (1999-2002) and worked in the department of physics and astrophysics, University of Delhi from April 1999 to January 2002.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	08

1. Sharma, J., & **Sharma, S. C**. (2022). In the existence of a transverse dc electric field, the kinetic theory of current-driven electrostatic ion cyclotron waves excitation in a magnetized dusty plasma. *Contributions to Plasma Physics*, *62*(9), e202200073.

2. Jyoti, **Sharma, S. C**., Pathak, N., & Sharma, R. P. (2022). Beam-driven whistler mode nonlinear saturation and turbulence in the magnetopause. *Physics of Plasmas*, *29*(9), 092104.

3. Kansal, M., & **Sharma, S. C**. (2022). Exploration of Novel Hafnium Oxide (HfO2) Based Plasma-Assisted Gate All Around Carbon Nanotube FET (GAA-CNTFET) for High Sensing Applications. *ECS Journal of Solid State Science and Technology*, *11*(10), 101002.

4. Kansal, M., & **Sharma, S. C**. (2022). Performance Evaluation & linearity distortion analysis for plasma-assisted dual-material carbon nanotube field effect transistor with a SiO2-HfO2 Stacked Gate-Oxide Structure (DM-SGCNFET). *Silicon*, 1-11.

5. Sharma, S., & **Sharma, S. C**. (2022). Effect of Plasma Control Parameters on the Growth of Nitrogen-Doped Nanocone-Vertical Graphene Hybrid: Theoretical Investigations. *Plasma Chemistry and Plasma Processing*, *42*(2), 413-433.

6. Sharma, U., & **Sharma, S. C.** (2022). Investigations on Plasma Pretreatment of Catalyst Film and Catalyzed Growth of Carbon Nanotubes. *IEEE Transactions on Plasma Science*, *50*(4), 888-898.

7. Sharma, U., & **Sharma, S. C**. (2022). Impact of plasma process parameters on the growth of vertically aligned carbon nanotube array and its optimization as field emitters. *The European Physical Journal Plus*, *137*(7), 82

Biography

VINOD SINGH

Department of Applied Physics

Prof. Vinod Singh is a Professor in the Department of Applied Physics, Delhi Technological University, Delhi. He is also the Associate Director of Human Resource Development Centre (HRDC), DTU and the Convener of Institution's Innovation Council (IIC), DTU. He joined DCE as a Lecturer in Physics in 2003 at the age of 23 years and has teaching, research and academic administrative experience of more than 19 years. He received his Ph.D. degree from Indian Institute of Technology (IIT) Delhi. He was honored with the University Gold Medal in both the B.Sc. and M.Sc. (Physics) and also honored with the Bhamashah Award (Gold Medal), presented by Sir V.S. Naipaul, Nobel Laureate. He is an active researcher currently supervising eleven Ph.D. scholars and has published a patent (granted). He was honored with the best presentation award by Bharat Ratan Prof. C. N. R. Rao in Nano India 2017 conference. He has been awarded the Research Excellence Awards for excellence in research by DTU. He has delivered more than 15 invited talks in international and national academic events. He is the Principal Investigator of the two sponsored research projects. He was the convener of a reputed International Conference on Atomic, Molecular, Optical and Nano Physics with Applications (CAMNP-2019) and is the editor of Springer's proceedings in physics. He is the editorial board member of Frontiers in Sensors. His broad areas of research include material science, sensors, 2D materials, functional nanomaterials and their size dependent properties and applications.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. Berwal, U., **Singh, V**., & Sharma, R. (2022). Key role of Tb3+ doping on structural and photoluminescence properties of Gd2Ti2O7 pyrochlore oxide. *Ceramics International*, *48*(15), 22307-22316.

2. Sharma, S., & **Singh, V.** (2021). Carbon Nanotubes in Emerging Photovoltaics: Progress and Limitations. *IEEE Journal of Photovoltaics*, *12*(1), 167-178.

3. Singh, V., Kulriya, P. K., Kumar, A., Kumar, R., Kumar, P. P., Berwal, U., ... & **Singh**, K. (2022). Hydrogen induced structural modifications in size selected Pd-Carbon core-shell NPs: Effect of carbon shell thickness, size and pressure. *International Journal of Hydrogen Energy*, *47*(25), 12642-12652.

4. Chandra, K., **Singh,** V., Sharma, S. K., & Kulriya, P. K. (2022). Structural magnetic properties correlation in Ge doped frustrated Ho2Ti2O7 pyrochlore. *Journal of Magnetism and Magnetic Materials*, *561*, 169694.

Biography

VINEET SHARMA

Department of Applied Physics

Dr. Vineet Sharma has completed PhD from the Department of Applied Physics, Delhi Technological University (DTU), Delhi. He did his M.Sc. in Condensed Matter Physics from Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonipat, Haryana and his Bachelor of Science in Physics from Keshav Mahavidyalaya, Delhi University, Delhi. He started his research in Nanotechnology during his master's thesis work. After completing his master's, he worked as a Junior Research Fellow in SERB-DST sponsored project in the Laser-spectroscopy Lab, Department of Applied Physics, DTU Delhi, India. He qualified for the JEST and GATE exams in Physics (2016). He has published five (5) research papers in internationally reputed SCI/SCIE journals and one (1) patent has been issued.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Vineet Sharma** and Mohan Singh Mehata, A parallel investigation of un-doped and Mn2+ doped zinc selenide quantum dots at low temperature and application as an optical temperature sensor, Materials Chemistry and Physics 276 (2022) 125349. Impact factor: 4.778.

2. **Vineet Sharma** and Mohan Singh Mehata, Photoluminescence turn-off based dual analytes (Hg2+ and Pb2+) sensor in water using 3-marcaptoproponic acid protected Mn2+ doped ZnSe quantum dots, Chemical Physics Letters 787 (2022) 139270. Impact factor: 2.719.

Biography

VIDHI

Department of Applied Physics

Vidhi is a PhD Scholar at DTU and she did her masters in physics from DTU. From a very young age she was intrigued by science and technology. During her school days, small experiments in the physics class grabbed her interest and which led her to pursue BSc Physics hons from St. Stephen's College. Apart from Physics she finds joy in playing basketball and enjoys making paintings as well.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Rao, A. S. (2022). Spectroscopic characterizations of Dy3+ ions doped phosphate glasses for epoxy-free white LED applications. *Optical Materials*, *132*, 112863.

Biography

VIKAS

Department of Applied Physics

Mr. Vikas is currently working as a full-time research scholar in the Department of Applied Physics at Delhi Technological University (DTU), Delhi. He completed his graduation (B.Sc.) and post-graduation (M. Sc.) in Physics from Maharshi Dayanand University (MDU), Rohtak, Haryana in 2013 and 2017. He developed his interest in experimental research and his area of interest is luminescent glasses/glass-ceramics and p hosphor-in glasses (PiGs) for optoelectronic applications. He is currently working on rare-earth-activated inorganic luminescent materials focusing on solid-state lighting applications at Luminescent Material Research Lab (LMRL), DTU. He has published 02 research papers in different reputed International journals and attended various national and international conferences related to his research work.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Vikas**, Mula Jayasimhadri and Divi Haranath, "Spectroscopic investigations of Dy3+ doped tungstate-tellurite glasses for solid-state lighting applications", International Journal of Applied Glass Sciences, vol. 13, pp. 645-654, 2022. Impact Factor: 2.087.

2. **Vikas** and Mula Jayasimhadri, "Thermally stable red luminescence from Eu3+ activated telluro zinc phosphate glass under near-ultraviolet light excitation for photonic application", Luminescence: The Journal of Biological and Chemical Luminescence, Vol. 37, pp. 2059-2066, 2022. Impact Factor: 2.613.

Biography

YASH PATHAK

Department of Applied Physics

Yash Pathak received his B.Sc. degree in Physics (Hons.) from DBRAU Agra University, Uttar Pradesh, India, in 2017 and his M.Sc. degree in Physics from DBRAU Agra University, Uttar Pradesh, India, in 2019. He is currently pursuing a Ph.D. degree with the Department of Applied Physics at Delhi Technological University (Formerly Delhi College of Engineering), New Delhi, India. He has authored or co-authored around 7 papers in different reputed international journals and conferences. He is currently investigating new channel materials that can further improve the performance of nanoscale devices and the effects of various structural properties on NCFET overall performance. His research interests include modeling and simulation study of nanoscale semiconductor devices, experimental circuit design and their ULSI switching applications. He is a student member of IEEE.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Pathak, Y.**, Malhotra, B.D. & Chaujar, R. Detection of biomolecules in dielectric modulated double metal below ferroelectric layer FET with improved sensitivity. J Mater Sci: Mater Electron 33, 13558–13567 (2022). https://doi.org/10.1007/s10854-022-08290-x

2. **Pathak, Y.**, Malhotra, B.D. & Chaujar, R. Analog/RF Performance and Effect of Temperature on Ferroelectric Layer Improved FET device with Spacer. Silicon 14, 12269–12280 (2022). https://doi.org/10.1007/s12633-022-01822-4

Biography

YASHA TAYAL

Department of Applied Physics

Ms. Yasha Tayal has completed her doctoral degree in the Department of Applied Physics, Delhi Technological University (DTU), Delhi, India under the supervision of Prof. A.S. Rao. She has received her M.Sc degree in Physics from CCS University, Meerut, India. She has been working in various Engineering Colleges in Delhi-NCR from 2008 onwards, teaching various subjects of Physics. She started her teaching experience from Dr. Akhilesh Das Gupta Institute of Technology & Management, Delhi in the year 2008. Currently working as Assistant Professor in ABES Engineering College, Ghaziabad, U.P. Her area of interest includes synthesis and optical analysis of glasses for photonic applications. She is currently working on luminescent materials focusing on w-LEDs and solar cell applications at Materials and Atmospheric Science Research Lab (MASRL), DTU. She has published three papers and attended various national and international conferences related to her research.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Yasha Tayal,** A.S. Rao, Sumandeep Kaur, Photoluminescence characteristics of Sm3+/Eu3+ co-doped LPZABS glasses for solar cell applications, Solid State Sci. Vol. 125, pp. 106834 - 106844 (2022) Impact Factor: 3.059.

Department of Biotechnology

Biography

ASMITA DAS

Department of Biotechnology

Dr. Asmita Das completed her PhD in Immunology from Jawaharlal Nehru University, New Delhi, India and thereafter did postdoctoral research in the Laboratory of Immunogenetics in National Institute of Allergy and Infectious Diseases (NIAID) at National Institutes of Health (NIH) for 5 years. She has been engaged in extensive research in NK cell development and NK receptor modulation and signaling. Her research focus is on combinatorial immunotherapy for cancer and immunodiagnostics. She is also involved in research in Immunoinformatics and genomics with special thrust on theranostics. Apart from her core area of research, she is also engaged in multi-institution interdisciplinary research with IIT Delhi in the field of Computational Fluid Dynamics in Immune complex diagnostics, AIIMS in tumor microenvironment studies and with JNU in a project on nanoparticle mediated drug delivery system development. Her research work in Autophagy and NK receptor signaling has generated several high impact publications like 11.1, 21 and many others.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Priyanka Rawat and **Asmita Das** (Corresponding author) Differential expression of disparate transcription factor regime holds the key for NK cell development and function modulation. Life Sciences(Elsevier) 297, 120471, 2022. ISSN 0024-3205 (Impact Factor:6.78)

2. Muskaan Dhingra, Shayon Mahalanobis and **Asmita Das** (Corresponding author) Thyroid receptor B might be responsible for breast cancer associated with Hashimoto's thyroiditis: a new insight into pathogenesis. Immunologic Research, Springer, Vol 70, 441-448, 2022. ISSN: 0257-277X (Impact Factor 4.5)

Biography

BANSI DHAR MALHOTRA

Department of Biotechnology

Dr. Bansi D. Malhotra received the Ph.D. degree from the University of Delhi, New Delhi, in 1980. He retired as SERB Distinguished Fellow (Government of India) with the Department of Biotechnology, Delhi Technological University, New Delhi, India in July 2022. He has published more than 300 articles in refereed international journals, has filed 12 patents, and has co-authored many textbooks. His current research activities include biosensors, bio-fuel cells, conducting polymers, self-assembled monolayers, nano-biotechnology, biomedical engineering, and biomolecular electronics. He is a Fellow of the Indian National Science Academy and the National Academy of Sciences, India. He is also an Academician of the Asia Pacific Academy of Materials. He was a recipient of the National Research Development Corporation Award 2005 for invention on blood glucose biochemical analyzer.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Gupta, N., Todi, K., Narayan, T., & **Malhotra, B. D**. (2022). Graphitic carbon nitride-based nanoplatforms for biosensors: design strategies and applications. *Materials Today Chemistry*, *24*, 100770.
2. Aggarwal, V., Solanki, S., & **Malhotra, B. D**. (2022). Applications of metal–organic framework-based bioelectrodes. *Chemical Science*.

Biography

DEBLEENA GUIN
Department of Biotechnology

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Guin, D.,** Yadav, S., Singh, P., Singh, P., Thakran, S., Kukal, S., ... & Kukreti, R. (2022). Human genetic factors associated with pneumonia risk, a cue for COVID-19 susceptibility. Infection, Genetics and Evolution, 102, 105299.

Biography

JAI GOPAL SHARMA
Department of Biotechnology

Prof. Jai Gopal Sharma has been working at the Department of Biotechnology, Delhi Technological University Delhi, India. He has completed his Masters in Zoology from the Meerut University and Ph.D. from University of Delhi. He went to Kyoto University, Japan as a Post-Doctoral Fellow and conducted research in radiation biology. He continued the study in India as a Senior Research Associatatul e (CSIR). Then he joined the Ministry of Science and Technology, Government of India as Scientist. He has completed 7 National and International Collaborative projects funded by different agencies such as CSIR, DBT, UGC, DST, BBSRC (United Kingdom).

His areas of interest are Aquaculture, Fish Nutrition, Industrial and Environmental Biotechnology, Water Quality Management, Radiation Biology, UV-B Radiation, Aquatic Ecology, Biosensor, Bioremediation, Bio-energy, Microbiology, Water Pollution, Nano-biotechnology, Gene Expression, Water Chemistry, Environmental Impact Assessment, Chromatography, Amino Acid, Fatty Acid, Biofuel, Medicinal and Aromatic Plants.

As his area of expertise is diverse, he is exploring the new compounds and amino acids from Medicinal and Aromatic Plants that can have potential benefits for human health and the screening and identification of immune relevant functional genes in fish. Also new generation bioremediation practices to combat the hazardous compounds (pesticides, explosives, ammonia, plastics etc.) from soil and water to initiate bioremediation strategies to clean our environment for the next generations.

He has been guiding B. Tech., M.Tech., Ph.D. and Post-Doctoral students. Prof. Sharma is a recipient of many awards, including two times Young Scientist Award. He has visited more than 20 countries for his scientific visits such as Australia, France, Japan, United Kingdom, Spain, Malaysia, Norway, South Africa, Israel, China, U.S.A, Denmark, Belgium, Tanzania etc. He is a life member of many professional bodies. He has delivered many invited lectures at various workshops and training programs. He has served as subject expert in All India Radio and Indian National Television. He has published more than one hundred research papers in reputed peer reviewed journals.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **Sharma, J**., Kumar, N., Mittal, P. and Chakrabarti, R., 2022. Evaluation of UV–B protective properties of leaves and seeds of Achyranthes aspera in Asian catfish Clarias batrachus (Linn.). Photochemical & Photobiological Sciences, pp.1-16.
2. Chaudhary, N., Verma, D., **Sharma, J. G**., & Solanki, P. R. (2022). A novel bioinspired carbon quantum dots based optical sensor for ciprofloxacin detection. *Materials Letters*, *308*, 131090.
3. Kumar, L., Chugh, M., Kumar, S., Kumar, K., **Sharma, J**., & Bharadvaja, N. (2022). Remediation of petrorefinery wastewater contaminants: A review on physicochemical and bioremediation strategies. Process Safety and Environmental Protection, 159, 362-375.
4. Tiwari, N., Bansal, M., Santhiya, D., & **Sharma, J. G**. (2022). Insights into microbial diversity on plastisphere by multi-omics. *Archives of Microbiology*, *204*(4), 216.
5. Tiwari, N., Santhiya, D., & **Sharma, J. G**. (2022). Biodegradation of micro sized nylon 6, 6 using Brevibacillus brevis a soil isolate for cleaner ecosystem. *Journal of Cleaner Production*, *378*, 134457.

Biography

LAKHAN KUMAR

Department of Biotechnology

Lakhan Kumar works towards Environmental Sustainability. He completed his B. Tech in Biotechnology from National Institute of Technology, Jalandhar and M. Tech in Industrial Biotechnology from Delhi Technological University, Delhi. His interest areas include Bioenergy, Bioprocess Engineering, Algal Biorefinery, and Remediation of Environmental Pollutants. He has published several peer-reviewed articles and book chapters majorly in Biofuels & Biorefinery, and Bioremediation. At present, he is pursuing his Ph.D. in Biotechnology at Department of Biotechnology, Delhi Technological University, Delhi, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **L. Kumar**, M. Chugh, S. Kumar, K. Kumar, J. Sharma, and N. Bharadvaja, "Remediation of petrorefinery wastewater contaminants: A review on physicochemical and bioremediation strategies," Process Safety and Environmental Protection, vol. 159. Elsevier, pp. 362–375, Mar. 01, 2022, doi: 10.1016/j.psep.2022.01.009. Impact Factor- 7.926

Biography

MEHAR SAHU

Department of Biotechnology

Mehar Sahu received the B. Tech. degree in Biotechnology from Amity University in 2019.

She has recently taken admission in the PhD programme at Delhi Technological University

(DTU), India under the supervision of Prof. Pravir Kumar. She has successfully completed her Master of Technology programme in Biomedical Engineering. She joined Molecular

Neuroscience and Functional Genomics Laboratory at DTU in May 2020 and continues to work there. Her main research interests are in post-translational modifications, artificial intelligence, machine learning and brainwaves entrainment in the field of neurosciences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **Sahu, M.,** Tripathi, R., Jha, N. K., Jha, S. K., Ambasta, R. K., & Kumar, P. (2022). Cross talk mechanism of disturbed sleep patterns in neurological and psychological disorders. *Neuroscience & Biobehavioral Reviews*, 104767.

2. Tripathi, R., Gupta, R., **Sahu, M**., Srivastava, D., Das, A., Ambasta, R. K., & Kumar, P. (2021). Free radical biology in neurological manifestations: mechanisms to therapeutics interventions. *Environmental Science and Pollution Research*, 1-48.

3. Gupta, R., **Sahu, M**., Tripathi, R., Ambasta, R. K., & Kumar, P. (2022). Protein S-sulfhydration: Unravelling the prospective of hydrogen sulfide in the brain, vasculature and neurological manifestations. *Ageing Research Reviews*, 101579.

Biography

NAVNEETA BHARDWAJ

Department of Biotechnology

Dr. Navneeta Bharadvaja is Assistant Professor in the Department of Biotechnology, Delhi Technological University, Delhi. Her research area includes establishing the cultures of medicinal plants to obtain pharmaceutically essential compounds, obtaining high yields of Secondary Metabolites, Phyto-remediation, Algal Biotechnology, Nutraceuticals, Biofuels and Plant Informatics. She has more than 14 years of teaching and research experience in the field of Biotechnology.

Award Summary and Publications Details

Category Detail	No. of publications
COMMENDABLE RESEARCH AWARDS	06

1. Verma A, **Bharadvaja N.** Plant-mediated synthesis and characterization of silver and copper oxide nanoparticles: antibacterial and heavy metal removal activity. Journal of Cluster Science. 2022 Jul;33(4):1697-712. https://doi.org/10.1007/s10876-021-02091-8IF3.447

2. Nanda N, **Bharadvaja N**. Algal bioplastics: current market trends and technical aspects. Clean Technologies and Environmental Policy. 2022 Jul 13:1- 21. https://doi.org/10.1007/s10098-022-02353-7IF-4.700

3. Anand, S., **Bharadvaja, N.** Potential Benefits of Nutraceuticals for Oxidative Stress Management. Rev. Bras. Farmacogn. 32, 211–220 (2022). https://doi.org/10.1007/s43450- 022-00246-wIF-2.464

4. Roy, A., Sharma, N. & **Bharadvaja, N**. Assessment of phytochemical and genetic diversity analysis of Plumbago zeylanica L. accessions. Genet Resour Crop Evol 69, 209–219 (2022). https://doi.org/10.1007/s10722-021-01220-6IF- 1.876

5. Anand, R., Mohan, L. & **Bharadvaja, N**. Disease Prevention and Treatment Using βCarotene: the Ultimate Provitamin A. Rev. Bras. Farmacogn. 32, 491–501 (2022). https://doi.org/10.1007/s43450-022-00262-wIF-2.464

6. Kumar L, Chugh M, Kumar S, Kumar K, Sharma J, **Bharadvaja N.** Remediation of petrorefinery wastewater contaminants: A review on physicochemical and bioremediation strategies. Process Safety and Environmental Protection. 2022 Mar 1;159:362- 75. https://doi.org/10.1016/j.psep.2022.01.009IF-7.926

Biography

NAVNEET CHAUDHARY

Department of Biotechnology

Navneet Chaudhary working as a Ph.D. research scholar (registration no. 2k18/PHD/BT/09), working under the supervision of Prof. Jai Gopal Sharma in the Department of Biotechnology at Delhi Technological University, New Delhi in collaboration with special Centre for Nanoscience at Jawaharlal Nehru University, New Delhi under the co-supervision of Dr. Pratima R. Solanki. He is doing Ph.D. research on "Nanomaterial based biosensors for the detection of antibiotics." He has also attended the prestigious senior research fellowship awarded by ICMR since 2019 to support my research work. In this direction, he had published several research works in reputed high impact journals. He has more than 4 years of research experience in the field of biosensors and molecular biology where he had worked on multiple projects and gained the knowledge in electrochemical biosensor, optical sensors, Bacterial culture, molecular biology, fluorescence microscopy, immunology and cell biology. He received his master degree from Gautam Buddha University greater Noida (Uttar Pradesh).He had presented his research work at the various International and national conferences and got best poster award in an international conference.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Chaudhary, N.**, Verma, D., Sharma, J. G., & Solanki, P. R. (2022). A novel bioinspired carbon quantum dots based optical sensor for ciprofloxacin detection. Materials Letters, 308, 131090

Biography

NEHA TIWARI

Department of Biotechnology

Neha Tiwari is a Research Scholar at the Discipline of Biotechnology, Department of Biotechnology, Delhi Technological University (formerly Delhi College of Engineering), Delhi, India. She received her Master's degree from the Dept. of Biotechnology, Gautam Buddha University, Greater Noida, U.P. Currently, she is pursuing Ph.D. under the supervision of Prof. Jai Gopal Sharma and Dr. Deenan Santhiya, on the topic "Microbial degradation of Microplastics' ' . She has published papers in reputed and high impact factor journals affiliated with Delhi Technological University. Her research interests are in the field of Nano Biotechnology and Environmental Biotechnology.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Tiwari, N.,** Bansal, M., Santhiya, D. and Sharma, J.G., 2022. Insights into microbial diversity on plastisphere by multi-omics. Archives of Microbiology, 204(4), pp.1-16. Impact factor: 2.667

2. **Tiwari, N.,** Santhiya, D. and Sharma, J.G., 2022. Biodegradation of micro sized nylon 6, 6 using Brevibacillus brevis a soil isolate for cleaner ecosystem. Journal of Cleaner Production, 378, p.134457. Impact factor: 11.072

Biography

PRAVIR KUMAR

Department of Biotechnology

Prof. Pravir Kumar, is Dean International affairs and also HoD of Department of Biotechnology. He had also been Dean of Alumni Affairs at DTU. An academician with more than 20 years of research and teaching experience in vascular biology, molecular neuroscience, drug discovery and lead molecule identification. His areas of research interest and expertise include protein aggregation, molecular chaperone and ubiquitin E3 ligase in neurodegenerative disorders along with the aberrant cell cycle re-entry into aged neurons and muscles. Kumar has more than 3300+ citations, h-index:27; i-10: 47; 200+ papers in peer-reviewed journals and conference proceedings. Before joining Delhi Technological University, Prof. Kumar served as an Associate Professor and Assistant Director for Centre for medical Engineering at Vellore Institute of Technology, Vellore, /institution of Eminence (IoE). He has obtained MS degree from BHU, Varanasi, India with Molecular and clinical genetics specialization, and PhD degree from J. W. Goethe University, Germany in the field of coronary artery diseases and cardiovascular physiology. Before returning to India, he served in the Neurology Department at Tufts University School of Medicine, Boston, USA as a postdoctoral fellow and later at faculty position. He has also served as National Expert member of Soldiers health and drug discovery (SHDD), Defence Research and Development Organization, Ministry of Defense, Government of India. He is also in the selection panel in prestigious Fulbright scholarship, Indian Council of Medical Research, Ministry of Health, and did confidential works of Government of India as an advisor. He is editorial and reviewer board member of more than 50 journals of international repute including in Nature publication house.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: SILVER
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	07

1. Divya Yadav, **Pravir Kumar*** (2022), Restoration and targeting of aberrant neurotransmitters in Parkinson's disease therapeutics, Neurochemistry International (Elsevier) Volume 156, June 2022, 105327 (https://doi.org/10.1016/j.neuint.2022.105327) IF: 4.297 [*: Corresponding author]

2. Rohan Gupta, Rashmi K. Ambasta, **Pravir Kumar** (2022), Multifaced role of protein deacetylase sirtuins in neurodegenerative disease, Neuroscience & Biobehavioral Reviews (Elsevier) Volume 132, January 2022, 976-997, (https://doi.org/10.1016/j.neubiorev.2021.10.047) IF: 9.052 [*: Corresponding author]

3. Rohan Gupta, Mehar Sahu, Rahul Tripathi, Rashmi Kumar Ambasta, **Pravir Kumar** (2022), Protein Ssulfhydration: Unravelling the prospective of hydrogen sulfide in the brain, vasculature and neurological manifestation, Ageing Research Reviews (Elsevier) Volume 76, April 2022, 101579 (https://doi.org/10.1016/j.arr.2022.101579) IF: 11.788 [*:Corresponding author]

4. Mehar Sahu, Rahul Tripathi, Niraj Kumar Jha, Saurabh Kumar Jha, Rashmi Kumar Ambasta, **Pravir Kumar*** (2022), Cross talk mechanism of disturbed sleep patterns in neurological and psychological disorders, Neuroscience & Biobehavioral Reviews (Elsevier) Volume 140, September 2022,104767 (https://doi.org/10.1016/j.neubiorev.2022.104767) IF: 9.052 [*: Corresponding author]

5. Rahul Tripathi, Rohan Gupta, Mehar Sahu, Devesh Srivastava, Ankita Das, Rashmi K Ambasta & **Pravir Kumar*** (2022), Free radical biology in neurological manifestations: mechanisms to therapeutics interventions, Environmental Science and Pollution Research (Springer) Volume 29, September 2022, 62160–62207 (https://doi.org/10.1007/s11356-021-16693-2) IF: 5.190 [*:Corresponding author]

6. Sudhanshu Sharma, Dia Advani, Ankita Das, Nishtha Malhotra, Akanksha Khosla, VanshikaArora, Ankita Jha, Megha Yadav, Rashmi Kumar Ambasta, **Pravir Kumar*** (2022), Pharmacological intervention in oxidative stress as a therapeutic target in neurological disorders Provisionally, Journal of Pharmacy and Pharmacology (Oxford), Volume 74, April 2022, 461-484 (https://doi.org/10.1093/jpp/rgab064) IF: 4.810 [*: Corresponding author]

7. Smita Kumari, Sudhanshu Sharma, Dia Advani, Akanksha Khosla, **Pravir Kumar** & Rashmi K. Ambasta* (2022), Unboxing the molecular modalities of mutagens in cancer, Environmental Science and Pollution Research (Springer) Volume 29, September 2022, 62111–62159 (https://doi.org/10.1007/s11356-021-16726-w) IF: 5.19

Biography

RAHUL TRIPATHI

Department of Biotechnology

Rahul Tripathi is currently pursuing Ph.D. Biotechnology from the Department of Biotechnology, Delhi Technological University under supervision of Prof. Pravir Kumar. His area of research interest is "Functional Genomic Analysis of Neurodegenerative Diseases". He has worked as Senior Research Fellow at the Indian Institute of Wheat & Barley Research. He has completed his M.Tech. Biotechnology from Motilal Nehru National Institute of Technology (MNNIT), Allahabad and B.Tech. Biotechnology from N.C. College of Engineering (Kurukshetra University), Panipat. He has qualified DBT-JRF Category I (2016), GATE (2016 & 2014), and JGEEBILS (2016 & 2014). He is receiving a fellowship from the Department of Biotechnology (DBT), Government of India. He has published one first-authored papers in the reputed journal Environmental Science and Pollution Research (IF: 5.19; Springer, DOI: 10.1007/s11356-021-16693-2) and four as co-author inAgeingResearchReviews(IF:11.788;Elsevier,DOI:10.1016/j.arr.2022.101579and10.1016/j.arr.2023.101855), Neuroscience and Biobehavioral Reviews (IF: 9.052; Elsevier; DOI: 10.1016/j.neubiorev.2022.104767) and Neurochemistry International (IF: 4.297; DOI: 10.1016/j.neuint.2020.104841).

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **Tripathi R**, Gupta R, Sahu M, Srivastava D, Das A, Ambasta RK and Kumar P. Free radical biology in neurological manifestations: mechanisms to therapeutics interventions. Environmental Science and Pollution Research 29, 62160–62207. DOI: 10.1007/s11356-021-16693-2 (IF: 5.19)
2. Gupta R, Sahu M, **Tripathi R**, Ambasta RK and Kumar P. Protein S-sulfhydration: Unraveling the prospective of hydrogen sulfide in the brain, vasculature and neurological manifestations. Ageing Research Reviews 76, 101579. DOI: 10.1016/j.arr.2022.101579 (IF: 11.788)
3. Sahu M, **Tripathi R**, Jha NK, Jha SK, Ambasta RK, Kumar P. Cross talk mechanism of disturbed sleep patterns in neurological and psychological disorders. Neuroscience & Biobehavioral Reviews. 2022:104767. DOI: 10.1016/j.neubiorev.2022.104767 (IF: 9.052)

Biography

RAJKUMAR CHAKROBORTHY

Department of Biotechnology

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Chakraborty, R**., Bhattacharje, G., Baral, J., Manna, B., Mullick, J., Mathapati, B. S., ... & Das, A. K. (2022). In-silico screening and in-vitro assay show the antiviral effect of Indomethacin against SARS-CoV-2. Computers in Biology and Medicine, 147, 105788.

Biography

RAKSHA ANAND

Department of Biotechnology

Raksha Anand works on the development of algal nutraceuticals, and waste and biomass valorization. She completed her BSc (Hons.) degree in Biotechnology from the School of Basic Sciences and Research (SBSR), Sharda University, and Master's degree in Biotechnology from Delhi Technological University, Delhi. Her interest areas include Nutraceuticals and Lifestyle Disease Management, Algal Biorefinery, and Environmental remediation.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R. Anand**, L. Mohan, and N. Bharadvaja, "Disease Prevention and Treatment Using βCarotene: the Ultimate Provitamin A," Revista Brasileira de Farmacognosia, vol. 32, no. 4. pp. 491–501, May 30, 2022, doi: 10.1007/s43450-022-00262-w. Impact Factor: 2.464

Biography

ROHAN GUPTA

Department of Biotechnology

The scientific research interests of Mr. Rohan Gupta involve the mechanism of lysine-induced post-translational mechanism and its associated enzymes in the pathogenesis of neurodegenerative diseases through the involvement of multiple signaling pathways. His academic training, research experience, teaching assistance, and scientific training experience have provided him with excellent background on multiple disciplines, such as computational biology, neuroinformatics, biomedical informatics, drug designing, drug discovery, proteomic studies, genetics, and molecular biology. As a master's student, he was feeling lucky to work under the supervision of Prof. Pravir Kumar on the identification of novel histone deacetylase inhibitors as a therapeutic approach for Alzheimer's disease. He gained expertise in the machine learning models, network biology, and transcriptional regulation of disease progression. As a doctoral student under the supervision of Prof. Pravir Kumar, he was able to implement his experience of computational biology, machine learning, bioinformatics tools, network and structural biology in identification of acetylation and HDACs mechanism in the pathogenesis of neurodegenerative disease, especially AD and PD. During his Ph.D., he published several first author papers in major journals, namely aging research reviews, neuroscience and biobehavioral reviews, cellular and molecular life sciences, life sciences, molecular diversity, ACS omega, and many others.

Award Summary and Publications Details

Category Title	No. of publications
COMMENDABLE RESEARCH AWARD	03

1. **Gupta, R**., Sahu, M., Tripathi, R., Ambasta, R. K., & Kumar, P. (2022). Protein S-sulfhydration: Unravelling the prospective of hydrogen sulfide in the brain, vasculature and neurological manifestations. *Ageing Research Reviews*, 101579.

2. **Gupta, R**., Ambasta, R. K., & Kumar, P. (2022). Multifaced role of protein deacetylase sirtuins in neurodegenerative disease. *Neuroscience & Biobehavioral Reviews*, *132*, 976-997.

3. Tripathi, R., **Gupta, R**., Sahu, M., Srivastava, D., Das, A., Ambasta, R. K., & Kumar, P. (2021). Free radical biology in neurological manifestations: mechanisms to therapeutics interventions. *Environmental Science and Pollution Research*, 1-48.

Biography

SMITA RASTOGI VERMA

Department of Biotechnology

Dr. Smita Rastogi Verma is Assistant Professor, Department of Biotechnology, Delhi Technological University, Delhi. A Ph.D in Biochemistry (Gold medallist) from Lucknow University, an M.Tech. in Biotechnology (I rank) from the Institute of Engineering & Technology, Lucknow, and an M.Sc. in Biochemistry (Gold Medallist) from Lucknow University, she has more than 18 years of teaching and research experience. Before joining DTU, she worked as a faculty in the Department of Biotechnology, Integral University, Lucknow. Her area of specialization is Molecular Biology. She has guided 6 Ph.D. students. She has ~45 publications in reputed journals to her credit and has also contributed several chapters in various nationally and internationally published books. She has also authored a text book on 'Genetic Engineering' published by Oxford University Press.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. V. Aggarwal, S. Sunder, **S. Rastogi Verma,** "Disease-associated dysbiosis and potential therapeutic role of Akkermansia muciniphila, a mucus degrading bacteria of gut microbiome", Folia Microbiologica, vol. 67, no. 6, pp. 811-824, 2022. Impact factor: 2.629

Biography

SMITA KUMARI

Department of Biotechnology

Smita Kumari is a highly motivated and energetic Ph.D. research scholar working under the supervision of Prof. Pravir Kumar in the Department of Biotechnology at Delhi Technological University. Her Ph.D. research area is "Modulating Tumor Microenvironment using Combinatorial Therapy." She has qualified Junior Research Fellowship (JRF)/National Eligibility Test (NET) category-I and Graduate Aptitude Test in Engineering (GATE) in 2018. Currently, she is receiving a fellowship from the Department of Biotechnology (DBT), Govt. of India. She had also availed scholarship from BCIL (Biotechnology Consortium India Limited), Government of India. She graduated in Bachelors of Technology (Biotechnology) from Beant College of Engineering & Technology Gurdaspur, Punjab (India), where she secured 2nd position in the university. She has 6years of industrial research experience in the oncology-based biotechnology industry, where she has worked on multiple projects. Mammalian cell culture, molecular biology, fluorescence microscopy, biochemistry, immunology, cell biology, network biology, and bioinformatics are among her specialties. Her research has

appeared in prestigious journals such as Biochimica et Biophysica Acta (BBA) - Reviews on Cancer, Nature Biomedical Engineering, ESPR, Frontiers in Oncology and Chemical Communications. She has presented posters at various national and international conferences. She is highly ambitious and dedicated towards her research work.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumari, S.**, Sharma, S., Advani, D., Khosla, A., Kumar, P., & Ambasta, R. K. (2022). Unboxing the molecular modalities of mutagens in cancer. *Environmental Science and Pollution Research*, 1-49.

Biography

SUDHANSHU SHARMA

Department of Biotechnology

The scientific research interests of Mr. Sudhanshu Sharma involve the collaborative action of molecular chaperones, ubiquitin E3 ligases and other signaling molecules in the reversal of glioblastoma and other brain tumors. His academic training, research experience, teaching assistance, and scientific training experience have provided him with excellent background on multiple disciplines, such as cancer biology, signaling pathways, docking and molecular dynamic simulations, drug designing, drug discovery, proteomic studies, genetics, and molecular biology. As a master's in biochemistry, he received the university gold medal. As a doctoral student under the supervision of Prof. Pravir Kumar, he was able to implement his experience of wet lab experimentations such as cell culture and other proteomic tools in the identification of potential drug candidates in combating glioblastomas and other brain tumors. During his Ph.D., he published several papers in major journals. He also holds the prestigious DST-INSPIRE fellowship and is currently working as DST INSPIRE senior research fellow (SRF).

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Kumari, S., **Sharma, S.**, Advani, D., Khosla, A., Kumar, P., & Ambasta, R. K. (2022). Unboxing the molecular modalities of mutagens in cancer. Environmental Science and Pollution Research, 29, 62111–62159.

2. **Sharma S**, Advani D, Das A, Malhotra N, Khosla A, Arora V, Jha A, Yadav M, Ambasta RK, Kumar P. Pharmacological intervention in oxidative stress as a therapeutic target in neurological disorders. Journal of Pharmacy and Pharmacology. 2022 Apr;74(4):461-84. Impact factor:3.765

Biography

VIDUSHI AGGARWAL

Department of Biotechnology

Vidushi Aggarwal has recently obtained her Bachelor of Technology (B. Tech) in Biotechnology from Delhi Technological University (DTU), India. She is currently pursuing MTech in Biological Engineering at IIT Gandhinagar. She is a recipient of the IASc-INSA-NASI Summer Research Fellowship 2021 at the Institute of Bioinformatics (IOB), Bengaluru, India. Recently, she was shortlisted for sponsored Idea development in the Tata Steel MaterialNEXT 3.0 challenge for a research project based on nanomaterials for water remediation. Her main areas of interest include metal–organic frameworks, nanomaterials, biosensors and cancer therapeutic targeting. She is highly motivated to pursue a career in translational research with the aim of contributing to patient-centered care and innovative medicine.

Award Summary and Publications Details

Category Detail	No. Of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Aggarwal, V.,** Solanki, S., & Malhotra, B. D. (2022). Applications of metal–organic framework-based bioelectrodes. *Chemical Science*.

2. **Aggarwal, V**., Sunder, S., & Verma, S. R. (2022). Disease-associated dysbiosis and potential therapeutic role of Akkermansia muciniphila, a mucus degrading bacteria of gut microbiome. *Folia Microbiologica*, *67*(6), 811-824.

Biography

YASHA HASIJA

Department of Biotechnology

Prof. Yasha Hasija (B.Tech, M.Tech, Ph.D.) is a Professor at the Department of Biotechnology, and Associate Dean of Alumni Affairs, at Delhi Technological University. Her research interests include genome informatics, genome annotation, microbial informatics, integration of genome-scale data for systems biology, and personalized genomics. Several of her publications have been published in prestigious international journals, and she has made significant contributions to the fields of biotechnology and bioinformatics as an author and editor of notable books. Her expertise, through her book chapters and conference papers, is of significance to other academic scholarship and teaching. She is also on the Editorial Board of numerous international journals. Hasija's work has brought her recognition and several prestigious awards, including Human Gene Nomenclature Award at the Human Genome Meeting (2010), held at Montpellier, France. She has been the Project Investigator for several research projects sponsored by the Government of India, including DST-SERB, CSIR-OSDD, and DBT. As Prof. Hasjia continues conducting research, her passion for finding the translational implications of her findings grows.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. Meena J., **Hasija Y**. Application of explainable artificial intelligence in the identification of Squamous Cell Carcinoma biomarkers. Computers in Biology and Medicine. 2022 Jul 1;146:105505. Impact Factor: 6.69

2. Chakraborty, R., **Hasija, Y.** Predicting protein intrinsically disordered regions by applying natural language processing practices. Soft Comput 26, 12343–12353 (2022). Impact Factor: 3.72

3. Bhasin, S., Nadar, M. & **Hasija, Y**. Epicatechin analogues may hinder human parainfluenza virus infection by inhibition of hemagglutinin neuraminidase protein and prevention of cellular entry. J Mol Model 28, 319 (2022). Impact Factor: 2.17

4. Chakraborty R, Bhattacharje G, Baral J, Manna B, Mullick J, Mathapati BS, Abraham P, Madhumathi J, **Hasija Y**, Ghosh A, Das AK. In-silico screening and in-vitro assay show the antiviral effect of Indomethacin against SARSCoV-2. Computers in Biology and Medicine. 2022 Aug 1;147:105788. Impact Factor: 6.69

5. Guin, D., Yadav, S., Singh, P., Singh, P., Thakran, S., Kukal, S., ... & Kukreti, R. (2022). Human genetic factors associated with pneumonia risk, a cue for COVID-19 susceptibility. Infection, Genetics and Evolution, 102, 105299.

Department of Civil Engineering

Biography

DEEPAK SINGH

Department of Civil Engineering

Dr. Deepak Singh is currently working as an Assistant Professor (Contractual) in the Department of Civil Engineering, NIT Hamirpur, Himachal Pradesh, India. He received his B. Tech. (Hons.) in Civil Engineering from Uttarakhand Technical University, his M.Tech (Hons.) in Hydraulic Engineering (Civil Engineering) from GBPUAT, Pantnagar, and his Ph.D. in Civil Engineering from DTU. He has published thirteen papers in refereed international and national journals and four chapters in conference proceedings/springer publishing. His area of research is hydraulic engineering, computational hydraulics, and hydraulic structures.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **D. Singh**, and M. Kumar (2022). "Energy dissipation of flow over the type-B Piano Key Weir." Flow Measurement and Instrumentation, Elsevier Ltd, 83(November 2021), Vol. 83, pp 102-109. Impact Factor: 2.65.
2. **Singh, D.**, & Kumar, M. (2022). Hydraulic design and analysis of piano key weirs: a review. Arabian Journal for Science and Engineering, 47, 5093–5107.

Biography

GEETA DEVI

Department of Civil Engineering

Ms. Geeta Devi, is currently a Research Scholar at Department of Civil Engineering, Delhi Technological University, Delhi. She completed her M.E. from Punjab Engineering College, Chandigarh in Water Resources field in 2014. She has also obtained B.Tech. Degree in Civil Engineering from Maharishi Markandeshwar University. Her area of interests are Water resource planning, river hydraulics, open channel flow, and rainfall-runoff forecasting. In addition, she also has 5 years of teaching experience.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Devi, Geeta**, and Munendra Kumar. "Experimental study of the local scour around the two piers in the tandem arrangement using ultrasonic ranging transducers." Ocean Engineering 266 (2022): 112838. Impact factor: 4.372
2. **Devi, Geeta**, and Munendra Kumar. "Characteristics assessment of local scour encircling twin bridge piers positioned side by side (SbS)." Sādhanā 47, no. 3 (2022): 1-13. Impact factor: 1.214

Biography

MANVENDRA VERMA

Department of Civil Engineering

Dr. Manvendra Verma earned a Bachelor of Technology from Inderprastha Engineering College Ghaziabad, which is affiliated with the Uttar Pradesh Technical University Lucknow. He completed M. Tech from the National Institute of Technology Srinagar (J&K) in 2016. In August 2016, He began a full-time Ph.D. program with a DTU fellowship in the Department of Civil Engineering at Delhi Technological University in New Delhi, and he successfully defended their thesis in October 2021. Now, he is working as Assistant Professor in the Department of Civil Engineering, GLA University, Mathura, Uttar Pradesh.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **Manvendra Verma**; Nirendra Dev, "Effect of Liquid to Binder Ratio and Curing Temperature on the Engineering Properties of the Geopolymer Concrete" Silicon., 14 (2022), pp. 1743-1757, 2022. ISSN: 1876-9918 (IF 2.941) DOI: 10.1007/s12633-021-00985-w

2. **Manvendra Verma**; Nirendra Dev, "Effect of Ground Granulated Blast Furnace Slag and FlyAsh ratio and the curing conditions on the Mechanical Properties of Geopolymer Concrete," Structural Concrete, 23(4), pp. 2015-2029, 2022. ISSN: 1751-7648 (IF 2.793) DOI: 10.1002/suco.202000536

3. **Manvendra Verma**; Nirendra Dev, "Effect of SNF-Based Superplasticizer on Physical, Mechanical and Thermal Properties of the Geopolymer Concrete" Silicon., 14(2022), pp. 965- 975, 2022. ISSN: 1876-9918 (IF 2.941) DOI: 10.1007/s12633-020-00840-4

4. Rahul Kumar; **Manvendra Verma;** Nirendra Dev, "Investigation on the effect of seawater condition, sulfate attack, acid attack, Freeze-thaw condition, and wetting-drying on the Geopolymer concrete," Iranian Journal of Science and Technology Transactions of Civil Engineering, 46(2022), 2823–2853, 2022. ISSN: 2364-1843 (IF 1.461) DOI: 10.1007/s40996- 021-00767-9

5. Kumar, R., **Verma, M.**, Dev, N., & Lamba, N. (2022). Influence of chloride and sulfate solution on the long-term durability of modified rubberized concrete. Journal of Applied Polymer Science, 139(37), e52880.

Biography

MEENAKSHI SINGH

Department of Civil Engineering

Meenakshi Singh is a research scholar in the Civil Engineering Department of Delhi Technological University, New Delhi, India. She did his M.Tech in Transportation Engineering from National Institute of Technology, Kurukshetra in 2013. She worked as assistant professor in Ajay Kumar Garg Engineering College, Ghaziabad. She has more than 1 year of experience in teaching. Her research interests are: application of geosynthetics in geotechnical and highway engineering, pavement design, application of soft computing tools in transportation engineering.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Singh M**, Trivedi A, Shukla SK. "Evaluation of Geosynthetic Reinforcement in Unpaved Road Using Moving Wheel Load Test". Geotextiles and Geomembranes, Volume 50, Issue 4, pages 581-589, 2022. https://doi.org/10.1016/j.geotexmem.2022.02.005. Impact Factor: 5.839

Biography

MOHIT AGGRWAL

Department of Civil Engineering

Mohit Aggarwal is a PhD Scholar at the Civil Engineering Department of Delhi Technological University. He is working on a research area entitled "Assessment of Heavy Metal Pollution in Ganga River from Kanpur to Prayagraj Stretch, India" under the guidance of Prof. S Anbukumar & Prof. T Vijaya Kumar. He has completed his Bachelor degree in civil engineering from Bharati Vidyapeeth Deemed University, Pune and Masters in civil engineering from Motilal Nehru National Institute of Technology, Allahabad. He is currently working as an Assistant Professor at G L Bajaj Institute of Technology and Management, Greater Noida. He has working experience of more than 6 years. He has worked as an Assistant Professor in Govt. of India TEQIP project as a NPIU faculty at Madhav Institute of Technology and Science, Gwalior. He has also worked as "Senior Research Fellow" in the Central Pollution Control Board, Delhi.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **M. Aggarwal,** S. Anbukumar, and T. Vijaya Kumar, 'Heavy metals concentrations and risk assessment in the sediment of Ganga River between Kanpur and Prayagraj, UP, India', Sādhanā, vol. 47, no. 4, pp. 195, 2022. Impact Factor: 1.214

Biography

MUNENDRA KUMAR

Department of Civil Engineering

Prof. Munendra Kumar is currently a Professor in the Civil Engineering Department at Delhi Technological University, India. He obtained his B. Tech. (Civil) and M.Tech. (Structural Design) degree from AMU Aligarh and a Ph.D. degree (Fluid Mechanics) from IIT Delhi. He has published about 45 papers in national and international journals and conference proceedings. His research areas are applied Fluid Mechanics, surface water quality management, computational hydraulics, and hydraulic structures. He has guided 04 Ph.D. and 40 M.Tech Dissertations.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. D. Singh, and **M. Kumar,** (2022). "Hydraulic Design and Analysis of Piano Key Weirs: A Review." Arabian Journal for Science and Engineering, Springer Berlin Heidelberg, Vol. 47, Issue No. 4, pp 5093-5107. Impact Factor: 2.807
2. Singh, D., & **Kumar, M**. (2022). Energy dissipation of flow over the type-B Piano Key Weir. Flow Measurement and Instrumentation, 83, 102109.
3. Devi, G., & **Kumar, M**. (2022). Characteristics assessment of local scour encircling twin bridge piers positioned side by side (SbS). Sādhanā, 47(3), 109.
4. Devi, G., & **Kumar, M**. (2022). Experimental study of the local scour around the two piers in the tandem arrangement using ultrasonic ranging transducers. Ocean Engineering, 266, 112838.

Biography

NERUSUPALLI DINESH KUMAR REDDY

Department of Civil Engineering

Mr. Nerusupallall Dinesh Kumar Reddy, Ph.D., Department of Civil Engineering, Delhi Technological University, Delhi, India. N. Dinesh Kumar Reddy received his bachelor's degree from JNTU in Anantapur, Andhra Pradesh, and his master's degree in construction technology and management from NITTTR in Bhopal. He has participated in over 10 conferences and published journal articles.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Reddy, N. D. K**., Gupta, A. K., & Sahu, A. K. (2022). A novel soil liquefaction prediction model with intellectual feature extraction and classification. *Advances in Engineering Software*, *173*, 103233.

Biography

NITIN LAMBA

Department of Civil Engineering

Nitin Lamba is a research scholar in the Civil Engineering Department of Delhi Technological University, New Delhi, India. He received his Bachelor of Engineering degree in Civil Engineering Branch from Bangalore Institute of Technology, Bangalore, India, and a Master of Technology degree in Structural and Construction Engineering specialization from Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, India. He previously worked as Assistant Professor at Netaji Subhas University of Technology (West Campus-Formerly CBPGEC), Jaffarpur, New Delhi, India. His research interests are Fiber Reinforced Concrete, Carbon Fibers, Recyclable Materials, High Strength Concrete, Mechanical Characteristics, Impact Strength, and Durability of Concrete. He has several research publications in international journals and conferences. He is a member of the American Society of Civil Engineering (ASCE), the International Association for Promoting Geoethics (IAPG), and many other reputed societies.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **L. Nitin,** R. Ritu, and S. Poonam, " Mechanical characteristics of high strength concrete incorporating recycled CFRP fibers", J. Appl. Polym. Sci., vol. 139, no. 47, Dec. 2022. Impact Factor: 3.057
2. Kumar, R., Verma, M., Dev, N., & **Lamba, N**. (2022). Influence of chloride and sulfate solution on the long-term durability of modified rubberized concrete. Journal of Applied Polymer Science, 139(37), e52880.

Biography

PARVESH KUMAR

Department of Civil Engineering

Parvesh Kumar has done Ph.D. in 2022 in Geotechnical Engineering from Delhi

Technological University, Delhi. He completed his M.Tech in 2016 from NIT Srinagar J&K. His areas of interest include geotechnical engineering, ground improvement techniques, FEM modeling, and stability of underground structures.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, P.**, & Shrivastava, A. K. (2022). Experimental and numerical analysis of deformation behaviour of tunnels under static loading conditions. *Sustainable Energy Technologies and Assessments*, *52*, 102057.

Biography

RAJU SARKAR

Department of Civil Engineering

Dr. Raju Sarkar is a Professor in the Department of Civil Engineering, Delhi Technological University (DTU). Prior to joining back to his parent organization DTU in July 2019, Dr. Raju was working as Professor in Department of Civil Engineering and Architecture, College of Science and Technology, Royal University of Bhutan, Bhutan under Ministry of External Affairs, Govt. of India deputation to Bhutan. During his tenure in Bhutan, he established the research Center for Disaster Risk Reduction and Community Development Studies and also worked as Team Leader to start the new undergraduate programme – Engineering Geology in Royal University of Bhutan. Presently he is Chair, Commission on Education and Outreach and Co-Chair, Commission on Earthquake Hazard, Risk and Strong Ground Motion, International Association of Seismology and Physics of the Earth's Interior (IASPEI) – IUGG. He is also the Member of the a) Making Cities Resilient – United Nations Office for Disaster Risk Reduction (UNDRR) and b) Working Group - Earthquake and Landslide Early Warning System (ELEWS) of the South Asia Alliance of Disaster Research Institutes (SAADRI). He has vast experience of working in Hindu-Kush Himalayan region both at government and community level. He has published quite a good number of original research articles in peer reviewed journals, books, book chapters and proceedings of international societies and serving as an editorial member of several journals. Dr. Raju is collaborating in a number of research projects funded by ICSU, World Bank, GCRF-UK, EPSRC-UK, RAS-UK, DHI-RGoB, MoEF. He has keen interest in Geotechnics for Natural Disaster Mitigation, Geohazards Risk Managements, Landslide, Seismology, Community Resilience against Cataclysmic Events, Vulnerability and Risk Assessment and Disaster Management Education.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. Mohanty, B., & **Sarkar, R.** (2022). An assessment of historical and future coastal dynamic response along the Odisha coast. *Environmental Earth Sciences*, *81*(13), 353.

2. Pal, S., **Sarkar, R.**, & Saha, T. K. (2022). Exploring the forms of wetland modifications and investigating the causes in lower Atreyee river floodplain area. *Ecological Informatics*, *67*, 101494.

3. Saha, S., Saha, A., Hembram, T. K., Mandal, K., **Sarkar, R.**, & Bhardwaj, D. (2022). Prediction of spatial landslide susceptibility applying the novel ensembles of CNN, GLM and random forest in the Indian Himalayan region. *Stochastic Environmental Research and Risk Assessment*, *36*(10), 3597-3616.

4. Saha, S., Saha, A., Roy, B., **Sarkar, R.**, Bhardwaj, D., & Kundu, B. (2022). Integrating the Particle Swarm Optimization (PSO) with machine learning methods for improving the accuracy of the landslide susceptibility model. *Earth Science Informatics*, *15*(4), 2637-2662.

Biography

RAHUL KUMAR

Department of Civil Engineering

Rahul Kumar is a PhD Research Scholar at the Department of Civil Engineering, Delhi Technological University, Delhi. He completed his M.Tech from NIT Srinagar, J&K, in structural engineering in 2016. He has also obtained B.Tech. Degree in Civil Engineering from Uttar Pradesh Technical University. His areas of interest are concrete technology and structural engineering.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **K. Rahul**, D. Nirendra, "Mechanical and Microstructural Properties of Rubberized Concrete After Surface Modification of Waste Tire Rubber Crumb", Arab. J. Sci. Eng. 47, 4571–4587 (2022). Impact Factor: 2.807
2. **K. Rahul**, D. Nirendra, "Assessment of Mechanical and Impact Resistance Properties of Rubberized Concrete After Surface Modification of Rubber Crumb", Iran. J. Sci. Technol. Trans. Civ. Eng. vol. 46, no. 4, pp. 2855–2871, Aug. 2022. Impact Factor: 1.461
3. **K. Rahul**, D. Nirendra, "Effect of acids and freeze-thaw on the durability of modified rubberized concrete with optimum rubber crumb content", J. Appl. Polym. Sci. 139, 52191 (2022). Impact Factor: 3.057
4. **K. Rahul**, V. Manvendra, D. Nirendra, and L. Nitin, "Influence of chloride and sulfate solution on the long term durability of modified rubberized concrete", J. Appl. Polym. Sci., vol. 139, no. 37, pp. 1–15, Oct. 2022. Impact Factor: 3.057
5. **Kumar, R.**, Verma, M., & Dev, N. (2022). Investigation on the effect of seawater condition, sulphate attack, acid attack, freeze–thaw condition, and wetting–drying on the geopolymer concrete. Iranian Journal of Science and Technology, Transactions of Civil Engineering, 46,2823–2853.

Biography

RAHUL KUMAR MEENA

Department of Civil Engineering

Working as an Assistant Professor in the department of Civil Engineering at Punjab Engineering College, Chandigarh, India since August 2022. Submitted Ph.D. thesis titled "Wind effects on tall buildings having different corner configurations using CFD" in June 2022 to the Delhi Technological University. Master of Technology is awarded in Structural Engineering from Delhi Technological University in the year 2018, and completed B.tech in the year 2015 from RTU Kota.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Meena, R. K.**, Raj, R., & Anbukumar, S. (2022). Effect of wind load on irregular shape tall buildings having different corner configuration. *Sādhanā*, *47*(3), 126.

Biography

RITU RAJ

Department of Civil Engineering

Dr. Ritu Raj is an Assistant Professor at the Civil Engineering Department, DTU. He has published more than 80 technical papers in reputable journals and international conferences. He has supervised many students at the level of graduates, postgraduates, and doctorates. His research interests include behaviour of wind load on the response of tall buildings, aerodynamics study, aero-elastic model study inside BLWT, behaviour of high strength concrete with and without Fibre, and earthquake engineering. He has more than 8.5 years of graduate and postgraduate teaching experience. His teaching areas include structure engineering, strength of materials, steel structures, and design of tall buildings.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. L. Nitin, **R. Ritu**, and S. Poonam, "Mechanical characteristics of high strength concrete incorporating recycled CFRP fibers", J. Appl. Polym. Sci., vol. 139, no. 47, Dec. 2022. Impact Factor: 3.057
2. M. Rahul Kumar**, R. Ritu**, and Anbukumar. S. "Effect of wind load on irregular shape tall buildings having different corner configuration", Sadhana, Vol. 47, no. 126, April 2022.

Biography

SHILPA PAL

Department of Civil Engineering

Dr. Shilpa Pal is Associate Professor Department of Civil Engineering, Delhi Technological University, New Delhi. She has done her B.Tech from Thapar Institute of Engineering & Technology, Patiala, M.Tech. (Gold Medalist) in Structural Engineering from Punjab Engineering College (Punjab University), Chandigarh and Ph.D. in Earthquake Engineering from IIT Roorkee. Her areas of interest are 2-D & 3-D Seismic Analysis of Dams and Seismic Slope Stability Analysis, Landslide hazard, vulnerability and risk studies, Damage detection in Buildings, Application of Soft Computing Techniques in Civil Engineering problems, and Self bacterial concrete. Presently her team is working on damage detection in buildings using smart materials and protection of heritage structures. She has published more than 50 research papers in International and National Journals and Conferences. She has guided 04 PhD and is presently guiding 06 Ph.D. students and has guided more than 100 M.Tech Dissertations. She is undertaking many consultancy works and is presently working as Co-PI in a prestigious project by National Disaster Management Authority on Development of Earthquake Disaster Risk Reduction Index in collaboration with MNIT Jaipur.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. S. Indrajeet, D. Nirendra and **P. Shilpa**, "Impedance based damage assessment of concrete under the combined effect of impact and temperature using different piezo configurations. Sensors and Actuators: A. Physical, Vol. 345, No. pp. 1-16, 2022 Impact Factor 4.291.

Biography

SHAMBALID AHADY

Department of Civil Engineering

Shambalid Ahady is a research scientist specializing in Energy Efficiency in Buildings and sustainable building design. She joined the PhD program, department of Civil Engineering DTU in 2018, earned Master of construction management and technology (Gold Medal) from AUH and Bachelor of Technology (Civil engineering) from Balkh University. She has academic and professional experience and served as Assistant professor, Civil engineer and consultant in Afghanistan. She has authorized many research papers in journals and international conferences and served as reviewer for scientific Journals. She is an active member of OWSD (organization for women in science for the developing world).

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Shambalid Ahady**, Nirendra Dev, Anubha Mandal, Sustainable energy retrofit plan for enhancing energy efficiency of residential apartments in arid climate: case of Afghanistan, Sadhana, 47, 131 (2022). Impact factor:1.214, DOI: https://doi.org/10.1007/s12046-022-01896-1
2. **Shambalid Ahady**, Nirendra Dev, Anubha Mandal, Iranian Journal of Science and Technology, Transactions of Civil Engineering, 46, 3963–3978 (2022). Impact factor: 1.461, DOI: 10.1007/s40996-022-00848-3

Department of Computer Science & Engineering

Biography

AASTHA MAHESHWARI

Department of Computer Science & Engineering

Aastha Maheshwari received her M. Tech. degree from the National Institute of Technology (NIT) Hamirpur, Himachal Pradesh. She is pursuing a Ph.D. in Computer Engineering from Delhi Technological University (Formerly Delhi College of Engineering), New Delhi, India. Her specializations are Internet of Things (IoT), sensor networks and wireless communication.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Maheshwari, R**. K. Yadav, and P. Nath, "Data Congestion Control Using Offloading in IoT Network," Wireless Personal Communications, vol. 125, no. 3, pp. 2147-2166, 2022.

Biography

ADITI SHARMA

Department of Computer Science & Engineering

Aditi Sharma is currently associated with Thapar Institute of Engineering Technology, Patiala as Assistant Professor (Grade- I) in Department of Computer Science and Engineering. Prior to this she worked as Assistant Professor (Grade- II) at Jaypee Institute of Information technology, Waknaghat, Ms. Sharma was also associated with Delhi Technological University (DTU), Delhi and DIT University, Dehradun. She has more than 4 years of teaching experience. She has submitted her Ph.D. thesis at Delhi Technological University in the field of Affective Computing. Ms. Sharma earned her Post-graduation, Masters in Software Engineering from Delhi Technological University in 2017. She graduated from Punjabi University Patiala in 2015 with Bachelor of Technology in Computer Science and Engineering. With a top score of 717 and an All India Rank of 571 in 2015, she has qualified GATE four times. In 2018, She also qualified UGC-NET for Assistant Professor. Affective Computing, Machine Learning, Predictive Healthcare, and Text Summarization are some of her research interests. She has 13 publications, five of which are in high impact SCI/SCIE journals. In 2022, Ms. Sharma received "Commendable Research Award for Excellence in Research" for her research work from Delhi Technological University. She holds professional memberships in IEEE, ACM, CSI and IAENG..

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. A. Kumar, K. Sharma, **A. Sharma***, "MEmoR: A Multimodal Emotion Recognition using Affective Biomarkers for Smart Prediction of Emotional Health for People Analytics in Smart Industries". Image and Vision Computing, Elsevier ISSN: 0262-8856, Vol. 123, 104483 (2022), Impact Factor: 3.860.

Biography

AKSHI KUMAR

Department of Computer Science & Engineering

Dr. Akshi Kumar is a Senior Lecturer-Data Science and AI in the Department of Computing & Mathematics, Faculty of Science & Engineering, Manchester Metropolitan University, United Kingdom. She is a Post-doc from Federal Institute of Education, Science and Technology of Ceará, Fortaleza, Brazil and a PhD from Faculty of Technology, University of Delhi, India. She has worked as an Associate Professor at the Netaji Subhas University of Technology (NSUT), New Delhi, India and as an Assistant Professor at the Delhi Technological University (DTU), New Delhi, India and has a total teaching and research experience of 16 years. Dr. Kumar has received 7 research awards for Excellence in Research from various National and International organizations. Her name has been included in the "Top 2% scientist of the world" list by Stanford University, USA in 2022 and 2021. Based on the list, her current world rank within the field of Artificial Intelligence and Image Processing is 2367. She has published more than 85 peer-reviewed journal papers including 50 SCIE publications, 65+ conference papers with 4 best paper awards and 2 patents with the Indian Patent Office. She has successfully guided 7 doctorates, 33 Master thesis candidates. She has been serving as an Associate editor and guest editor in various high impact journals with reputed publishers. Her research interests are in affective computing, social network and media analytics, NLP, and AI for pervasive healthcare.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **Kumar, A.**, Sachdeva, N. A Bi-GRU with attention and CapsNet hybrid model for cyberbullying detection on social media. World Wide Web 25, 1537–1550 (2022). Impact Factor: 3.000.
2. **Kumar, A.,** Sachdeva, N. Multimodal cyberbullying detection using capsule network with dynamic routing and deep convolutional neural network. Multimedia Systems 28, 2043–2052 (2022). Impact Factor: 2.60
3. **Kumar, A.**, Sharma, K., & Sharma, A. (2022). MEmoR: A multimodal emotion recognition using affective biomarkers for smart prediction of emotional health for people analytics in smart industries. Image and Vision Computing, 123, 104483.

Biography

ANIL SINGH PARIHAR

Department of Computer Science & Engineering

Dr. Anil Singh Parihar is a Professor in the Department of Computer Science & Engineering at Delhi Technological University, Delhi, India. He received his B. Tech. Degree in Electronics and Communication Engineering in 2005 from U. P. Technical University, Lucknow, India, M.E. degree in Electronics and Communication Engineering from Delhi College of Engineering, New Delhi, India in 2008, and Ph.D. degree in the area of applications of soft computing in image processing in 2016. He joined the Department of Information Technology at Delhi Technological University, Delhi, India as Assistant Professor in 2010. His research interest includes Deep Learning, Computer Vision, Pattern Recognition, Natural Language Processing, Soft Computing and Evolutionary Algorithms

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	02
COMMENDABLE RESEARCH AWARD	02

1. G. Jain, S. Chopra, S. Chopra and **Anil Singh Parihar**, "Attention-Net: An Ensemble Sketch Recognition Approach Using Vector Images," in IEEE Transactions on Cognitive and Developmental Systems, vol. 14, no. 1, pp. 136-145, March 2022. Impact Factor: 4.546.
2. A. Kabra, A. Agarwal and **Anil Singh Parihar**, "Potent Real-Time Recommendations Using Multimodel Contextual Reinforcement Learning," in IEEE Transactions on Computational Social Systems, vol. 9, no. 2, pp. 581-593, April 2022. Impact Factor: 4.747.
3. **Anil Singh Parihar**, D. Varshney, K. Pandya & A. Aggarwal, "A comprehensive survey on video frame interpolation techniques" Visual Computer Vol. 38, pp. 295–319, 2022. Impact Factor: 2.835.
4. **Anil Singh Parihar**, S. Kumar, & S. Khosla, "S-DCNN: stacked deep convolutional neural networks for malware classification" Multimed Tools Appl, vol. 81, pp. 30997–31015, 2022. Impact Factor: 2.577

Biography

ANURAG GOEL

Department of Computer Science & Engineering

Anurag Goel received the M.Tech. degree with Gold medal in the field of Computer Science and Engineering from Indraprastha Institute of Information Technology IIIT Delhi in 2017 and is currently pursuing Ph.D. in the field of Deep Clustering from IIIT Delhi.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARDS	02

1. **Anurag Goel**, and Angshul Majumdar. "Sparse subspace clustering friendly deep dictionary learning for hyperspectral image classification." IEEE Geoscience and Remote Sensing Letters 19 (2021): 1-5.
2. **Anurag Goel**, and Angshul Majumdar. "K-Means Embedded Deep Transform Learning for Hyperspectral Band Selection." IEEE Geoscience and Remote Sensing Letters 19 (2022): 1-5.

Biography

ARUNA BHAT

Department of Computer Science & Engineering

Dr. Aruna Bhat is an Associate Professor at the Department of Computer Science and Engineering. Her research interest is aligned with the applications of machine learning for healthcare data analytics, biometrics, online social media analytics and image processing. Her doctoral work was based on incorporating robustness in facial biometric systems. She has been an academician for over a decade and has taught various core and specialized undergraduate and postgraduate courses like machine learning, artificial intelligence, information security, cyber forensics, data warehouse and data mining, business intelligence and pattern recognition. Her current research work is focussed on online social media and cybercrime analytics, image enhancement, medical image processing and vernacular sign language assistance.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. R. Kumar and **A. Bhat**, "A study of machine learning-based models for detection, control, and mitigation of cyberbullying in online social media", *International Journal of Information Security*, vol. 21, no. 6, pp. 1409-1431, 2022. Impact Factor: 2.427.
2. Monika, & **Bhat, A**. (2022). Automatic Twitter crime prediction using hybrid wavelet convolutional neural network with world cup optimization. International Journal of Pattern Recognition and Artificial Intelligence, 36(05), 2259005.

Biography

ASHISH GIRDHAR

Department of Computer Science & Engineering

Dr. Ashish Girdhar is currently working as Assistant Professor in Kurukshetra University. He has worked as Assistant Professor in the department of Computer Science and Engineering from Dec 2020 to Nov 2022. He has 9 SCI/SCIE Publications and many other publications also. His area of research is Image Prozcessing.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Girdhar, A**., Kapur, H., & Kumar, V. (2022). Classification of white blood cell using convolution neural network. *Biomedical Signal Processing and Control*, *71*, 103156.

Biography

INDU SINGH

Department of Computer Science & Engineering

Ms. Indu Singh is currently working as Assistant Professor in the Computer Science Engineering Department at Delhi Technological University, Delhi, India. Singh received her B.Tech in 2010 in Computer Science Engineering and M.Tech degree in Information Security from Ambedkar Institute of Advanced Communication Technologies & Research, Govt. of NCT Delhi in 2012. She is currently pursuing her Ph.D in Computer Science Engineering from Delhi Technological University, Delhi with specialisation in Data Mining and Information Security. Her research interests include Database Systems, Data Mining, Information Security, Machine Learning, Fuzzy systems and Swarm Intelligence. She has published several papers in international conferences and Journals of IEEE, Elsevier, Springer and ACM. She has received IEEE Best Paper Award in ICACCI-2016. Singh is also serving as a reviewer for Computers in Biology and Medicine (Elsevier), Computers and Electrical Engineering (Elsevier), Soft Computing Journal (Springer), Journal of Ambient Intelligence and humanized computing (Springer), Cluster Computing Journal (Springer) and various International Conferences of Elsevier, Springer and IEEE. She is also a member of IEEE.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Jindal, R., & **Singh, I.** (2022). Detecting malicious transactions in database using hybrid metaheuristic clustering and frequent sequential pattern mining. *Cluster Computing*, 1-23.

Biography

IRFAN ALAM

Department of Computer Science & Engineering

Irfan Alam received M.Tech degree in Information Technology from the School of Computer and Information Science, University of Hyderabad, Hyderabad, India, in 2019. He is pursuing PhD in Computer Science and Engineering at Department of Computer Science and Engineering, Delhi Technological University, New Delhi, India. His current research interests include Cryptography, IoT security, Healthcare security, Cyber Security and Networks. He is a life-time member of Cryptology Society of India. He has papers published in SCI and Scopus indexed journals.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Alam,** I., & Kumar, M. (2022). A novel protocol for efficient authentication in cloud-based IoT devices. Multimedia Tools and Applications, 81(10), 13823-13843.

Biography

MANISHA SAINI

Department of Computer Science & Engineering

Manisha Saini is currently pursuing Ph.D. in Computer Science and Engineering Department from Delhi Technological University, India. Her research interests include Computer Vision, Neural Networks, Machine Learning, and Deep Learning. She has more than seven years of combined academic and industrial experience. She is currently working as an Artificial Intelligence Research Engineer at a B2B based computer vision startup after her experience as a Senior Computer Vision Engineer working at an early-stage B2C tech startup. Previously, she had worked as an Assistant Professor in the Department of Computer Science and Engineering at Manav Rachna International Institute of Research and Studies, Faridabad and served as an Assistant Professor at the Department of Computer Science and Engineering, G D Goenka University, Gurgaon.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Saini, Manisha**, and Seba Susan. "Diabetic retinopathy screening using deep learning for multi-class imbalanced datasets." Computers in Biology and Medicine 149 (2022): 105989

Biography

MANPREET KAUR

Department of Computer Science & Engineering

Manpreet Kaur received her B. Tech. in Electronics and Communication Engineering from Punjab Technical University, Punjab, India in 2005 and Master of Engineering in Electronics and Communication from Thapar University, Patiala, India in 2007. She is currently working as Member (Senior Research Staff) at Central Research Laboratory, Ghaziabad, Bharat Electronics Limited. She has more than 15 years of experience in the field of research and development. She has received various awards and certificates of appreciation for her research activities. She is serving as a reviewer for IEEE, Elsevier and Springer journals etc. She has also served as a technical chair and member of TPC of various reputed international conferences. Her research interests include wireless communication and cognitive radios networks and 5G and beyond technologies etc.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **M. Kaur** and R.K. Yadav, "EC Analysis of Multi-Antenna System over 5G and Beyond Networks and its Application to IRS-Assisted Wireless Systems", Wireless Personal Communications, vol. 124, pp. 1861–1881, 2022. DOI: https://doi.org/10.1007/s11277- 021-09434-8 Impact Factor: 2.017.
2. S. Kumar, P.S. Chauhan, R. Bansal, **M. Kaur** and R.K. Yadav, "Performance Analysis of CSS Over α–η–μ and α–κ–μ Fading Channel Using Clustering-Based Technique", Wireless Personal Communications, vol. 126, pp. 3595–3610, 2022. DOI: https://doi.org/10.1007/s11277-022-09880-y Impact Factor: 2.017.
3. S. Kumar, P. Yadav**, M. Kaur** and R. Kumar," A survey on IRS NOMA integrated communication networks", Telecommunication Systems, vol. 80, pp. 277–302, 2022. DOI: https://doi.org/10.1007/s11235-022-00898-y Impact Factor: 2.33

Biography

MINNI JAIN

Department of Computer Science & Engineering

Ms. Minni Jain is currently an Assistant Professor in the Department of Computer Science and Engineering, at Delhi Technological University, New Delhi, India. She is pursuing Ph.D. in Natural Language Processing area from the Computer Science and Engineering Department of Delhi Technological University. She earned Gold Medal in her M. Tech in Information Security from Guru Gobind Singh Indraprastha University, Delhi (GGSIPU). Her research interests include Natural Language Processing, Social Network Analysis, Graph Algorithms, and Machine Learning.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. A. Sharma, A. Kabra and **M. Jain**, "Ceasing hate with moh: Hate speech detection in Hindi–English code-switched language". Information Processing & Management, Vol 59(1), pp.102760, 2022. Impact Factor: 7.466
2. **M. Jain**, A. Suvarna and A. Jain, "An evolutionary game theory based approach for query expansion". Multimedia Tools and Applications, Vol 81, 1971–1995, 2022. Impact Factor: 2.577
3. **M. Jain**, G. Bhalla, A. Jain and S. Sharma, "Automatic keyword extraction for localized tweets using fuzzy graph connectivity measures". Multimedia Tools and Applications, Vol 81, 42931–42956, 2022. Impact Factor: 2.577
4. **M. Jain**, A. Jaswani, A. Mehra and L. Mudgal, "EDGly: detection of influential nodes using game theory". Multimedia Tools and Applications, Vol 81, 1625–1647, 2022. Impact Factor: 2.577

Biography

PAWAN SINGH MEHRA

Department of Computer Science & Engineering

Dr. Pawan Singh Mehra is currently working as an Assistant Professor in Delhi Technological University, New Delhi. He received his Ph.D. degree in Computer Engineering from Jamia Millia Islamia and M.Tech (Hons) in Computer Science and Engineering from Center for Development of Advanced Computing (CDAC). He completed Bachelor of Engineering from RJIT, Gwalior. He has more than 12 years of Teaching and Research Experience. He has qualified UGC-NET and GATE multiple times. He has authored more than 40 publications in International conferences and journals indexed in SCIE, Scopus, ESCI, Web of Science. Currently his H-index is 13 and i-10 index is 20 with more than 600 citations. He is an active reviewer in International Journals indexed in SCIE, Scopus. He is Senior member of IEEE and ACM and Life member of CSI and ISTE. He has published a book on Internet of Things and edited a book for GATE. His research interests include Wireless Sensor Network, Internet of Things, Image processing, Cryptography and Network security & Quantum Computing.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **P. S. Mehra**, "E-FUCA: enhancement in fuzzy unequal clustering and routing for sustainable wireless sensor network," Complex & Intelligent Systems 2021, vol. 8, pp. 393–412, May 2022, doi: 10.1007/S40747-021-00392-Z. IF: 6.7
2. R.K. Rathore, D. Mishra, **P.S. Mehra**, O. Pal, A.S. HASHIM, A. Shapi'i, T. Ciano, M. Shutaywi, "Real-world model for bitcoin price prediction," Inf Process Manag, vol. 59, no. 4, p. 102968, Jul. 2022, doi: 10.1016/J.IPM.2022.102968. IF: 7.46

Biography

PRATIMA SHARMA

Department of Computer Science & Engineering

Currently, Dr. Pratima Sharma is working as an Assistant Professor pursuing both academic and research work in the School of Computer Science Engineering and Applied Sciences at Bennett University, Uttar Pradesh, India. She has completed her Ph.D. degree under the supervision of Prof. Rajni Jindal (Professor), Department of Computer Science and Engineering, Delhi Technological University, Delhi, and Dr. Malaya Dutta Borah (Assistant Professor), Computer Science Department, National Institute of Technology, Silchar, Assam, India. Within the research, She has focused on blockchain technology and combined it with a cloud storage system to provide a complete distributed environment with security and privacy features.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **Sharma, P.**, Jindal, R., & Borah, M. D. (2022). A review of blockchain-based applications and challenges. *Wireless Personal Communications*, 1-43.
2. **Sharma, P**., Jindal, R., & Borah, M. D. (2022). Blockchain-based cloud storage system with CP-ABE-based access control and revocation process. *The Journal of Supercomputing*, 1-29.
3. **Sharma, P**., Jindal, R., & Borah, M. D. (2022). A review of smart contract-based platforms, applications, and challenges. *Cluster Computing*, 1-27.

Biography

PRERNA SHARMA

Department of Computer Science & Engineering

Prerna Sharma is an Assistant Professor in the Department of Computer Science and Engineering at MAIT, GGSIPU, India. She is also a doctoral researcher at Delhi Technological University (DTU), India. She has obtained her M.Tech in IT from USIT, GGSIPU India and B.Tech in CSE from GPMCE, GGSIPU, India. Her research interests include Artificial Intelligence, Computational Intelligence, Nature-Inspired Computing.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. S.Prerna, S.Kapil, "Fetal state health monitoring using Enhanced Binary Bat Algorithm", Computers and Electrical Engineering, Vol. 101, 108035, 2022. Impact Factor: 4.152

Biography

PUNEET KANSAL

Department of Computer Science & Engineering

Award Summary and Publications Details

Category Detail	No. of Pubications
COMMENDABLE RESEARCH AWARD	01

1. **Kansal, P.**, Kumar, M., & Verma, O. P. (2022). Classification of resource management approaches in fog/edge paradigm and future research prospects: a systematic review. The Journal of Supercomputing, 78(11), 13145-13204.

Biography

RAHUL KATARYA

Department of Computer Science & Engineering

Prof. Rahul Katarya is working in the Department of Computer Science & Engineering, at Delhi Technological University (DTU) (formerly Delhi College of Engineering), New Delhi, India. He was selected World's top 2% Scientist in the year 2020, 2021 and 2022 by Stanford University, USA in the Science-Metrix category (Artificial Intelligence & Image Processing). He is the Officer-in-charge of the "Big Data Analytics and Web Intelligence'' (BDAWI) Laboratory, and the CALIBRE research group is associated with this laboratory. His research interests are Big Data Analytics, Data Science, Web Mining, Social Networks, Recommender Systems, Artificial Intelligence, Machine Learning, Web Personalization, Deep Learning, Knowledge Discovery & Management, Computational Intelligence, Climate change, healthcare and Online Human Behaviour Analysis etc. He is a valued Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) and a Life Member of the Computer Society of India (CSI). He is a reviewer of various IEEE Transactions, Elsevier and Springer journals. He has published various research articles in Science Citation Index (SCI) indexed international journals and in IEEE international conferences. Delhi Technological University awarded him the ``Commendable Research Award" for excellence in research for the years 2017-2022. He has delivered various expert talks in Russia, Japan, the USA and New Zealand on Big Data analytics, Artificial Intelligence, Healthcare, Climate change and Data Mining. Prof. Rahul Katarya was Elected as a Member of the Asia-Pacific Artificial Intelligence Association (AAIA) on May 23, 2022. Prof. Rahul Katarya was selected as a young scientist in International Cooperation Division, Department of Science & Technology (DST), Govt. of India, 5th BRICS Young Scientists Conclave-2020 Chelyabinsk, Russia of the theme "BRICS Partnership of Young Scientists and Innovators for Science Progress and Innovative growth" September 21-25, 2020 Chelyabinsk, Russia. Prof. Rahul Katarya was also selected & invited by Japan Science & Technology (JST) for the special invitation program designed for young Indian officers and researchers under the framework of the Japan-Asia Youth Exchange program in SAKURA SCIENCE Exchange Program, Japan from 26 to February 1, 2020, administered by Japan Science & Technology Agency, Tokyo, Japan. Prof. Rahul Katarya

(Only team from India, with two DTU undergraduate students) was selected, participated and contributed in Otago Polytechnic, New Zealand and Untouched World Foundation Engineering Waterwise Programme in Central Otago, New Zealand from 17 March to 6 April 2019. This Programme is a part of the UNESCO Global Action Programme based on youth leadership, international citizenship, sustainable development, and quality education, and is a partnership between Otago Polytechnic and the Untouched World Foundation, with support from Education New Zealand.

Award Summary and Publications Details

Citation Award
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. Aakansha Gupta, **Rahul Katarya**, "Deep embedding for mental health content on social media using vector space model with feature clusters", Concurrency and Computation: Practice and Experience, Wiley, Volume 34, issue 13, 2022, doi: https://doi.org/10.1002/cpe.6930 (Impact Factor: 1.831, Publisher: Wiley).
2. Polipireddy Srinivas, **Rahul Katarya**, "hyOPTXg: OPTUNA hyper-parameter optimization framework for predicting cardiovascular disease using XGBoost", Biomedical Signal Processing and Control, Volume 73, 2022, 103456, ISSN 1746-8094, https://doi.org/10.1016/j.bspc.2021.103456, (https://www.sciencedirect.com/science/article/pii/S1746809421010533) (Impact Factor: 5.076, Publisher: Elsevier).
3. **Rahul Katarya**, Rajat Saini, "Enhancing the wine tasting experience using greedy clustering wine recommender system", Multimedia Tools & Applications, 81, 807–840 (2022). https://doi.org/10.1007/s11042-021-11300-5 (Impact Factor: 2.577, Publisher: Springer).
4. Utkarsh Agrawal, Vasudha Rohatgi, **Rahul Katarya**, Normalized Mutual Information-based equilibrium optimizer with chaotic maps for wrapper-filter feature selection, Expert Systems with Applications, Volume 207, 2022, 118107, ISSN 0957-4174,

Biography

RAJEEV KUMAR

Department of Computer Science & Engineering

Dr. Rajeev Kumar is working as an Assistant Professor in the Department of Computer Science and Engineering, Delhi Technological University (Formerly Delhi College of Engineering), Delhi, India. He received his B.Tech. in Information Technology from Uttar Pradesh Technical University, Lucknow, India in 2007 and his MTech. and Ph.D. in Computer Engineering from University of Delhi, Delhi, India, in 2012 and 2017, respectively. He did his Post-Doctorate from Kyungil University, South Korea. He was awarded a fellowship from National Research Foundation (NRF), Korea, for the period 2018-2019 and 2021-2024 to work on projects in the domain of multimedia security. Currently, he is serving as a review editor with the journal 'Frontiers in Signal Processing'. Additionally, he is also serving as a lead guest editor with "Journal of Information Security and Applications" and "International Journal on Semantic Web and Information Systems". His research interests include steganography, reversible data hiding, multimedia forensics, Image Processing, compression, and wireless sensor networks.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. S. Singh, A. S. Nandan, A. Malik; **R. Kumar***, L. K. Awasthi, N. Kumar, "A GA-Based Sustainable and Secure Green Data Communication Method Using IoT-Enabled WSN in Healthcare", IEEE Internet of Things Journal, 9(10), pp. 7481 - 7490, 2022. Impact Factor: 9.471.
2. A. S. Nandan, S. Singh, **R. Kumar***, N. Kumar, "An Optimized Genetic Algorithm for Cluster Head Election Based on Movable Sinks and Adjustable Sensing Ranges in IoT-Based HWSNs", IEEE Internet of Things Journal, 9(7), pp. 5027 - 5039, 2022. Impact Factor: 9.471.
3. **R. Kumar**, N. Kumar, and K-H Jung, "Enhanced interpolation-based AMBTC image compression using Weber's law", Multimedia Tools and Applications, Vol. 81, pp. 20817–20828, 2022. Impact Factor: 2.577.

Biography

RAJEEV K. YADAV

Department of Computer Science & Engineering

Dr. Rajesh Kumar Yadav is an Assistant Professor in the Department of Computer Science & Engineering at Delhi Technological University (Formerly Delhi College of Engineering), Delhi, India. He received his B.E (Computer Science & Engineering) from G. B. Pant Engineering College Pauri (H.N.B Garhwal University), M.Tech. (Computer Science) from U.P. Technical University, Lucknow and Ph.D (Computer Engineering) from Delhi Technological University (Formerly Delhi College of Engineering), New Delhi, India. His areas of research interest are Mobile Computing, Wireless Sensor Networks (WSNs) and Internet of Things (IoT).

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. **R. K. Yadav**, R. Mishra, "Cluster-Based Classical Routing Protocols and Authentication Algorithms in WSN: A Survey Based on Procedures and Methods", Wireless Personal Communications, vol. 123, pp. 2777–2833, 2022. Impact Factor: 2.017.
2. Kaur, M., & **Yadav, R. K**. (2022). EC Analysis of Multi-Antenna system over 5G and beyond networks and its Application to IRS-Assisted Wireless systems. Wireless Personal Communications, 1-21.
3. Kumar, S., Chauhan, P. S., Bansal, R., Kaur, M., & **Yadav, R. K**. (2022). Performance analysis of css over α–η–μ and α–κ–μ fading channel using clustering-based technique. Wireless Personal Communications, 126(4), 3595-3610.
4. Maheshwari, A., **Yadav, R. K**., & Nath, P. (2022). Data Congestion Control Using Offloading in IoT Network. Wireless Personal Communications, 125(3), 2147-2166.

Biography

RAJNI JINDAL

Department of Computer Science & Engineering

Dr. Rajni Jindal is working as Professor at the Computer Engineering Department, Delhi Technological University, Delhi, India. She received her M.E. from Delhi College of Engineering. She completed her PhD (Computer Engineering) from Faculty of Technology, Delhi University. She also worked as Professor (IT) and Dean (Research & Collaboration) at IGDTUW for 3 years. She possesses a work experience of around 34 years in research and academics. Her major areas of interest are Database Systems, Data Mining, Operating systems, Compiler Design. She has authored around 150 research papers and articles for various national and international journals/conferences and also 5 books. She is a senior member of IEEE and life member of CSI.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **Jindal, R**., Kumar, N., & Patidar, S. (2022). IoT streamed data handling model using delta encoding. *International Journal of Communication Systems*, *35*(13), e5243.
2. **Jindal, R**., & Singh, I. (2022). Detecting malicious transactions in database using hybrid metaheuristic clustering and frequent sequential pattern mining. *Cluster Computing*, 1-23.
3. Sharma, P., **Jindal, R**., & Borah, M. D. (2022). A review of blockchain-based applications and challenges. *Wireless Personal Communications*, 1-43.
4. Sharma, P., **Jindal, R.**, & Borah, M. D. (2022). Blockchain-based cloud storage system with CP-ABE-based access control and revocation process. *The Journal of Supercomputing*, 1-29.
5. Sharma, P., **Jindal, R**., & Borah, M. D. (2022). A review of smart contract-based platforms, applications, and challenges. *Cluster Computing*, 1-27.

Biography

RAVI SHARMA

Department of Computer Science & Engineering

Ravi Sharma completed his MTech in software engineering from Delhi Technological University and is currently working as Assistant Professor in Galgotias University. Currently he is pursuing PhD from Delhi Technological University. His areas of expertise are image processing and machine learning. Dr. Kapil Sharma completed his PhD from Maharshi Dayanand University. He is currently working as HOD in the IT department in Delhi Technological University. His areas of expertise are Image Processing, Machine learning and Information retrieval.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Sharma, R., Sharma, K. An optimal nuclei segmentation method based on enhanced multi-objective GWO. Complex Intell. Syst. 8, 569–582 (2022). https://doi.org/10.1007/s40747-021-00547-y

Biography

SANJAY KUMAR

Department of Computer Science & Engineering

Dr. Sanjay Kumar is currently an Assistant Professor in the Department of Computer Science and Engineering, Delhi Technological University, New Delhi, India. He did Ph.D. degree in Computer Applications from Indian Institute of Technology (IIT) Delhi. He has completed MTech in Computer Application from Indian Institute of Technology (IIT) Delhi, India. Previously, he has worked with National Informatics Centre, Govt. of India as Scientist-B. His research interests include Machine Learning, AI, Social Network Analysis, NLP, and Design and Analysis of Algorithms. He has published more than 50 articles and proceeding papers in reputed journals and conferences, including 20 papers in top rated SCI/SCIE journals. He is also associated with numerous Springer and Elsevier journals as reviewers.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	06

1. **S. Kumar**, and A. Panda, "Identifying influential nodes in weighted complex networks using an improved WVoteRank approach", Applied Intelligence, 52, pages 1838–1852 (2022). Impact Factor: 5.091
2. **S. Kumar**, A. Gupta, and I. Khatri "CSR: A community based spreaders ranking algorithm for influence maximization in social networks", World Wide Web, 25, pages 2303–2322 (2022), Impact Factor: 3.0
3. **S. Kumar**, A. Mallik, and B. S. Panda "Link prediction in complex networks using node centrality and light gradient boosting machine", World Wide Web, 25, pages 2487–2513 (2022), Impact Factor: 3.0
4. **S. Kumar**, A. Mallik, A. Khetarpal, and B.S. Panda, "Influence maximization in social networks using graph embedding and graph neural network", Information Sciences, 607, 1617-1636 (2022). Impact Factor: 8.233
5. **S. Kumar**, D. Lohia, D. Pratap, and B.S. Panda, "MDER: modified degree with exclusion ratio algorithm for influence maximisation in social networks", Computing, 104, 359–382 (2022), Impact Factor: 2.2
6. S. Anand, Rahul, A. Mallik, and **S. Kumar**, "Integrating Node Centralities, Similarity Measures, and Machine Learning Classifiers for Link Prediction", Multimedia Tools and Applications, 81, 38593–38621 (2022), Impact Factor: 2.577

Biography

SATYA SAI NAGA HIMABINDU GADDE

Department of Computer Science & Engineering

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Himabindu, G. S. S. N**., Rao, R., & Sethia, D. (2022). A self-attention hybrid emoji prediction model for code-mixed language:(Hinglish). Social Network Analysis and Mining, 12(1), 137.

Biography

UTKARSH AGGARWAL

Department of Computer Science & Engineering

Utkarsh Agrawal is currently working as a Software Engineer at Walmart Global Tech. He completed his B.Tech degree in Computer Science and Engineering from Delhi Technological University in 2022. During his undergraduate studies, he published his work in international conferences and journals. As a member of IEEE DTU student chapter, he also organized several workshops for the university students. His research interests include Big Data Analytics, Numerical Optimization and Swarm Intelligence.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **U. Agrawal**, V. Rohatgi, and R. Katarya, "Normalized mutual information-based equilibrium optimizer with chaotic maps for wrapper-filter feature selection," Expert Systems with Applications, vol. 207, p. 118107, 2022. Impact Factor: 8.665.

Delhi School of Management

Biography

ASHA THOMAS

Department of DSM

Dr. Asha Thomas is an Assistant Professor in the Department of Operations Research and Business Intelligence, Faculty of Management at Wroclaw University of Science and Technology, Poland. She completed her PhD in Management and Quality Sciences with a specialization in Knowledge Management (KM) from Delhi School of Management, Delhi Technological University, Delhi, India. Her areas of research interest include knowledge management, open innovation, big data, grass-root innovation, and SMEs. Her paper titled "Reviving tourism industry post-Covid-19: A resilience-based framework is in the TOP 1% of the most cited articles in Social Science (Source: Web of Science, 2022). She has about 12 years of experience in teaching and over three years of experience in the IT and Telecom industries. She has several research papers published in top journals, including the 'Tourism Management Perspectives, 'Journal of Knowledge Management,' Knowledge Management Research & Practice, Journal of Intellectual Capital, European Journal of Innovation, Management Decision, Kybernetes', 'Frontiers in Psychology',' Sustainability'. She has published 15 books at a national level and book chapters with publishers like 'Palgrave Macmillan' and 'Springer'. She is a reviewer of many leading journals and also serves as Associate Editor and Guest Editor for international journals. She has also contributed to a policy draft for G20 (T20) summit 2021, held in Rome, Italy.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Asha Thomas**, Vikas Gupta, "Tacit knowledge in organizations: bibliometric and a framework-based systematic review of antecedents, outcomes, theories, methods and future directions", Journal of Knowledge Management 24, 4 pp. 1014- 1041 (2022). (Impact Factor: 8.689)
2. Jain, N., **Thomas, A**., Gupta, V., Ossorio, M., & Porcheddu, D. (2022). Stimulating CSR learning collaboration by the mentor universities with digital tools and technologies–an empirical study during the COVID-19 pandemic. Management Decision, 60(10), 2824-2848.

Biography

PRADEEP KUMAR SURI

Department of DSM

Prof. Pradeep Kumar Suri is originally from the Indian Statistical Service and served in the Centre Government before joining DTU. He has been the National Coordinator for establishing the Agricultural Marketing Information System in the country. He has publications in both national and international journals, and authored a book "Strategic Planning and Implementation of E-governance" published by Springer. He has also extended e-governance consultancy support at both national and international levels. He has served as Head (DSM, DTU), Chairman/Member of various academic/administrative committees and delivered invited talks in several organizations. His areas of interest in teaching and research include E-governance, Business Analytics, Decision Sciences and Project Management.

Award Summary and Publications Details

Category Detail	No. of publications
COMMENDABLE RESEARCH AWARD	02

1. **P.K.Suri** and Sushil, "Effectiveness of strategy implementation and e-governance performance", Evaluation and Program Planning, Vol.92, 2022. Impact Factor: 1.886
2. Singh, Y., & **Suri, P. K**. (2022). An empirical analysis of mobile learning app usage experience. Technology in Society, 68, 101929.

Biography

SAURABH AGGARWAL

Department of DSM

Dr. Saurabh Agrawal works as Associate Professor in Delhi School of Management, Delhi Technological University (DTU), Delhi, India. He belongs to a town called Kaimganj (District: Farrukhabad, UP). He has vast experience of academics, research, and the industry both in India and USA. He has completed his PhD in reverse supply chain from DTU. His research focus is in the areas of supply chain management, reverse logistics, sustainability, and e-waste management. He has completed his undergraduate degree from Indian Institute of Technology, Roorkee, India. He has received his Master's Degree in Business Administration from OSU, USA, and Master's Degree in Industrial Engineering from Indian Institute of Technology, Delhi, India. He has published research papers in international journals of repute including Business Strategy & the Environment, Journal of Enterprise Information Management, Sustainable Computing: Informatics & Systems, Resource Policy, Resources, Conservation and Recycling, Journal of Cleaner Production, Competitiveness Review, and so on.

Award Summary and Publications Details

Citation Award
Highly Cited Paper Award: Agrawal S., Singh R. K., Murtaza Q., A literature review and perspectives in reverse logistics, Resources, Conservation and Recycling, 2015, 97, 76 - 92

Category Detail	No. of publications
COMMENDABLE RESEARCH AWARD	01

1. **Agrawal, S**., Sahu, A., Kumar, G., "A conceptual framework for the implementation of Industry 4.0 in legal informatics", Sustainable Computing: Informatics and Systems, Vol. 33, pp. 100650, 2022. Impact factor 4

Biography

VIKAS GUPTA

Department of DSM

Dr Vikas Gupta is a Gold Medalist (MBA) and has more than 20 years of experience. He is currently working as an Assistant Professor, Delhi School of Management, Delhi Technological University (Former Delhi College of Engineering). His Ph.D. is in the domain of Knowledge Management and Innovation. He has several research papers and articles in his credit which are published in Scopus, SCI, SSCI and ABDC listed Journals. He has published books and book chapters at the national and international level. His research interests are in the domains of knowledge management, innovation, and corporate social responsibility. He is involved in studies related to Knowledge Management and the various dimensions associated with it. He has been awarded the Best Faculty Award in the area of management. He has also been associated with many consultancy projects.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Jain, N., Thomas, A., **Gupta, V.,** Ossorio, M. and Porcheddu, D. (2022), "Stimulating CSR learning collaboration by the mentor universities with digital tools and technologies – an empirical study during the COVID-19 pandemic", Management Decision, Vol. 60 No. 10, pp. 2824-2848. (Impact Factor: 5.534).
2. Thomas, A., & **Gupta, V**. (2022). Tacit knowledge in organizations: Bibliometrics and a framework-based systematic review of antecedents, outcomes, theories, methods and future directions. Journal of Knowledge Management, 26(4), 1014-1041.

Biography

YASHDEEP SINGH

Department of DSM

Yashdeep Singh is an Assistant Professor at the Delhi School of Management (DSM), Delhi Technological University (DTU), Delhi, India. He received his Master of Business Administration (MBA) in Information Technology and Marketing from the Indian Institute of Technology, Delhi. He holds a Bachelor of Engineering (BE) in Computer Science from the Netaji Subhas Institute of Technology, Delhi. His areas of interest for teaching, research, and consultancy include Consumer Behaviour, Data Analytics, Digital Marketing, Human-Computer Interaction, Information Technology Management, Mobile learning, and Social media.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Y. Singh** and P. K. Suri, "An empirical analysis of mobile learning app usage experience," Technoloy in Society, vol. 68, p.101929, 2022. Impact Factor: 6.879

Department of Electrical Engineering

Biography

AAKASH KUMAR SETH

Department of Electrical Engineering

Dr. Aakash Kumar Seth received B.Tech degree in Electrical and Electronics Engineering from Bhagwan Parshuram Institute of Technology, Delhi, India in 2013 and M.Tech degree in Electric Drives and Control from Institute of Engineering and Technology, Lucknow, India in 2017. He has completed his Ph.D. in Electrical Engineering from Delhi Technological University, Delhi in 2021. He is presently working as Lecturer in Department of Electrical Engineering Govt. Polytechnic, Uttar Pradesh. Dr. Seth is recipient of commendable and premier research excellence awards in 2021 and 2022 respectively. He is also an active reviewer of many reputed journals like IEEE, IET and Elsevier. His research interests include Electric Vehicle Charging, Power Quality, Microgrid and Power System Protection.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Seth, A. K.**, & Singh, M. (2022). Modified repetitive control design for two stage off board Electric Vehicle charger. *ISA transactions*, *128*, 343-356.

Biography

AJISHEK RAJ

Department of Electrical Engineering

Ajishek Raj received his B.Tech degree in Electrical and Electronics Engineering from Dr. M.G.R. Educational and Research Institute, Chennai in 2012 and his M. Tech and Ph.D. degree from Delhi Technological University, Delhi in 2016 and 2021 respectively. Currently, he is working as assistant professor in Electrical Engineering Department, National Institute of Technology, Patna. His research interests are in the area of Analog Circuit designs like Sinusoidal Oscillator Circuit design (low and high frequency generation both), Active Filter Circuit Design, Non-linear Analog Circuit design employing minimal employment of active block (i.e., Analog Multiplier, Divider and Square Root Circuit) and Inverse analog filters. He has published 16 research articles in SCIindexed international journals and 06 research articles in international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **A. Raj**, P. Kumar, D. R. Bhaskar, and R. Senani, "New Very-Low-Frequency Third-Order Quadrature Sinusoidal Oscillators Using CFOAs", Circuits, Systems and Signal Processing, vol. 41, pp. 4293–4323, 2022. Impact Factor: 2.311

2. **A. Raj**, D. R. Bhaskar, Raj Senani and Pragati Kumar, "Extension of Recently Proposed TwoCFOA-GC All Pass Filters to the Realisation of First order Universal Active Filters," AEUInternational Journal of Electronics and Communications, vol. 146, 2022. Impact factor: 3.169

3. D. R. Bhaskar, **A. Raj**, Raj Senani, Pragati Kumar, "CFOA-Based Simple Mixed-Mode First Order Universal Filter Configurations", International Journal of Circuit Theory and Applications, vol. 50, no. 7, 2022. Impact Factor: 2.378

4. D. R. Bhaskar, **A. Raj**, Raj Senani, "Three New CFOA-Based SIMO-type Universal Active Filter Configurations with Unrivalled Features", AEU-International Journal of Electronics and Communications, vol. 153, 2022. Impact Factor: 3.169

5. D. R. Bhaskar, **A. Raj**, Raj Senani, "Novel CFOA-Based Configuration that Realises a SIMOtype Universal Active Filter and an SRCO", International Journal of Circuit Theory and Applications, vol. 2022. Impact Factor: 2.378

Biography

ALKA SINGH

Department of Electrical Engineering

Dr. Alka Singh received the B.E. degree in Electrical Engineering from Delhi College of Engineering, Delhi, India, in 1996, the M. Tech. Degree in Technology in Power Systems from the Indian Institute of Technology, New Delhi, India, in 2001, and the Ph.D. degree from Netaji Subhas Institute of Technology (Delhi University), Delhi, India, in 2006. She has teaching, industry and research experience of more than twenty-five years. She is a Senior member of IEEE and Past Chair of IEEE PES-IAS Delhi Chapter. She is currently a Professor in the Department of Electrical Engineering, Delhi Technological University, Delhi. Her research interests include power systems, power quality and applications of power electronics to power systems.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. Arora, A., **Singh, A**. Design and analysis of Quadratic Bernstein Functional Blending Neural Network for shunt compensation and Phase Locked Loop. Electr Eng 104, 3631–3647 (2022). https://doi.org/10.1007/s00202-022-01571-y.

2. Saxena, H., **Singh, A**., Rai, J. N., & Badoni, M. (2022). PV integrated grid synchronization technique using modified SOGI-FLL and zero-crossing detector. Electrical Engineering, 104, 361–1372.

3. Bansal, P., & **Singh, A**. (2022). Nonlinear adaptive normalized Huber control algorithm for 5-level distribution static compensator. Electrical Engineering, 104(3), 1635-1648.

Biography

ANKITA ARORA

Department of Electrical Engineering

Dr. Ankita Arora received the B.Tech degree in Electrical Engineering from Jamia Millia Islamia, New Delhi, India, in 2012 and M.Tech Degree in Process Control from Netaji Subhas Institute of Technology, Delhi University, New Delhi, India, in 2015. She is currently the Assistant Professor in Department of Electrical Engineering, Delhi Technological University, Delhi. Her research interests include Power electronics, Power quality, Machine Learning, Renewable Energy sources, Electric Vehicles, Microgrid. She is a member of IEEE, ISTE, International Association of Engineers (IAENG) and many other reputed societies.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Arora, A**., Singh, A. Design and analysis of Quadratic Bernstein Functional Blending Neural Network for shunt compensation and Phase Locked Loop. Electr Eng 104, 3631–3647 (2022). https://doi.org/10.1007/s00202-022-01571-y

Biography

ASTITVA KUMAR

Department of Electrical Engineering

Dr. Astitva Kumar received his Doctorate from Department of Electrical Engineering, Delhi Technological University, India in 2021. He completed his M.Tech from Department of Electrical Engineering, Delhi Technological University, India with specialization in control and instrumentation in 2015. He completed his B.Tech from Uttar Pradesh Technical University,Uttar Pradesh, India in 2013. He has published more than 17 papers in reputed international journals and conference proceedings. His research interest focuses on renewable energy integration, optimization techniques, PV power forecasting, energy management systems and intelligent controllers for hybrid energy systems.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Kumar, A**., Rizwan, M., & Nangia, U. (2020). A New Approach to Design and Optimize Sizing of Hybrid Microgrids in Deregulated Electricity Environment. *CSEE Journal of Power and Energy Systems*, *8*(2), 569-579.
2. **Kumar, A**., Rizwan, M., & Nangia, U. (2022). A hybrid optimization technique for proficient energy management in smart grid environment. *International Journal of Hydrogen Energy*, *47*(8), 5564-5576.

Biography

AVDESH KUMAR

Department of Electrical Engineering

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, A.,** Garg, R., & Mahajan, P. (2022). Performance improvement of grid-integrated PV system using novel robust least mean logarithmic square control algorithm. Electrical Engineering, 104(5), 3207-3224.

Biography

CHAUDHARY INDRA KUMAR

Department of Electrical Engineering

Dr. Chaudhry Indra Kumar is an Assistant Professor in the Department of Electrical Engineering at Delhi Technological University, where he has been since 2020. Prior to that, he was working as an Assistant professor in Birla Institute of Technology and Science Pilani, Goa. Previously he was associated with the Indian Institute of Technology Roorkee, as a Research Associate. He received his Ph.D. in VLSI Design from the Indian Institute of Technology Roorkee in 2019.

He has published several research articles and served as a reviewer in many reputed international journals and conferences. His research interest is in the areas of device physics, circuit- device interaction, Low power circuit design, and energy efficient sequential circuit design.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Shekhar, R., & **Kumar, C. I**. (2022). Design of highly reliable radiation hardened 10T SRAM cell for low voltage applications. *Integration*, *87*, 176-181.

Biography

DATA RAM BHASKAR

Department of Electrical Engineering

D. R. Bhaskar received B.Sc. degree from Agra University, B. Tech. degree from Indian Institute of Technology (IIT) Kanpur, M. Tech. from IIT Delhi and Ph.D. from University of Delhi. Prof. Bhaskar held the positions of Lecturer (1984–1990) and Senior Lecturer (1990–1995) at the Electrical Engineering Department of Delhi College of Engineering (now Delhi Technological University). He joined the Electronics and Communication Engineering (ECE) Department of Jamia Millia Islamia in July 1995, as a Reader and became a Professor in January 2002. He served as the Head of the Department of ECE from 2002 to 2005. Presently he is working in the Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India. His teaching and research interests are in the areas of Bipolar and CMOS Analog Integrated Circuits and Systems, Current Mode/Voltage Mode Signal Processing, Communication Systems, Fractional Order Filters and Electronic Instrumentation. Prof. Bhaskar has authored or co-authored 110 research papers-all in international journals of repute, 10 international conference papers and 4 book chapters. He has co-authored 4 monographs published by Springer. He has acted/has been acting as a Reviewer for several journals of IEEE, IEE and other international journals of repute.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: SILVER
Early Research Impact & Influence Award

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	07

1. **D. R. Bhaskar**, A. Raj, Raj Senani, Pragati Kumar, "CFOA-Based Simple Mixed-Mode First Order Universal Filter Configurations", International Journal of Circuit Theory and Applications, vol. 50, no. 7, 2022. Impact Factor: 2.378

2. **D. R. Bhaskar**, Garima Mann, and Pragati Kumar. "OTRA-based positive/negative grounded capacitance multiplier." Analog Integrated Circuits and Signal Processing vol. 111, no. 3, pp. 469-481, 2022. Impact Factor:

3. **D. R. Bhaskar**, Garima Mann, and Pragati Kumar. "Single operational transresistance amplifier based grounded resistance controlled synthetic inductor configuration." International Journal of Circuit Theory and Applications, vol. 50, no. 7, pp. 2642-2652, 2022. Impact factor: 2.378

4. **D. R. Bhaskar**, A. Raj, Raj Senani, "Three New CFOA-Based SIMO-type Universal Active Filter Configurations with Unrivalled Features", AEU-International Journal of Electronics and Communications, vol. 153, 2022. Impact Factor: 3.169

5. **D. R. Bhaskar**, A. Raj, Raj Senani, "Novel CFOA-Based Configuration that Realises a SIMOtype Universal Active Filter and an SRCO", International Journal of Circuit Theory and Applications, vol. 50, no. 12, pp. 4251-4264, 2022. Impact Factor: 2.378

6. A. Raj, P. Kumar, **D. R. Bhaskar**, and R. Senani, "New Very-Low-Frequency Third-Order Quadrature Sinusoidal Oscillators Using CFOAs", Circuits, Systems and Signal Processing, vol. 41, pp. 4293–4323, 2022. Impact Factor: 2.311

7. A. Raj, **D. R. Bhaskar**, Raj Senani and Pragati Kumar, "Extension of Recently Proposed TwoCFOA-GC All Pass Filters to the Realisation of First order Universal Active Filters", AEU International Journal of Electronics and Communications, vol. 146, 2022. Impact factor: 3.169

Biography

MAYANK KUMAR

Department of Electrical Engineering

Dr. Mayank Kumar is an Assistant Professor with the Department of Electrical Engineering, Delhi Technological University, Delhi, India. He has received the B.Tech. (Hons.) degree in electronics and communication engineering from Dr. A.P.J. Abdul Kalam Technical University, Lucknow, India, in 2010, and the M.Tech. and Ph.D. degrees in electrical engineering from the Motilal Nehru National Institute of Technology Allahabad, Prayagraj, India, in 2013 and 2017, respectively. He has served as an Assistant Professor at Adani Institute of Infrastructure Engineering, Ahmedabad, India from July 2017 to January 2020. Dr. Kumar is a Senior Member of IEEE, member of Institution of Engineers. He has more than ten years of experience in the field of teaching and research. His research interests include, digitized PWM control of power electronic converters, switching techniques of dc–dc, dc–ac, and ac–ac converters, modeling and control of switched power electronics circuits, solar power conversion, fault tolerant converters and so on. He is a regular reviewer of IEEE Transactions on Industrial Electronics, IEEE Transactions on Power Electronics, IEEE Transactions on Circuits and Systems, IET Power Electronics, and so on.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **M. Kumar**, "Time-Domain Characterization and Detection of Open-Circuit Faults for the H-Bridge Power Cell," IEEE Transactions on Power Electronics, vol. 37, no. 2, pp. 2152-2164, Feb. 2022, doi: 10.1109/TPEL.2021.3103851. Impact Factor: 5.967

Biography

MONIKA VERMA

Department of Electrical Engineering

Dr. Monika Verma is presently working as software development Engineer in Centre of Excellence for Electric Vehicle and Related Technologies in Electrical Engineering Department, DTU. She received her B. Tech. Degree in Electrical Engineering from G. B. Pant University of Agriculture & Technology, Uttarakhand, India in 2013, and her M. Tech. Degree in Power Electronics and Drives from Vellore Institute of Technology, India in 2016, and is presently pursuing Ph.D. in Electrical Engineering from Delhi Technological University, India. She is Institute of Electrical and Electronics Engineers (IEEE) student member, and Institution of Engineering and Technology (IET) associate member.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Verma, M**., Sreejeth, M., & Singh, M. (2021). Application of hybrid metaheuristic technique to study influence of core material and core trench on performance of surface inset PMSM. *Arabian Journal for Science and Engineering*, 1-17.

Biography

NARENDRA KUMAR-II

Department of Electrical Engineering

Prof. Narendra Kumar did Bachelor of Engineering from IIT-Roorkee, Master of Engineering from Punjab Engineering College, Chandigarh, in Electrical Engineering and Ph.D. from Delhi College of Engineering (Now known as Delhi Technological University), in Electronic Instrumentation & Control. He has published more than 100 research papers in various journals and conferences. He has published three books. He has published 2 patents also. He has guided 4 PhDs and 65 projects to PG students. He is a senior member of IEEE and life member of ISTE. He is reviewer of IEEE Transactions on Power Electronics, IETE Journal of Research and IET Energy Systems Integration. He had been reviewer for many conferences also. He had been examiner of MS thesis of McGill University, Canada. His current area of interest is Electronic Instrumentation, Power Electronics and control applications in Power Systems, Renewable Energy, Electric Vehicles & other systems.

He has more than 34 years academic experience and more than 2 years industrial experience. He has long administrative experience. He has completed more than 50 administrative assignments successfully like Member of Board of Management, Member of Academic Council, Dean, Student Discipline, Chairman, Board of Discipline, Chief Warden of boys & girls hostels, Chairman, Students Grievance Redressal Committee, Superintendent of Examinations, Chairman, Central Purchase Committee, Chairman, Faculty and Staff recruitment committee, and Head of Department etc, in DTU.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **Kumar, N**., & Sharma, A. (2022). Design and Analysis of Nonlinear Controller for a Standalone Photovoltaic System Using Lyapunov Stability Theory. *Journal of Solar Energy Engineering*, *144*(1).

Biography

NEHA KHANDUJA

Department of Electrical Engineering

Neha Khanduja received the B.tech degree in Electrical Engineering from University of Rajasthan, India in 2006, and the M.Tech degree in Control & Instrumentation from Delhi Technological University, Delhi, India in 2013.She completed her Ph.D degree in Metaheuristic algorithms and its applications to nonlinear Control systems, with the department if Electrical Engineering, Delhi Technological university, New Delhi, India, in 2022.She is currently working in Bhagwan parshuram institute of Technology, New Delhi, India. She has many publications in peer reviewed journals and presented her research articles in several international conferences. Her area of research is optimization, Metaheuristic algorithms, Artificial Intelligence and Nonlinear Control systems.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Khanduja, Neha**, and Bharat Bhushan. “Hybrid State of Matter Search Algorithm and its Application to PID Controller Design for Position Control of Ball Balancer System.” Iranian Journal of Science and Technology, Transactions of Electrical Engineering 46, no. 3 (2022): 785-804.

Biography

PRAVEEN BANSAL

Department of Electrical Engineering

Praveen Bansal has done B.Tech in Electrical Engineering from Madhav Institute of Technology and Science(MITS), Gwalior in 2009 then complete M.Tech from Maulana Azad National Institute of Technology (MANIT), Bhopal in 2012 in the stream of Electrical Drives . He is currently working as a research scholar in the department of Electrical Engineering,DTU from 2018 onwards. His research area includes Multilevel inverters, Power Quality improvement techniques, Solar PV array for grid integration, etc.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Bansal, P**., Singh, A. Nonlinear adaptive normalized Huber control algorithm for 5-level distribution static compensator. Electr Eng 104, 1635–1648 (2022). https://doi.org/10.1007/s00202-021-01424-0

Biography

RAJESH KUMAR

Department of Electrical Engineering

Dr. Rajesh Kumar received a B.Tech. degree in Applied Electronics and Instrumentation Engineering from M.D.U, Rohtak, M.Tech. degree in Electrical Engineering (Control Systems) from the National Institute of Technology, Kurukshetra, India. He has completed his Ph.D. degree in control and identification of nonlinear systems using intelligent tools from Netaji Subhas Institute of Technology, New Delhi (University of Delhi), India. Dr. Kumar is also serving as the editor and reviewer for reputed international journals. He has published 14 SCI/SCIE-indexed research papers in various high-quality international journals, two Scopus-indexed international journals, 3 Springer book chapters, and 8 international Scopus-indexed IEEE conferences. His current research interests include Artificial Neural networks, Intelligent modeling and control, system identification, stability analysis, and optimization.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Rajesh Kumar** "A Lyapunov-stability-based context-layered recurrent pi-sigma neural network for the identification of nonlinear systems." Applied Soft Computing, Vol. 122 (2022), pp. 108836. Impact Factor: 8.26.

Biography

RAVI CHAUDHARY

Department of Electrical Engineering

Ravi Choudhary is pursuing his Ph.D (Part Time). Paper title is 'Cascade FOPI-FOPTID controller with energy storage devices for AGC performance advancement of electric power systems'

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Choudhary, R.**, Rai, J. N., & Arya, Y. (2022). Cascade FOPI-FOPTID controller with energy storage devices for AGC performance advancement of electric power systems. *Sustainable Energy Technologies and Assessments*, *53*, 102671.

Biography

RUPAM SINGH

Department of Electrical Engineering

Rupam Singh received the B.Tech. degree in Electrical and Electronics Engineering from the Hindustan College of Science and Technology, Mathura, India, in 2013, and the M.Tech. degree in Control System from Amity University, Noida, India, in 2016. She completed her Ph.D. degree in Intelligent Control and Robotics with the Department of Electrical Engineering, Delhi Technological University, New Delhi, India, in 2021. She previously worked as a Postdoctoral Fellow with the Institute for Intelligent System Technologies, Alpen-Adria-Universität, Klagenfurt, Austria from March 2021 to January 2023. She is currently working as an Assistant Professor with SDU Robotics, University of South Denmark (SDU), Odense, Denmark. She has many publications in peer-reviewed journals and presented her research articles in several International Conferences. Her area of research is Artificial Intelligence, Machine Learning, Control Systems, Condition Monitoring, and their application in robotics and unmanned vehicles.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	01

1. **Singh, R.**, & Bhushan, B. (2021). Evolving intelligent system for trajectory tracking of unmanned aerial vehicles. *IEEE Transactions on Automation Science and Engineering*, *19*(3), 1971-1984.
2. **Singh, R.,** & Bhushan, B. (2022). Adaptive control using stochastic approach for unknown but bounded disturbances and its application in balancing control. *Asian Journal of Control*, *24*(3), 1304-1320.

Biography

SHUBHAM GUPTA

Department of Electrical Engineering

Mr. Shubham Gupta received the B.E. degree in electrical engineering from College of Technology and Engineering (CTAE), Udaipur, India, in 2012, the M.Tech. degree in power engineering from Guru Nanak Dev Engineering College (GNDEC), Ludhiana, India, in 2015. He is currently working towards the Ph.D. degree with the Delhi Technological University (DTU), Delhi, India. His research interests include power system operation, electricity trading, and distribution system analysis.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01

1. **S. Gupta,** V. K. Yadav and M. Singh, "Optimal Allocation of Capacitors in Radial Distribution Networks Using Shannon's Entropy," in *IEEE Transactions on Power Delivery*, vol. 37, no. 3, pp. 2245-2255, June 2022, doi: 10.1109/TPWRD.2021.3107857

Biography

UPMA SINGH

Department of Electrical Engineering

Upma Singh received her B.Tech degree in electronics and communication engineering from Uttar Pradesh Technical University, India in 2010 and M.Tech degree in instrumentation and control from Deenbandhu Chhotu Ram University, Haryana, India in 2012. She is currently pursuing PhD at the Department of Electrical Engineering, Delhi Technological University, Delhi, India. Her areas of interest are artificial intelligence, machine learning, Modelling and Optimization of Hybrid Renewable Energy Systems and Applications, Conventional & Renewable Energy Sources and Intelligent Techniques.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Singh, U**., & Rizwan, M. (2022). Enhancing wind power forecasting from meteorological parameters using machine learning models. *Journal of Renewable and Sustainable Energy*, *14*(6), 063302.

Biography

VINOD KUMAR YADAV

Department of Electrical Engineering

Dr. Vinod Kumar Yadav (SM'21) received B.Tech. degree in electrical engineering from Institute of Engineering and Technology (IET), Bareilly, India in 2003, M.Tech. degree in power system engineering from National Institute of Technology (NIT), Jamshedpur, India in 2005 and Ph. D. degree in power system engineering from Indian Institute of Technology (IIT), Roorkee, India in 2011. Since 2011, he has been associated with various technical universities and involved in teaching electrical engineering. Currently, he is Professor in Electrical Engineering Department, Delhi Technological University (Previously Delhi College of Engineering), Delhi, India. His research interests include renewable energy systems, power system planning & optimization, distributed generation and smart grid. Dr. Yadav has received Two times Commendable Research Award from Delhi Technological University, Delhi, 2020 and 2021, also received best teacher award from Rashtriya Shaikshik Mahasangh, Uttar Pradesh in 2016. He is Senior member of IEEE, USA and Member of International Association of Engineers.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **V. K. Yadav**, A. Yadav, R. Yadav, A. Mittal, N.H. Wazir, S. Gupta, R.K. Pachauri, S. Ghosh, "A novel reconfiguration technique for improvement of PV reliability," in Renewable Energy, vol. 182, pp. 508-520, Feb. 2022.

Department of Electronics & Communications Engineering

Biography

AAKANSHA SRIVASTAVA

Department of Electronics & Communications Engineering

Akanksha Srivastava is a Doctoral research scholar at the Electronics and Communication Engineering Department at Delhi Technological University, Delhi, India. She is also working as a Principal Investigator (Women Scientist) in a project entitled "Green EARTH: Green Energy Aware Radio Technology for Cognitive Network with Heterogeneity" under Women Scientists Scheme-A (WOS-A) funded by the Department of Science and Technology (DST), Government of India at DTU, Delhi. She is an active member of various professional bodies like IEEE, IEEE ComSoc, IEEE-WIE, IEEE Young professional, etc. In 2018, she was awarded the India Innovation Challenge Design Contest award by DST and Texas Instruments. Her current research includes Green Communication, Cognitive Radio Networks, and Next Generation Energy Efficient Wireless Communication Networks.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Akanksha Srivastava** and Gurjit Kaur "Cooperation and energy harvesting based spectrum sensing schemes for green cognitive radio networks", Transactions on Emerging Telecommunications Technologies, pp. e4714, 2022. John Wiley and Sons Ltd, Impact Factor: 3.31.
2. Kaur, G., Parasher, Y., **Srivastava, A.**, & Singh, P. (2022). Machine learning-based predictive modeling for failure management of optical spatial mode division multiplexing system. International Journal of Communication Systems, 35(17), e5337.

Biography

ANURAG CHAUHAN

Department of Electronics & Communications Engineering

Anurag Chauhan received his B.Tech degree in Electronics and Communication Engineering from GGSIPU in 2013 and completed his M.Tech in the field of VLSI Design from the National Institute of Technology, Kurukshetra, India in 2015. He is presently working as an Assistant Professor in the Department of Electronics and Communication Engineering, Delhi Technological University. He is pursuing PhD in the field of nanoelectronics from Delhi Technological University, Delhi, India. His research interests include VLSI, Spintronics, Optoelectronics and Magnetic properties of materials. He is also a member of IEEE society.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Chauhan, A.**, Tomar, P. First-Principles Study of Enhanced Absorption in Van der Waals Heterostructure of MoS2/Cd0.90Zn0.10Te0.93Se0.07 in the Visible Region. J. Electron. Mater.51, 6595–6602 (2022). https://doi.org/10.1007/s11664-022-09901-3 Impact Factor: 2.047

Biography

ARVIND GANESH

Department of Electronics & Communications Engineering

Arvind Ganesh is presently working as a physical design engineer in NXP semiconductors. He graduated from Delhi Technological University in 2021 with a B.Tech in ECE and received the gold medal for topping his batch. His interests include Physical Design, Analog Design and Quantum computing.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Ganesh, A.,** Goel, K., Mayall, J.S. et al. Subthreshold Analytical Model of Asymmetric Gate Stack Triple Metal Gate all Around MOSFET (AGSTMGAAFET) for Improved Analog Applications. Silicon 14, 4063–4073 (2022) Impact Factor: 2.941

Biography

ASHISH RATURI

Department of Electronics & Communications Engineering

Ashish Raturi is a Ph.D. research scholar in the department of electronics and communication engineering at DTU. He has received B. Tech degree in electronics and communication engineering from Graphic Era University Dehradun. Afterward, he completed his M. Tech from NIT Kurukshetra in VLSI design. His research focuses are computational techniques, material science, nanotechnology, and optoelectronics. He has published papers in SCI and Scopus-indexed journals and presented papers in various International conferences

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **A. Raturi,** P. Mittal and S. Choudhary, "Electronic and optical properties of lithium niobate (LiNbO3) under tensile and compressive strain for optoelectronic applications: Insights from DFT-computations", Materials Science in Semiconductor Processing (ISSN: 1369-8001) Vol. 144, p.106606, March 2022 (Elsevier, SCIE, IF: 4.644) doi; https://doi.org/10.1016/j.mssp.2022.106606
2. **A. Raturi**, P. Mittal and S. Choudhary, "Tuning the electronic and optical properties of SrTiO3 for optoelectronic and photocatalytic applications by plasmonic-metal doping: a DFTcomputation", Optical and Quantum Electronics (ISSN: 0306-8919) Vol. 54 (634), pp. 1-19, Aug 2022 (Springer, SCIE, IF: 2.794) doi; https://doi.org/10.1007/s11082-022-03995-z

Biography

BHAWNA RAWAT

Department of Electronics & Communications Engineering

Ms. Bhawna Rawat is a Ph.D. research scholar in the Department of Electronics and Communication Engineering at Delhi Technological University under the supervision of Prof. Poornima Mittal. Her research interests include low power circuit design and memory circuits in emerging technologies. She received her B. Tech Degree in Electronics and Communication Engineering from Shiv Nadar University, Greater Noida, and M.Tech degree in VLSI Design from Indira Gandhi Delhi Technical University for Women, Delhi. She is GATE qualified and receives DTU fellowship. She has been awarded a commendable research award for the year 2021.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	02

1. **B. Rawat**, and Poornima Mittal, "A comprehensive analysis of different 7T SRAM topologies to design a 1R1W bit interleaving enabled and half select free cell for 32 nm technology node," *Proceedings of the Royal Society A: Mathematical, Physical, and Engineering Sciences*, vol. 478, no. 2259, pp. 20210745-20210771, March 2022. (Proceedings of Royal Society, SCIE, IF – 3.213) doi; http://doi.org/10.1098/rspa.2021.0745
2. **B. Rawat** and P. Mittal, "A Reliable and Temperature Variation Tolerant 7T SRAM Cell with Single Bitline Configuration for Low Voltage Application", *Circuits, Systems and Signal Processing*, vol. 41, pp. 2779-2801, May 2022 (Springer, SCIE, IF: 2.311); doi: https://doi.org/10.1007/s00034-021- 01912-5
3. P. Mittal, **B. Rawat** and N. Kumar, "Tetra-variate scrutiny of diverse multiplexer techniques for designing a barrel shifter for low power digital circuits", *Microprocessors and Microsystems*, vol. 90, pp. 104491-104507, April 2022. (Elsevier, SCIE, IF: 3.503); doi: https://doi.org/10.1016/j.micpro.2022.104491

Biography

CHHAVI DHIMAN

Department of Electronics & Communications Engineering

Dr. Chhavi Dhiman has received the B.Tech. from Indira Gandhi Delhi Technical University for Women (IGDTUW), Delhi, India, in 2011, M.Tech. and Ph.D. from Delhi Technological University (DTU), Delhi, India, in 2014 and 2019 respectively. She is currently working as an Assistant Professor in the Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, India. Her current research interests include Machine Learning, Deep Learning, Pattern Recognition, Human Action Identification and Classification. Her H-index is 7, and has 344 total research citation counts in the last five years. She has published 22 research papers in the reputed IEEE/ACM/Elsevier/Springer Transaction and Journals, and International Conferences. She is a reviewer of various Journals/Transactions of ACM, IEEE, IET, Springer and Elsevier. She has received the Premiere Research Award in 2021 and 2022 for her outstanding research contributions. She is a Subject Matter Expert at TCSions 2021 to Present.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Sharma, N., **Dhiman, C**., Indu, S., "Pedestrian Intention Prediction for Autonomous Vehicles: A Comprehensive Survey", Neurocomputing, Impact Factor: 5.719, Volume 508, 7 October 2022, Pages 120-152. https://doi.org/10.1016/j.neucom.2022.07.085

2. Singh, K., **Dhiman, C**., Vishwakarma, D. K., Makhija, H., & Walia, G. S. (2022). Sparse coded composite descriptor for human activity recognition. Expert Systems, e12805. https://doi.org/10.1111/exsy.12805 . Impact Factor: 2.587

Biography

DAMYANTI SINGH

Department of Electronics & Communications Engineering

Damyanti Singh was born in 1994 and is currently pursuing Ph.D in VLSI from Delhi Technological University, New Delhi. She has received B.Tech degree in Electronics and Communication Engineering from Uttar Pradesh Technical University, Lucknow, U.P., in 2014, M.Tech in VLSI from Delhi Technological University, New Delhi, in 2018. Her research interest includes design of non-volatile SRAM and DRAM memory.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **D. Singh**, K. Gupta, and N. Pandey, "A Novel Low-Power Nonvolatile 8T1M SRAM Cell," Arab. J. Sci. Eng., vol. 47, no. 3, pp. 3163–3179, 2022, doi: 10.1007/s13369-021-06035-2. (SCIE indexing, 2.807 IF)

2. **D. Singh**, K. Gupta, and N. Pandey, "A novel read decoupled 8T1M nvSRAM cell for near threshold operation," Microelectronics J., vol. 126, p. 105496, 2022, doi: 10.1016/j.mejo.2022.105496. (SCIE indexing, 1.992 IF)

Biography

DHEERAJ SINGH

Department of Electronics & Communications Engineering

I am Dheeraj Singh pursuing PhD part time under the guidance of Dr. Deva Nand in the Electronics & Communication Department.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Kumar, A., **Singh, D.**, & Nand, D. (2022). A novel CFDITA-based design of grounded capacitance multiplier and its transpose structure. *Circuits, Systems, and Signal Processing*, *41*(10), 5319-5339.

Biography

DUSHYANT SINGH CHAUHAN

Department of Electronics & Communications Engineering

Dushyant Singh Chauhan is currently pursuing his Ph.D. degree in the Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India. His research interest focuses on the modelling of underwater channels. He has received his Master's degree (M.E.)in Electronics from Punjab Engineering College, Chandigarh, India. He has received her Bachelor's degree (B.Tech.) in Electronics & Communication Engineering from Dr. APJ Abdul Kalam Technical University, Lucknow, India. He has qualified GATE & NET in 2018 He has received Commendable Research Award for excellence in 2022 from Research and Council Board of DTU, Delhi. He has published 02 SCI/SCIE/Scopus Indexed Journals and presented his research work in several national and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Chauhan, D.S**., Kaur, G. and Kumar, D., 2022. Development of multi diagonal based OCDMA system for free space optical communication system. Optical and Quantum Electronics, 54(5), pp.1-11. (SCI, IF 2.794) https://doi.org/10.1007/s11082-022- 03690-z

2. **Chauhan, D.S**., Kaur, G. and Kumar, D., 2022. Design of novel MIMO UOWC link using gamma–gamma fading channel for IoUTs. Optical and Quantum Electronics. (SCI, IF 2.794) https://doi.org/10.1007/s11082-022-03890-

Biography

ENOCK OSORO OMAYIO

Department of Electronics & Communications Engineering

Enock O. Omayio received B. Ed (Science) degree in Mathematics and Physics from Kenyatta University, Kenya, M.Sc (Electronics and Instrumentation) from the same university. He is currently a PhD scholar in the department of Electronics and Communication Engineering at Delhi Technological University, in Delhi, India. His research interests are in computer vision, image processing and deep learning.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Omayio, E.** O., Indu, S., & Panda, J. (2022). Historical manuscript dating: traditional and current trends. *Multimedia Tools and Applications*, *81*(22), 31573-31602.

Biography

GARIMA SINGH

Department of Electronics & Communications Engineering

The author Garima Singh is doing research at Delhi Technological University, Delhi. She obtained her BE degree in Electronics and Communication Engineering from Sharda University in 2013 and ME (Electronics and Communication) from Jaypee Institute of Information and Technology in 2015. She has been the topper throughout her academic career and has the distinction of receiving an A+ for her ME thesis. She has spent over 5 years towards research and teaching. Her professional experience and research are in the area of Cognitive Radio, Cooperative Communication, Green Smart Technology, Internet of Things, Optical and Wireless Communication System. She has presented and attended many technical conferences in her area of expertise and has experience of delivering expert talks. She has several publications in International Journals and conferences including book chapters in leading international press like IGI, CRC and Elsevier. She served as a reviewer of some good conferences and journals like IEEE, Springer. She is an active member of IEEE Young Professional and Women in Engineering Society. She has also qualified many NPTEL Certificate Courses in her area of interest.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Singh, G.**, & Kaur, G. (2022). Development of a Mathematical Model for Multi-user Coded-Cooperation Based Cognitive Radio System and Its Outage Probability Analysis. *Wireless Personal Communications*, 1-18.
2. **Singh, G.**, & Kaur, G. (2022). Modeling and Simulation of Molecular Communication Based Nanonetwork Using Finite Shaped Spherical Receiver. *Wireless Personal Communications*, 1-15.

Biography

GAURAV SAXENA

Department of Electronics & Communications Engineering

Gaurav Saxena received his Bachelor of Technology (B.Tech.) Degree in Electronics and Communication Engineering, from Uttar Pradesh Technical University Lucknow, India, in 2007, M. Tech degree in Microwave Electronics, from University of Delhi, South Campus, Delhi, India and Ph.D. from Delhi Technological University, Delhi, India, in 2020 and awarded a Commendable Research Award for 3 SCI articles Published in 2020 session and awarded a Commendable Research Award for 2 SCI articles Published in 2021 session. He also received a meritorious scholarship from July 2010 to July 2012 given by the University of Delhi. From Dec.2011 to May 2012 he has worked as an internship trainee at CSIR, NPL Delhi where he established traceability of the VNA and received an appreciation certificate from Scientist-F. Now, he is working as an Associate Professor in Electronics & Communication Engineering Department from Galgotias College of Engineering and Technology, Greater Noida, Uttar Pradesh and published Two patent and numerous research articles in peer reviewed International Journals and Conferences. His recent research interest includes modelling of passive microwave components like filters Power divider/combiner, Microwave antenna for 5G-6G and Wireless applications, Meta-material absorber/Metasurface Antenna, MIMO Antenna receiver/transmitter, Graphene based THz MIMO antenna, absorbers, Sensors and LNA etc.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Saxena, Gaurav**, Y. K. Awasthi, and Priyanka Jain. "Four-element penta band MIMO antenna for multiple wireless application including dual-band circular polarization characteristics." International Journal of Microwave and Wireless Technologies 14, no. 4 (2022): 465-476.Cambridge University Press (SCI Journal with Impact Factor: 1.064) DOI: https://doi.org/10.1017/S1759078721000593

Biography

GARIMA VARSHNEY

Department of Electronics & Communications Engineering

Garima Varshney received a B.Tech. degree in Electronics and Communication Engineering (ECE) from Aligarh Muslim University and an M.Tech. degree in VLSI design and embedded systems from Delhi Technological University, Delhi. Currently, she is pursuing her doctorate from DTU. She got the best paper award for her paper at the IEEE conference, iPACT'21. She is a recipient of DTU commendable research award 2021. Her research interests include fractional order analog signal processing and signal generating circuits. She has published 11 papers in reputed international journals and international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Varshney, G.**, Pandey, N., & Pandey, R. (2022). Design and implementation of OTA based fractional-order oscillator. Analog Integrated Circuits and Signal Processing, 113(1), 93-103.
2. **Varshney, G.**, Pandey, N., & Minaei, S. (2022). CIM applications in fractional domain: Fractional-order universal filter & fractional-order oscillator. AEU-International Journal of Electronics and Communications, 156, 154408.

Biography

GURJIT KAUR

Department of Electronics & Communications Engineering

Dr. Gurjit Kaur is a Professor in the Department of Electronics & Communication Engineering at the Delhi Technological University (DTU), Delhi, India. She has been a topper throughout her academic education. As a testimonial to the same, she has been awarded by Chief Minister S. Prakash Singh Badal for being the topper in Punjab state. After that, she was awarded a 'Gold Medal' by the former President of India Dr. A P J Abdul Kalam for being the overall topper of the Punjab Technical University, Jalandhar in the B.Tech. program. She also received an Honour from the Guru Harkrishan Education Society for being a topper among all the colleges and all the disciplines of PTU, Jalandhar. She also worked as a convener for two international conferences i.e., International ICIAICT 2012 which was organized by CSI, Noida Chapter, and international conference EPPICTM 2012 which was held in collaboration with MTMI, USA, University of Maryland Eastern Shore, USA, and Frostburg State University, USA at School of Information and Communication Technology, Gautam Buddha University, Greater Noida, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	06

1. **Gurjit Kaur**, Yaman Parasher, Akanksha Srivastava, Prabhjot Singh "Machine learning-based predictive modeling for failure management of optical spatial mode division multiplexing system", International Journal of Communication Systems, Vol 35, No 17, pp. e5337, 2022. John Wiley and Sons Ltd, Impact Factor: 1.88
2. Singh, G., & **Kaur, G.** (2022). Development of a Mathematical Model for Multi-user Coded-Cooperation Based Cognitive Radio System and Its Outage Probability Analysis. Wireless Personal Communications, 123, 2413–2430.
3. Singh, G., & **Kaur, G**. (2022). Modeling and Simulation of Molecular Communication Based Nanonetwork Using Finite Shaped Spherical Receiver. Wireless Personal Communications, 123, 3065–3079.
4. Chauhan, D. S., **Kaur, G**., & Kumar, D. (2022). Development of multi diagonal based OCDMA system for free space optical communication system. Optical and Quantum Electronics, 54(5), 325.
5. Chauhan, D. S., **Kaur, G**., & Kumar, D. (2022). Design of novel MIMO UOWC link using gamma–gamma fading channel for IoUTs. Optical and Quantum Electronics, 54(8), 512.
6. Srivastava, A., & **Kaur, G**. (2022). Cooperation and energy harvesting based spectrum sensing schemes for green cognitive radio networks. Transactions on Emerging Telecommunications Technologies, e4714.

Biography

KAMAKASHI RAUTELA

Department of Electronics & Communications Engineering

Kamakshi Rautela, received M.Tech. degree from Graphic Era Hill University, Bhimtal, India, in 2017. She is currently pursuing the Ph.D. degree with the Department of Electronics and Communication Engineering from Delhi Technological University, New Delhi, India. Her current research interests include machine learning, deep learning, computer vision, and medical image processing.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Rautela, K**., Kumar, D. and Kumar, V., 2022. A Systematic Review on Breast Cancer Detection Using Deep Learning Techniques. Archives of Computational Methods in Engineering, pp.1-31. (Springer, SCIE, IF: 8.171), doi.org/10.1007/s11831-022-09744-5.
2. **Rautela, K**., Kumar, D. and Kumar, V., 2022. Dual-modality synthetic mammogram construction for breast lesion detection using U-DARTS. Biocybernetics and Biomedical Engineering, 42(3), pp.1041-1050. (Elsevier, SCIE, IF: 3.503), doi.org/10.1016/j.bbe.2022.08.002

Biography

KRITI SUNEJA

Department of Electronics & Communications Engineering

Kriti Suneja is an Assistant Professor in the Department of Electronics and Communication Engineering, Delhi Technological University. She is currently pursuing PhD and her research interests include VLSI design, testing of digital systems and non-linear dynamic systems.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **K. Suneja**, N. Pandey and R. Pandey, "Systematic Realization of CFOA Based Rössler Chaotic System and Its Applications", Arabian Journal for Science and Engineering, Vol. 47, No.11, pp.13799-13810. Impact Factor:2.807.

Biography

MANJEET KUMAR

Department of Electronics & Communications Engineering

Dr. Manjeet Kumar received the B.Tech degree in Electronics and Telecommunication Engineering from Kurukshetra University, Kurukshetra, India in 2008, and the M.Tech degree in Signal Processing from Guru Gobind Singh Indraprastha University, Delhi, India, in 2011, and the Ph.D. degree in from the Department of Electronics and Communication Engineering, Netaji Subhas Institute of Technology (NSIT), Delhi affiliated to University of Delhi, India, in 2017. He served as Assistant Professor in the department of Electronics and Communication Engineering, Bennett University, Greater Noida from June 2016 to July 2020. From July 2020, he has been working as Assistant Professor in the department of Electronics and Communication Engineering at Delhi Technological University, Delhi. He has authored more than thirty-five research articles and fifteen conference papers in reputed international journals and conferences. He also served as a reviewer in many International Journals. His research interests include Signal processing, Biomedical signal processing, Image processing, Fractional systems, Optimization algorithms, Nature-inspired algorithms, Artificial Intelligence in Healthcare, Signal analysis using Wavelet Transform, Wavelet filter banks, Adaptive filtering, Linear and nonlinear system identification, Healthcare assistive techniques, and Low-power biomedical circuit design, ECG detection, ECG Classification, PPG Signal Analysis, Heart rate estimation and Blood pressure estimation, NonStationary signal analysis, IoMT. He has been awarded with "Commendable Research Award '' in 2021 by Delhi Technological University, Delhi, India. His total citations are 1279 with h-index 22 and i-10-index 36.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	02
COMMENDABLE RESEARCH AWARD	05

1. Pankaj, Ashish Kumar, **Manjeet Kumar** and Rama Komaragiri, "STSR: Spectro-Temporal Super-Resolution Analysis of a Reference Signal Less Photoplethysmogram for Heart Rate Estimation During Physical Activity", *IEEE Transactions on Instrumentation & Measurement*, Volume 71, Pages 1- 10, 2022. Impact factor: 5.332
2. Prashant Mani Tripathi, Ashish Kumar, **Manjeet Kumar** and Rama Komaragiri, "Multilevel Classification and Detection of Cardiac Arrhythmias with High-Resolution Superlet Transform and Deep Convolution Neural Network", *IEEE Transactions on Instrumentation & Measurement*, Volume 71, Pages 1-13, 2022. Impact factor: 5.332
3. Shilpa Garg, Richa Yadav, and **Manjeet Kumar**, "DCT Interpolation Based Design of Two-Dimensional FIR Fractional Order Digital Differentiator", *Multidimensional Systems and Signal Processing, (Springer*), Volume 33, Pages 1367–1386, 2022. Impact factor: 2.030
4. Pankaj, Ashish Kumar, Rama Komaragiri and **Manjeet Kumar**, "Reference Signal Less Fourier Analysis Based Motion Artifact Removal Algorithm for Wearable Photoplethysmography Devices to Estimate Heart Rate during Physical Exercises", *Computers in Biology and Medicine, (Elsevier)*, Volume 141, February 2022, Impact factor: 6.698
5. Prashant Mani Tripathi, Ashish Kumar, Rama Komaragiri and **Manjeet Kumar**, "A Review on Computational Methods for Denoising and Detecting ECG Signals to Detect Cardiovascular Diseases", *Archives of Computational Methods in Engineering (Springer)*, Volume 29, Pages 1875-1914, May 2022. Impact factor: 8.171
6. Pankaj, Ashish Kumar, Rama Komaragiri and **Manjeet Kumar**, "A Review on Computation Methods Used in Photoplethysmography Signal Analysis for Heart Rate Estimation", *Archives of Computational Methods in Engineering (Springer)*, Volume 29, Pages 921-940, March 2022. Impact factor: 8.171
7. Prashant Mani Tripathi, Ashish Kumar, Rama Komaragiri and **Manjeet Kumar**, "Watermarking of ECG Signals Compressed Using Fourier Decomposition Method", *Multimedia Tools and Applications (Springer)*, Volume 81, Pages 19543-19557 June 2022. Impact factor: 2.577

Biography

MUNINDRA

Department of Electronics & Communications Engineering

Munindra was born in Roorkee, Uttarakhand-India in August 1990. He received a B. Tech. and M. Tech. degrees in Electronics and Communication engineering from the Uttrakhand Technical University, Dehradun, in 2011 and the National Institute of Technology (NIT) Delhi in 2016 respectively. Currently, he is pursuing a PhD degree in Electronics and Communication Engineering from Delhi Technological University, Delhi-India in 2017. His research interest includes graphene and other 2D materials, graphene nano-electronics field effect transistors for application in high-speed electronics. Graphene heterostructure and VDW structure are promising fields to study in the POST-DOC programme.

Award Summary and Publications Details

Category Detail	No. of Publication
COMMENDABLE RESEARCH AWARD	01

1. Nand, D. (2022). Nonlinearity Analysis of Quantum Capacitance and its Effect on Nano-Graphene Field Effect Transistor Characteristics. *Journal of Electronic Materials*, *51*(8), 4616-4624.

Biography

NEETA PANDEY

Department of Electronics & Communications Engineering

Dr. Neeta Pandey received the M.E. degree in microelectronics from Birla Institute of Technology and Sciences, Pilani, India and the Ph.D. degree from Guru Gobind Singh Indraprastha University, New Delhi, India. She has served in Central Electronics Engineering Research Institute, Pilani; Indian Institute of Technology, New Delhi; Priyadarshini College of Computer Science, Noida; and Bharati Vidyapeeth's College of Engineering, New Delhi in various capacities. She is currently a Professor with the Electronics and Communication Engineering Department, Delhi Technological University, New Delhi. She has authored more than 180 technical papers in reputed national and international conferences and journals. Her current research interests include analog and digital VLSI design.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: SILVER
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	06

1. G. Varshney, **N. Pandey**, and R. Pandey, "Design and implementation of OTA based fractional-order oscillator," Analog Integr. Circuits Signal Process., vol. 113, no. 1, pp. 93–103, 2022, doi: 10.1007/s10470-022-02069-0. (SCIE indexing, 1.321 IF)

2. G. Varshney, **N. Pandey**, and S. Minaei, "CIM applications in fractional domain: Fractionalorder universal filter & fractional-order oscillator," AEU - Int. J. Electron. Commun., vol. 156, no. March, p. 154408, 2022, doi: 10.1016/j.aeue.2022.154408. (SCIE indexing, 3.169 IF)

3. R. Sivaram, K. Gupta, and **N. Pandey**, "On improving the performance of dynamic positivefeedback source-coupled logic (D-PFSCL) through inclusion of transmission gates," Microprocess. Microsyst., vol. 90, no. September 2021, p. 104521, 2022, doi: 10.1016/j.micpro.2022.104521. (SCIE indexing, 3.503 IF)

4. K. Suneja, **N. Pandey**, and R. Pandey, "Systematic Realization of CFOA Based Rössler Chaotic System and Its Applications," Arab. J. Sci. Eng., vol. 47, no. 11, pp. 13799–13810, 2022, doi: 10.1007/s13369-021-06379-9. (SCIE indexing, 2.807 IF)

5. D. Singh, K. Gupta, and **N. Pandey,** "A novel read decoupled 8T1M nvSRAM cell for near threshold operation," Microelectronics J., vol. 126, no. May, p. 105496, 2022, doi: 10.1016/j.mejo.2022.105496. (SCIE indexing, 1.992 IF)

6. Singh, D., Gupta, K., & **Pandey, N.** (2022). A novel low-power nonvolatile 8T1M SRAM cell. Arabian Journal for Science and Engineering, 47(3), 3163-3179.

Biography

N. JAYANTI

Department of Electronics & Communications Engineering

Dr. N.Jayanthi is an Assistant Professor in the department of Electronics and Communication Engineering at Delhi Technological University, since 2007. She has done B.E. in Electronics and Communication Engineering from Bharathidasan University, Trichy, Tamil Nadu and M.Tech.in Communication Systems from National Institute of Technology, Trichy. She has completed her Ph.D. thesis titled "Analysis of Digitized Historical Inscriptions and Manuscripts at Delhi Technological University. Her area of research interest includes image processing, Pattern recognition, machine learning and Communication systems. She has published a number of technical papers in International Conferences and reputed Journals. She has completed a DST sponsored project titled "Development of OGC standards based sensor network for intelligent traffic management" in the capacity of co-principal investigator and working as a co principal investigator for the DST Sponsored Project on Development of framework for imaging, restoring and archiving inscription and manuscript. She is a member of professional societies such as IEEE and Intelligent Transport system (ITS) and also life member in Pattern Recognition and Artificial Intelligence (IUPARI). She is secretary of IEEE intelligent transportation systems society for Delhi chapter.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Natarajan, **Jayanthi**, et al. "Speech and gesture analysis: a new approach." Multimedia Tools and Applications 81.15 (2022): 20763-20779. Impact Factor: 2.577.
2. Jain, P., **Jayanthi, N**., & Lakshmanan, M. (2022). Closed Form Expressions of AC and SER for Double GG Fading Distribution under EGC Scheme in FSO Communication System. Wireless Personal Communications, 127, 2935–2954.

Biography

PIYUSH JAIN

Department of Electronics & Communications Engineering

Piyush Jain received his B.Tech. (2010) from Kurukshetra University and MTech (2013) from Punjab Engineering College University of Technology, Chandigarh. He was pursuing PhD from Delhi Technological University (formerly Delhi College of Engineering). But unfortunately he passed away due to covid -19 on 6th may 2021. He worked as an Assistant Prof. at Galgotias College of Engineering and Technology, Greater Noida, Uttar Pradesh, India. He was a fellow member of IETE. He has published several publications in Wireless communication, Free Space Optical communication. His research interest includes modelling and analysis of channel impairments in Wireless Communication.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Jain, P**., Jayanthi, N., & Lakshmanan, M. (2022). Closed Form Expressions of AC and SER for Double GG Fading Distribution under EGC Scheme in FSO Communication System. *Wireless Personal Communications*, 1-20.

Biography

POORNIMA MITTAL

Department of Electronics & Communications Engineering

Prof. Poornima Mittal (Ph.D, M.Tech(H), B.Tech), Member IEEE has published 150+ research papers in international journals and conferences of repute. Her research interest includes design/modeling of flexible electronic devices, memory and low power VLSI circuits. She has published two patents on novel TFT structure and memory design. Also, she has published a TextBook titled "Organic Thin-Film-Transistor Applications: Materials to Circuits' ' by CRC Press, Taylor & Francis in 2016. She is the reviewer of IEEE transactions and other reputed international journals of IEEE, IET, Elsevier, IOP, Wiley and Taylor & Francis. She has received the research awards in 2012 and 2015 for her dedicated research at Graphic Era University, Dehradun. Also, she has received Premier/Commendable Research Awards in 2019, 2020, 2021 and 2022 at Delhi Technological University (DTU), Delhi, India. She is the recipient of Innovator of the Year Award at Uttarakhand State Science and Technology Congress in 2016. She has delivered many expert talks and chaired sessions in the reputed international conferences. She is a life member of many professional societies. She has more than 17 years of academic and research experience. Presently, she is working as Professor in the Department of ECE at DTU, Delhi.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	04

1. Rawat, B., & **Mittal, P.** (2022). A comprehensive analysis of different 7T SRAM topologies to design a 1R1 W bit interleaving enabled and half select free cell for 32 nm technology node. Proceedings of the Royal Society A, 478(2259), 20210745.
2. **P. Mittal**, B. Rawat and N. Kumar, "Tetra-variate scrutiny of diverse multiplexer techniques for designing a Barrel Shifter for Low Power Digital Circuits", Microprocessors and Microsystems Journal (ISSN: 0141-9331), Vol. 90, pp. 104491, Feb 2022 (Elsevier, I.F. 3.503), DOI: https://doi.org/10.1016/j.micpro.2022.104491.
3. Raturi, A., **Mittal, P**., & Choudhary, S. (2022). Electronic and optical properties of lithium niobate (LiNbO3) under tensile and compressive strain for optoelectronic applications: Insights from DFT-computations. Materials Science in Semiconductor Processing, 144, 106606.
4. Raturi, A., **Mittal,** P., & Choudhary, S. (2022). Tuning the electronic and optical properties of SrTiO3 for optoelectronic and photocatalytic applications by plasmonic-metal doping: a DFT-computation. Optical and Quantum Electronics, 54(10), 634.
5. Rawat, B., & **Mittal, P**. (2022). A reliable and temperature variation tolerant 7T SRAM cell with single bitline configuration for low voltage application. Circuits, Systems, and Signal Processing, 41, 2779–2801.

Biography

O. P. VERMA

Department of Electronics & Communications Engineering

Prof. O.P. Verma is holding a charge of principal, GB Pant Govt.Engineering College Okhla Delhi on diverted capacity from DTU since April 20,2017. Prior to joining the G B Pant Engineering College, he was professor and Head, Department of Computer Science & Engineering (Aug2014-April 2017).He has been Head of Department of Information Technology (Nov 2007-April 2017), Head, Computer Centre (Aug 2014-April2017),and served as Dean, continuing Education (feb 2013- Dec2015)as well at DTU. He was chief Investigator of ISEA Project Phase -I and Phase -II, sponsored by the Department of Electronics and Information Technology, Government of India at DTU. He has guided 07 PhD and presently 8 students are pursuing PhD under his supervision .He is an editor of two books. He has Published more than 90 papers in reputed journals and conferences . He has a Google Scholar H-index of 22 and i-10 index of 39. He was the organizing Chair of IEEE India International Conference on Information Processing, 12-14 August 2016 and General chair, 4th International Conference on Computer and Management, 22-23 December 2018.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: SILVER
Early Research Impact & Influence Award

Biography

RAJIV KAPOOR

Department of Electronics & Communications Engineering

Professor in the department of ECE and Ex Principal at AIACTR.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: SILVER
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kapoor, R.,** Goel, R., & Sharma, A. (2022). An intelligent railway surveillance framework based on recognition of object and railway track using deep learning. *Multimedia tools and applications*, *81*(15), 21083-21109.

Biography

RICHA

Department of Electronics & Communications Engineering

Richa is a research scholar in the Department of Electronics and Communication, Delhi Technological university. She has received B.Tech and M.Tech in Electronics and Communication Engineering from Sant Longowal Institute of Engineering and Technology (SLIET) in 2009 and 2011 respectively. She has attended/presented more than 10 National/International Conferences. Her area of interest is Antenna, RF & microwave and Data communication.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sharma, R**., Raghava, N.S. & De, A. Design and Analysis of Circular Microstrip Patch Antenna for White Space TV Band Application. Wireless Pers Commun 126, 3333–3344 (2022). Impact Factor (2.017).

Biography

SACHIN TARAN

Department of Electronics & Communications Engineering

"Dr. Sachin Taran is a motivated Teaching Professional with approximately ten years of teaching and research experience in Electronics and Communication Engineering. Dr. Taran presently working as an Assistant Professor at Delhi Technological University (DTU), Shahbad Daulatpur, New Delhi, 10042, India, Since July 2020. He received a Ph.D. degree from the Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, India, and did Postdoc from the Nanyang Technological University (NTU) Singapore, From 2019 to June 2020.

Dr. Taran served as an Assistant Professor at the Department of Electronics and Communication at, Sanghvi Innovative Academy, Indore, India during 2009-2010. He served as an Assistant Professor at the Department of Electronics and Communication at, Medicaps University, Indore, India during 2010-2015. He has authored/co-authored 37 research papers in various reputed international publishers' journals/conferences, such as IEEE, Elsevier, Springer, IET, and IOP. His last five-year citations are 988 with h-index 18 and i-10-index 24. His research interests include artificial intelligence, signal processing, time-frequency analysis, and machine learning. He serves as a technical reviewer of leading international journals of IEEE and IET etc. He is also the awardee of the Research excellence award-2020 and 2021 at DTU for his publications.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Pant, H., Dhanda, H. K., & **Taran, S**. (2022). Sleep apnea detection using electrocardiogram signal input to FAWT and optimize ensemble classifier. *Measurement*, *189*, 110485.

Biography

S. INDU

Department of Electronics & Communications Engineering

Prof Indu Sreedevi received her B.Tech. degree in Electrical Engineering from TKM College of Engineering, University of Kerala, India, M. Tech. degree in Electrical Engineering from College of Engineering Trivandrum, University of Kerala, India and PhD in the area of Visual Sensor Networks from University of Delhi, Delhi, India. She Joined Electronics and Communication Engineering Department of Delhi College of Engineering in 1999 . Currently she is working as Dean (student Welfare), Public relation Officer and Professor of ECE Department of Delhi Technological University. She has taught various courses of the ECE Department at UG and PG Level. She has guided around 40 M Tech students. There are 9 PhD students pursuing PhD under her. Under her guidance 10 candidates completed PhD successfully. Her area of research interest is Computer Vision, Sensor Networks and Image Processing. She has published one book "Smart Camera Networks" and one Book Chapter "Video Surveillance' ' published by INTECH, UK. She has published around 150 publications in international journals, National and International conferences. She has completed 5 Sponsored projects worth 80 lakhs as Principal Investigator, sponsored by Naval Research Board and Department of Science and Technology. Now two projects are onGoing sponsored by DST and Ministry of Electronics and Information Technology She received Commendable research award from Delhi Technological university for 4 consecutive years 2018 to 2021 . She is the recipient of Best Branch Councillor award from IEEE USA and also recipient of Outstanding Branch Councillor award of IEEE Delhi section for 5 consecutive years from 2013-2018 She was Head of the Department of Electronics and Communication Engineering during Aug 2016- Aug 2019. She has organised various events like Technical Festival and Engifest as Coordinator. She has also worked as PRO during 2014-2015. She was Branch Counsellor of IEEE DTU student Branch during 2012-2018. She is Chairperson of Cultural council, DTU since 2016. She is a member of the selection committee of UPSC, NIELIT etc. She is a senior member of IEEE and life member of IUPRAI. She is also a review committee member of ICVGIP and NCVPRIPG, two prestigious conferences of India. She was Technical Chair Person of International Conference IICIP 2016 organized by CSE Department of DTU during Aug 2016. She was the general chair of the International conference "International conference on Signal Processing, VLSI and Communication Engineering" organized during 28-30 March 2019 technically sponsored by IEEE. She was Finance chair of IEEE SOLI 2022.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. Gupta, M., Bhargava, L., & **Indu, S**. (2022). Deep neural network learning for power limited heterogeneous system with workload classification. *Computing*, 1-28
2. Sharma, N., Dhiman, C., & **Indu, S**. (2022). Pedestrian intention prediction for autonomous vehicles: A comprehensive survey. Neurocomputing, 508, 120-152.
3. Omayio, E. O., **Indu, S**., & Panda, J. (2022). Historical manuscript dating: traditional and current trends. Multimedia Tools and Applications, 81(22), 31573-31602.

Biography

SNEHLATA YADAV

Department of Electronics & Communications Engineering

Snehlata Yadav received the B.Tech. degree in ECE from Uttar Pradesh Technical University, India, in 2014, and the M.Tech. degree in Microelectronics from the National Institute of Technology, Srinagar (J&K), India, in 2018. She has rendered her services in the Electrical Engineering department at IIT Jammu for a year. She is currently pursuing a Ph.D. degree at Delhi Technological University, India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **S. Yadav**, S. Rewari, and R. Pandey, "Junctionless Accumulation Mode Ferroelectric FET (JAM-FE-FET) for High-Frequenc Digital and Analog Applications," Silicon, 2022. Impact Factor: 2.941

Biography

SONAM REWARI

Department of Electronics & Communications Engineering

Dr. Sonam Rewari has an area of research as Semiconductor Devices and Modeling. She has published 51 research papers. Has a granted patent and 5 copyrights.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. Mann, R., **Rewari, S**., Pal, P. et al. Radiation-Sensitive AlGaN/GaN MOS-HEMTBased Dosimeter. J. Electron. Mater. 51, 5609–5616 (2022). https://doi.org/10.1007/s11664-022-09795-1
2. Sharma, S., Goel, A., **Rewari, S**. et al. Enhanced Analog Performance and HighFrequency Applications of Dielectric Engineered High-K Schottky Nanowire FET. Silicon 14, 9733–9749 (2022). https://doi.org/10.1007/s12633-022-01663-1
3. Das, A., **Rewari, S**., Kanaujia, B.K. et al. Recent Technological Advancement in Surrounding Gate MOSFET for Biosensing Applications - a Synoptic Study. Silicon 14, 5133–5143 (2022). https://doi.org/10.1007/s12633-021-01288-w
4. Ganesh, A., Goel, K., Mayall, J. S., & **Rewari, S**. (2022). Subthreshold analytical model of asymmetric gate stack triple metal gate all around MOSFET (AGSTMGAAFET) for improved analog applications. Silicon, 14(8), 4063-4073.
5. Yadav, S., **Rewari, S.**, & Pandey, R. (2022). Junctionless Accumulation Mode Ferroelectric FET (JAM-FE-FET) for High Frequency Digital and Analog Applications. Silicon, 14, 7245–7255 (2022).

Biography

SUDIPTA MANJUMDAR

Department of Electronics & Communications Engineering

Sudipta Majumdar received her B.Tech. and M.Tech. degrees in Electronics and Communication Engineering from University of Allahabad, Allahabad, India and Ph.D. degree from Delhi University, Delhi, India. She is currently working as an Assistant Professor in Electronics and Communication Engineering Department, Delhi Technological University, Delhi, India since 2010. She worked as Teaching-cum-Research Fellow at Netaji Subhas Institute of Technology, Delhi, India. She also worked as Project Associate at Indian Institute of Technology, Delhi and Indian Institute of Information Technology, Allahabad, India. She is a reviewer of several international journals. Her current research interests include image processing, signal processing particularly linear and non-linear system identification, nonlinear system modeling and stochastic filtering.

Award Summary and Publications Details

Category Detail	No. of publications
PREMIER RESEARCH AWARD	01

1. Gautam, A. K., **Majumdar, S**., & Parthasarthy, H. (2022). State and parameter estimation of non-uniform transmission line using Kronecker product based modeling. *IEEE Transactions on Power Delivery*, *37*(5), 4291-4302.

Biography

SUMIT KALE

Department of Electronics & Communications Engineering

Dr. Sumit Kale working as an Assistant Professor, in the Department of Electronics and Communication Engineering of DTU Delhi from July 2020. He has published several research articles in peer-reviewed journals and conferences of high repute. He is also a peer reviewer of several SCI journals and conferences. Presently he is working on a SERB DST-sponsored project. He is an active Senior Member of IEEE and IEEE Electron Devices Society. His research currently focuses on design, simulation, and investigation of high-performance nano-scale devices for analog/RF, low-power, and biosensor applications. In addition, design, and analysis of high-speed and low-power circuits.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. **Kale, S.**, & Chandu, M. S. (2022). Dual metal gate dielectric engineered dopant segregated Schottky Barrier Mosfet with reduction in ambipolar current. *Silicon*, *14*(3), 935-941.

2. **Kale, S.,** Latha, N. H., & Bramhane, L. K. (2022). Design and Proposal of Double Pocket Schottky Barrier TFET with Dielectric Modulation for Biosensors Applications. *Silicon*, 1-10.

3. Singh, R., Kaim, S., MedhaShree, R., Kumar, A., & **Kale, S**. (2022). Dielectric engineered schottky barrier MOSFET for biosensor applications: Proposal and investigation. *Silicon*, *14*(8), 4053-4062.

Biography

SUDHARSHAN KUMAR

Department of Electronics & Communications Engineering

Sudarshan Kumar earned his bachelor's degree in electronics and communication engineering from Meerut University and his master's degree in digital communication from UPTU, Lucknow. He is pursuing a Ph.D. from Delhi Technological University, New Delhi. He is currently working as an assistant professor at the Maharaja Agrasen Institute of Technology, New Delhi. He has published many research articles in international journals and conferences. His area of interest is electromagnetic field theory, antennas, microwave circuits, and substrate-integrated waveguide circuits.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sudarshan Kumar** and Asok De, "Design and analysis of sinusoidally modulated substrate integrated waveguide and filters" International Journal of RF and microwave computer added engineering, vol. 32, Issue 1/ e 22912, January 2022, Impact Factor 1.987

Biography

YASHNA SHARMA

Department of Electronics & Communications Engineering

Dr. Yashna Sharma has been an Assistant Professor in the Department of Electronics and Communication Engineering at Delhi Technological University, India since 2016. She joined the Indira Gandhi Institute of Technology, Delhi in 2007 and received a degree of Bachelor of Technology in Electronics and Communication, in August of 2011 with exemplary performance from there. Thereafter, she joined the Indian Institute of Technology-Delhi in the fall of 2011 to pursue graduate studies. She obtained a Master's degree in Optoelectronics and Optical Communication from the institute in 2013. She was awarded the 'perfect ten gold medal' and the 'gold medal for the best woman with highest CGPA' by the President of India for her performance in the M. Tech program. She completed her doctoral thesis from IIT Delhi on 'Nanophotonic Sensors and Devices" in June 2017, for which she was awarded a 'Distinction in Doctoral Thesis' by IIT Delhi. Her research includes computational and numerical investigations of engineered plasmonic substrates, SERS-based sensing and the design of optical switches based on phase change materials.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Y. Sharma** and A. Dhawan, "Near-field plasmonic switches based on Sierpińskifractal nanoantennas on VO2 films," Journal of Optics, 24(6), 065001, 2022. Impact Factor: 2.516

Department of Environmental Engineering

Biography

ABHINAV PANDEY

Department of Environmental Engineering

Mr. Abhinav Pandey received M. Sc. Degree in Environmental Science (University medal) and M. Tech. (Hons.) in Civil-(Environmental) Engineering from B. B. A. Central and Madan Mohan Malaviya University of Technology, India, in 2004 and 2006, respectively. Presently, he is registered as a Ph. D. candidate at Department of Environmental Engineering, Delhi Technological University, Delhi, India. His areas of research interest are exhaust emission, urban air quality, health risk assessment, environmental policies and regulations and socio-environmental issues. He has published 10 research papers, including those in the international journals of repute (such as Proceedings of the Royal Society A; Transportation Research Part D; Journal of Environmental Engineering – ASCE; Environmental Science and Pollution Research etc.) focusing on emission and air quality-related areas. Having attended various international conferences in the relevant areas of emission monitoring and analysis, he has also reviewed 4 research papers for internationally acclaimed journals, namely, Critical Reviews in Environmental Science and Technology and Air Quality, Atmosphere and Health. Besides, he holds over 15 years of industrial experience working at Larsen & Toubro, India's largest engineering and construction organization, at its Engineering Design & Research Centre (EDRC). He is a student member of ASCE, AEESP and ASEE.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	02
COMMENDABLE RESEARCH AWARD	01

1. **Pandey, A**., Pandey, G., & Mishra, R. K. (2022). Applying the indexing system for assessment of effectiveness of the exhaust emission compliance certification process for passenger cars. *Proceedings of the Royal Society A*, *478*(2266), 20220315.

2. **Pandey, A**., Mishra, R. K., & Pandey, G. (2022). Investigating exhaust emissions from in-use passenger cars: exploratory analysis and policy outlook. *Journal of Environmental Engineering*, *148*(7), 04022035.

3. **Pandey, A**., Pandey, G., & Mishra, R. K. (2022). An in situ exploratory analysis of diesel cars' emission: way forward on policy evaluation. *Environmental Science and Pollution Research*, *29*(56), 84434-84450.

Biography

A. K. HARITASH

Department of Environmental Engineering

Dr. A.K. Haritash is Professor and Head in the Department of Environmental Engineering, Delhi Technological University. He has about 15 years of teaching experience, and has around 20 years of research experience. His area of interest is environmental monitoring of Polycyclic Aromatic Hydrocarbons (PAHs), water quality assessment, wetland monitoring, Advanced Oxidation Processes (AOPs), and bioremediation. He has around 70 publications in the form of research papers, conference articles, and an edited book. His research on biodegradation of PAHs has been conferred the status of FAST BREAKING RESEARCH in Environmental Engineering by Thomson Reuters and ScienceWatch. Dr. Haritash has been conferred state level Outstanding Faculty Award for his contribution in academics and research. He is also the recipient of the Research Excellence Award of DTU consecutively for the last 4 years. He has been on the panel of subject experts in Shastri Indo-Canadian Institute and TERI School of Advanced Studies etc. He is member of Editorial Board of Indian Journal of Waste Management and Applied Chemical Engineering journal. Dr. Haritash has participated in several national and international seminars, conferences, and workshops

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: GOLD
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	04

1. Chitrakshi, **Haritash AK** (2022) Appraisal of hydrochemistry and suitability assessment for water in an agriculture-dominated aquatic ecosystem of Rajasthan, India. Rendiconti Lincei. Scienze Fisiche e Naturali, 33:851-866. (IF-2.03)

2. Pipil H, **Haritash AK**, Reddy KR. (2022) Spatio-temporal variations of quality of rainwater and stormwater and treatment of stormwater runoff using sand–gravel filters: case study of Delhi, India. Rendiconti Lincei. Scienze Fisiche e Naturali, 33:135-142. (IF-2.03)

3. Pipil H, Yadav S, Chawla H, Taneja S, Verma M, Singla N, **Haritash AK.** (2022) Comparison of TiO2 catalysis and Fenton's treatment for rapid degradation of Remazol Red Dye in textile industry effluent. Rendiconti Lincei. Scienze Fisiche e Naturali, 33(1):105-114. (IF-2.03)

4. Ambastha, S. K., & **Haritash, A. K.** (2022). Emission of respirable dust from stone quarrying, potential health effects, and its management. *Environmental Science and Pollution Research*, 1-8.(I.F-5.9).

Biography

CHITRAKSHI

Department of Environmental Engineering

Ms Chitrakshi is a Research Scholar in the Department of Environmental Engineering, currently involved in Impact of agriculture on aquatic ecosystems in semi-arid regions of Rajasthan. She has done B.Tech. and M.Tech. in Environmental Engineering from Delhi Technological University, Delhi. She has a total of 4 years of research experience and 3 years of teaching experience as a research scholar in Delhi Technological University. Her area of interest is water quality analysis and monitoring. She has published 3 research papers in peer reviewed international SCI indexed journals. She has also attended several National and International conferences and seminars.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Haritash, A. K. (2022). Appraisal of hydrochemistry and suitability assessment for water in an agriculture-dominated aquatic ecosystem of Rajasthan, India. *Rendiconti Lincei. Scienze Fisiche e Naturali*, 1-16.

Biography

HARSH PIPIL

Department of Environmental Engineering

Harsh Pipil is a Research Scholar in the Department of Environmental Engineering, currently engaged in treatment of stormwater using different techniques. He has acquired Civil Engineering from Noida Institute of Engineering and Technology, Greater Noida. Followed by it, he has completed M. Tech. in Environmental Engineering from Delhi Technological University, Delhi. After M. Tech., he worked with Military Engineer Services (MES) as Junior Engineer in Jaipur, India. He went to Auckland, New Zealand, to study Construction Project Management from Unitec Institute, and worked successfully as Site Manager, while located in Auckland. He has total 3 years of construction experience in India and overseas, whereas, he has 3 years of research experience. His area of interest is wastewater treatment, stormwater treatment, and constructed wetlands. He has also attended several National and International conferences, seminars, workshops and successfully published many research papers in reputed international journals

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **H. Pipil**, A. K. Haritash and K. R. Reddy, "Spatio-temporal variations of quality of rainwater and stormwater and treatment of stormwater runoff using sand–gravel filters: case study of Delhi, India", *Rendiconti Lincei. Scienze Fisiche e Naturali*, Vol. 33, Issue 1, pp. 135–142, 2022. Impact Factor: 1.810
2. **Pipil, H.**, Yadav, S., Chawla, H., Taneja, S., Verma, M., Singla, N., & Haritash, A. K. (2022). Comparison of TiO2 catalysis and Fenton's treatment for rapid degradation of Remazol Red Dye in textile industry effluent. Rendiconti Lincei. Scienze Fisiche e Naturali, 33(1), 105-114.

Biography

KULVENDRA PATEL

Department of Environmental Engineering

Kulvendra Patel is currently pursuing Ph.D. from Department of Environmental Engineering, Delhi Technological University under the supervision of Prof. S.K. Singh. His research interests include life cycle assessment, sustainable development, biofuels, wastewater treatment. He has received his master's degree in Environmental Engineering from Delhi Technological University with LCA as specialization. He has qualified GATE in 2018 and was awarded scholarship from AICTE. He has published 3 research papers and 1 conference proceedings.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Patel, K**. & Singh, S.K. (2022) A life cycle approach to environmental assessment of wastewater and sludge treatment processes. *Water and Environment Journal*, 36(3), 412–424. Impact Factor: 1.977. Available from: https://doi.org/10.1111/wej.12774

Biography

RACHNA GARG

Department of Environmental Engineering

Rachna Garg is a research scholar in the Department of Environmental Engineering, Delhi Technological University. Her research area is industrial wastewater treatment using advanced oxidation processes. She has gained her master degree in Environment Management from Guru Gobind Singh Indraprastha University, Delhi. She has received her graduation degree in life sciences from MDU, Rohtak. She has published one paper in SCI international journal and one paper in conference preceding.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R.Garg**, S.K.Singh, " Treatment technologies for sustainable management of wastewater from iron and steel industry-a review", *Environmental Science and Pollution Research*, vol. 29, no. 50, pp. 75203–75222. Impact Factor: 5.190. https://doi.org/10.1007/s11356-022-23051-3

Biography

RIKI SARMA

Department of Environmental Engineering

Riki Sarma is currently pursuing her Ph.D. degree in the Department of Environmental Engineering at Delhi Technological University. Her research interests include studies on groundwater availability and contamination using numerical modeling and geospatial tools. She has received her Master's degree in Environmental Studies from TERI School of Advanced Studies, Delhi and Bachelor's degree in Chemistry (Hons.) from St. Stephen's College, University of Delhi. After completing her Master's, she gained industrial experience in Ambuja Cements Ltd. and research experience in Indian Agricultural Research Institute, Delhi and IOCL R&D, Faridabad. So far, she has published 3 research papers in SCI journals and presented her work in 3 international conferences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R. Sarma** and S. K. Singh, "A comparative study of data-driven models for groundwater level forecasting", *Water Resources Management,* vol. 36, no. 8, pp. 2741-2756, 2022. Impact Factor: 4.426

Biography

RAJEEV KUMAR MISHRA

Department of Environmental Engineering

Presently teaching as an Assistant Professor in Department of Environmental Engineering, Delhi Technological University, Delhi, India, since 15 t h April 2011.The thrust areas of his research are Environmental Implications of Urban Transport Systems, Urban Air Pollution Monitoring, Ultrafine Particles,Tailpipe Emission Monitoring & Analysis, Traffic Noise Analysis and Modelling, Impact of Urban Transport on Climate Change,Sustainable Development. He also published 30 international & 8 National research papers in various reputed journals. He has also presented 36 international & 7 national conference papers. Dr. Mishra has written two book chapters published in Springer. He has reviewed different research papers of various journals like Environmental progress and sustainable energy (Wiley Publications), Environmental Impact assessment review (Elsevier), International journal of Sustainable built environment (Elsevier).

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	02
COMMENDABLE RESEARCH AWARD	04

1. Abhinav Pandey, Govind Pandey, **Rajeev Kumar Mishra** (2022). Applying the indexing system for assessment of effectiveness of the exhaust emission compliance certification process for passenger cars. *Proceedings of the Royal Society A* 478: 20220315. https://doi.org/10.1098/rspa.2022.0315 (IF: 3.213, Q-1).
2. Abhinav Pandey, **Rajeev Kumar Mishra**, Govind Pandey (2022). Investigating exhaust emission from in-use passenger cars: an exploratory analysis and policy outlook. *Journal of Environmental Engineering, ASCE,* Vol. 148 (7), 04022035. https://doi.org/10.1061/(ASCE)EE.1943-7870.0002015 (IF: 1.75, Q-2).
3. Abhinav Pandey, Govind Pandey, **Rajeev Kumar Mishra** (2022). An in situ exploratory analysis of diesel cars' emission: way forward on policy evaluation. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-022-21719-4 (IF: 5.190, Q-1).
4. Amit Krishan, **Rajeev Kumar Mishra,** Anwar Khursheed (2022). Evaluation of water quality using water quality index, synthetic pollution index, and GIS technique: A case study of the river Gomti, Lucknow, India. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-022-21493-3 (IF: 5.190, Q-1).
5. Shailendra Kumar Yadav, **Rajeev Kumar Mishra**, Bhola Ram Gurjar (2022). Ultrafine Particle Number Concentration and its size distribution during Diwali festival in megacity Delhi, India: Are 'Green Crackers' Safe?, *Journal of Environmental Management,* Vol. 317, 1 September 2022, 115459. https://doi.org/10.1016/j.jenvman.2022.115459 (IF: 8.91, Q-1).
6. Shailendra Kumar Yadav, **Rajeev Kumar Mishra**, Bhola Ram Gurjar (2022). Assessment of the effect of the judicial prohibition on firecracker celebration at the Diwali festival on air quality in Delhi, India. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-021-17695-w (IF: 5.190, Q-1).

Biography

SAURAV KUMAR AMBASTHA

Department of Environmental Engineering

Saurav Kumar Ambastha is a Research Scholar in Department of Environmental Engineering, currently doing research study on impact of Mining on Water and Air Quality. He has completed his Engineering in Industrial Biotechnology from Dr. M.G.R University Chennai. Followed by it, he has completed M. Tech. in Environmental Engineering from BIT Mesra, Ranchi. After M. Tech., he worked in Academics as Assistant Professor in the universities of NCR. He has a total 11 years of experience in a combination of Academics, Industries and Consultancy. His area of interest in Air Quality Modelling, Dust Dispersion modelling, Groundwater Modelling and Air and Water Quality analysis. He has also attended several National and International conferences, seminars, workshops and successfully published many research papers in reputed journals.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **S. K. Ambastha** and A. K. Haritash "Emission of respirable dust from stone quarrying, potential health effects, and its management", *Environmental Science and Pollution Research* 29, 6670–6677 (2022). Impact Factor: 5.190.

Biography

S.K.SINGH

Department of Environmental Engineering

Prof. S. K. Singh is Vice-Chancellor, Rajasthan Technical University, Kota, Rajasthan and Professor in Department of Environmental Engineering at Delhi Technological University. He has obtained his Ph.D. from BITS, Pilani, M. Tech. from IIT-BHU, Varanasi and B.E. from Gorakhpur University. He has been engaged in teaching, research, administration and consultancy for over 32 years. He started his esteemed career as a Faculty Member at BITS, Pilani in 1988 and has held positions of Head, Deptt. of Environmental Engineering, DTU, Dean (Faculty of Technology), Delhi University, Head, Deptt. of Civil Engineering, DU, Dean (Administration), Delhi College of Engineering and Founder Chairman, EDUSAT Program for Delhi State. He is also Member of Board of Governors, CSMRS, Ministry of Water Resources, GOI, Member, Board of Management, Visvesvaraya Group of Institutions, Member, Board of Management, Walchan d College of Engineering, Sangli and Independent Director, WAPCOS Limited (A Mini Ratna-I PSU, GOI). Prof. Singh has guided 12 PhDs, 75 M.Tech. theses and more than 180 undergraduate projects so far. He has participated in various national and international conferences, published more than 251 research papers in national and international journals, authored 06 books and has made many significant contributions in the field of science and technology.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **S. K. Singh** and Ali Reza Noori, "Groundwater quality assessment and modeling utilizing water quality index and GIS in Kabul Basin, Afghanistan", *Environmental Monitoring and Assessmen*t, vol. 194, no. 10, pp. 673, 2022. Impact Factor: 3.

2. **R.Garg**, S.K.Singh, " Treatment technologies for sustainable management of wastewater from iron and steel industry-a review", *Environmental Science and Pollution Research*, vol. 29, no. 50, pp. 75203–75222. Impact Factor: 5.190. https://doi.org/10.1007/s11356-022-23051-3.

Department of Humanities

Biography

KHYATI KATHURIA

Department of Humanities

Khyati Kathuria is a Research Scholar of Economics in the Department of Humanities, Delhi Technological University, Delhi. She traces her academic roots from majoring in B.A. (Hons) Economics from the University of Delhi to earning a Postgraduate Degree (Gold Medalist) in Economics from Guru Gobind Singh Indraprastha University, Delhi. Currently, she is pursuing her Ph.D. under the supervision of Prof. Nand Kumar and has published a number of research papers in the area of Economics in different journals of repute.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Kathuria, K.**, & Kumar, N. (2022). Pandemic?induced fear and government policy response as a measure of uncertainty in the foreign exchange market: Evidence from (a) symmetric wild bootstrap likelihood ratio test. Pacific Economic Review, 27(4), 361-379.
2. **Kathuria, K.**, & Kumar, N. (2022). Are exports and imports of India s trading partners cointegrated? Evidence from Fourier bootstrap ARDL procedure. Empirical Economics, 62(3), 1177-1191.

Biography

NAND KUMAR

Department of Humanities

Dr. Nand Kumar is a Professor of Economics in the Department of Humanities, Delhi Technological University and is presently heading the Department. Kumar has done his MA in Economics from JawaharLal Nehru University, Delhi. He has done his Ph.D. from Delhi Technological University, Delhi. He has published a number of seminal research papers in the area of Economics in different international journals of repute. Currently, there are 10 research scholars registered for Ph.D. under his supervision. Prior to joining DTU, Delhi, Prof. Kumar has served as a Probation Officer in the Department of Home Jail in the Province of Bihar.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Kathuria, K., & **Kumar, N.** (2022). Pandemic?induced fear and government policy response as a measure of uncertainty in the foreign exchange market: Evidence from (a) symmetric wild bootstrap likelihood ratio test. Pacific Economic Review, 27(4), 361-379.
2. Kathuria, K., & **Kumar, N.** (2022). Are exports and imports of India s trading partners cointegrated? Evidence from Fourier bootstrap ARDL procedure. Empirical Economics, 62(3), 1177-1191.

Department of Information Technology

Biography

AKSHAY MOOL

Department of Information Technology

Akshay Mool is a PhD scholar in the Department of Information Technology at Delhi Technological University. He is doing his research in the field of Image Processing using Machine Learning.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Mool, A**., Panda, J., & Sharma, K. (2022). Optimizable face detection and tracking model with occlusion resolution for high quality videos. *Multimedia Tools and Applications*, *81*(8), 10391-10406.

Biography

BINDU VERMA

Department of Information Technology

Dr. Bindu Verma is a faculty in the Department of Information Technology at Delhi Technological University (Formerly known as Delhi College of Engineering). She earned a masters and Doctorate degree in Automated Intent Recognition using Hand Gesture and Face Expression Analysis from School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi. She is passionate to work in the area of computer vision, machine learning, human computer interaction, intelligent systems, and affective state monitoring. I have made substantial contributions to the field of human-computer interaction, emotion recognition, and intent recognition with many research articles published in international conferences and journals. I am the reviewer of many International Journals such as IET intelligent transport system, IEEE Transactions on Circuits and Systems for Video Technology, intelligent transportation system conferences, etc.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Verma, Bindu**. "A two stream convolutional neural network with bi-directional GRU model to classify dynamic hand gesture." *Journal of Visual Communication and Image Representatio*n 87 (2022): 103554.

Biography

DEEPAK DAGAR

Department of Information Technology

Deepak Dagar received the B.Tech degree in Software Engineering from Delhi Technological University (DTU), Delhi, in 2014 and M.Tech from Netaji Subhas Institute of Technology (NSIT), Delhi, in 2016. Worked in Bombardier Transportation Private Limited from 2016- 2019 as software testing engineer and software test lead. Currently teaching in the Delhi Government Schools along with pursuing part-time PhD from DTU. Current interests include, deep learning, computer vision, deepfake multimedia generation and detection.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **D. Dagar** and D. K. Vishwakarma, "A literature review and perspectives in deepfakes: generation, detection, and applications," I*nternational Journal of Multimedia Information Retrieval*, vol. 11, pp. 219-289, 2022. Impact Factor: 2.553

Biography

DEEPIKA VARSHNEY

Department of Information Technology

Deepika Varshney is an Assistant Professor in the CSE Department at Jaypee Institute of Information and Technology. She completed her PhD in the area of Online social media privacy and security from Delhi Technological University under the guidance of Prof. Dinesh Kumar Vishwakarma. She has completed her Bachelor degree in CSE from Maharana Pratap College of Technology, Gwalior and Masters in Information Security and Management from Indira Gandhi Delhi Technical University for womens, New Delhi. She has received commendable research awards in the Year 2020 and 2022 from DTU and Best Teamwork award from WSSS web science summer school, Russia 2017. Her areas of Interest are Machine Learning, NLP, Deep Learning, and Cyber security.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Varshney, Deepika,** and Dinesh Kumar Vishwakarma. "A Unified Approach of Detecting Misleading Images via Tracing its Instances on Web and Analyzing its Past Context for the Verification of Content." arXiv preprint arXiv:2109.09929 (2022) '*International Journal of Multimedia Information Retrieval'* Accepted. Impact Factor: 2.55.

Biography

DINESH KUMAR VISHWAKARMA

Department of Information Technology

Dinesh Kumar Vishwakarma received the Ph.D. degree in the field of Computer Vision and Machine Learning from Delhi Technological University, New Delhi, India, in 2016. He is currently a Professor and Head, the Department of Information Technology, Delhi Technological University. His current research interests include Computer Vision, Deep/Machine Learning, Sentiment Analysis, Fake News Detection, Multimedia Data Analytics, and Crowd Behaviour Analysis. He received research excellence awards from the Delhi Technological University in the years 2017, 2018, 2019, 2020, 2021 and 2022. He is Associate Editor of IEEE Transactions on Circuits Systems for Video Technology. He has been featured among top 2% scientists of the world by Stanford University in the year 2021, and 2022. He is a reviewer of various journals/ transactions of the ACM, IEEE, Elsevier, and Springer. He is a senior member of IEEE, Member of Association for Computing Machinery, and a lifetime member of ISTE.

Award Summary and Publications Details

Citation Award
Highly Cited Paper Award : Yadav A., Vishwakarma D. K., Sentiment analysis using deep learning architectures: a review, Artificial Intelligence Review, 2020,53(6), 4335–4385
Early Research Impact & Influence Award

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	06

1. A. Yadav, **D. K. Vishwakarma**, A Language-independent Network to analyze the impact of COVID-19 on the World via Sentiment Analysis, *ACM Transactions on Internet Technology*, Vol. 22, No. 1 (28), pp 1–30, 2022.
2. M. Sabih, **D.K. Vishwakarma**, A Novel Framework for detection of motion and appearance-based Anomaly using Ensemble Learning and LSTMs, *Expert Systems with Applications*, Vol. 192, 2022.
3. M. Sabih, **D.K. Vishwakarma**, Crowd anomaly detection with LSTMs using optical features and domain knowledge for improved inferring, *Visual Computer*, 38, pp. 1719–1730, 2022.
4. **D.K. Vishwakarma**, K. Jain, Three-dimensional human activity recognition by forming a movement polygon using posture skeletal data from depth sensor, *ETRI Journal*, Vol. 44 (2), 286-292, 2022.
5. D. Dagar, **D.K. Vishwakarma**, A literature review and perspectives in deepfakes: generation, detection, and applications, *International Journal of Multimedia Information Retrieval*, Vol. 11, pp. 219–289, 2022.
6. D. Varshney, **D.K. Vishwakarma**, A Unified Approach of Detecting Misleading Images via Tracing its Instances on Web and Analysing its Past Context for the Verification of Multimedia Content, *International Journal of Multimedia Information Retrieval*, Vol. 11, pp. 445–459, 2022.
7. K. Singh, C. Dhiman**, D. K. Vishwakarma**, H. Makhija, G. S. Walia, Sparse Coded Composite Descriptor for Human Activity Recognition, *Expert Systems*, Vol. 39(e), 12805, 2022.

Biography

PARMINDER PAL SINGH BEDI

Department of Information Technology

I am parminder pal singh bedi from punjab. My Phd roll no is 2k18/phdit/501. I am doing my PhD under the supervision of Professor Kapil Sharma, who's Head of the department of information technology.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Bedi, P. P. S.**, Bala, M., & Sharma, K. (2022). Extractive summarization using concept-space and keyword phrase. *Expert Systems*, *39*(10), e13110.

Biography

PRIYANKA MEEL

Department of Information Technology

Dr. Priyanka Meel received a Bachelor of Technology (B.Tech.) Degree from the Indian Institute of Information Technology and Management, Gwalior, India, in 2011 and Master of Technology (M.Tech.) Degree from the Indian Institute of Information Technology and Management, Gwalior, India, in 2013. She joined as an Assistant Professor in the Department of Information Technology, Delhi Technological University, New Delhi, India, in 2016. She received a Doctor of Philosophy (Ph. D.) degree from the Department of Information Technology, Delhi Technological University, New Delhi, India in 2022. Her current research interests include Artificial Intelligence, Data Analytics, Fake News Detection, Image Processing, Pattern Analysis, Machine Learning, and Deep Learning.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. Chahat Raj and **Priyanka Meel**, "ARCNN framework for multimodal infodemic detection." *Neural Networks*, Vol. 146, pp. 36-68, 2022.Impact Factor: 9.657
2. Chahat Raj and **Priyanka Meel**, "People lie, actions Don't! Modeling infodemic proliferation predictors among social media users." *Technology in Society,* Vol. 68, pp. 101930, 2022.Impact Factor: 6.879

Biography

RITU AGARWAL

Department of Information Technology

Dr. Ritu Agarwal received her Ph.D degree in Information technology in October 2021 from Information Technology Department, Delhi Technological University. Currently she is working as an Assistant Professor in the Department of Information Technology at Delhi Technological University, Delhi. Her research interests include Data Structures, Algorithm design, Information Security, Data Recovery, Digital Media Forensics, Cyber Forensics.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Agarwal, Ritu,** and Om Prakash Verma. "Robust copy-move forgery detection using modified superpixel based FCM clustering with emperor penguin optimization and block feature matching." *Evolving Systems* 13, no. 1 (2022): 27-41. Impact Factor: 2.347.

Biography

SRISTI VASISTHA

Department of Information Technology

Srishti Vashishtha has received the B.Tech. degree in information technology from the Maharaja Surajmal Institute of Technology, Guru Gobind Singh Indraprastha University (GGSIPU), New Delhi, India, and the M.Tech. degree in computer science from the University School of Information, Communication and Technology, GGSIPU. She received a Ph.D. degree from the Information Technology Department, Delhi Technological University, New Delhi in 2022. Her current research interests include data mining, natural language processing, machine learning and fuzzy logic.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **S. Vashishtha** and S. Susan, "Neuro-fuzzy network incorporating multiple lexicons for social sentiment analysis." *Soft Computing*, 26(9), pp.4487-4507. Impact Factor: 3.732

Biography

SWATI SHARDA

Department of Information Technology

Dr. Swati Sharda is PhD in Information Technology (2022 batch). Her Research Area is a combination of Electrical and Information Technology; "Smart Grid Energy Management using IoT and Computational Intelligence". She had 10 years of teaching experience as Guest Faculty in DTU, NSUT Delhi. She is currently working as an "Intelligent Automation Developer" in Fidelity International Gurgaon. She has got expertise in Process Automation and Orchestration tools like Appian, Blue Prism and Agile Environment.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Swati Sharda**, Mukhtiar Singh, Kapil Sharma. "A complete consumer behavior learning model for real-time demand response implementation in smart grid." Applied Intelligence, Volume: 26 (January 2022) Impact Factor: 5.086 (Pub: Springer) (SCIE)

Biography

VIRENDRA RANGA

Department of Information Technology

Dr. Virender Ranga received his Ph.D. degree in February 25, 2016 from Computer Engineering Department of National Institute of Technology, Kurukshetra, Haryana, India followed by M.Tech. and B.Tech. degrees. Currently, he is Associate Professor in Information Technology Department of Delhi Technological University, Delhi since October 26, 2021. Earlier, he worked as Assistant Professor with the Computer Engineering Department, National Institute of Technology Kurukshetra, Haryana, India from March 20, 2008 to October, 25 2021. He has published more than 100 research papers in various SCI/SCIE/ SCOPUS/ESCI/INSPEC Journals and various reputed International Conferences in the area of Computer Communications and Computer Security. He has also published two text books with Paging Publishers, New Delhi on Computer Application in Pharmacy. He has been conferred by Young Faculty Award in 2016 for his excellent contributions in the field of Computer Communications. He has acted as member of various TPCs in various International conferences of repute. He is a member of editorial board of various reputed journals like Journal of Applied Computer Science & Artificial Intelligence, International Journal of Advances in Computer Science and Information Technology (IJACSIT), Circulation in Computer Science (CCS), International Journal of Bio Based and Modern Engineering (IJBBME) and International Journal of Wireless Networks and Broadband Technologies. He acted as Guest Editor for a special issue published

by International Journal of Sensors, Wireless Communications and Control (Bentham Science Publication). He is acting as Bentham Science Ambassador of Asia Region. He is an active reviewer of many reputed journals like various IEEE Transaction journals, Springer journals, Elsevier journals, Taylor & Francis journals, Wiley journals and InderScience journals. His research area includes Wireless Sensor & Ad-hoc Networks Security, IoT security, FANET security, SDN security, IoRT etc.

Award Summary and Publications Details

Citation Award
Early Research Impact & Influence Award

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Aditi Zear, **Virender Ranga***, Kriti Bhusan, "Partition detection and recovery by UAVs in damaged WSANs using N-angle clustering" *International Journal of Communication Systems*", Vol. 35 (11), pp. 1-22, 2022. Impact Factor: 2.047.

Department of Mechanical Engineering

Biography

ABHISHEK SAHU

Department of Mechanical Engineering

Abhishek Sahu is currently a research scholar in the Department of Mechanical Engineering at Delhi Technological University. He earned his Bachelor of Engineering degree in Mechanical Engineering from RGPV University, Bhopal and Master of Engineering degree in Advance Production Systems from NITTTR, Bhopal. His research interests include Industry 4.0, Circular Economy, Supply Chain Management, and Assembly Line Balancing. He has published various research articles and patents in International Journals, including Journal of Enterprise Information Management, Sustainable Computing: Informatics and Systems and The TQM Journal.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sahu, A**., Agrawal, S., & Kumar, G. (2022). Integrating Industry 4.0 and circular economy: A review. *Journal of Enterprise Information Management*, *35*(3), 885-917.

Biography

ANIL KUMAR

Department of Mechanical Engineering

Dr. Anil Kumar is Associate Professor in Department of Mechanical Engineering, with an additional charge of Additional Coordinator-Centre for Energy and Environment, Delhi Technological University, Delhi, India. He completed his Ph.D. in Solar Energy from Indian Institute of Technology Delhi, India in 2007. He was Post-Doctoral Researcher at Energy Technology Research Center, Department of Mechanical Engineering, Faculty of Engineering, Prince of Songkla University, Hat Yai, Songkhla, Thailand in the discipline of Energy Technology. His nature of experience in Teaching and Research (Science, Technology, Society, and Sustainable Development). His areas of specialization are; Energy Technology, Energy Economics, Heat Transfer, and Environmental Issues. He has published 195 papers in international peer-reviewed journals and 80 papers in the International/National conferences proceeding. He has received more than 6700+ citations with 45 h-index (Google Scholar) and 4200+ citations with 36 h-index (SCOPUS). He authored 12 books (4 National and 8 International editions). He is Fellow and Chartered Engineer of The Institution of Engineers (India) (vide no. F-1268879, date of election 24-08-2020). He appears in the most cited number Information Systems (IS) researchers featured in the World Ranking of"Top 2% scientists created by Stanford University since 2019". He also appeared in AD Scientific Index 2021, 2022 and 2023: World Scientist and University Rankings. 01 granted patent and 03 published patents in his credit.He has supervised 10 Ph.D. scholars, 43 master students. Dr. Kumar has visited countries, namely UK, Thailand, and Malaysia.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award: GOLD
Early Research Impact & Influence Award

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	13

1. Niranjan Shau, **Anil Kumar**, Samsher. Review on Energy Conservation and Emission Reduction Approaches for Cement Industry. *Environmental Development*. Volume 44, December 2022, 100767. https://doi.org/10.1016/j.envdev.2022.100767. SCI Impact Factor 4.69
2. Ravi Kant and **Anil Kumar**. Review on Essential Oil Extraction from Aromatic and Medicinal Plants: Techniques, Performance and Economic Analysis. *Sustainable Chemistry and Pharmacy-Elsevie*r Volume 30, December 2022, 100829. https://doi.org/10.1016/j.scp.2022.100829. SCI Impact Factor 5.464
3. Ravindra Kumar, **Anil Kumar**, Amit Pal. Overview of Hydrogen Production from Biogas Reforming: Technological Advancement. *International Journal of Hydrogen Energy*. Volume 47, Issue 82, 30 September 2022, Pages 34831-34855. https://doi.org/10.1016/j.ijhydene.2022.08.059. SCI Impact Factor 7.139
4. Mukul Sharma, Deepali Atheaya and **Anil Kumar**. Exergy, drying kinetics and performance assessment of Solanum lycopersicum (tomatoes) drying in an indirect type domestic hybrid solar dryer (ITDHSD) system. *Journal of Food Processing and Preservation*. 2022; 46, e16988. https://doi.org/10.1111/jfpp.16988. SCI Impact Factor 2.609
5. Anand Kushwah, **Anil Kumar**, Manoj Kumar Gaur, Amit Pal. Performance Analysis of Heat Exchanger-Evacuated Tube Assisted Drying System (HE-ETADS) Under Unload Condition. *Sustainable Energy Technologies and Assessments*. Volume 53, Part B, October 2022, 102589. https://doi.org/10.1016/j.seta.2022.102589. SCI Impact Factor 7.632
6. Shimpy, Mahesh Kumar, Anil Kumar, Ravinder Kumar Sahdev, Himanshu Manchanda. Comparison of Groundnut Drying in Simple and Modified Natural Convection Greenhouse Dryers: Thermal, Environmental and Kinetic Analysis. J*ournal of Stored Products Research.* Volume 98, September 2022, 101990. https://doi.org/10.1016/j.jspr.2022.101990. SCI Impact Factor: 2.831
7. Naman Goyal, Akshansh Aggarwal and **Anil Kumar**. Financial Feasibility of Concentrated Solar Power with and without Sensible Heat Storage in Hot and Dry Indian Climate. *Journal of Energy Storage* Volume 52, Part B, 15 August 2022, 105002. https://doi.org/10.1016/j.est.2022.105002. SCI Impact Factor: 8.907
8. Shimpy Mehra, Mahesh Kumar, Ravinder Kumar Sahdev, Himanshu Manchandha, **Anil Kumar**. Experimental investigations on latent heat storage based modified mixed-mode greenhouse groundnuts drying. Journal of Food Processing and Preservation. *Journal of Food Processing and Preservation (WILEY,*). https://doi.org/10.1111/jfpp.16725 . SCI Impact Factor: 2.19
9. Anand Kushwah, **Anil Kumar** and Manoj Kumar Gaur. Drying kinetics, performance, and quality assessment for banana slices using heat pump–assisted drying system (HPADS). *Journal of Food Process Engineering*, Vol. 45, Issue 3, e13964. https://doi.org/10.1111/jfpe.13964. SCI Impact Factor 2.356.
10. Geetam Richhariya, Bhim Charan Meikap, **Anil Kumar**. Review on fabrication methodologies and its impacts on performance of dye-sensitized solar cells. *Environmental Science and Pollution Research* volume 29, pages 15233–15251 (2022). https://doi.org/10.1007/s11356-021-18049-2 SCI Impact factor: 5.19
11. Om Prakash, **Anil Kumar**, Samsher, Kumaresh Dey, Ankesh Aman. Exergy and Energy Analysis of Sensible Heat Storage based Double Pass Hybrid Solar Air Heater. *Sustainable Energy Technologies and Assessments* 49 (2022) 101714. https://doi.org/10.1016/j.seta.2021.101714. SCI Impact Factor 7.632
12. Naman Goyal, Akshansh Aggarwal and **Anil Kumar**. Concentrated Solar Power Plants: A Critical Review of Regional Dynamics and Operational Parameters. *Energy Research & Social Science-Elsevier.* Volume 83, January 2022, 102331. https://doi.org/10.1016/j.erss.2021.102331. SCI Impact Factor 8.514
13. Sanjeev Kumar Verma, Subhashish Gaur, Tabish Akram, Samsher Gautam, **Anil Kumar**. Emissions from Homogeneous Charge Compression Ignition (HCCI) Engine Using Different Fuels: A Review. *Environmental Science and Pollution Research- Springer*. 29, 50960–50969 (2022). https://doi.org/10.1007/s11356-021-15602-x. SCI Impact factor: 5.190

Biography

ANAND KUSHWAH

Department of Mechanical Engineering

Mr. Anand Kushwah is currently pursuing Ph.D. at Delhi Technological University, Delhi, India from 2021. Here, using the research facilities I combined my interests and gained the quantitative and analytical skills, successfully filing two patents on Apparatus for Heating Automotive/Industrial Coolant Using Solar Evacuated Tubes and System of the Same (Patent No. 201821045563) and Method and Apparatus for Controlling the Temperature of Solar Dryer (Patent No. 201921001878). During these years, I not only participated in organizing and enrolling in 11 workshops and short-term courses but also coordinated tech fests, GIAN courses and industry visits for students to teach them using live and hands-on experience. Through my patents and interest in research and innovation I have published 7 papers in International Conference, 4 papers in National Conference, 2 papers in Scopus Journals, 4 papers in other journals and 7 papers in SCI Journal. Presently, 2 of my papers are under review, each in SCI Journal and ESCI Journal respectively. I also received an award from the International Travel Grant CSIR HRD Government of India.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **A. Kushwah,** A. Kumar, M. Kumar, and A. Pal, "Performance analysis of heat exchanger- evacuated tube assisted drying system (HE-ETADS) under unload condition," Sustain. Energy Technol. Assessments, vol. 53, no. PB, p. 102589, 2022, doi: 10.1016/j.seta.2022.102589
2. **A. Kushwah,** A. Kumar, M. Kumar, and A. Pal, "Drying Kinetics, Performance, and Quality Assessment for Banana Slices Using Heat Pump–Assisted Drying System (HPADS)," Journal of Food Process Eng., 45(3), pp. 1–10,2022, https://doi.org/10.1111/jfpe.13964

Biography

ASHOK KUMAR SINGH

Department of Mechanical Engineering

Dr. Ashok Kumar Singh was born on 01st February 1983, in Lucknow, Uttar Pradesh, India. He did his Ph.D. in 2022 at Mechanical Engineering Department, specializing in Thermal Engineering from Delhi Technological University, Delhi. He has received his B.Tech. Degree from Uttar Pradesh Technical University, Lucknow (presently AKTU, Lucknow) in Mechanical Engineering in 2007 and M.Tech. from Maharshi Dayanand University, Rohtak, Haryana, in Manufacturing Technology and Automation in 2010. Dr. Ashok Kumar Singh has teaching experience of about 15 years and published more than 10 SCI-indexed papers in reputed International Journals and more than 23 Scopus-indexed papers in International Conferences and Journals. Dr. Singh received "Commendable Research Award – 2020 & 2021" in 2021 and 2022, respectively, from Delhi Technological University, Delhi, and also featured in the list of "World Ranking of Top 2% Scientists" in the 2022 database created by the experts at Stanford University, United States of America. His research areas of interest are solar thermal and solar desaltification systems.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Ashok Kumar Singh**, Samsher, "Optimum Techno-Eco Performance Requisites for Vacuum Annulus Tube Collector Assisted Double Slope Solar Desaltification Unit Integrated Modified Parabolic Concentrator", *Environmental Science and Pollution Research*, Vol. 29, pp. 34379–34405, 2022. Impact Factor – 5.190

2. **Ashok Kumar Singh**, Samsher, "Techno-Environ-Economic-Energy-ExergyMatrices Performance Analysis of Evacuated Annulus Tube with Modified Parabolic Concentrator Assisted Single Slope Solar Desalination System", *Journal of Cleaner Production*, Vol. 332, 129996, pp. 1 – 24, 2022. Impact Factor: 11.072

Biography

ASHISH KUMAR

Department of Mechanical Engineering

Ashish kumar working as an Assistant Professor in mechanical engg. dept. Galgotias college of engg. and tech. Gr. Noida. I am a research scholar in DTU under the supervision of Prof. R. C. Singh and Prof. Rajiv chaudhary. My research area is in the field of metal matrix composite.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, A.**, Singh, R.C. & Chaudhary, R. Investigation of Nano-Al2O3 and Micro-coconut Shell Ash (CSA) Reinforced AA7075 Hybrid Metal–Matrix Composite Using Two-Stage Stir Casting. *Arab J Sci Eng* 47, 15559–15573 (2022).

Biography

BHARAT SANGA

Department of Mechanical Engineering

"I have done B.Tech. in Mech. Engg. from G. B. Pant University in 1992. After that, in the year 2008, I have done M.E. in Manufacturing Technology from Punjab University. I have recently completed my Ph.D. in Ultrasonic Welding from DTU, Delhi.

I am working as Associate Processor in the Mechanical Engineering department in Guru Nanak dev DSEU Rohini Campus. My area of interest includes welding, optimization, modeling and simulation."

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sanga, B.**, Wattal, R., & Nagesh, D. S. (2022). Weld joint characterization in ultrasonic welding of phosphor bronze sheets. *Engineering Science and Technology, an International Journal*, *30*, 101040.

Biography

DEEPAK KUMAR

Department of Mechanical Engineering

Deepak Kumar is a research scholar in the Department of mechanical engineering DTU. He is working on the "wear behaviour of thermally sprayed ceramic coating for high-temperature application". He completed his M.Tech. from DTU in 2016. He has published 12 international research papers and attended six international conferences. He received the Best Paper Award in the international conference on Industrial and manufacturing systems (CIMS-2020) at NIT, Jalandhar. Also received the best paper award in the International conference on smart cities at Jamia Millia Islamia, 2019.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, D.,** Murtaza, Q., Walia, R. S., & Singh, P. (2022). Comparative investigation on thermally sprayed Al2O3, Al2O3–13%(TiO2) and Al2O3–40%(TiO2) composite coatings from room to 400° C temperature. *Surface Topography: Metrology and Properties*, *10*(1), 015043.

Biography

FAIZAN KHALID

Department of Mechanical Engineering

Mr. Faizan Khalid is currently employed as Assistant Professor in the Department of Mechanical Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi. He is pursuing his Ph.D. in Mechanical Engineering from Faculty of Engineering & Technology, Delhi Technological University, New Delhi. He has done M. Tech from Indian Institute of Technology (IIT), New Delhi. He has published around 12 research articles in International Journals and conferences. He possesses four years of teaching, research and industrial experience with leading institutions/organizations. His research interests include Renewable Energy Systems, biofuels and Internal combustion engines.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Faizan Khalid** and Rajesh Kumar "Development and assessment of a new solar-based trigeneration system using hydrogen for vehicular application in a self-sustained community" *International Journal of Hydrogen Energy*, 2022;26082-26090, (Elsevier, SCIE indexed, Impact factor:7.132)

Biography

GIRISH KUMAR

Department of Mechanical Engineering

Dr. Girish Kumar is working as a Professor in the Department of Mechanical Engineering at Delhi Technological University, Delhi, India. He has more than 25 years of experience in industry, teaching and research. Dr. Kumar is currently having additional responsibilities as Chief Executive Officer (CEO) of DTU-Innovation and Incubation Foundation, Nodal Officer-World class skill Centre-DTU and coordinator, Internal Quality Assurance Cell (IQAC)-DTU. He has worked as Works Manager for five years in Indian Ordnance Factory Services (IOFS) under the Ministry of Defence Government of India before joining academics. His teaching and research areas include Optimization, Reliability Engineering, Maintenance Management, Quality engineering, Stochastic Modeling, etc. He holds a PhD degree in Reliability Engineering from Indian Institute of Technology Delhi, India. Dr. Kumar has published more than 70 papers in International Journals and conference proceedings. He also completed a visiting faculty assignment at Asian Institute of Technology Bangkok in the year 2017.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **G. Kumar**, A. T. James, K. Choudhary, R. Sahai, and W. K. Song, "Investigation and analysis of implementation challenges for autonomous vehicles in developing countries using hybrid structural modeling," *Technological Forecasting and Social Change*, Vol. 185 (December 2022), pp. 122080, 2022. Impact Factor: 10.884.

2. A. T. James, **G. Kumar,** P. Tayal, A. Chauhan, C. Wadhawa, J. Panchal, "Analysis of human resource management challenges in implementation of industry 4.0 in Indian automobile industry," *Technological Forecasting and Social Change*, Vol. 176 (March 2022), pp. 121483, 2022. Impact Factor: 10.884.

3. A. T. James, **G. Kumar**, A. Pundhir, S. Tiwari, R. Sharma, J. James, "Identification and evaluation of barriers in implementation of electric mobility in India," *Research in Transportation Business & Management*, Vol. 43 (June 2022), pp. 100757, 2022. Impact Factor: 4.286

4. **G. Kumar**, A. Anwar, A. Dikshit, A. Poddar, U. Soni & W. K. Song, "Obstacle avoidance for a swarm of unmanned aerial vehicles operating on particle swarm optimization: a swarm intelligence approach for search and rescue missions," *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, Vol. 44 (2022), pp. 56, 2022. Impact Factor: 2.361.

5. Kumar, N., **Kumar, G.,** & Singh, R. K. (2022). Analysis of barriers intensity for investment in big data analytics for sustainable manufacturing operations in post-COVID-19 pandemic era. Journal of Enterprise Information Management, 35(1), 179-213.

Biography

HUSSAM SADIQUE

Department of Mechanical Engineering

Hussam Sadique is a Research Scholar in the department of Mechanical Engineering, DTU, Delhi. He received a B.Tech. from VFSTR in 2013, and an M.Tech. from the ZHCET, AMU, in 2016. His research interests span both design and thermal sciences. Much of his work has been on the design and development of microchannel heat sinks for mitigating high-intensity heat generation in MEMS. Apart from that, his interest also lies in the areas of computational fluid dynamics, microfluidics, and heat transfer. He explored the area of emissions in diffusion flame, which addressed the issues of emissions from diesel engines. During his project at CSIR-CMERI, CoEFM, Ludhiana, he designed a laser-guided check row planter. He has published papers in international conferences and reputed journals in the area of thermal sciences.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **H. Sadique**, Q. Murtaza, and Samsher, "Heat transfer augmentation in microchannel heat sink using secondary flows: A review," *Int. J. Heat Mass Transf.*, vol. 194, p. 123063, 2022, doi: 10.1016/j.ijheatmasstransfer.2022.12306

Biography

HUSSAIN MEHDI

Department of Mechanical Engineering

Dr Husain Mehdi received his PhD from Delhi Technological University, Delhi and his M.Tech (Machine Design) from Aligarh Muslim University, Aligarh, in 2013. His teaching and research interests include Friction stir welding/Processing, Composite material, Machine Design, Computational fluid dynamics (CFD), and advanced materials. He delivered his lecture as a keynote speaker at the International conference on scientific ideas of young scientists, Poland, 2021 and in the 2nd Edition of the International Congress of Chemical Engineering, Morocco, 22 June 21. He has supervised 14 M.Tech research scholars and more than 25 B.Tech student projects. Now he is working as an associate professor in the department of Mechanical Engineering at Meerut Institute of Engineering and Technology, Meerut, India. He has published more than 51 research papers in reputed journals and conferences. His research publications were cited in more than 882 research publications worldwide with an 19 H index. He organized an international conference on advanced research and innovation in Engineering (ICARIE-2017) in 2017 at Meerut Institute of Technology, Meerut (U.P).

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Abdul Wahab Hashmi, **Husain Mehdi**, R. S. Mishra, Prabhujit Mohapatra, Neeraj Kant & Ravi Kumar, Mechanical Properties and Microstructure Evolution of AA6082/Sic Nanocomposite Processed by Multi-Pass FSP. *Transactions of the Indian Institute of Metals* 75, 2077–2090 (2022). https://doi.org/10.1007/s12666- 022-02582-w

Biography

KHUSHBU YADAV

Department of Mechanical Engineering

Khushbu Yadav is working as a Research Scholar at the Centre for Advanced Studies and Research in Automotive Engineering (CASARE), Mechanical Engineering Department, Delhi Technological University, Delhi. She did her B.Tech in Mechanical Engineering from M.P.E.C, Kanpur. She did her M.Tech in Mechanical Engineering from MNNIT, Allahabad. Her research expertise includes alternative fuels with special emphasis on Biodiesel. She has more than 10 years of teaching experience in mechanical engineering. She has published 2 research papers in SCI and Scopus indexed journals and 8 research papers in peer reviewed journals/conferences. She is working as an Assistant Professor in the department of Mechanical Engineering, Amity School of Engineering and Technology, Amity University, Noida, U.P.

Award Summary and Publications Details

Category Detail	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Khushbu Yadav**, Naveen Kumar, Rajiv Chaudhary, 2022, "Effect of synthetic and aromatic amine antioxidants on oxidation stability, performance, and emission analysis of waste cooking oil biodiesel", *Environmental Science and Pollution Research*, vol-29, issue-19, pages-27939-27953. Impact Factor- 5.19 (Q1).

Biography

KIRAT SINGH

Department of Mechanical Engineering

Kirat Singh is working as a Research Scholar at the Centre for Advanced Studies and Research in Automotive Engineering (CASARE), Mechanical Engineering Department, Delhi Technological University, Delhi. He did her M.Tech in Mechanical Engineering from DTU, DELHI. Her research expertise includes alternative fuels with special emphasis on Biodiesel. He has more than 19 years of teaching experience in mechanical engineering. She has published 3 research papers in SCI and 3 CONFERENCE research papers in peer reviewed journals/conferences. He is working as an Assistant Professor in the department of Mechanical Engineering, R.KG.I.T.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Naveen Kumar, **Kirat Singh**. Study of combustion, performance and emissions characteristics of oxygenated constituents and methanol fumigation in the inlet manifold of a diesel engine. *Sustainable Energy Technologies and Assessments*, vol-49, pages-1- 12. Impact Factor- 7.632.

Biography

MOHMAD IQBAL

Department of Mechanical Engineering

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. 1.Iqbal, M., & Madan, A. K. (2022). CNC Machine-Bearing Fault Detection Based on Convolutional Neural Network Using Vibration and Acoustic Signal. Journal of Vibration Engineering & Technologies, 10(5), 1613-1621.

Biography

NAMAN GOYAL

Department of Mechanical Engineering

Naman Goyal completed his graduation from Delhi Technology University in B.Tech Mechanical Engineering with 9.35 CGPA in 2021. He is currently working as a Software Engineer in Citicorp Services India Private Limited and aspires further to be well versed in his field. He has been a research and new technology enthusiast since the early years of his education. With keen interest in Finance, Renewable Energy, Computer Languages and Machine Learning, he has successfully co authored 4 research papers and plans to add more in the respective fields. Apart from research, Naman has also worked on numerous robotics and Software related projects. In terms of work experience Naman has worked with 6 startups and 3 MNCs.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Naman Goyal**, Akshansh Aggarwal and Anil Kumar. Financial Feasibility of Concentrated Solar Power with and without Sensible Heat Storage in Hot and Dry Indian Climate. *Journal of Energy Storage*. Vol.52, Part B, pp105002, 15 August 2022. SCI Impact Factor: 8.907
2. **Naman Goyal**, Akshansh Aggarwal and Anil Kumar. Concentrated Solar Power Plants: A Critical Review of Regional Dynamics and Operational Parameters. *Energy Research & Social Science.* Vol. 83, pp102331, January 2022. SCI Impact Factor 8.514

Biography

NARENDRA KUMAR

Department of Mechanical Engineering

Narender Kumar is a research scholar (Part Time) in the department of mechanical engineering, Delhi Technological University Delhi (DTU), India. He is working as an Assistant Professor at Amity University Gurgaon, Haryana, India. He has done B. Tech. in mechanical Engineering from Kurukshetra University Kurukshetra and M. Tech in Industrial Engineering from Indian Institute of Technology Delhi (IITD), India. He has published about 12 research papers in reputed international and national journals and conferences. His areas of interest include Operation research, total quality management & quality assurance, Manufacturing Engineering, Optimization Technique, and supply chain management. He has about 12 years and 05 months of experience in teaching and research.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, N**., Kumar, G. and Singh, R.K. (2022), "Analysis of barriers intensity for investment in big data analytics for sustainable manufacturing operations in post-COVID19 pandemic era", *Journal of EnterpriseInformationManagement,*Vol.35,No.1,pp.179-213. https://doi.org/10.1108/JEIM-03-2021-0154

Biography

NIRANJAN SAHOO

Department of Mechanical Engineering

Niranjan Sahoo is a research scholar pursuing his Ph.D. at Mechanical Engineering Department with specialization in Thermal Engineering from Delhi Technological University, Delhi. He has received his M.Tech. from Jadavpur University, Kolkata. Mr. Niranjan Sahoo has published 1 SCIE indexed paper in a reputed International Journal, and 3 Scopus indexed papers in International Conferences. His research areas of interests are solar power towers and application of solar energy in the field of cement industry.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Niranjan Sahoo**, Anil Kumar and Samsher, "Review on Energy Conservation and Emission Reduction Approaches for Cement Industry". *Environmental Development-Elsevier* Volume 44, December 2022, 100767. https://doi.org/10.1016/j.envdev.2022.100767. Impact Factor -4.69 (SCIE)

Biography

N YUVARAJ

Department of Mechanical Engineering

Dr. N.Yuvaraj has obtained his Bachelor's degree in production engineering from Government College of Technology, Coimbatore, India, and Masters Degree in Mechanical Engineering from Delhi College of Engineering, Delhi University, Delhi, India and PhD from Delhi Technological University. Since 2000, he has been working as Faculty in the Department of Mechanical Engineering, Delhi Technological University (Formerly Delhi College of Engineering), Delhi, India. He is doing active research in the area of surface composites, welding, casting, manufacturing and reverse logistics. He has published more than 50 papers in different journals & conferences at national & international level.

Award Summary and Publications Details

Category Title	No. of Publication
COMMENDABLE RESEARCH AWARD	01

1. **Yuvaraj, N**., & Roy, J. G. (2022). Enhancement of Microstructural and Mechanical Properties of Ultrasonic Vibration-Assisted Cold Metal Transfer Welding of 304 Stainless Steel. *Journal of Materials Engineering and Performance*, *31*(10), 8497-8511.

Biography

PIU JAIN

Department of Mechanical Engineering

Piu Jain is a Research Scholar in the Department of Mechanical Engineering, Delhi Technical University, New Delhi. She holds a Bachelor's degree from BIT, Sindri and Master's degree from JSSAT Noida. Her areas of research include manufacturing issues in industry and mass customization. She has ten years of industrial experience in Indian manufacturing industries. She is also working as an Assistant Professor in the Department of Mechanical and Automation Engineering, Maharaja Agrasen Institute of Technology, Delhi. She has authored many research papers in international conferences and two research papers in International Journals.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **P. Jain**, S.K Garg and G. Kansal, "Implementation of mass customization for competitive advantage in Indian industries: an empirical investigation", *The International Journal of Advanced Manufacturing Technology,* vol 121, no 1-2, pp 737–752, 2022, Impact factor 3.56.

Biography

PRAVIN KUMAR

Department of Mechanical Engineering

Dr. Pravin Kumar is working as an Associate Professor in the Department of Mechanical Engineering, Delhi Technological University, Delhi. He has obtained the degree of B Sc. Engg. (Mechanical) From Bhagalpur College of Engineering, M.Tech. (Industrial Management) from IIT (BHU), Varanasi, and Ph.D. (Supply Chain Management) from IIT Delhi. He has more than 22 years of teaching and research experience. His area of expertise is Industrial Engineering and Operations Management. He has authored more than 70 research papers in reputed Journals and conferences. He has also authored books in the area of Industrial Engineering & Management (Pearson Learning, Delhi), Engineering Economy and Management (Wiley India), and Basic Mechanical Engineering (Pearson Learning, Delhi).

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Kumar, P.,** & Kumar Singh, R. (2022). Strategic framework for developing resilience in Agri-Food Supply Chains during COVID 19 pandemic. *International Journal of Logistics Research and Applications*, 25(11), 1401-1424.
2. **Kumar, P**., & Singh, R. K. (2022). Application of Industry 4.0 technologies for effective coordination in humanitarian supply chains: a strategic approach. *Annals of Operations Research*, 1-33.

Biography

PRETTY RANI

Department of Mechanical Engineering

Preety Rani is pursuing his PhD from Delhi Technological University, Delhi. She completed his M.Tech in CAD/CAM from Kurukshetra University, Kurukshetra, in 2013 and B.tech in Mechanical Engineering from Maharshi Dayanand university, Rohtak in 2011. Her research interests include Friction stir welding/Processing and Composite material. She has more than 10 years' experience as an assistant professor in the department of Mechanical Engineering. She has published more than 15 research papers in reputed journals and conferences.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Rani, P**., Mishra, R. Influence of Reinforcement with Multi-Pass FSW on the Mechanical and Microstructural Behavior of Dissimilar Weld Joint of AA5083 and AA6061. *Silicon* 14, 11219–11233 (2022). https://doi.org/10.1007/s12633-022- 01863-9.
2. **Rani, P**., Mishra, R.S. Influence of Nano-Sized Al2O3 Nanoparticles and Multipass FSW on Microstructure and Mechanical Characteristics of Dissimilar Welded Joints of AA6061 and AA5083. *Trans Indian Inst Met* 75, 2817–2827 (2022). https://doi.org/10.1007/s12666-022-02655-w

Biography

PREM SHANKER YADAV

Department of Mechanical Engineering

Prem Shanker Yadav is working as an Assistant Professor in the Department of Mechanical Engineering, JSS Academy of Technical Education, Noida. He did B.Tech in Mechanical Engineering from JSS Academy of Technical Education, Noida; M.Tech in Applied Mechanics from IIT Delhi. Currently, He is pursuing a part time Ph.D from department of mechanical engineering, Delhi Technological University under guidance of Dr. Raghvendra Gautam. His research interest includes; Alternative fuel, special emphasis on spray characteristics of fuel in CI engine, Computational Fluid Dynamics. He has published three SCI indexed research papers and two conferences.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Yadav, P. S**., & Gautam, R. (2022). Numerical and experimental analysis on spray characteristics of biodiesel (waste cooking oil) using pressure swirl atomizer. *Environmental Progress & Sustainable Energy*, *41*(3), e13761.

Biography

QASIM MURTAZA

Department of Mechanical Engineering

Presently, Qasim Murtaza is a Professor, since 2015, in the Department of Mechanical Engineering, at Delhi Technological University, Delhi. He got his Ph.D. (2006) from Dublin City University, Ireland through a European Union Scholarship. Later, he worked as Research Associate at Metropolitan Manchester University, Manchester, UK. He also visited various academic institutions and industries in several countries for academic pursuits. He guided 45 M.Tech theses and 11 PhDs. He has published more than 150 research papers in reputed journals and conference proceedings. He has got the best paper award from Elsevier, Emerald, and Springer publication houses.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	03

1. Syed Mohammed, A., Lodhi, A. S., & **Murtaza, Q.** (2022). Techno-economic feasibility of hydrogen based electric vehicle charging station: A case study. *International Journal of Energy Research*, *46*(10), 14145-14160.
2. Kumar, D., **Murtaza, Q.**, Walia, R. S., & Singh, P. (2022). Comparative investigation on thermally sprayed Al2O3, Al2O3–13%(TiO2) and Al2O3–40%(TiO2) composite coatings from room to 400° C temperature. *Surface Topography: Metrology and Properties*, *10*(1), 015043.
3. Sadique, H., & **Murtaza, Q**. (2022). Heat transfer augmentation in microchannel heat sink using secondary flows: A review. *International Journal of Heat and Mass Transfer*, *194*, 123063.

Biography

RAGHVENDRA GAUTAM

Department of Mechanical Engineering

Raghvendra Gautamis working as an Assistant Professor in the Department of Automobile Engineering in Delhi Technological University. He did B.E in Mechanical Engineering Department from Delhi College of Engineering and M. Tech in thermal Engineering from Delhi College of Engineering; PhD from Delhi Technological University. He worked as Sr. Engineer in Shree Cement Ltd. He has published more than 40 research paper in international journal repute and conferences

Award Summary and Publications Details

Category Title	No. of publication
COMMENDABLE RESEARCH AWARD	02

1. **Gautam, R**., Chauhan, B. S., & Lim, H. C. (2022). Influence of variation of injection angle on the combustion, performance and emissions characteristics of jatropha ethyl ester. *Energy*, *254*, 124436.

2. Yadav, P. S., & **Gautam, R**. (2022). Numerical and experimental analysis on spray characteristics of biodiesel (waste cooking oil) using pressure swirl atomizer. *Environmental Progress & Sustainable Energy*, *41*(3), e13761.

Biography

RAJESH KUMAR

Department of Mechanical Engineering

Prof. Rajesh Kumar is currently employed as a Professor in the Department of Mechanical Engineering, Delhi Technological University, Delhi. He has completed his B. Tech. in Mechanical Engineering from HBTI Kanpur, and M.E. in Thermal Engineering from IIT Roorkee. He received his Ph.D. from Jamia Millia Islamia, New Delhi in the area of refrigeration and air-conditioning. He has more than 22 years of experience in teaching & Research in the fields of Thermodynamics, Refrigeration & Air conditioning, Renewable energy and Fluid Mechanics. He has guided and guided more than 25 M. Tech and 20 Ph. D. thesis. He has published more than 40 research papers in reputed international journals of Elsevier, ASME Transactions, ASHRAE Transaction, Wiley, Inderscience, Springer etc. He is also a reviewer of ASME, Elseveir, Inderscience, Springer, Wiley. He is a life member of Solar Energy Society of India and fellow of Institution of Engineer.

Award Summary and Publications Details

Category Detail	No. of Publications
PREMIER RESEARCH AWARD	01
COMMENDABLE RESEARCH AWARD	03

1. Mohd Asjad Siddiqui, Abdul Khaliq, **Rajesh Kumar** "Thermodynamic and Comparative Analysis of Ejector Refrigeration Cycle and Absorption Refrigeration Cycle Integrated Wet Ethanol-Fueled HCCI Engine for Cogeneration of Power and Cooling" *Journal of Thermal Science and Engineering Applications*, April 2022, Vol. 14 No. 04 pp. 041003. https://doi.org/10.1115/1.4051632 (Transaction of ASME, SCIE indexed, Impact Factor = 1.879)

2. Kaushalendra Kumar Singh, **Rajesh Kumar**, "Energy, Exergy, Environmental and Economic Analyses of Natural Refrigerants for Cascade Refrigeration" *Arabian Journal for Science and Engineering*, Vol. 47, pp.15797–15821, 2022. https://doi.org/10.1007/s13369-022- 06804-7 (Springer, SCIE indexed, Impact Factor = 2.807)

3. Faizan Khalid, and **Rajesh Kumar** "Development and assessment of a new solar-based trigeneration system using hydrogen for vehicular application in a self-sustained community" International *Journal of Hydrogen Energy*, Vol. 47, pp. 26082-26090, 2022. https://doi.org/10.1016/j.ijhydene.2022.04.008 (Elsevier, SCIE indexed, Impact factor = 7.13)

4. Sachin Rana, Mohammad Zunaid, **Rajesh Kumar** "Enhancement of thermal energy storage in a phase change material heat exchanger having elliptical and circular tubes with & without fins" *Journal of Energy Storage,* Vol. 56, pp. 105856, 2022. https://doi.org/10.1016/j.est.2022.105856 (Elsevier, SCIE indexed, Impact factor = 8.907)

Biography

RASHI KOUL

Department of Mechanical Engineering

Rashi Koul completed her PhD in alternative fuels from Centre for Advanced Studies and Research in Automotive Engineering, Department of Mechanical Engineering, Delhi Technological University, Delhi in February 2023. She has worked on renewable diesel, its production and investigated its effects on various parameters on the light-duty CI engines. Her thesis title was 'Performance, Emission and Combustion of Renewable Diesel on Compression Ignition Engine'. She did her B.E in Mechanical Engineering from Amravati University, Maharashtra; M.Tech in Thermal Engineering from Delhi Technological University, Delhi. Her research interests include alternative fuels especially next-generation biofuels, hydroprocessed vegetable oil, higher alcohols, algae, combustion and exhaust emissions. She has authored/co-authored more than 10 quality research/ review papers in renowned International Journals of repute and conferences. She is also a reviewer for many journals published by Springer, Taylor & Francis, Wiley, etc.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **Rashi Koul**, Naveen Kumar and R C Singh (2022): Comparative analysis of ternary blends of renewable Diesel, diesel and ethanol with diesel, Sustainable Energy Technologies and Assessment, DOI: 10.1016/j.seta.2021.101828.
2. Naveen Kumar, **Rashi Koul**, R C Singh (2022): Comparative analysis of renewable diesel and biodiesel produced from Jatropha oil. Environmental Progress & Sustainable.

Biography

RAVI BUTOLA

Department of Mechanical Engineering

Dr. Ravi Butola has worked as an Assistant Professor in the Department of Mechanical Engineering at Delhi Technological University, Delhi. He has completed his Ph.D from Delhi Technological University, Delhi and M. Tech from Delhi Technological University, Delhi. He received the B. Tech degree from G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand. He has 10 years of teaching experience. He has published more than 40 research papers in International Journal/Conferences Proceeding, and 5 Book chapters. He is working in the area of advanced manufacturing processes, composite material and surface modification. He is also a reviewer of Journal of Material Research (Springer), Journal of Adhesion Science and Technology (T&F), Journal of Mechanical Engineering Science (SAGE), Surface Topography: Metrology and Properties (IOP) etc.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **R. Butola***, P. Singh. Review-Parametric Study and Various Strategies of Aluminium Metal Matrix Composites Fabricated by Friction Sir Processing. *ECS J of Solid-State Sci. and Techno.* Vol. 11(9), 2022, pp. 093001. https://doi.org/10.1149/2162- 8777/ac8bf4 Impact Factor: 2.483

2. C. Pratap, P. Chandra, **R. Butola***, A. Shukla. Fabrication and characterization of AA6063/B4C metal matrix surface nanocomposite using Friction stir processing, *ECS J of Solid-State Sci. and Techno*, Vol, 11(3), pp. 033010, 2022. https://doi.org/10.1149/2162-8777/ac5c81 Impact Factor: 2.483)

Biography

RAVINDRA KUMAR

Department of Mechanical Engineering

Ravindra Kumar is a research scholar pursuing his Ph.D. at Mechanical Engineering Department with specialization in Thermal Engineering from Delhi Technological University, Delhi. He has received his M.Tech. from National Institute of Technology, Silchar (Assam). Mr. Ravindra Kumar has published 3 Scopus indexed papers in International Conferences and Journals. His research areas of interests are Renewable energy, Hydrogen energy, Reforming Process, Heat Transfer, CFD and I C Engines.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Ravindra Kumar**, Anil Kumar and Amit Pal "Overview of hydrogen production from biogas reforming: Technological advancement". *International Journal of Hydrogen Energy-Elsevier* Volume 47, Sept. 2022 (34831-34855). https://doi.org/10.1016/j.ijhydene.2022.08.059. Impact Factor 7.139(SCI)

Biography

RAVI KANT

Department of Mechanical Engineering

Ravi Kant is pursuing his Ph.D. at Mechanical Engineering Department with specialization in Thermal Engineering from Delhi Technological University, Delhi. He has received his M.Tech. from Maulana Azad National Institute of Technology, Bhopal. Mr. Ravi Kant has published 5 SCIE indexed and 2 ESCI papers in reputed International Journals, and more than 5 Scopus indexed papers in International Conferences and Journals. He has awarded as a winner in ''Global Village Conclave Contest - ग्रामोदय 2022" in theme of Rural Energy organised by IIT Delhi Alumni Association (IITDA) in association with Centre for Rural Development & Technology (CRDT), Unnat Bharat Abhiyan and CSIR-National Institute of Science Communication & Policy Research (CSIR-NIScPR), New Delhi. Mr. Ravi Kant got 5th research excellence award awarded by Delhi technological university (DTU), Delhi for publication of a research article in a reputed peer reviewed journal. His research areas of interests are solar energy systems, and solar desalination systems, Heat transfer, extraction of essential oil by solar energy.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. Ravi Kant and Anil Kumar, "Review on Essential Oil Extraction from Aromatic and Medicinal Plants: Techniques, Performance and Economic Analysis". *Sustainable Chemistry and Pharmacy-Elsevier* Volume 30, December 2022, 100829. https://doi.org/10.1016/j.scp.2022.100829. Impact Factor 5.464

Biography

SACHN RANA

Department of Mechanical Engineering

Sachin Rana has received his B. Tech. in Mechanical Engineering from UP Technical University, Lucknow and M. Tech in Thermal Engineering from Indian Institute of Technology Roorkee. He is currently working as an Assistant Professor in ABES Institute of Technology, Ghaziabad and pursuing PhD from Delhi Technological University, Delhi. His research interests include Computational Fluid Dynamics, Heat Transfer Enhancement, Phase Change Materials and Thermal Contact Conductance. He has more than 12 years of industrial, academic and research experience. He has published many high impact papers and book chapters in various international journals and international conferences of repute.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Sachin Rana**, Mohammad Zunaid, Rajesh Kumar (Dec 2022). "Enhancement of thermal energy storage in a phase change material heat exchanger having elliptical and circular tubes with & without fins" *Journal of Energy Storage* (ISSN / eISSN: 2352- 152X / 2352-1538), Vol 56, Part A, 105856. https://doi.org/10.1016/j.est.2022.105856 (SCIE, I.F. 8.907)

Biography

SANJAY KUMAR

Department of Mechanical Engineering

Presently, Dr Sanjay Kumar is a faculty in Department of Mechanical Engineering, Delhi Technological University (Formerly Delhi college of Engineering)Delhi since 2008. Before joining D.T.U., he worked as Assistant Professor at Krishna Institute of Engineering and Technology (KIET), Ghaziabad and Sunderdeep Engineering College, Ghaziabad. He Received his Bachelor's degree in mechanical Engineering from M.I.T. Muzaffarpur (Bihar) and Master Degree in Machine Design from I.I.T. BHU, Varanasi (UP). He did his Ph.D in evaluation of dynamic fracture toughness for two different aluminium alloys from Applied Mechanics Department, I.I.T. Delhi. His Teaching and research interests are in the area of Finite Elements Methods, Fracture Mechanics and Evaluation of Mechanical Properties of Materials. He published/presented more than twenty national and international conferences/proceedings and published more than fifteen papers in reputed national/international journals.

Award Summary and Publications Details

Category Title	No. of publication
COMMENDABLE RESEARCH AWARD	01

1. Pandouria, A. K., **Kumar, S**., & Tiwari, V. (2022). Experimental study of dynamic fracture behavior of Al7075-T651 under different loading rates. *Materials Today Communications*, *33*, 10

Biography

SANJEEV KUMAR

Department of Mechanical Engineering

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Kumar, S.,** & Pal, A. (2022). Multi-objective-parametric optimization of diesel engine powered with fuel additive 2-ethylhexyl nitr**ate-algal biodiesel. Sustainable Energy Technologies and Assessments, 53, 102518.**

Biography

SRIKANT VIDYA

Department of Mechanical Engineering

Shrikant Vidya is a research scholar in the Department of Mechanical Engineering, Delhi Technological University, New Delhi. He holds a Master's degree from Indian Institute of Technology (Indian School of Mines), Dhanbad. As recognition of his academic achievements, he has received an appreciation certificate from a working institute for his research activities. He is presently working as an Assistant Professor in the Department of Mechanical Engineering at Galgotias University, Greater Noida. Mr. Shrikant has been involved in research on non-conventional machining, micro machining, micro measurement and additive manufacturing. He has authored many research papers in International Journals and Conferences of repute.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Shrikant Vidya**, Reeta Wattal, P. Venkateswara Rao, "Experimental Investigation on Machinability and Geometric Tolerance in Die-Sinking EDM of Microholes and Channels", MAPAN, *Journal of Metrology Society of India*, Vol. 37, 399–407 (2022), https://doi.org/10.1007/s12647-022-00532-x, Impact Factor: 1.446.

Biography

SUMIT JAIN

Department of Mechanical Engineering

Sumit Jain pursuing his PhD (Thesis submitted) from Delhi Technological University, Delhi. He completed his M.Tech in Manufacturing System from Kurukshetra University, Kurukshetra, in 2013. His teaching and research interests include Friction stir welding/Processing, Composite material and advanced materials. He has more than 10 years' experience as an assistant professor in the department of Mechanical Engineering. He has published more than 20 research papers in reputed journals and conferences.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Jain, S.**, Mishra, R.S. Microstructural and mechanical behavior of micro-sized SiC particles reinforced friction stir processed/welded AA7075 and AA6061. *Silicon* 14, 10741–10753 (2022). https://doi.org/10.1007/s12633-022-01716-5

Biography

UMA GAUTAM

Department of Mechanical Engineering

Uma Gautam is currently Pursuing PhD from DTU, enrolled in 2016 . She Published two Research Papers in reputed SCIE International Journal, She also Attended 30 workshops/ FDP/ Conferences. She has done her M. Tech in Manufacturing Technology & Automation from Al-Falah School of Engg. & Tech, MD University, Rohtak with 83.06% in 2013 & B. Tech in Mechanical & Automation Engg. From IGIT, GGSIPU, Kashmere Gate, with 65.96 CGPA in 2007. She is also Working with HMRITM as an Assistant Professor in MAE Department w.e.f. 29 Sep 2008 to till dateApart from this She Worked With Minda Corporation Limited as Executive-R&D Department w.e.f. Sept. 2007 to 27 Sept 2008 She also Qualified GATE Score.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Gautam, U.** (2022). Effect of Process Parameter on Tensile Strength and Hardness of SS304 Processed by Microwave Radiation. *Transactions of the Indian Institute of Metals*, *75*(3), 653-662.

Department of Softwaare Engineering

Biography

RUCHIKA MALHOTRA

Departament of Software Engineering

Prof. Ruchika Malhotra is Head of Department and Professor in the Department of Software Engineering, Delhi Technological University, Delhi, India. She served as Associate Dean in Industrial Research and Development, Delhi Technological University from August 2018 to 2022. She was awarded with the prestigious Raman Fellowship for pursuing Post-doctoral research in Indiana University Purdue University Indianapolis USA. She received her master's and doctorate degree in software engineering from the University School of Information Technology, Guru Gobind Singh Indraprastha University, Delhi, India. She has received the IBM Faculty Award 2013. She has been ranked amongst the World's top 2% scientists by Stanford University report, USA, for her research in the field of "Artificial Intelligence & amp Image Processing" in 2020, 2021, and 2022. She is recipient of the Commendable Research Award (in 2018, 2019, 2020, 2021, and 2022) by Delhi Technological University. Her h-index is 36 as reported by Google Scholar. She is author of a book titled "Empirical Research in Software Engineering" published by CRC press and co-author of a book on Object Oriented Software Engineering published by PHI Learning. She has published more than 220 research papers in international journals and conferences. Her research interests are in software testing, improving software quality, statistical and adaptive prediction models, software metrics and the definition and validation of software metrics.

Award Summary and Publications Details

Citation Award
Cumulative Citation Award :SILVER
Highly Cited Paper Award: Malhotra R., A systematic review of machine learning techniques for software fault prediction, Applied Soft Computing, 2015, 27, 504 - 518
Early research Impact & Influence Award

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **R. Malhotra** and S. Meena, "Defect prediction model using transfer learning", *Soft Computing*, vol. 26, no. 10, pp. 4713-4726, 2022. Impact Factor: 3.732

University School of Management and Entrepreneurship

Biography

ASHIMA

Department of USME

Aashima is a Research Scholar in the Department of Management, Delhi Technological University, East Delhi Campus. She holds a degree in Masters of Commerce from the University of Delhi. Her areas of research interest include health insurance, health expenditure and public health

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. M. Nanda, R. Sharma, S. Mubarik, Aashima, and K. Zhang, "Type-2 Diabetes Mellitus (T2DM): Spatial-temporal Patterns of Incidence, Mortality and Attributable Risk Factors from 1990 to 2019 among 21 World Regions", *Endocrine*, vol. 77, no. 3, pp. 444-454, 2022. Impact Factor: 3.925.
2. Aashima, M. Nanda, R. Sharma, and C. Jani, "The burden of chronic kidney disease in Asia, 1990–2019: Examination of estimates from global burden of disease 2019 study", *Nephrology*, vol. 27, no. 7, pp. 610-620, 2022. Impact Factor: 2.358.

Biography

DEEPTI AGGARWAL

Department of USME

Dr. Deepti Aggrawal is currently working as an Assistant Professor at USME, DTU. She is UGC-NET qualified in Management and holds a Ph.D. in Operational Research from University of Delhi. She brings in-rich experience of around 7 years in varied fields of Education, Banking, Analytics & Quantitative techniques. She has published several articles in journals of international repute. Her research area includes Innovation Adoption and Technology Diffusion Modeling & Optimization in Marketing, modeling in software reliability engineering and applications of multi-criteria decision making techniques for solving real life problems. She has co-authored one text-book entitled "Market Assessment with OR Applications" published by CRC Press, Taylor & Francis group. She is a life member of Society for Reliability, Engineering, Quality and Operations Management.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	01

1. **Aggrawal, D**., Anand, A., Bansal, G., Davies G., Maroufkhani P., Dwivedi Y.K. "Modelling product lines diffusion: a framework incorporating competitive brands for sustainable innovations". *Operations Management Research*, Vol.15, pp. 760–772 (2022). https://doi.org/10.1007/s12063-022-00260-0 Impact Factor: 7.032

Biography

MEHAK NANDA

Department of USME

Mehak Nanda is a Research Scholar in the Department of Management, Delhi Technological University, East Delhi Campus. She holds a degree in Masters of Commerce from the University of Delhi. Her areas of research interest include health expenditure and public health.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	02

1. **M. Nanda**, R. Sharma, S. Mubarik, Aashima, and K. Zhang, "Type-2 Diabetes Mellitus (T2DM): Spatial-temporal Patterns of Incidence, Mortality and Attributable Risk Factors from 1990 to 2019 among 21 World Regions", Endocrine, vol. 77, no. 3, pp. 444-454, 2022. Impact Factor: 3.925.
2. Aashima, **M. Nand**a, R. Sharma, and C. Jani, "The burden of chronic kidney disease in Asia, 1990–2019: Examination of estimates from global burden of disease 2019 study", Nephrology, vol. 27, no. 7, pp. 610-620, 2022. Impact Factor: 2.358.

Biography

RAJESH SHARMA

Department of USME

Dr. Rajesh Sharma is an Assistant Professor in the discipline of Economics. He has completed Ph.D. Economics from the Indian Institute of Technology Ropar, Punjab. He has contributed several research papers in reputed journals published by Elsevier, Springer, Wiley, Oxford University Press and Public Library of Sciences. His areas of research include health economics, epidemiology of cancer and economic cost of cancer management and control. He has featured among a list of top 2% scientists worldwide in the list provided by Stanford University in 2020, 2021, and 2022. He is also on the editorial board in BMC Public Health (Associate Editor), PLOS Global Public Health, Archives of Public Health, and Health Care Science.

Award Summary and Publications Details

Category Title	No. of Publications
COMMENDABLE RESEARCH AWARD	05

1. **R. Sharma**, "A comparative examination of colorectal cancer burden in European Union, 1990–2019: Estimates from Global Burden of Disease 2019 Study", *International Journal of Clinical Oncology,* vol. 27, no. 8, pp. 1309-1320, 2022. Impact Factor: 3.85.

2. **R. Sharma**, "Mapping of global, regional and national incidence, mortality and mortality-to-incidence ratio of lung cancer in 2020 and 2050", *International Journal of Clinical Oncology*, vol. 27, no. 4, pp. 665-67, 2022. Impact Factor: 3.85.

3. **R. Sharma** and C. Jani, "Mapping incidence and mortality of leukemia and its subtypes in 21 world regions in last three decades and projections to 2030", *Annals of Hematology*, vol. 101, no.7, pp. 1523-1534, 2022. Impact Factor: 4.030.

4. M. Nanda, **R. Sharma**, S. Mubarik, Aashima, and K. Zhang, "Type-2 Diabetes mellitus (T2DM): spatial-temporal patterns of incidence, mortality and attributable risk factors from 1990 to 2019 among 21 world regions", *Endocrine*, vol. 77, no. 3, pp. 444-454, 2022. Impact Factor: 3.925.

5. Aashima, M. Nanda, **R. Sharma**, and C. Jani, "The burden of chronic kidney disease in Asia, 1990–2019: Examination of estimates from global burden of disease 2019 study", *Nephrology*, vol. 27, no. 7, pp. 610-620, 2022. Impact Factor: 2.358

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