

# दिल्ली प्रौद्योगिकी विश्वविद्यालय DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)
Estd. by Govt. of NCT of Delhi Vide ACT 6 of 2009



Shahbad Daulatpur, Main Bawana Road, Delhi - 110042

# annual report

(01 अप्रैल 2015 - 31 मार्च 2016) (01 April 2015 - 31 March 2016)



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# **ACKNOWLEDGEMENT**



The Delhi Technological University, Delhi has emerged as one the premier Technological institutions of our great country with state of the art facilities, world class education, training, research and consultancy in the arena of engineering and technology, applied science and management and has become fully networked with industries on one hand and the academic and scientific community in the world on the other.

In the academic year 2015-16 a total of 1747 students were admitted in B-Tech. program including 145 students of B.Tech.(Evening). In PG programs a total of 511 students were admitted including 63 of MBA and 18 of executive MBA. The number of Ph.D. research scholars admitted was 33. A total of 2291 number of students were admitted in the year 2015-16. The faculty members published 617 research papers in the national and International Journals and 323 in the Conferences and Symposia. A total of 940 research papers were published which is about 40% higher than the papers published in the previous year, 2014-15.

A total of 261 organisations/ companies took part in campus placement and offered 1211 jobs proposals. The students from various streams of B.Tech. M.Tech. MBA Programs in diverse fields of engineering & technology, and management participated in placement process. The highest salary in the campus placements for the graduating batch of 2016 has scaled up to US\$190000 p.a. by a software giant, the Google, a US based MNC. While a salary of Rs.30Lacs p.a. was offered by Goldman Sachs. The background of companies visited the campus was wide ranging and included top leaders in core engineering industries, manufacturing industries, oil Industries and also IT and IT enabled services especially e-commerce, finance, marketing, consultancy firms, and R&D laboratories.

In order to cope with the increased need of the students such as their hostels, class rooms and laboratories, a proposal for construction of buildings under Phase-II Construction at DTU Campus, costing Rs.256 Crore has been submitted to the government. A piece of land measuring 4852.8 m2 has been allotted in I.T.I. Mayur Vihar Campus for establishment of East Delhi Campus/Constituent College of Delhi Technological University by the DTTE. For development of campus, the soil investigation work has already been carried out by PWD. The building is expected to be completed by the end of March 2017 so that Academic session can be started next year. Major events such as Techfest-16, Engifest-16, IEE International Conferences ICPEICES-2016, IICIP-2016, and other events such as UDAAN, TED, Ideathon, etc were organised.

Editing and compilation of the annual report 2015-16 was a matter of great challenge and responsibility for us. Retrieving of the data from various Departments and Sections was the major task to be carried out. I sincerely acknowledge the encouragement and direction given by Hon'ble Vice Chancellor, DTU, and Prof. Yogesh Singh. The Heads of various Departments, Training & Placement, Controller of Exams, Dean Academic (UG & PG), Dean (IRD), Director Physical Education, helped immensely in getting the data as and when required. I am extremely thankful to all of them. Lastly but not the least I acknowledge my thanks to Miss Jyoti Sharma, Data Entry Operator who helped me in getting typed the Report.

(Prof. Narendra Kumar) Director (IQAC) & Editor



Visitor

His Excellency Shri Pranab Mukherjee

President of India



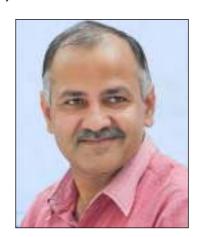
Chancellor

His Excellency Shri Najeev Jung

Lt. Governor, Govt. of NCT, Delhi



**Shri Arvind Kejriwal** Hon'ble Chief Minister



**Shri Manish Sisodia** Hon'ble Deputy Chief Minister

Govt. of NCT, Delhi



Hon'ble Vice Chancellor **Prof. Yogesh Singh** 



Pro-Vice Chancellor **Prof. S. K. Garg** 



Registrar
Col. Neeraj Suri (Retd.)



Director, IQAC **Prof. Narendra Kumar** 

# **DEANS**



**Prof. Madhusudan Singh**Dean Academic (UG)



Prof. Vishal Verma Dean Academic (PG)



**Prof. Vikas Rastogi** Dean (Student Welfare)



Prof. A. Trivedi Dean (IRD)



Prof. H. C. Taneja Dean (A & IA)



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# ANNUAL REPORT : AT A GLANCE 2015-16

# DEPARTMENTS/CENTRES/UNITS

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# GRANTS

Govt. of NCT of Delhi
Plan Grant 41.00 crore
UGC Grant 2.80 crore
TEQIP Grant 6.25 crore

Total 50.05 crore

# STUDENTS ADMITTED B.Tech. 1602 B.Tech (Evening) 145 PG Degree 511 Research Scholars 33 Total 2291

**STUDENTS STRENGTH** B. Tech. (Full Time) 6323 B. Tech. (Evening) 583 M. Tech. (Full Time) 831 M. Tech. (Evening) 40 MBA 140 Executive MBA 42 Total PG 1053 Total (UG+PG) 7959 Research Scholars 385 Total 8344

# NUMBER OF DEGREES AWARDED

 B.Tech
 1245

 PG Degree
 712

 Ph.D.
 01

 Total
 1958

### **FACULTY/STAFF STRENGTH**

Faculty in Position 201 Non-Teaching Staff in position 211 Total 412

# RESEARCH PAPERS

Journals/ Conference/Symposia 617 Conference/Symposia 323 Total 940

### **CONSULTANCY PROJECTS**

Number of Projects 10 Outlay (Lacs of Rs.) 31.80387

### **SPONSORED RESEARCH PROJECTS**

Number of Projects 11 Outlay (Lacs of Rs.) 397.50800



Delhi Technological University (Erstwhile Delhi College of Engineering) has a glorious past of more than 75 years and is widely acclaimed for its excellence in education, research & training. DTU's transformation from Delhi Polytechnic to Delhi College of Engineering and then finally to Delhi Technological University has taken an astounding shape and the autonomy granted to it has spurred progress in several uncharted territories. The various transformations have helped us to remain young and energetic in our endeavour for academic excellence.

With a history of over 75 years in providing technical education within modern educational infrastructure, DTU is an institution which defines and continues to update frontiers of Engineering. DTU is fully networked with Industrial, Academic & Scientific community. It has partnerships with leading Universities and Industries in India & abroad. DTU has the alma mater of a highly distinguished pool of

World class Engineers and Technologists which includes **Vinod Dham**, the father of the Pentium Chip, **Promod Haque**, the world's most widely acclaimed Venture Capitalist, **Raj Soin**, the Avionics wizards of US & a top ranking Techno Entrepreneur, **Durgadas Agrawal**, the renowned Techno-Entrepreneur based in Houston, to name a few

Delhi Technological University has been the pioneer of Quality Technical Education, Research and Innovation. Our University has kept the quality of education & research as its main focus of academic & professional activities, and this has earned us a high reputation in the country and abroad. This is evident from DTU figuring several times among the Top Ten Engineering Institutions in the country, along with the prestigious IITs.

Delhi Technological University, has taken several new initiatives in restructuring and strengthening its academic programmes at Postgraduate and Undergraduate levels during the years. Introduction of new programs at the postgraduate level and focus on research and development are crucial factors that have helped in the recognition of DTU as a premier University for higher learning. The University has emerged as the leading Technological University for higher technical education and research in the country. DTU continues to be the one of the most sought-after destination undergraduate for postgraduate studies and attracts the top performers in national examinations such as JEE (Mains) and GATE.

We are aware of the enhanced expectations of the student community and public at large and strive to live up to our image that has been so persistently built up over the years. We at DTU are committed to achieve our goals to create an environment in which we can nurture our students to be knowledgeable, innovative and trained to work unceasingly to serve the Nation and society. The development of the Nation depends upon their technical competence and work ethics that they have imbibed during their formative years as students. We are focused to keep pace with the continual progress in the fields of science and technology. The characteristics of the student population at the university are undergoing a significant change in the recent times. The university has responded pragmatically to the large increase in its intake by substantially reorienting itself academically, technologically and administratively and using it as a great opportunity to retain its leadership in engineering education in the country. The undergraduate curriculum for engineering education is designed in such a way that it introduces a new rigor and methodology in undergraduate teaching, laying emphasis on developing analytical skills and challenging

the students intellectually. A special M.Tech. Programme in Power Electronics for the employees of Delhi Metro Rail Corporation in Electrical Engineering Department is being offered and is becoming popular.

### **Admissions**

In the year 2016, with the initiative of Government of NCT of Delhi, admission to the B.Tech. Programmes at Delhi Technological University was conducted through common counselling as "Joint Admission Counselling, Delhi" along with three other technical universities/institutes viz. Indira Gandhi Delhi Technical University for Women (IGDTUW), Netaji Subhas Institute of Technology (NSIT) and Indraprastha Institute of Information Technology Delhi (IIIT-D). In this way, total 1747 admissions in B.Tech at DTU were made through common counselling. It is a matter of pride that DTU has also offered two seats (supernumerary) to Prime Minister's J&K Special Scholarship Scheme for 2016-17 sponsored by AICTE under MHRD funds. The admission to the category PIO/FN/NRI has been conducted through DASA and 69 students were admitted this year.

The Ph.D. student strength has steadily been increasing over the last three 3 years. In 2015-16, about 33 Ph.D. scholars were admitted. All students involved in research in the University are given the opportunity to interact with research community at the National and International level by providing funds to attend International Conferences TEQIP-II. through the research scholars are the primary beneficiary of this scheme, a small number of other PG students and UG students have also been benefited. The total number of Undergraduate students and Graduate students admitted in 2015-2016 were 1747 and 430 respectively. The number of students admitted in MBA and Executive MBA was 63 and 18 respectively.

# **Academic Infrastructure**

Department of Applied Chemistry was established as a subsidiary department to cater to the needs of engineering students. It continued as a helping department at old St. Stephen's College at Kashmere Gate till 1986. In 1997, the department of Applied Chemistry was shifted to the new campus of Delhi College of Engineering. In 1998, the department had started a new four year course of B.E Polymer Science and Chemical Technology. The Department has 14 well-established laboratories in Applied Chemistry, Polymer Science and Chemical Technology along with two research laboratories and one CAD lab. Teachers and students of the Department often go abroad for presenting research papers in seminars/conferences/collaborations etc.

Department of Applied Mathematics offer courses to undergraduate and postgraduate students of various engineering disciplines. The syllabi have been designed in the areas of Applied Mathematics, Computational Techniques and Statistics to impart sound knowledge of various mathematical tools and their applications in the engineering disciplines. A few full time Ph.D. scholarships are available in the above fields.

**Applied Physics** Department was established to support the academic offered by all engineering program departments. Applied Physics Department is a major department of Delhi Technological University providing cutting edge research, innovation and education in the emerging areas of science and technology. As a result, this department offers B.Tech. In Engineering Physics, M.Tech in Microwave and Optical Communication Engineering, M.Tech. Nanoscience and Technology and M.Tech. Nuclear Science and Engineering.

Department of Biotechnology, founded in 2004 with a vision to make an impact through research and technology based

successfully conducting training, is undergraduate and postgraduate programmes. The Department is running various programmes in Biotechnology, Bioinformatics, Biomedical Engineering & Industrial Biotechnology. The Department is also running research oriented Ph.D. programme. The department has undertaken sponsored projects funded by ICMR, CSIR, DST, UGC, etc. The department has 10 state-of-the-art laboratories. The department conducts annual technical festival KARYON in which the students and experts from industry participate in academic deliberations to enhance Industry- University interactions.

Department of Civil Engineering offers one B. Tech Programme in civil engineering and M. Tech Programmes in Hydraulics and Flood Control, Structural Engineering, and Geotechnical Engineering. The department also provides opportunity to working engineers for upgrading their qualification under continuing education programme on part time basis, these programmes are: M. Tech. in daytime, and B.Tech in evening time. The department is well equipped with laboratories related to Structure, Concrete Testing, Soil Mechanics, Highway Engineering, Experimental Stress Analysis, Computational Mechanics, Education Technology, Photogrammetric and GIS facilities, Environmental Engineering and Hydraulics Laboratories. The department of Civil Engineering lays greater emphasis on quality research for industrial design and development. Excellent facilities are available to conduct research for the award of Ph.D. degree in the disciplines of Structural Engineering, Structural Dynamics, Earthquake Engineering, Water Resources Engineering, Environmental Engineering, Experimental Mechanics, Geotechnical Engineering and other interdisciplinary areas.

Department of Computer Science and Engineering endeavours to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. The curriculum defined, lays greater emphasis on design principles and development of system software for operating systems, database management systems, mining, computer graphics and networks. Department has developed state-ofthe-art laboratories in the various fields Computer **Engineering-Computer** Architecture Lab. Network Lab, Web Designing Lab, Computation and programming Lab, Operating System Lab, Artificial Intelligence Lab and many others. Currently, the department offers doctorate, post-graduate & under-graduate courses in fields of Computer Engineering; Information Technology & Software Engineering & Technology. The department also has an active student chapter of Computer Society of India (CSI) and contributes significantly in professional activities undertaken by IEEE and IET student's chapters. Fifteen new Assistant Professors have been recruited in this session.

Delhi School of Management (DSM) was established in 2009 with the upgradation of Delhi College of Engineering into Delhi Technological University. DSM was established with a vision of inculcating a penchant for innovation, research, and experimentation in the aspiring managers. DSM aims at extending the seven-decade long legacy of DCE by incubating and developing techno-managers, who are adept at identifying pertinent and critical business problems and apply their technical skills and competencies in solving those issues.

Department of Electronics and Communication Engineering has seen considerable growth since its inception

in 1976. This department offers UG/PG and Ph.D. programmes. Currently the Department has 11 well equipped curriculum laboratories and 4 research laboratories. Frontal areas of the advance level research in the department are Micro Strip Antenna Design, Sensor Networks, Image Processing and Analog and Digital System Design. The department regularly organizes seminars, workshops and training programs to keep pace with the new developments and recent trends in relevant technologies. The department plans to have centre of excellence in the field of robotics, machine vision, medical electronics and VLSI in collaboration with industry. The department is planning to impart training program in cutting edge technologies for creating a talent hub to meet industrial manpower needs. The department is striving to utilize the power of brilliant minds at DTU and its networked institution/research laboratories for development of future electronics.

Department of Electrical Engineering has grown significantly since its inception in 1941. The goal of the department is to provide quality education at undergraduate and postgraduate levels and undertake cutting edge research in various areas of Electrical Engineering. The department has an annual intake of 150 and 100 students in the B.Tech. programmes in Electrical Engineering and Electrical & Electronics Engineering, respectively. The department is also offering B.Tech. (Evening) with an intake of 46 students. At the post graduate level, the department is offering two M.Tech. programmes in Control and Instrumentation and Power Systems with a combined intake of 48 students. The department is also running part time (evening) PG program in Power Electronic Systems for DMRC (under MoU) since 2012- 13. In addition to the above, the department offers regular Ph.D. programmes in various areas of specialization in Electrical Engineering.

These include Intelligent Control, Optimization, Power Quality, Renewable Energy Sources, Smart Grids, System Operation and Control, Power System Dynamics and Stability, Flexible AC Transmission (FACTS), Electric Drives and Hybrid Electric Vehicles. The department currently has 17 laboratories equipped with state-of-the art equipment and latest version of latest software platforms. Currently, sponsored projects from the DST and the AICTE amounting to more than Rs. 1.3 crores are underway in the department.

Department of Environmental Engineering was established in February-2012. The department offers B.Tech, M.Tech and Ph.D. programs and an opportunity to working engineers for their academic upgradation by offering part time PG course. The department is actively involved in research and development and has well established laboratories in all the areas of environmental engineering.

Department of Humanities was established in the year 1941 with a view to impart necessary soft skills to the graduating engineering students. Initially, courses in English, Economics and Accountancy were taught to the students. With the growing impetus on new courses like Econometrics. Gender and Technology and timely revision of syllabi of subjects like Engineering Economics and Communication Skills, a crossover between technical and nontechnical aspects of learning is facilitated. The main objective is to give the students a comprehensive idea of the competition and the emerging work culture to make them confident and market ready. To sensitize students towards the technological need of poor and deprived for inclusive growth, B.Tech students of all the branches are compulsorily asked to visit slum and prepare an assignment on the problems of slum and how science and engineering can be used to improve their lives.

Department of Mechanical, Production & Industrial Engineering has experienced considerable growth since its inception in 1941 with the intake rising from 30 to 328 (186 for Mechanical, 48 for Production & Industrial Engineering, and 94 for Automobile Engineering). The department also offers Post Graduate courses with specialization in Thermal Engineering, Production Engineering, Computational Design and Renewable Energy Technology. The Ph.D. programs in all fields of Mechanical Engineering are also offered. In addition, the department also offers four years B. Tech. Programme for working diploma holder. The department possesses modern laboratories equipped latest experimental set-ups and research facilities for instrumentation, experimental stress analysis, strength of materials, fluid mechanics, IC-engines, automotive engineering, robotics, heat transfer, solar energy, flexible manufacturing system, computational fluid dynamics supported by software like view-flex, CAD-CAM and i.e. engine design. Cad Lab has softwares like NX-LAD, NXCAM, AUTOCAD Inventor, Catia, Techomatix, Abacus, Ladino, NX-Nastran, Hyper mesh, Hyper-works, MDADAMS, Dynaform etc. Fluent software is available in the CFD Centre. Industrial Engineering lab has software: SPSS, Witness and Lingo-7. The department has developed eco-friendly technology using alternate refrigerants in the RAC lab for re-directing global warming and Ozone depletion. The research and development is facilitated by NT enabled workstations and competitive robots with digital controller. In addition, microprocessors, micro controllers, PIC, spectrum analyser and logic analyser are available for project work. The department has a modern workshop equipped with sophisticated machinery in Fitting and Machine Shop. The facilities at the welding shop include pulse TIG, ultrasonic welding and submerged arc welding. The students are given hands on experience on CNC Drilling, CNC Lathe Machine EDM & wire EDM.

# **Training and Placement of Students**

Owing to the remarkable talent of its students and strong corporate relations, DTU entered the 2015-16 placement seasons in full force. A total of 261 organizations had taken part in the campus placements and they offered around 1211 job proposals. Students from various streams of Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), Master of Business Administration (MBA) programs in diverse fields of engineering and technology, participated in the placement process.

The highest salary in the campus placements for the graduating batch of 2016 has scaled up to US \$1,90,000 p.a. by the software giant, the Google, a US based MNC, while a domestic salary of Rs. 30 lakhs p.a. was offered by Goldman Sachs. The background of companies visiting the campus was wide ranging and included top leaders in core engineering industries, manufacturing industries, oil Industries and also IT and IT enabled services especially e-commerce start-ups, finance, marketing, consultancy firms, R & D laboratories and even NGOs. Major recruiters of the year included Schlumberger, Amazon, Google, Microsoft, EPIC, Maruti Suzuki, Tata Motors, Hyundai, Honda, Bajaj, Mercedes Daimler, Samsung, McKinsey, Oracle. Deloitte. Flipkart, Jabong, Snapdeal, Adobe, Godrej, Freescale, Reliance, Sandisk, Larsen and Toubro, United Health Group, Bharti Airtel, Havels, EXL Services, TPDDL, Toshiba Japan, Turner Construction and ITC among others. Government organizations such as C-DOT, Indraprastha Gas Limited,

BEL, Indian Army, TRAI, TCIL, Indian Navy etc. also visited the campus for recruitments. The University has consistently worked hard in terms of looking at all avenues that can be tapped into, to offer numerous opportunities to students in every field that interests them.

# **Infrastructure Development**

In order to cope with the increased need of the students w.r.t their hostels, class rooms and laboratories, a proposal for construction of buildings under 'Phase-II Construction at DTU Campus' at a cost of Rs 256 Crore has been submitted to the government and it covers new constructions of boys' and girls' hostels, academic blocks for the newly added UG and PG programs, centre for innovation and techno-entrepreneurship. Two multipurpose halls, 4 SPS class rooms of 120 capacities each, and two halls of 225 student capacity have been constructed. Nuclear Science laboratory the department of Physics and one in Biotechnology has been completed. The construction of one Disaster Management laboratory in Civil and one library block in Mechanical is likely to be completed soon.

A piece of land measuring 4852-8 sqm has been allotted in ITI Mayur Vihar Campus for establishment of East Delhi Campus/ Constituent College of Delhi Technological University by the DTTE. For development of campus, the soil investigation work has already been carried out by PWD. It is proposed to construct a 4 to 7 storied building semi- permanent in nature with steel structure and newly innovative materials which may fulfil the requirement of DTU and additional floors shall be utilized in future. The building is expected to be completed by the end of March 2017 so that academic session can be started next year.

# **EDUSAT Network**

EDUSAT, a satellite specially designed for facilitating distance education in India was launched in September 2004. It is planned to set up a high capacity satellite based interactive network to meet the requirements of various users in education sector across the country and to run it as an application project for implementing distance education. Live and recorded lectures are broadcasted on a daily basis from the EDUSAT to remote locations in India. The students of different institutes can interact with teachers and ask their queries related to the subject. A large number of recorded lectures are available and are telecasted from time to time. Complete courses on different subjects taught by renowned faculties of I.I.T, Delhi are also available on the HUB. Live as well as recorded lectures are telecasted on the daily basis from the HUB to different Engineering Institutes, Management Institutes, Diploma Institutes, Industrial Training Institutes of Delhi state. Lectures being telecasted from EDUSAT delivered by experts and renowned faculty educational institutes/industries. from Apart from that, lectures/conferences of renowned scientists and eminent experts from different specialization are being recorded under "Distinguish Public Lecture Series: by EDUSAT and all are telecasted through network.

# ESTABLISHMENT OF INCUBATION CENTRE

The Incubation Centre of DTU was inaugurated by Honourable Deputy Chief Minister Sh. Manish Sisodia. Five cubicles have been established, which will serve as breeding grounds for innovation and excellence. DTU is among the first six universities to be funded by the Delhi State Government under this Incubation Policy.

## **UNIVERSITY POLICIES**

Students can start their own industry with infrastructural, expert and monetary support from the university. There will be a special pool of experts that will help the enterprise stand on its own feet. Initial seed funding will be provided by the university. Also, students shall be encouraged to float their entrepreneurship career for two years. If they are not satisfied with their enterprise, they are eligible for interviews and placements. The pre-final students can also step into entrepreneurial journey, and come back later to complete their studies.

# **Sports and Gymnasium**

The students of Delhi Technological University are provided with excellent sports facilities and are encouraged to take part in the tournaments held in and around NCR Delhi, particularly, engineering institutions. Delhi Technological University has a 450 m track, ground for Football, Hockey, Cricket, two courts for Volley Ball, two courts for Basketball, three courts for Tennis and five courts for Badminton. The Table Tennis rooms, Chess rooms, Carom rooms and Gyms are also available in each hostel of the DTU campus. The sports council of DTU has organized several tournaments during 2015-16 academic sessions. D.T.U. students participated in the sports festiwals of I.I.T. Kanpur during 2nd Oct. to 4th Oct., 2015. Our students bagged the 2nd position in the Badminton in All India G.V.M. Shooting Championship during 3rd to 6th Oct. 2015. Dushyant Singh of B.Tech (5th Sem. Civil) participated in Delhi State Shooting Championship, which was held at Dr. Karni Singh Shooting Range, Tughlagabad, New Delhi during 3rd to 6th Oct; 2015. He participated in 5 events of pistol shooting and won 5 gold medals in the championship.

The university has well equipped gymnasium with the modern equipment used by the university students, faculty and staff members. There are two gymnasia in the university, one is situated in the sports ground and another in the faculty residential area which is used by girls too.

### **Health Centre**

DTU has a Health Centre managed by well experienced medical doctors. Five medical practitioners are available throughout the day. The university health centre is also visited by specialized medical practitioners for ENT, Eye, Dental care etc. for their expert advice and treatment. The university has a tie up with nearby leading hospitals in case of emergency. A new sports medicine-cumphysiotherapy centre has been added to provide the necessary expert advice.

# Students Technical Societies and Achievements

The university not only concentrates on academic activities, but also places an emphasis on an all-round development of its students. The Institute has therefore, created excellent infrastructure for a variety of co-curricular and extracurricular activities and various technical societies are functioning in the University under the faculty advisors and mentors. The DTUSA along with its different technical societies of various departments generally plan, organize and manage the various student activities throughout the year. The various societies working in the University are: Computer society of India, DTU Chapter, The Institution of Engineering and Technology, IET, DTU Chapter, Robotics Society, SR-DTU, IEEE, DTU, Society of Manufacturing Engineering, DTU, SAE, DTU Chapter, ASME, DTU Chapter, International Society for Optical Engineering (SPIE), Society for Experimental Mechanics (SEM), American

Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), DTU Chapter, Society of Plastics Engineers (SPE) DTU, American Society of Civil Engineers (ASCE), DTU Chapter and Society for Environmental Engineering, DTU.

The various societies have organised their annual function in Jan-Feb, 2016 and later they have also organised the Technical festival from 13-15 February, 2016. The cultural spectacle started with inauguration ceremony, a gracious beginning to the highest on energy fest. The ceremony was also enlightened by the esteemed presence of Sh. Manish Sisodia, Deputy Chief Minister, Govt. of NCT Delhi who imparted some pearls of wisdom to the excited audience and gave them valuable advice on how to be a good leader. Sh. Sandeep Kumar, Minister of Women, Child and SC/ ST Welfare and Sh. Ved Prakash, MLA of Bawana Constituency were the guests of honour. The Cultural Secretary, Mr. Nalin Choudhary delivered an inspiring speech which kept the audience enthralling.

A national level event was organised by ASME, DTU Chapter as "ASME Human Powered Vehicle Challenge-2015". ASCE-International President Dr. R.D. Stevens visited Delhi Technological University on 5th March 2015 along with delegates to explore the areas of mutual interest among the DTU and ASCE international student chapter. During a well-attended address, he praised the engineering activities and talked about the report cards prepared by ASCE.

ASME Human Powered Vehicle Challenge India 2015 was organized at DTU New Delhi on January 21, 2016. The ASME organized a national level competition in collaboration with Delhi Technological University starting from 16th January, 2016. Top engineering students from across the country rolled out

new concept designs in pedal powered transportation. 55 teams competed from colleges across India including the IIT's, NIT's in this year's competition. The race was flagged off by the Chief Judge Mr. Nathan Taylor. A team of 3rd year students of DTU became the overall winners of the 2015 HPVC India. They stood ranking 1st, 5th and 3rd in Design, Drag and Endurance event respectively. The vehicle developed by the DTU team was able to achieve a top speed of 60km/hr. Delhi Technological University students continued to shine the University name by demonstrating both technical and managerial adroitness.

# **National Service Scheme (NSS)**

The overall aim of NSS-DTU is to give an extended dimension to the higher education system and orient the students towards community service while they are studying in the institution, and to establish a meaningful linkage between the campus and the community. Some of the highlights of NSS are as below:

In the wake of recent developments in the field of cleanliness and hygiene the Hon'ble Prime Minister, Shri Narendra Modi, NSS DTU organized cleanliness drive in Shahbad village, Delhi under the guidance of Registrar and Faculty Advisor, NSS DTU. The Cleanathon was conducted over a span of two days. On the first day, 40 volunteers cleaned a park and few streets. NSS has adopted 5 villages of Delhi for their cleanliness drive. NSS organised a clean Yamuna Drive on 13th April, 2015 at Wazirabad Yamuna Ghats.

**Donation Drives:** In the wake of joy of giving a week-long cloth donation drive was conducted during the month of October 2015 in DTU. In this campaign the students were urged to donate their old clothes. These clothes were then donated

to the NGO- Centre for Social Responsibility and Leadership (CSRL) for distribution in Uttarakhand.

The team surveyed every house in Shanti Colony, Jawahar Colony, Bapu and Sapera Basti and collected data regarding the number of girls below 18, their education, sanitary and health problems. This gave them an account of the daily problems that slum dwellers face. Major problems include water scarcity, sanitation- toilets and waste disposal, transportation, proper housing, basic civilian rights, education, gender inequality, under age marriage and poor quality of education in schools around the area.

**Drug Awareness Programme:** Youth is the biggest strength for any progressive country. NSS DTU organised a drug awareness programme at Dr B.R. Ambedkar Auditorium, in August in collaboration with Narcotics Control Bureau, Ministry of Home Affairs, Govt. of India. The programme was graced by Shri Rohit Sharma, Zonal Director NCB Delhi Unit, and Col.(Retd.) Neeraj Suri, Registrar, Delhi Technological University. The keynote address was delivered by Dr Yatanpal Singh, Psychiatry Department All India Institute of Medical Sciences. The event witnessed a huge turnout including the volunteers, other students and faculty members.

Teach INDIA Programme: This programme aims to impart education to every person who yearns to learn. NSS DTU feels proud to be a part of The Times of India initiative "Teach India Programme-English for Employability". Study materials are provided by TOI group and quality teaching is ensured by NSS volunteers. The classes are held on daily basis in the evening. Volunteers teach practical things like using business cards, replying and sending emails, greeting etiquettes and

many more real life scenarios, apart from tenses and variables. Orphanage visits are also organized regularly by the NSS team to teach the orphan students.

# **TEQIP – II: A World Bank Project**

TEQIP-II Project started in DTU in July 2013 with an overall funding of Rs.12.5 Crore. The main objectives of TEQIP-II project are to strengthen PG education, research and innovation, promote industry partnership in education and research, and build quality faculty capacity.

# **Outreach Programmes**

Continuing Education Programme (CEP), Quality Improvement Programme, Development Programme Curriculum and FDP Faculty Development Program (FDP) activities continued to attract wide interest from industry, academia and from our own faculty. The CEP courses at DTU, aim at working professionals, and have sustained its significant activities despite the challenging industrial scenario prevailing throughout this period. The FDP programs, sponsored by TEQIP-II at DTU are meant for professors and are fully funded by TEQIP-II. These courses are very popular, and a large number of college teachers are benefited from them. With a view of having more interactions between industry professionals and teachers. special attempts have been made to open up the FDP programs to college teachers and industry professionals. This has been found to be a very worthwhile experience for the teachers and the industry personnel. As per the career advancement scheme implemented in this session, numerous

# promotions have been granted.

# **TEQIP-II Sponsored Events**

Department of Electronics and Engineering organized Communication TEQIP- II sponsored expert lecture series on VLSI Design from 18 to 29 January, 2016. Key speakers of the programs were Prof. G. Viswesvaran IIIT Delhi, Dr Mukul Sarkar IIT Delhi, Dr. Shouribrata Chatterjee IIT Delhi, Mr. B. Sriram (Free scale Semiconductors), Mr Babul Anunay (Free scale Semiconductor) and Mr. Manoj Kumar Tiwari (ST Microelectronics). The program covered a spectrum of topics including differential amplifiers, oscillators, integrated chip design in analog domain; a logical effort time and system on chip and reliability issues and design constraints in deep submicron technology in digital domain.

Faculty Development Program(TEQIP-II) on "Recent Trends in Pattern Analysis and Machine Learning" was organized by the Department of Electronics and Communication Engineering from 11th July to 15th July with Dr. Dinesh K. Vishwakarma as the Course Coordinator and Sh. M.S. Chaudhary and Sh. Rajesh Birok as the co-coordinators. The course focused on the applications of Pattern Recognition, Visual Object Recognition, Medical Image Analysis and Facial Recognition.

Faculty Development Programs (TEQIP-II) were organized by the Department of Civil Engineering with Prof. Nirendra Dev as the chairman. FDP on "Geotechnical Engineering for Urban Infrastructure" and "Recent Developments in Fluid Mechanics" was organised from 11th July to 15th July with Amit Kumar Shrivastava as the Course Coordinator and Dr. Munendra Kumar and Er. S. Anbu Kumar as the Co-coordinators of this short term course which was based on The Geotechnical Challenges faced by engineers in building projects and highways. FDP on "Recent Developments in Fluid Mechanics" from 18th July to 22nd July with Dr. Munendra Kumar as the Course Coordinator and Dr. Amit Kumar Shrivastava, T. Vijaya Kumar and Er. S. Anbu Kumar as the Co-coordinators of this short term course which was based on Fluid Statics, Fluid Kinematics, Hydrodynamic Stability, Forces on Submerged Bodies, Fluids in Relative Equilibrium and Boundary Layer Theory.

Faculty Development Program (TEQIP-II) on "Statistical Methods and A brief on LaTex" was organized by the Department of Applied Mathematics from 18th July to 22nd July with Prof. Sangita Kansal as the Chairman, Prof. H.C. Taneja as the Co-Chairman, Dr. S. Sivaprasad Kumar as the Course Coordinator and Dr. R. Srivastava, Dr. Naokant Deo and Dr. C.P.Singh as the co-coordinators. The course focused on various Statistical Methods, Regression Analysis and Sampling Distributions.

Faculty Development Programs (TEQIP-II) were organized by the Department of Humanities with Dr. Seema Singh as the Principal Coordinator. FDP on "Social Responsibility of Higher Educational Institutions" was organized from 21st July to 22nd July, with Ms. Saroj Bala, Mr. Nand Kumar and Ms. Parinita Sinha as the coordinators of this seminar on College/University-NGO-Corporate Sector Community partnership. FDP on "Research and Publication" was organized from 25th

July to 29th July, with Mr. Nand Kumar and Ms. Parinita Sinha as the Course Coordinators. Eminent Scholars from JNU, University of Delhi, IIT Delhi and other reputed institutions delivered lectures on the emerging trends of research in social sciences, management and language.

Faculty Development Program(TEQIP-II) on "Recent Developments and Challenges in Materials and Manufacturing Process" was organized by the Department of Mechanical, Production and Automobile Engineering from 25th July to 29th July with Prof. R.S. Mishra as the Chairman, Prof. Vipin as Principal Coordinator and Dr. N. Yuvaraj, Dr. R.C. Singh and Dr. M.S. Niranjan as the course coordinators. The objectives of the course were to generate and impart knowledge on the fabrication of recent advanced materials and composites.

# National and International Collaborations

The DTU has signed 18 MoU with various universities, institutions and organizations. This year, DTU has signed two new MoUs with University of South Florida, U.S.A and Chaoyang University of Technology, Taiwan for academic interactions, students and faculty exchange, and collaborative R&D work. The MoU with TCS has also being renewed.

# Major Events in 2016



### Techfest'16

The tech fests of Delhi Technological University were organized from 19th to 21st of February, 2016, and were overseen by Dr. S. Indu, the Faculty Co-ordinator, and Aastik Chawla, Student Co-ordinator. The various tech fests encompassed events from all myriads of technical innovation and skills under the banner of Innova, Karyon (Dept. of Biotechnology), Aurora (DEPTH), Cogenesis (CSE Dept.), Troika (IEEE DTU), Renaissance (IET DTU), Asymptotes (SIAM DTU), Tatva (Dept. of Applied Chemistry) and Excelsior (SR-DTU). This time around, the tech fests witnessed an unprecedented participation from teams in and around Delhi NCR. They hosted new event and gave a multitude of participation and skill development opportunities to students of all cadres. For the first time, under the guidance of Hon'ble Vice Chancellor of DTU Prof. Yogesh Singh two Hackathons were organized in the hardware and software domains for the first time ever in the Techfest 2016 under the aegis of IEEE DTU. Students built projects on given themes over a 24-hour period of continuous mentorship and presented their finished scalable products in front of faculty panels. The overnight Hackathons were organized under the supervision of an administrative committee comprising of Dr. Roli Purwar, Dr. Richa Srivastava, Ms. Geeta, Dr. Nilam, Prof. Jeebananda Panda, Mr. Alok Kumar Singh, Dr. N.S. Raghava and Mr. Deva Nand.

# **Engifest'16**

Engifest'16, the official cultural extravaganza of DTU, took place from 12th to 14th February. Celebrating the 75th Anniversary of DTU, this year's fest was themed around Super-Villains. Honourable Deputy Chief Minister Sh. Manish Sisodia was the chief guest for the opening ceremony. Various events, spanning numerous non-scholastic

fields were organized during Engifest. These included events like Spandan, Engildol, Nukkad Nataks, Shakedown, The Kaleidoscope Film Festival and Natya. The 3 days also witnessed some enthralling live performances by Vishal & Shekhar, Lagori Band and Antariksh Band.

# International Conferences ICPEICES 2016

The 1st IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2016) was organized by the Department of Electrical Engineering in association with IEEE PELS-IES and PES-IAS Delhi chapter from July 04, 2016 to July 06, 2016 at DTU as a part of the platinum jubilee celebrations of DCE-DTU. The conference was inaugurated on July 4, 2016 in Dr. B.R. Ambedkar Auditorium, DTU. Professor Ved Prakash, Chairman UGC, was the Chief Guest of the ceremony. The keynote address was delivered by the Guest of Honour, Professor Sudip K. Mazumder, fellow IEEE, University of Illinois, Chicago, USA. Professor Yogesh Singh, Honourable Vice Chancellor, DTU, presided over the function. Professor Madhusudan Singh, General Chair, ICPEICES, welcomed the dignitaries and delegates, participating in the conference and appreciated the efforts made by the organizing committee in hosting the prestigious conference at DTU. Dr. Bharat Bhushan, Organizing and Technical Chair, ICPEICES, presented a brief schedule of the conference and acknowledged the active participation of the sponsors, authors and reviewers. The conference included keynote address, tutorial sessions and plenary sessions by distinguished speakers. ICPEICES 2016 received overwhelming response from researchers in India and abroad. More than 1600 research papers were received, out of which about 680 papers were presented in the conference.

# **IICIP-2016**

1st India International Conference Information Processing-2016 on was organized between 12 August 2016 and 14 August 2016 in association with IEEE. The conference provided a wide platform to researchers from academies, industries and government organizations to share their novel ideas. The conference aimed to provide an international forum for contemplating the interdependent and inter-disciplinary research ideas for enhanced quality work or information processing. in association with IEEE, will be organized between 12th August, 2016 and 14th August, 2016. IICIP will provide a wide platform to researchers from academies, industries and government organizations to share their novel ideas.

# Other Events UDAAN

DCE-DTU Alumni Association in partnership with E-Cell organised a competition-cumevent on 22nd January 2016 to facilitate enterprising start-ups through pitching competitions. Eminent panellists gave invaluable insights on their journey from DTU to where they stand today. This jury consisted of stalwarts of the industry a panel which consisted of Pravin Sinha of Jabong, Rohit Chaddha of foodpanda, Alok Goel of SAIF partners and Sanjay Modi of monster India. Vice Chancellor, Dr. Yogesh Singh through his brilliant poetry motivated the students to strive for excellence and promised to set up Dgbater, a business incubation centre to create the next generation of Unicorn Start-ups from our college. The teams were broadly divided into team students and team alumni. Innovative ideas such as on-demand laundry, autonomous cars, advisor circuit among others. A total of 8

alumni teams and 4 students team pitched their ideas and were judged on parameters ranging from innovation, revenue model, finance, marketing and risk evaluation. At the end of the event Team Mark n Move were adjudged the winner of alumni round and EazyPG the winner of student round. They won a cash prize of Rs. sixty thousand and Rs. thirty thousand respectively. Such an annual event will surely create an even better start-up environment in DTU.

### **TED**x

hiatus, After a 4-year Technology, Entertainment, Design (TED) was back in DTU as TEDx DTU on 18th April, 2016. The Pro Vice Chancellor of DTU, Prof. S. K. Garq inaugurated the event by the lamp lighting ceremony along with the Dean of Student Welfare Prof. Vikas Rastogi and all the distinguished speakers amongst others. The event had the theme 'Deconstructing Perceptions, Reconstructing Identities', and kicked off with an enthralling performance Madhurima. The speakers' handpicked by Angad Grover, the curator, included eminent personalities like Dilip Chabria, Car designer and the founder of DC Design; Richa Chaddha, Bollywood Actress; Dr. Ashok Seth, Chairman of Fortis Escorts Heart Institute; Alisha Abdullah, first female national racing champion; Taru Dalmia, a Reggae artist; Ritu Marya, Editor-in-Chief for Franchise India Media: Sanjay Modi, Managing Director, Monster India; and Aaron Friedland amongst others. With keen listeners in the audience, an equally amazing open house followed the inspirational talks delivered by the dignitaries. To add to the excitement, DC Avanti, a sports car produced by DC design, was kept on display in the campus. Scrumptious lunch and refreshments were savoured by all.

### Ideathon

E-Cell DTU organized the grand finale of Ideathon: Chase Your Dream contest on 15th April 2016, which had seen a participation of 1200 teams nationwide. Vijay Shekhar Sharma's PayTM awarded the final winner a prize of INR 1 crore. Various entrepreneurs, investors and DTU's alumni were hosted during the Ideathon, including Vijay Shekhar Sharma (PayTM Founder, DCE '98), Dr. Pawan Kumar Sharma (IAS, DCE '94) and Jyoti Kamal (Senior Editor-TV18).

### Arena '16

Arena, the Sports Fest of DTU was organized between 4th and 8th April,2016. Intra college tournaments for all major sports including Basketball, Badminton, Chess (DTU Chess Championship), Cricket, Football, Volleyball and Athletics were conducted. Additionally, an inter college Kabaddi tournament was organized in DTU this year in which more than 32 teams participated. The Engi Green Run and Engi Green Ride were also organized for the first time this year. This year's ARENA was greeted with great excitement and enthusiasm by all the students.

# **Acknowledgments**

DTU is grateful to the financial support provided by GNCTD, MHRD, DST, AICTE, UGC, CSIR, DBT and DRDO. My sincere thanks to all the faculty members,

employees, students and alumni for their devotion and hard work invested in DTU. Over the years, DTU has contributed significantly to the national cause of providing excellent technical education and will continue with this same tradition in the coming years.

I am deeply indebted to the Hon'ble Chancellor, Shri Najeeb Jung, Lieutenant Governor of NCT of Delhi, Hon'ble Shri Arvind Kejriwal, Chief Minister, Hon'ble Shri Manish Sisodia, Deputy Chief, Minister, and Minister of Higher and Technical Education, for their guidance, support and co-operation which enables DTU to attain its goal. I take this opportunity to thank the Chief Secretary, Principal Secretary (Finance) and Secretary (Higher Education) and Director TTE, for their incessant cooperation by providing grants for the development of DTU. My sincere gratitude to the Members of Board of Management, Finance Committee, Planning Board, Academic Council and other Committees of DTU for their valuable contribution which enables DTU to achieve its mission. I compliment the Editorial team for their untiring efforts which was invested in compiling this report.

With best wishes.

Prof. Yogesh Singh (Vice Chancellor, DTU)

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# A WALK DOWN THE ROAD OF ACTION PLAN-PACKED YEAR 2015-16

They are the crème-de-le-crème, the forerunners, the torch-bearers, the leaders who have been hand-picked to uphold the ideals and the motto of the University. They are the charismatic and stellar members of DTU Cultural Council 2015-16 namely, Mr. Nalin Choudhary, Mr.Sheikh Farhan, Ms. Aditi Maheshwari, Mr. Nishant Aneja, Mr. Jatin Aggarwal and the members led by them. The chairperson of cultural council, Dr. S.Indu acknowledged their hard work and mentioned that she is contended to see the council blossoming in every way, since the first day of work. She was impressed that this year the college was more culturally active than any other year. She added that they have been singledout to provide guidance to their peers and juniors and to help the authorities in smooth functioning of the University.

Let's take a peek at academic year 2015-16 and the efforts put in by the council to make it the best so far: Academic year 2015-16 began with an unprecedented step by the cultural council to host Fresher's week brimming with ecstasy and rejoice. The preparations were in full swing from the beginning of the semester during which auditions were conducted and rehearsals were held. The various events included the Boys' and Girls' Marathon, 'Raise you voice'-Group Discussion, Flash Mob, Standup Comedy and an interactive session with the bestselling novelist Mr. Anurag Garg. The week ended with the exquisite fresher's night which featured an electric mélange of activities i.e. aweinspiring dance and band performances by the talented lots, enchanting fashion parade etc. Ms. Aditi Maheshwari, Jt. Cultural Secretary mentioned that she was delighted to see the freshers settle-in so quickly as the college was in a festive spirit during the entire week.



Students Celebrating Fresher' Night

On 19th of October, DTU saw its first ever Dandiya Night! Had it not been for the zeal of the cultural council to do something out of the box, we wouldn't have this mystique festival of energy and ebullience in our own campus. It started with a small folk garbaraas performance which was followed bynon-stop dancing including dandiya, garba, and obviously, jam session in the end, sending the dancers into a trance, especially when the music and dance was in its rawest form. The efforts put in by the Cultural Council were appreciated by all. Mr. Farhan said he was overjoyed to have been able to organize such an event in the campus as it created a fascinating aura of festiveness in the campus with colorful, musical sticks and traditional attire.



Students performing Dance during Dandia Night

On 7th of January, DTU witnessed the presence of VJ Bani, one of the finest youth and TV Icons! She was here for LinkedIn-MTV 'Get A Job' drive, in association with the top companies like Pepsi, Reliance, Adidas, Flipkart, HCL, UBER, Marico, Godrej, Amazon and Airtel to give you an opportunity to have a job of your dreams. Enthusiasm and effervescence overflowed amongst the students and they gathered in numbers to greet her. Bani mentioned in her interview that she was amazed by the energy of the college.

On 13th of January, the council collaborated with the British Council to present 'Great talk' with lain Stewart, a professor in the University of Plymouth and an eminent figure in the field in Geosciences renowned rock 'Geology's star'. as Students gathered in masses to attend his talk on "Communicating Geoscience through Popular Media" which was followed by a healthy interactive session. It was commended to be well-organized and provided a paradigm shift for the students as well as the guests, where they were able to look at a particular concept from a totally new perspective.



On 16<sup>th</sup> of January, DTU witnessed the most sensational, dazzling and hippest dance competition in town. It was judged by the Indian dancing heartthrob and the supremely talented: SALMAN KHAN of Dance India Dance fame. Around 30 proficient teams from different colleges participated out of which the most skilled 8 teams were selected who were aired

on TV by MTV.Exuberant fans came for an evening of live entertainment, and enjoyed with the rhythm of breath-taking dance performances. Mr. NishantAneja mentioned that he was contented to see the event being a success, hard work paid off.





### **ENGIFEST-2016**

True to its tradition, this year too, the much awaited Engifest'16 was held from 13<sup>th</sup> to 15<sup>th</sup> of February. Engifest'16 was a wave of activities, competitions, realization of passions & talents and nourishment of cultures where enthusiastic youngsters from all over India came and participated to be a part of this extravaganza.

The cultural spectacle started with inauguration ceremony, a gracious beginning to the most high on energy fest. It was presided over by honorable Vice Chancellor, ProfessorYogesh Singh. Ever ready to inspire and motivate he did just that in his addressing speech. The ceremony was also graced by the esteemed presence of Sh. Manish Sisodia, Deputy Chief Minister

of NCT Delhi who imparted some pearls of wisdom to the excited audience and gave them valuable advice on how to be a good leader.Sh. Sandeep Kumar, Minister of Women, Child and SC/ST Welfare and Sh.

Ved Prakash, MLA of Bawana Constituency were the guests of honour. The Cultural Secretary, Mr. NalinChoudhary delivered an inspiring speech which kept the audience enthralling.



Inauguration of Engifest-2016 by Hon'ble Deputy Chief Minister Shri Manish sisodia

The 3 days extravaganza commenced from 13th February. The nights were vibrant, reflecting the festive spirit at its peak. For the first time ever, the Cultural Council pulled off the most scintillating performance of Engi'16 - 'Vishal-Shekhar'live concert! It was a night full of energy, buoyancy and life. The next night witnessed power packed performances by 'Lagoriband'. The intensity of enthusiasm of both, the band members and the crowd, was sky high that night. The band members commended the council members for such a massive arrangement. The following night saw alumni band 'Antariksh' making everyone dance to their tunes and an equally sensational VH1 Supersonic EDM Night.





The days were equally groovy! Boogie Frantick, one of the known poppers from California USA was invited as a special judge for the STFU – street dance event. Around 200 dancers across the country participated in the event and battled with each other. Another event which caught the attention of a great crowd was 'Campus Princess'- a preliminary round for Femina Miss India, where the top 20 participants were shortlisted on the basis of their profiles, and walked the ramp to be shortlisted for subsequent rounds. It was judged bythe gorgeous, the stunning and supremely talented Miss India World 2015 - Aditi Arya.







# **KUMAR VISHWAS LIVE-2016**

Finally on Feb. 15, 2016 the event which was attended by such multitudinous fans that the OAT was jam-packed! – 'Kumar Vishwas Live'.With his wit, humor, satire and his poetry, he impressed everyone.



With paintball, pool, air hockey, laser tag and what not; Fun City propelledthe excitement to a new level altogether! Another sight of attraction was Food City. For the entire duration of the Engifest'16, the road from Mech-C to OAT was filled with the most delectable food stalls from the heart of the nation, offering mouthwatering food.Mr. Farhan, the treasurer of DTU said that he was filled with pride as this year the budget reached a new height of 50 lakhs, compared to last year's 22-25 lakh only. He congratulated the corporate team for the same. He also congratulated the PR team and the publicity team as the fest witnessed almost double participation and footfall this year.

On 5<sup>th</sup> and 6<sup>th</sup> of March, India's Got Talent – the biggest Indian reality television series on Colors television network, a part of the global British Got Talent franchise was in

DTU. It was the first time DTU ever saw such a big collaboration. The two days saw an explosion of *talent* and showmanship from every corner of Delhi and further. Around 3000 zealous and talented people battled it and the selected ones were shot to be aired on TV in our own auditorium and OAT!



Hindi poetry aficionados were in for a special treat on 12<sup>th</sup> April, at the KaviSammelan, held on the occasion of 75<sup>th</sup> anniversary of the college, where poets such as PratapFaujdar, Rasik Gupta, PK Azad, Sumit Mishra and Priyanka Rai narrated some of their best creations. PratapFaujdarji is one of the most famous and admired poets of present generation. His unique style of reciting poems created bouts of laughter in the auditorium.

DTU saw another new addition to its events where the honorable IAS and IPS officers of Delhi graced us by their presence. They gave a splendid presentation on women safety for the youngsters of DTU. Moreover, they educated them about their recent women safety app launch. It was followed by a KaviSammelan by renowned poets.

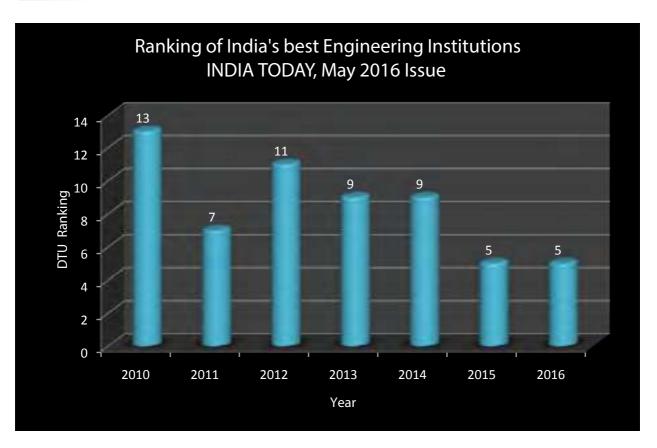
For our beloved seniors from BTech, MTechand MBA, the council took an inimitable step to organize a Farewell week, a fiesta devoted to the years spent in DTU to reminisce the joyous moments. The various events included 'Scribbling Day' where

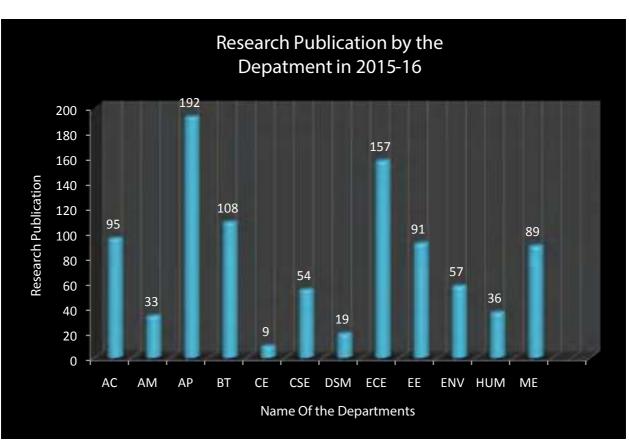




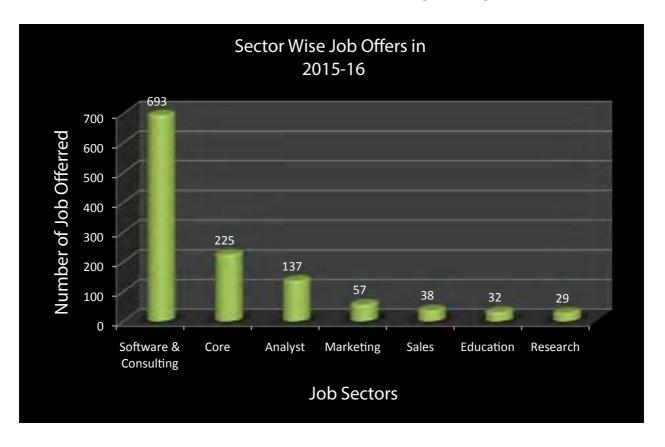
their special ones scribbled their affection on their T-shirts as a memory forever; 'Light it up' wherewish lanterns flooded the night sky of DTU; 'Prom night' a musical venture where the seniors danced their heart out with their beloved ones; 'DJ Night' where everyone danced along with full zeal for one last time and 'DTU Roast' which filled the auditorium with laughter and humor. Mr. NalinChoudhary, the Cultural Secretary of DTU mentioned that he was glad they could give such dynamic farewell to the seniors of BTech, MTech and MBA as it had never happened before.

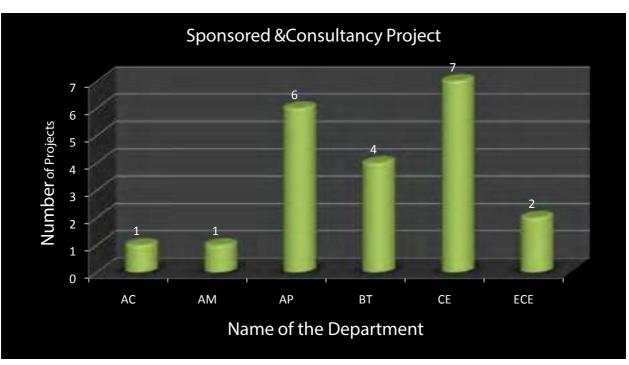
It wouldn't be wrong to say that that we are blessed to have such an ambitious council which is willing to go to extremes to provide us with such wonderful and countless events and activities.





# Sector Wise Job Offers in 2015-2016 Sponsored & Consultancy Projects





## 1 Organization and Administration

### 1.1 Court

### List of members of the Court, DTU.

As per Delhi Technological University Act 6 of 2009 read with section 20, following persons are the members of the Court, DTU.

- a) His Excellency Lt.Governor, Govt. of NCT, Delhi, Shri Najeeb Jung, the Chancellor.
- b) Hon'ble Vice Chancellor, Prof. Yogesh Singh
- Five eminent persons in the discipline of basic and applied science, engineering, technology and management, nominated by the Government.
- d) Principal Secretary or Secretary (Finance) to the Government ex-officio.
- e) Principal Secretary or Secretary (Higher Education) to the Government exofficio.
- f) Principal Secretary or Secretary (Technical Education) to the Government ex-officio.
- g) A representative of the University Grants Commission.
- h) A representative of All India Council for Technical Education established under the All India Council for Technical Education Act, 1987 (52 of 1987).
- i) Registrar of the University.

The term of the office of the nominated members of the Court other than Ex-Officio members, shall be three years.

## 1.2 The Planning Board

In exercise of the powers conferred under DTU Act, 2009, Section 23 (2) sub clause-(xii) read with Section (12) of the DTU (First) Statute 2009, the BOM of DTU constituted the Planning Board of the University as under: -

- Prof. Yogesh Singh, Vice Chancellor, DTU Chairman
- 2. Prof. Pankaj Jalote, Director, IIIT, Delhi Member
- Shri Ashok Khurana, Former DG, CPWD Member
- 4. Dr. M.K. Hada, Advisor-I, AICTE Member
- 5. Representative of UGC, not below the level of Jt. Secretary Member
- 6. Secretary DTTE/Director DTTE Member
- 7. Prof. Sanjay Dhande, Former Director, IIT, Kanpur Member
- 8. Col. Neeraj Suri (Retd.), Registrar, DTU Secretary

## 1.3 Board of Management

S. No.	Name	Position in the Board
1	Prof.Yogesh, Vice Chancellor, DTU	Member
2	Prof. S. K. Garg, Pro Vice Chancellor, DTU	Member
3	Principal. Secretary, Technical Education, Govt. of NCT Delhi	Member
4	Principal Secretary, Higher Education, Govt. of NCT Delhi	Member
5	Prof. G.K. Mehta, Eminent Member (Applied Science)	Member
6	Sh. K.L. Chugh, Eminent Member (Engineering.)	Member
7	Sh. J.V. Ramamurthy, Eminent Member (Management)	Member
8	Dr. Arbind Prasad, Eminent Member (Industry)	Member
9	Prof.Vikas Rastogi Professor, DTU	Member
10	Principal Secretary Finance, Govt. of NCT Delhi	Member
11	Prof. Vishal Verma, Dean-Academic (PG), DTU	Member
12	Prof. H.C. Taneja, Dean (A & IA), DTU	Member
13	Prof. A.K. Gupta, HoD, Environment Engg. Deptt, DTU	Member
14	Col. Neeraj Suri (Retd.), Registrar, DTU	Secretary

## **1.4 Finance Committee**

S. No.	NAME	Position in the Board
1	Prof.Yogesh Singh, Vice Chancellor, DTU	Chairman
2	Sh. S.N. Sahai Principal Secretary (Finance), GNCT of Delhi, New Delhi	Member
3	Smt. Punya Salila Srivastava Principal Secretary, Department of Training & Technical Education, GNCT of Delhi, Muni Maya Ram Marg, Pitam Pura, Delhi	Member
4	Sh. J.V. Ramamurthy, President & Chief Operating Officer, HCL Infosystems, E-4, 5, 6, Sector-11, Noida — 201 301	Member
5	Prof. S. K. Garg, Pro Vice Chancellor, DTU	Member
6	Col. Neeraj Suri (Retd.) Registrar, DTU.	Member
7	Shri Nand Kishore, Controller of Finance, DTU	Member Secretary

## 1.5 Academic Council

S. No.	Name & Designation	Position in the Academic Council
1	Prof. Yogesh Singh, Vice Chancellor, DTU vcdtu@dce.edu	Chairman
2	Prof. S.K. Jain, Vice Chancellor, Mata Vaishno Devi University Jammu, skjain51@hotmail.com	Member (Management)
3	Mr. O.P. Bhutani B-86, Surajmal Vihar, Delhi, opb@bhel.in, opb@bhelindustry.com	Member (Engineering)
4	Prof. C.R. Babu, Professor, Emiritus & Former Pro Vice Chancellor, University of Delhi, crb26@hotmail.com	Member (Applied Sciences)
5	Prof. Vir Singh, Department of Physics, IIT, Roorkee, virpbfph@iitr.ac.in	Member (UGC)
6	Prof. B.J. Alappat, Department of Civil Engg., IIT Delhi, bjalappat@yahoo.com	Member (AICTE)
7	Mr. Sanjeev Kumar Gupta, Managing Director (Corporate Affairs) M/S Accenture Services Pvt. Ltd., Gurgaon, sanjeev.gupta@accenture.com	Member (FICCI)
8	Prof. S.K. Garg, Pro Vice Chancellor, DTU, <a href="mailto:skgarg@dce.ac.in">skgarg@dce.ac.in</a> , skgarg@dce.ac.in, skgarg63@yahoo.co.in	Member
9	Prof. Vishal Verma, Dean Academic (PG), DTU, verma@dce.edu	Member
10	Prof.Madhusudan Singh, Dean Academic (UG), DTU, madhusudan@dce.ac.in	Member
11	Prof. Ashutosh Trivedi, Dean (IRD), DTU atrivedi@dce.ac.in	Member
12	Prof. Vikas Rastogi, Dean (SW), DTU rastogivikas@yahoo.com	Member
13	Prof. H.C. Taneja, Dean (A & IA), DTU, dean_aia@dce.ac.in	Member
14	ProfR. C. Sharma, HoD (Applied Chemistry), DTU, rsmishra@dce.ac.in	Member
15	Dr. Sangita Kansal, HoD (Applied Mathematics), DTU, Sangita_kansal15@rediffmail.com	Member
16	Prof. D. Kumar, HoD (Biotechnology), DTU , dkumar@dce.ac.in	Member
17	Prof. S.C. Sharma, HoD (Applied Physics), DTU, suresh321sharma@gmail.com	Member
18	Prof. A. K. Gupta, HoD (Env. Engg.), DTU, akgupta@dce.edu	Member
19	Dr. Seema Singh, HoD (Humanities), DTU seemasinghdce@yahoo.com	Member
20	Prof. P.K. Suri, HoD (DSM), DTU, pks.suri@gmail.com	Member
21	Prof. P.R. Chadha, HoD (E & C), DTU prchaddha@dce.ac.in	Member
22	Prof. R.S. Mishra, HoD (Mechanical & Production Engg.), DTU	Member
23	Prof. O.P. Verma, HoD (Comp. Sc. Engg.), DTU, opverma@dce.ac.in	Member
24	Prof. Madhusudan Singh, HoD (Elec. Engg.), DTU, madhusudan@dce.ac.in	Member

S. No.	Name & Designation	Position in the Academic Council
25	Prof. Nirendra Dev, HoD (Civil Engineering), DTU, nirendradev@dce.ac.in	Member
26	Dr. A.K. Madan, Associate Prof., Mech. Engg. Deptt., DTU	Member
27	Dr. M.S. Ranganathan, Assistant Prof., Mech. Engg. Deptt., DTU	Member
28	Prof. Vipin, Controller of Examination, DTU, verma@dce.edu	Member
29	Col. Neeraj Suri (Retd.), Registrar, DTU, registrardtu@dce.ac.in	Member Secretary

The term of members of the Academic Council other than Ex-Officio members shall be three years.

## **1.6 Administration**

S. No.	Name	Designation
1	His Excellency, Lt. Governor Govt. of NCT Delhi, Sri Najeeb Jung	Chancellor
2	Prof. Yogesh Singh	Vice Chancellor
3	Prof. S. K. Garg	Pro - Vice Chancellor
4	Prof. Madhusudan Singh	Dean Academic (UG)
5	Prof. Vishal Verma	Dean Academic (PG)
6	Prof. Ashutosh Trivedi	Dean (IRD)
7	Prof. Vikas Rastogi	Dean (SW)
8	Prof. H. C. Taneja	Dean (A & IA)
9	Col Neeraj Suri	Registrar
10	ProfR. C Sharma	HoD (Applied Chemistry)
11	Dr. Sangita Kansal	HoD (Applied Mathematics)
12	Prof. D. Kumar	HoD (Biotechnology)
13	Prof. S.C. Sharma	HoD (Applied Physics)
14	Prof. A.K. Gupta	HoD (Environment Engineering)
15	Dr. Seema Singh	HoD (Humanities)
16	Prof. P.K. Suri	HoD (DSM)
17	Prof. P.R. Chadha	HoD (E & C)
18	Prof. R.S. Mishra	HoD (Mechanical & Production Engineering)
19	Prof. O.P. Verma	HoD (Computer Science Engineering)
20	Prof. Madhusudan Singh	HoD (Electrical Engineering)
21	Prof. Nirendra Dev	HoD (Civil Engineering)
22	Dr. Narendra Kumar	Chief Warden
23	Dr. A.K. Srivastava	Director Physical Education
24	Dr. Rama Kant Shukla	Librarian
25	Mr. Vimal Jain	Executive Engineer

S. No.	Name	Designation	
26	Sh. Nand Kishore	DR (F&A) (On Deputation)	
27	Dr. Ravinder Kaushik	Assistant Registrar	
28	Dr. Vivek Tripathi	Assistant Registrar	
29	Sh. Anil Kumar	Assistant Registrar	
30	Dr. Lokesh Garg	Assistant Registrar	
31	Sh. B.S. Rawat	Assistant Registrar	

## 1.7 Internal Quality Assurance Cell (IQAC)

S. No.	Name	Designation
1.	Hon'ble Vice Chancellor, Prof. Yogesh Singh	Chairperson
2.	Prof. Narendra Kumar, Dept. of Electrical Engineering, Director (IQAC)	Member Secretary
3.	Prof. S.k Garg, Pro Vice Chancellor	Member
4.	Prof. Vishal Verma, Dean (PG)	Member
5.	Prof. Madhusudan Singh, Dean (UG)	Member
6.	Dr. Vipin, Controller of Exams.	Member
7.	Prof. Nirendra Dev, Head, Dept. of Civil Engineering	Member
8.	Col. Neeraj Suri, Registrar	Member
9.	Sh. Manoj Sethi, Programmer, Dept. of Computer Engineering, Associate Director (IQAC)	Member
10.	Sh. Rajesh Rohilla, Dept of E&C, Associate Director (IQAC)	Member
11.	Dr. Rajan Yadav, Associate Professor, Associate Director (IQAC)	Member
12.	Prof. S.G. Deshmukh,Director, IITM Gwalior	External Expert Member
13.	Sh. Kumar Gupta, Managing Director (Corporate Affairs), Accenture Services pvt. Ltd., Gurgaon	External Expert Member
14.	Sh. Arun Gupta, Alumni, C-10/6, Sector-17, Rohini, Delhi.	External Expert Member

## 2 Academic and Non-academic Staff

## 2.1 Academic Staff

(As on 31st March, 2016)

S. No.	Department	Prof.	Assoc. Prof.	Asstt. Prof.	Prof. (on contract)	Asstt. Prof. (on Contract)	Progra- mmer	Total
1.	Applied Chemistry	02	01	08	00	00	00	11
2	Applied Mathematics	01	02	08	00	01	00	12
3	Applied Physics	02	02	09	00	02	00	15
4	Biotechnology	00	02	03	01	05	00	11
5	Civil Engineering	09	05	10	00	01	00	25
6	Computer Science and Engineering	02	04	10	00	06	00	22
7	Delhi School of Management	01	01	03	01	02	00	08
8	Electronics and Communication Engineering	02	05	14	00	06	00	27
9	Electrical Engineering	07	10	10	00	01	00	28
10	Environmental Engineering	00	00	04	00	01	00	05
11	Humanities	00	01	03	00	00	00	04
12	Mechanical Engineering	08	11	20	00	10	00	49
13	Central Workshop	00	01	00	00	00	00	01
14	Workshop	00	01	01	00	00	00	02
15	Computer Centre	00	00	00	00	00	02	02
	Total	34	46	103	02	35	02	222

## 2.2 Non-academic Staff

Adn	Administrative Block		Non-Technical			Total
Peri	manent/ Deputation	Contract	Permanent/ Deputation	Contract		
1	Sr. Accounts Officer (on Deput.)	01	00	00	00	1
2	Accounts Officer (on Deput.)	02	00	00	00	2
3	Assistant Accounts Officer (on Deput.)	03	00	00	00	3
4	Section Officer (On Deput.)	00	01	00	00	1
5	Chief Store Keeper	01	00	00	00	1
6	Assistant Store Keeper	00	02	00	00	2
7	Draughtsman	01	00	00	00	1
8	Foreman	08	00	00	00	8
9	Console Operator	02	00	00	00	2
10	Sr. Mechanic	00	00	22	03	25
11	Sr. Mechanic GP-I	00	00	00	09	9

Adn	ninistrative Block	Non-Tech	nical	Technical Contract		Total
Perr	nanent/ Deputation	Contract	Permanent/ Deputation			
12	Sr. Mechanic GP-II	00	00	00	05	5
13	Sr. Mechanic GP-III	00	00	00	03	3
14	Sr. Mechanic GP-V	00	00	00	04	4
15	Sr. Mechanic GP-VI	00	00	00	01	1
16	Jr. Mechanic	00	00	15	80	23
17	Counter Assistant	00	00	03	02	5
18	Lab Attendt.	00	00	00	00	0
19	Library Attendt.	01	00	00	00	1
20	Assistant Librarian	00	01	00	00	1
21	PS to VC	00	01	00	00	1
22	Senior Office Assistant	00	02	00	00	2
23	Junior Office Assistant	00	36	00	00	36
24	Office Assistant	00	04	00	00	4
25	Assistant Programmer	00	03	00	00	3
26	Network Assistant	00	02	00	00	2
27	Technical Assistant	00	00	00	05	5
28	Junior Technical Assistant	00	00	00	21	21
29	SO to VC	00	01	00	00	1
30	Contractor	00	01	00	00	1
31	Documentalist	00	01	00	00	1
32	Gest. Operator3	01	00	00	00	1
33	Stenographer	00	01	00	00	1
34	Stenographer Grade - II (On Deput.)	01	00	00	00	1
35	Multi Tasking Staff	03	00	00	00	3
36	Messenger	01	00	00	00	1
37	Daftri	01	00	00	00	1
38	Chowkidar	04	00	00	00	4
39	Farash	02	00	00	00	2
40	Peon	05	00	00	00	5
41	Mali	01	00	00	00	1
42	Driver	00	03	00	00	3
43	Safai Karamchari	12	00	00	00	12
	Total	50	59	43	61	210

## 3. Academic Programmes

## **3.1 Undergraduate Courses**

S. No.	Department	B. Tech. Programme	Duration	Total No. Intake	Year of starting	Total No. Enrolled
1	Applied Chemistry	Polymer Science & Chemical Technology	4 Years	61	1999	61
2	Applied Mathematics	Mathematics and Computing	4 Years	95	2009	95
3	Applied Physics	Engineering Physics	4 Years	95	2009	95
4	Bio-technology	Bio-technology	4 Years	33	2004	33
5	Computer Science	Computer Engineering	4 Years	138	2009	138
	and Engineering	Information Technology	4 Years	94	2003	94
		Software Engineering	4 Years	93	2009	93
6	Civil Engineering	Civil Engineering	4 Years	121	1986	121
7	Electronics & Communication Engineering	Electronics & Communication Engineering	4 Years	184	1986	184
8	Electrical	Electrical Engineering	4 Years	139	1986	139
	Engineering	Electrical & Electronics Engineering	4 Years	94	2009	94
9	Environmental Engineering	Environmental Engineering	4 Years	61	1999	61
10	Mechanical Engineering	Mechanical Engineering	4 Years	185	1986	185
		Production & Industrial Engineering	4 Years	47	1999	47
		Auto-Mobile Engineering	4 Years	93	2009	93
	Total			1533		1533
	Total NRI candidate					69
	Grand Total-					1602

## **3.2 Post Graduate Courses**

SI. No.	Department		M. Tech. Programme	Duration	Sanctioned annual intake	Year of starting	Total student strength
1	Applied Chemistry	(a)	Polymer Technology	2 years	25	1986	20
2	Applied Physics	(a)	Nano Science & Technology	2 years	25	2009	20
		(b)	Nano Nuclear science & Technology	2 years	23	2012	18
3	Biotechnology	(a)	Bioinformatics	2 years	25	2010	20
		(b)	Bio Medical Engineering	2 years	23	2013	18
		(c)	Industrial Biotechnology	2 years	24	2013	19
4	Computer	(a)	Computer Science & Engg.	2 years	25	2009	20
	Science and	(b)	Software Engg.	2 years	25	2009	20
	Engineering	(c)	Information Technology	2 years	25	2009	20
5	Civil Engineering	(a)	Civil Engg. (Geotechnical Engineering)	2 years	24	1965	20
		(b)	Civil Engg. (Hydraulic & Water Resource Engg.)	2 years	25	1989	19
		(c)	Civil Engg. (Structural Engineering)	2 years	25	1965	20
6	Electronics & Communication Engineering	(a)	Signal Processing & Digital Design	2 years	25	1989	20
		(b)	Microwave & Optical Communication	2 years	25	2009	20
		(c)	VLSI Design and Embedded System	2 years	25	2009	20
7	Electrical Engineering	(a)	Electrical Engg. (Control & Instrumentation)	2 years	25	1989	20
		(b)	Electrical Engg, (Power System)	2 years	25	2009	20
8	Environmental Engineering	(a)	Environmental Engineering	2 years	25	2013	20
9	Mechanical Engineering	(a)	Mech. Engg. (Thermal Engineering)	2 years	25	1971	20
	3 3	(b)	Mech. Engg. (Production Engg.)	2 years	25	1971	20
		(c)	Mech. Engg. (Renewable Energy Tech.)	2 years	22	2013	18
		(d)	Mech. Engg. (Computational Design.)	2 years	18	2013	18
10	Delhi School of	(a)	MBA	2years	91	2009	63
	Management	(b)	EMBA	2years	24	2009	18
						Total	511

3 Academic Programmes

## 3.3 Ph.D. Programmes ok

SI. No.	Course	Branch	Admmision
1.	Ph.D.	Electronics & Communication Engineering (EC)	4
2.	Ph.D.	Computer Engineering and Software Engineering	3
3.	Ph.D.	Mechanical Engineering and Production & Industrial Engineering	9
4.	Ph.D.	Electrical Engineering	6
5.	Ph.D.	Civil Engineering (CE)	0
6.	Ph.D.	Environmental Engineering (ENE)	4
7.	Ph.D.	Applied chemistry, Polymer Technology and Chemical Engineering	2
8.	Ph.D.	Information Technology (IT)	0
9.	Ph.D.	Bio-Technology (BT)	0
10.	Ph.D.	Humanities	0
11.	Ph.D.	Applied Physics	3
12	Ph.D.	Applied Mathematics	0
13.	Ph.D.	Management	2
		Total	33

### 3.4 TRFs and PDFs

# Teaching cum Research Fellowship (Doctoral & Post Doctoral)

The University offers 25 Teaching Cum Research Fellowships [20 TRFs (Doctoral) and 05 Post Doctoral (PDFs)] to attract best of minds to ensure high academic standards and encourage research & innovation in area of relevance to industry and society.

## **4 Academic Departments**

## 4.1 Department of Applied Chemistry

Academic Staff: 10; Students Admitted: UG - 63, PG - 15, PhD - 02; Publications: Journals - 62, Book- 00, Conference/Symp.- 33

### 1. Salient Features

Established in 1941 as Delhi Polytechnic, Department of Applied Chemistry was also established as a subsidiary department to cater to the needs of engineering students. It continued as a helping department at old St. Stephens College at Kashmere Gate till 1986 when a new postgraduate course of M.E Polymer Technology was started in the department after the due approvals of then AICTE and University of Delhi. In 1997, the department of Applied Chemistry was shifted to the new campus of Delhi College of Engineering. In 1998, the department had started a new four year course of B.E Polymer Science and Chemical Technology. Till date, the Department has produced nearly 60 Ph.Ds, 230 M.E./M. students and 400 B.E./BTech students. The teachers of the Department have published more than 300 research papers in national and international journals of repute. The Department has well – established laboratories in Applied Chemistry, Polymer Science and Chemical Technology along with several research laboratories and one CAD lab. The department is actively involved in research in the areas of Chemistry, Polymer Science and Chemical Technology. The department has collaborations with reputed national and international industries, institutes and universities.

### 2. Academic Staff

### **Professors:**

**Dr. R.C.Sharma** Ph.D. Electro Solution Chemistry, Molten Electrolytes, Email rchsharma@dce.ac.in

### **Associate Professors:**

**Dr. Archna Rani,** Ph.D. Organic Chemistry, Email archanarani@dce.ac.in

#### **Assistant Professors:**

**Mr. Sudhir Gopalrao Warker,** M.Sc. Inorganic Chemistry & Co-ordination Polymers, Email sudhirwarkar@gmail.com

**Dr. Ram Singh**, Ph.D.Bioorganic Chemistry, Natural Products and Total Synthesis,

Email singh\_dr\_ram@ yahoo.com

**Dr. Richa Srivastava**, Ph.D. Organic Synthesis, Supramolecular Chemistry, Biomimetic Reactions, Email sri\_richa@rediffmail.co

**Dr. Saurabh Mehta**, Ph.D. Organic synthesis (conventional and \A0combinatorial), bioorganic \A0and medicinal chemistry, etc. Email saurabh.dtu@gmail.com

**Dr. Anil Kumar**, Ph.D. Bioinorganic Chemistry, Solar Cell, Cell Imaging molecules, Electronic structure calculation using G03 suite program, Email asl213@gmail.com

**Dr. Deenan Santhiya**, Ph.D. Nano-Biotechnology, Biosynthesis of nanopatterned materials, Environmental Biotechnology,\AOSurface\AOchemistry, Email deenan.santhiya@gmail.com

**Dr. Raminder Kaur**, Ph.D. Reaction Engineering, Polymer Composites, Bio-based Polymers, Email raminderkaur@dce.ac.in

**Dr. Roli Purwar,** Ph.D., Biopolymers, Polymeric\ A0membranes, Ecofriendly\ A0Processing\ A0of, Textiles, Natural Materials and their Application, Medical\ A0Textiles,EffluentTreatment, Email roli. purwar@gmail.com

# 3. Honors and Awards to Faculty Members

Nil

## 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Dr. Saurabh Mehta	University of Miami, Florida, USA	Training & Research	Jan. 2014 Jan. 2016

# 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Faculty Name	Details of Conference/Seminar/ Symposia / Workshop/ Guest Lecture	Venue	Dates
Prof. D. Kumar	India-Japan science seminar and a keynote speech by 2001 Nobel Laureate in chemistry, Dr. Noyori Ryoji	IIT New Delhi	Feb 26, 2015
	National seminar on "Recent advances in physics" (NSRAP-2015).	DTU	Feb 16, 2015
	International conference on recent trends in mechanical, material science, manufacturing, automobiles, aerospace, engineering and applied physics (AMAEAP-2016)	JNU New Delhi	30 April 2016.
	Ist National Conference on Emerging Trends & Future Challenges in Chemical Sciences (ETFC-2016).	Kirorimal College, University of Delhi	3-4 Feb 2016
Dr. Richa Srivastava,	The 102nd Indian Science Congress 2015	University of Mumbai	Jan 3-7 2015
Dr. Ram Singh	National Symposium on "New Horizons in Chemical Sciences"	DTU	Feb 15, 2015
	The 102nd Indian Science Congress 2015	University of Mumbai	Jan 3-7 2015
	National Symposium on "New Horizons in Chemical Sciences"	DTU	Feb 15, 2015
	102nd Indian Science Congress 2015	University of Mumbai	3-7 Jan 2015
	4th National Symposium on Recent Advances in Analytical Sciences	Jamia Hamdard, New Delhi	Feb, 9-10, 2015.
	9th National Conference on Solid State Chemistry and Allied Areas	University of Delhi	May 8-10, 2015.
	National Seminar on Innovative, Advance Research In Biomedical and Environmental Dynamics	Dyal Singh College	Oct 09-10, 2015
	National Conference on Interdisciplinary Approaches in Chemical	Jamia Millia Islamia	Dec 16, 2015.
	Vth International Symposium on "Fusion of Science & Technology", ISBN: 978-93-84935-64-1	New Delhi, India	Jan 18-22, 2016
	Bilayer composites wound dressing from Bombyx mori, BiTerm 2016	IIT Delhi	April 15-17 2016
	1st National Conference on Emerging Trends and Future Challenges in Chemical Sciences	Kirori Mal College	Feb 3-4, 2016
	DU-JAIST Indo-Japan Symposium on Chemistry of Functional Molecules/ Materials	University of Delhi	Feb 26-27, 2016
	6th International Symposium on "Current Trends in Drug Discovery & Research	CSIR-CDRI, Lucknow	25-28 Feb, 2016
	National seminar on "Role of analytical sciences in Sustainable Development".	Hansraj College, University of Delhi	March 4-5 2016
	National Conference on "Global Challenges – Role of Science & Technology in Imparting their Solutions (GCRSTS-2016)	Technological Institute of Textile & Sciences	Apr 23-24, 2016

Deenan Santhiya	18th Annual Meeting of the American-Society-of-Gene-and-Cell-Therapy	USA	May 2015
Dr. Roli Purwar	International Conference on Advanced Polymers Biomaterials, Bioengineering & Nano Drug Delivery, APA- 2015	Rajkot, India.	29-31 October
	Vth International Symposium on "Fusion of Science & Technology", ISBN: 978-93-84935-64-1	New Delhi, India	January 18-22, 2016
	Bilayer composites wound dressing from Bombyx mori BiTerm 2016	IIT Delhi.	April 15-17, 2016
	Dextrose plasticized muga and tasar silk fibroin films for skin tissue engineering, BiTerm 2016	IIT Delhi.	April 15-17, 2016

## **6. Participation of Faculty in Short Term Courses**

Name of Faculty	Name of Courses	Place	Dates
Dr Richa Srivastava	Recent Trends in Geoenvironmental Engineering organized by during	Civil Engineering Department at DTU	April 18-22, 2016.
	Research & Publication	Department of Humanities, DTU	25-29 July 2016.
Dr. Roli Purwar	Automation in Manufacturing	Mechanical Engineering, DTU	04-15 May 2015.
	Automation in Manufacturing	Mechanical Engineering, DTU	04-15 May 2015.
Dr. R. Kaur Mr. S. G. Warkar	Automation in Manufacturing	Mechanical Engineering, DTU	04-15 May 2015.
	Automation in Manufacturing	Mechanical Engineering, DTU	04-15 May 2015.
Dr. Ram Singh	Recent Trends in Geoenvironmental Engineering organized by during	Civil Engineering Department at DTU	April 18-22, 2016.
	Research & Publication	Department of Humanities at DTU	25-29 July 2016.
	Automation in Manufacturing	Mechanical Engineering, DTU	04-15 May 2015.
Dr. Anil Kumar	Research & Publication	Department of Humanities at DTU	25-29 July 2016.
Dr. D. Santhiya Dr Richa	Research & Publication	Department of Humanities at DTU	25-29 July 2016.
Srivastava	Recent Trends in Geoenvironmental Engineering organized by during	Civil Engineering Department at DTU	April 18-22, 2016.
	Research & Publication	Department of Humanities, DTU	25-29 July 2016.
	Automation in Manufacturing	Mechanical Engineering, DTU	04-15 May 2015.

# 7. Conference/Seminar/Symposia/Workshops Organized by the Department

Nil

## 8. (i) Completed Sponsored Research Projects

Principal Investigator	Title of Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Dr. Ram Singh	Design and Synthesis of novel Imidazole and Triazole Derivatives as potential Anti- Alzheimeric Agents	CSIR, Govt of India	21,35,000
Dr. Deenan Santhiya	Biophysical studies on siRNA/cationic agent nano complexes for gene delivery application	DST, Govt. of India	18,50000/-
Dr. Roli Purwar	Development of Bioactive Nanocomposite Films from Silk Sericin for Food Packaging	DST, Govt. of India	7,00,000/-

## (ii) Continuing Sponsored Research Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees`)
Dr. Anil Kumar	Synthesis, Characterization and Application of m-Benziporphodimethene	DST, Govt. of India	2650000/-
Dr Jay Singh	Nanostructured Metal Oxides Based Biosensors for Clinical Diagnostics Application	DST- INSPIRE Faculty Award (AORC scheme 2013)	35,00000
Dr Chandra Mouli Pandey	Graphene Based Lab-on-Chip Platforms for Detection of Cancer Biomarkers	DST- INSPIRE Faculty Award (AORC scheme 2013)	35,00000
Dr. Raminder Kaur (PI); Dr. R.S. Walia (Co-PI)	Development of Environment Friendly Rigid Polyurethane Foam for Multipurpose Use	DRDO, Govt. of India	32,34,000/-

# 9. Important Professional Affiliations:

### Dr. Ram Singh

- International Science Congress Association, India – Fellow Member (ISCA-FM-99)
- International Society for Neurochemistry-Full Member, Account Number (14075)
- The Indian Science Congress Association, Kolkata, India – Life Member (L12816)
- Indian Academy of Neurosciences Life Member (LS-182)
- International Brain Research Organization – Life Member
- Indian Society of Analytical Scientists Life Member (LMT2008/18)
- Association of Chemistry Teachers Life Member (LM-947)
- World Association of Young Scientist Member
- Scientists Without Borders Member
- Brilliant Uniflow of Talents and Intelligence (BUTAI): Honorary President

- Asian Journal of Chemistry: Member, Editorial Board (from Jan 2010)
- American Journal of Organic Chemistry: Member, Editorial Board (from Dec 2011)
- Organic Chemistry Letters: Editorial Advisory Board (from August 2013)
- CIBTech Journal of Pharmaceutical Sciences (CJPS) (from January 2014)

#### Dr. Richa Srivastava

- The Indian Science Congress Association, Kolkata, India – Life Member
- Indian Society of Analytical Scientists Life Member
- Research Journal of Biotechnology Life Member

#### Dr Roli Purwar

- Textile Engineers Society
- · Indian Plastic Institute
- Elastomer Technology Development Society
- Indian Rubber Institute

## 4.2 Department of Applied Mathematics Academic

Staff: 10, Students Admitted: UG 99, Ph.D.20, Publication: Journals: 21 Conference/Symp. 12

### 1. Salient Features

Mathematics is the base of all engineering as well as technological branches. A sound knowledge of mathematical tools makes a technocrat to excel in his profession. In fact the "Industrial Mathematics", a branch of Applied Mathematics, which is relevant for contemporary technological problems, is not only the queen of all sciences but is also the mother of all technologies. The Department of Applied Mathematics offer courses to undergraduate and postgraduate students of various engineering disciplines. The syllabi have been designed in the areas of Applied Mathematics, Computational Techniques and Statistics to impart sound knowledge of various mathematical tools and their applications in the engineering disciplines. Research Activities & Full Time Ph.D. Programs The department has the necessary expertise available in the following research areas of current interest: Information theory of its Applications, Graph theory, Numerical Simulation, Relativistic Cosmological Models, Complex Analysis, Algebra and Approximation Theory. A few full time Ph.D. scholarships are available in the above fields.

### 2. Academic Staff

#### **Professors**

Dr. H.C.Taneja, M.Sc, M.Phil, Ph.D., Information Theory hctaneja@rediffmail. com, hctaneja@dce.ac.in

#### **Associate Professors**

**Dr. Sangita Kansal (HOD)**, Ph.D., Category Theory and Petri nets, Sangita\_kansal15@ rediffmail.com

**Dr. Anjana Gupta,** M.Sc, M.Phil, Ph.D., Optimization Techniques Guptaanjana2003@yahoo.co.in

**Dr. L.N. Das**, M.Sc, Ph.D. Operations Research Indas@dce.ac.in

**Dr. Chandra Prakash Singh**, M.Sc, Ph.D. General Relativity and Cosmology, cpsphd@rediffmail.com

#### **Assistant Professors**

**Dr. Ramesh Srivastava**, M.SC, Ph.D., Numerical Simulation, rsrivastava@dce. ac.in

**Dr. Naokant Deo**, M.Sc, Ph.D., Approximation Theory, dr\_naokant\_deo@yahoo.com

**Dr. S.Sivaprasad Kumar**, M.Sc, M.Phil, Ph.D., Complex Analysis, spkumar@dce. ac.in

**Dr. Vivek Kumar Aggarwal,** M.Sc. (IIT Roorkee), Ph.D., (IIT Kanpur) Numerical Analysis Vivekkumar.ag@gmail.com

**Dr. Nilam**, Ph.D. Mathematical Modelling Rathi.nilam@gmail.com

## 3. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/Organization Visited	Purpose of Visit	Dates
Dr. H.C. Taneja	MNNIT Allahabad and NIT Trichy	Performance Auditor Under TEQIP II	2015
Dr. L. N Das	Utkal University, Vani Vihar, Bhubaneshwr	Conducting PhD Viva voce test	18/06/2016
Dr. Anjana Gupta	NITTTR, Chandigarh	Leadership development	12th to
		Workshop( UKIERI) by AICTE	14th October 2015
Dr. Anjana Gupta	NITTTR, Chandigarh	Leadership development	17th to 18th March
		Workshop( UKIERI) by AICTE	2016 2016

# 4. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Name of Faculty	Details of Conference/Seminar/Symposia/ Workshops/Guest Lecture	Venue	Dates
Prof. H.C. Taneja	9th International Triennial Calcutta Symposium on Probability and Statistics	Calcutta University	Dec 28-31, 2015
Dr. Laxminarayan Das	National Seminar on Recent Advances in Physics (NSRAP-2015) Depart,emt of Applied Physics, DTU, 16th February 2015.	DTU, Admin. Conference Hall	Feb 16, 2015
	TEQIP-II sponsored Faculty Development Programme on "Automation in Manufacturing (AIM-2015),	·	May 04-15, 2015.
	TEQIP-II sponsored one week Faculty Development Programme on Advances in Information Security (AIS-2016), Organized by Department of Computer Science & Engineering, Delhi Technological University, Delhi, January 18-22, 2016.	Department of Comp. Sc. DTU	Jan 19-22, 2016
	TEQIP-II sponsored one week Faculty Development Programme on "Recent Trends in Pattern Analysis and Machine Learning", organized by Department of Electronics and Communication Engineering, Delhi Technological University, Delhi, July 11-to 15, 2016.		July 11-15, 2016

Dr. S. Sivaprasad kumar	National Conference on Emerging Trends in Mathematics and Mathematical Sciences (NCETMMS-2015)		Dec 17-19, 2015
	One day Workshop on Curriculum revision and Development-2006, organized by department of applied Mathematics DTU, on April 22, 2016, participated as an expert/Resource person and reviewed the computation syllabus.		April 22, 2016
SangitaKansal	Delivered an invited lecture on "Embedding of a safe Petri Net into a Boolean Petri net"in NSRDPAM-2015	1	Sep 12-13, 2015
	"Basic results on Crisp Boolean Petri Nets" in M3HPCST-2015	RKGIT, Ghaziabad	Dec 27- 29, 2015
Dr. Anjana Gupta	ONE DAY CURRICULUM REVISION & DEVELOPMENT WORKSHOP for B.Tech (Mathematics & Computing) (Under TEQIP - II	DTU	April 22, 2016
	3rd Leadership development Workshop (UKIERI) by AICTE	NITTTR, Chandigarh	March 17- 18, 2016
	4th Leadership development Workshop( UKIERI) by AICTE	NITTTR, Chandigarh	Oct 12-14, 2015

## **5. Participation of Faculty in Short Term Courses**

Name of Faculty	Name of Course	Place	Dates
H.C. Taneja	<ol> <li>Management Capacity Enhancement Program</li> <li>Statistical Methods &amp; a Brief on LaTex</li> </ol>	IIM Raipur DTU Delhi	Oct 12 -17, 2015 July 18- 22, 2016
Dr. Laxminarayan Das	TEQIP-II sponsored one week Faculty Development Program- "Statistical Methods & a brief on LaTex", organized by Department of applied Mathematics, Delhi Technological University, July 18-22, 2016.	annexure, Smart Class Room, and SbFF5, Delhi	July 18- 22, 2016
Dr. S. Sivaprasad kumar	TEQIP-II sponsored Faculty Development Programme on "Automation in Manufacturing (AIM-2015),	Department of Mechanical, Production and Industrial Engineering, Delhi Technological University, Delhi,	May 04- 15, 2015.
	TEQIP-II sponsored one week Faculty Development Program- "Statistical Methods & a brief on LaTex", organized by Department of applied Mathematics, Delhi Technological University, July 18-22, 2016.	DTU	July 18- 22, 2016

Dr. Sangita Kansal	One week FDP on "Statistical methods & a brief on LaTex	DTU, Delhi	July 18- 22, 2016
	Worked as chairperson in One week FDP on "Statistical methods & a brief on LaTex	DTU, Delhi	July 18- 22, 2016
	Worked as chairperson in One day workshop on Curriculum revision& development.	DTU, Delhi	April 22, 2016
	Worked as an Expert person in One day workshop on Curriculum revision& development.	DTU, Delhi	April 22, 2016
	One week short term course on "Soft Computing"	DCRUST, Murthal(Sonepat)	Sep. 07- 11, 2015
Dr. Anjana Gupta	FDP under TEQIP-II On "Statistical Methods & a brief on LaTeX"	Department of Applied Mathematics, DTU	July 18- 22, 2016

## 6. Visitors to the Department

NIL

# 7. Conference / Seminar / Symposia / Workshops Organized by the Department

Organizing Secretary	Details of Conference/Seminar/Symposia/Workshops/ Guest Lecture	Venue	Dates
Dr. Anjana Gupta	One day Workshop on Curriculum revision and Development-2006, organized by department of applied Mathematics DTU, on April 22, 2016, participated as an expert/Resource person and reviewed the computation syllabus.	Mathematics Department,	April 22, 2016
Dr. S. Sivaprasad Kumar	TEQIP-II sponsored one week Faculty Development Program- "Statistical Methods & a brief on LaTex", organized by Department of applied Mathematics, Delhi Technological University, July 18-22, 2016.		18-22, July 2016

## 8. List of Candidates Awarded Ph.D. Degree

Name of Students	Name of Supervisor	Nationality	Gender (Male/ Female)	Category (Gen/SC/ST/ PD)	Title of Thesis
Virendra Kumar	Dr. S. Sivaprasad Kumar	INDIAN	Male	Gen	Differential Subordinations, Coefficients Estimate And Radius Constants Of Certain Analytic Functions

# 9. Important Professional Affiliations:

### Professor H. C. TANEJA

- Member American Mathematical Society.
  - Life member of the Indian Society for Information Theory and its Applications.
  - Life member of Indian Society of Technical Education.
  - Member International Association of Engineers (IAENG).
- Member Society For Industrial and Applied Mathematics (SIAM)
- Life member of Forum for Interdisciplinary Mathematics.

### Dr. Sangita Kansal

- Life member of "Ramanujan Mathematical Society".
- Life member of "Academy of Discrete Mathematics & Applications".

### Dr. S. Sivaprasad Kumar

- Life Member of Research Group in Mathematical Inequalities and Applications (RGMIA)
- Life Member of Indian Mathematical Society
- Life Member of Society for special functions and its applications

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## 4.3 Department of Applied Physics

Academic Staff: 13; Students Admitted: UG-94, PG- 45, Ph.D. 5; Publications: Journal Papers- 111, Conference/ Symp.-81; Ongoing Projects: 17, Patent 0

### 1. Salient Features

75 Years of tradition of excellence in Engineering & Technology Education, Research & Innovations, Delhi College of Engineering (DCE), (initially established as Delhi Polytechnic) came into being in the year 1941 to cater the needs of Indian industries. In 1952, the college was affiliated with university of Delhi and started formal degree level programmes in various branches of engineering. Applied Physics Department is established to support academic program offered by all engineering departments. From July 2009, the DCE has become Delhi Technological University vide Delhi act 6 of 2009.

Applied Physics Department is a major department of Delhi Technological University providing cutting edge research, innovation and education in the emerging areas of science and technology. As a result, this department offers.

B.Tech. **Engineering Physics:** in This four year"B.Tech in Engineering Physics" program covers the various interdisciplinary areas in physical sciences and emerging areas of engineering such as Nano Science and Technology, Microelectronics, Quantum Photonics. Information systems and Robotics etc. The Department also introduced theconcept of Majors and Minors to cater the growing demand of industries and provide them a sound platform enabling them to pursue higher studies and research, hence specialize in fields of their choice. The program in

Engineering Physics equips students with the fundamental knowledge of physics together with problem solving skills and understanding, which allows them to seek innovative careers in today's fast changing technological age.

- M.Tech. in Microwave and Optical **Engineering:** Communication two year "M.Tech. (MOC)" is offered from Applied Physics Department in association with Electronics Communication Engineering and Department. This program is designed and developed as an outcome of the establishment of an advanced R&D; center called "TIFAC-CORE Center of Relevance and Excellence in Fiber Optics and Optical Communication" under Mission REACH program of Technology Vision 2020, Govt. of India. This program equips young engineers and scientist to design, develop and innovate the new and changing configuration of microwave and optical fiber based telecommunication systems and networks.
- iii) M.Tech. Nanoscience and Technology: This program is offered from Applied Physics Department from the academic year 2009-10. The curriculum has been designed in a manner so that students are trained to various aspects of nanomaterials, their latest development, synthesis and characterization including the design and development of nanoscale optical and electronic devices. This programme equips young engineers

and scientist with diverse background to excel in the emerging areas of nano science and technology. Students of M.Tech. (NST) have the opportunity to do their projects and internships at National Physical Laboratory under DTU-NPL collaboration program.

iv) **M.Tech.** Nucelar Science and **Engineering:** This course deals with designing, implementation and maintenance of different systems that are related to nuclear fusion and nuclear fission. Nuclear engineers are those singificant professionals who make this world a better place to live in for the mankind by harnessing the power of the atom and making it useful through transferring energy to power houses and business withour producing greenhouse gases.

# 2 Academic Staff: Professors:

**Dr. Suresh Chand Sharma,** M.Sc, M.Phil, Ph.D., Plasma Physics/Plasma Applications, Nanotechnology, High Power Microwave Devices, Dusty Plasma/Strongly Coupled Dusty Plasma, THz Radiation Emission/Short Pulse lasers, Email: suresh321sharma@gmail.com prof\_sureshsharma@dtu.ac.in

**Dr. Ravindra Kumar Sinha** (On Lien), M.Sc, Ph.D. Fibre optics, optical communication, nanophotonics:devices & components based on photonic crystals & metamaterials Email: rksinha@dce.edu dr\_rk\_sinha@yahoo.co.in

### **Associate Professors:**

**Dr. Rinku Sharma**, M.Sc, Ph.D. Email: rinkusharmagtbit@gmail.com

**Dr. Allam Srinivasa Rao**, Ph.D. Solid state spectroscopy and atmospheric sciences.

#### **Assistant Professors:**

**Mr. Vinod Singh,** M.Sc , Synthesis and characterization of functional nanomaterials

and explore their size dependent properties and applications, Email: vinod.phy@dce.edu, vinodsingh@dce.ac.in

**Dr. Ajeet Kumar,** Ph.D. Fiber optics, integrated optics, solar energy, Email: ajeet.phy@dce.edu ajeetdph@gmail.com

**Dr. Nitin Kumar Puri**, Ph.D. Nanostructured materials & thin films, high energy heavy ion beams induced structure modifications & atomicdisplacements, materialcharacterization (XRD, AFM, SEM, TEM), x-ray spectroscopy Email: nitin.phy@dce.edu nitinpuri2002@yahoo.co.in

**Dr. Amrish Kumar Panwar**, M.Sc, Ph.D. Energy storage & conversion devices, surface modification, wetting, adhesion, coating, & bio-compatible materials, thermoelectric materials, muliti-ferriocmaterials, nanotechnology Email: amrish.phy@dce.edu panwaramar@gmail.com

**Dr. M.Jayasimhadri**, Ph.D. Optical/fluorescent spectroscopy, solid state physics, material science, nanotechnology Email: jaya.phy@dce.edu jayaphysics@yahoo.com

**Dr. Yogita Kalra**, Ph.D. Fiber and integrated optics, nano photonics, photonic crystals and their device applications Email: yogita. phy@dce.edu dryogitakalra@gm

**Dr. Rishu Chaujar**, Ph.D. Semiconductor device modeling simulation, analysis of mosfets & hemts for RF & wireless applications Email: rishu.phy@dce. edu, rishuchaujar@rediffmail.com Dr. Mohan Singh Mehata, Ph.D. Flourescent spectroscopy, quantum dots, organic leds, thin films, Email: mohan.phy@dce.edu

**Dr. Pawan Kumar Tyagi,** Ph.D. Carbon nanotubes: field emitters, graphene synthesis, hpht diamonds, single crystal diamond synthesis. Email: pawan.phy@dce.edu tyagi\_pawan@yahoo.co.in pawankumartyagi@gmail.com

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# 3. Honors and Awards to Faculty Members

### Dr. Rishu Chaujar:

 YOUNG SCIENTIST AWARD for contribution in the field of Microelectronics, Venus International Foundation, Center for Advanced Research and Design (VIFRA-2015), 2015.

Dr. M.S. Mehata, Visiting Professor/Scholar, Chinese Academy of Science, DICP, China, 2015

## 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Prof. Suresh C.	BPIT, Delhi	Delivered an invited Talk in two days National Conference	Dec 28, 2015
Sharma	Dr. B.R. Ambedkar University, Agra	Delivered an invited Talk in a three days International workshop	Jan 23, 2016
	Centre for Professional Development in Higher Education, University of Delhi, Delhi	Delivered a lecture on "Plasma production, Technology, Applications, Growth and Field Emission properties of Graphene sheet" for Refresher course	June 20, 2016
Mr. Vinod Singh	Material Research Society, Boston, <b>Massachusetts,</b> USA	Paper presentation on "Hydrogenation properties of size selected Pd-C coreshell nanoparticles: Effect of core size and shell thickness" in MRS Fall Meeting and Exhibits 2015	Nov 29- Dec 4, 2015
Dr. M.S. Mehata	University of Strathclyde, United Kingdom	Co-operative research and tanning	July 4-8 2016
	NIT Durgapur	To deliver a invited talk in short term course	May 16, 2016
	University of Lucknow	To deliver a invited talk in conference	Jan, 15-18, 2016
	Kumaun University	To deliver a invited talk in conference	March 27- 29, 2016
Dr. Amrish K. Panwar	IIT Kharagour	Deliver a talk on "Overviews and application of lithium ion batteries" in workshop	16-18 May 2016
Dr. Pawan Kumar	Delhi University	To deliver a invited talk in conference ICMECH 2016	March 04, 2016
Tyagi	IOP Bhubaneswar	To deliver a invited lecture	July 12, 2016
	INMAS, DRDO, Ministry Of Defence, Delhi	Organized Students Lab Visit	Mar, 2016
Dr. Rishu	IIM Indore	To attend MCEP Programme	Nov, 2015
Chaujar	USA	Attended and presented 6 papers in Tech Connect Innovation World Conference and Expo held in Washington, USA	June , 2015

# **5.** Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Organizing Secretary/ Faculty name	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Prof S. C. Sharma	Delivered an invited Talk on "THz Radiation Emission from Free Electron Laser (FEL)" in one day Seminar organized by department of applied physics, DTU	DTU, Delhi.	March 22, 2016,
Diane Rosenbaum/ Mr. Vinod Singh	MRS Fall Meeting and Exhibits 2015	Boston, Massachusetts, USA	Nov 29- Dec 4, 2015
Dr. Rishu Chaujar, Dr. Yogita Kalra, Dr. Amrish K. Panwar	National work shop on power electronics (MNWPE-2015)	Department of Electrical Engineering, DTU	Nov 6-7, 2015
Dr. Amrish K. Panwar	International Conference on Materials Science & Technology (ICMTECH-2016),	Conference Hall, University of Delhi, India.	March 1-4, 2016
	Workshop on: 'Lithium ion battery Technology and Mathematical modeling"	VikramShila Complex, IIT Kharagpur, WB, India	May 16-18, 2016
Dr.M.S. Mehata	Workshop on Gaussian (Gaussian Inc. USA)	Chennai	29 Feb-4 March 2016
Dr.Rishu Chaujar	Attended Tech Connect Innovation World Conference and Expo held in Washington, USA and presented 6 papers.	Washington, USA	June 14- June 17 2015
	Member, Board of Advisory Committee, National Conference (IC GATE-2016), ManavRachna University, June 2016.	Manav Rachna University	June 2016.
	Convenor, One Day National Seminar on Frontiers in Applied Science and Technology (FAST-2016) organized by Department of Applied Physics, Delhi Technological University in association with IEEE EDS Delhi Chapter on March 22, 2016.	DTU	March 22, 2016.
	Coordinator, A National Level Championship: Workshop on Raspberry Pi in association with IIT-Bombay, Delhi Technological University, October 16-17, 2015.	DTU	October 16- 17, 2015.
	Coordinator, Start Up Weekend Powered by Google for Entrepreneurs organized By E-Cell DTU, Delhi Technological University, Oct. 30-31 and Nov.1, 2015.	DTU	Oct. 30-31 and Nov.1, 2015.
	Attended a two-day National Workshop on Power Electronics (NWPE-2015), Department of Electrical Engineering, Delhi Technological University, November 6-7, 2015.	DTU	November 6-7, 2015.

Organizing Secretary/ Faculty name	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Dr.MS Mehata, Dr. Amrish K. Panwar Dr. Yogita Kalra	Participated in International Day of Yoga on June 21,2016 and attended the workshop on "Yoga and Ast of Living" during	DTU	June 21-26, 2016
Dr. Rinku Sharma Dr. Yogita Kalra	Member organizing committee of STTP on: Research and Publication	DTU	July 25-29, 2016

## 6. Participation of Faculty in Short Term Courses

Name of Faculty	Name of Courses	Place	Dates
Dr. Pawan K. Tyagi, Dr. Amrish K. Panwar, Dr. Yogita Kalra	FDP on: Recent development and challenges in materials and manufacturing process	Department of Mechanical Engineering, DTU	July 25- 29, 2016
Dr. Yogita Kalra	FDP on: Geotechnical Engineering for Urban infrastructure	TEQIP II DTU	July 11- 25, 2016
	FDP on: Recent Developments in Fluid Mechanics and Hydraulics	TEQIP – II, DTU	July 18- 22, 2016
Dr. Amrish K. Panwar,	STC on: Relevance to NanotechnologytoRechargeable Battery Technology	AICTE sponsored by QIP, IIT Roorkee.	July 18- 22, 2016
Dr. M. S. Mehata, Dr. Amrish K. Panwar,	FDP on: Recent Trends on Pattern Analysis and Machine Learning	TEQIP – II Department of Electronic & communication Engineering, DTU	July 11- 15, 2016
Dr M S Mehata Dr. Amrish K. Panwar	STTP on: PLC, HMI, SCADA & AC Drivers	TEQIP – II, Department of Electrical Engineering, DTU	June 13- 17, 2016
Dr. Rishu Chaujar, Dr. Amrish K. Panwar	FDP on: Recent Trends in Geo- environmental Engineering	TEQIP – II, Department of Civil Engineering, DTU	April 18- 22, 2016
Dr. Yogita Kalra, Dr. Pawan K. Tyagi, Dr. Nitin K. Puri, Dr. M. Jayashemhadri Dr. Amrish K. Panwar Dr. M S Mehata	FDP on: Recent advances in Alternative & Renewable Energy Technologies	Department of Mechanical Engineering, DTU	Dec 07- 11, 2015
Dr. Rishu Chaujar	Attended a 7 day Management Capacity Enhancement Programme (MCEP), Indian Institute of Management, Indore,	IIM Indore	Nov. 16- 22, 2015

Dr. Amrish K. Panwar	STC on: Electrochemical	TEQIP – II, Department of	Oct 08-
	Technologies in Hydrogen	Chemical Engineering, IIT	09, 2015
	Production and Utilization for	Delhi.	
	Electrical Energy		
Dr. Rinku Sharma	FDP on: Urban Environmental	TEQIP – II, Department of	July 13-
	Challenges and their control	Environmental Engineering,	17, 2015
	strategies (UECCS-2015)	DTU	

## 7. Visitors to the Department

Name	Affiliation	Purpose
Dr. Rim Cherif	University of Carthage, Tunisia	Visit under bilateral DST sponsored TUN-IND project.
Prof. Mourad Zghal	University of Carthage, Tunisia	Visit under bilateral DST sponsored TUN-IND project

# 8. Conference/Seminar/Symposia/Workshops Organized by the Department

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Chairman: Prof S. C. Sharma,	UGC sponsored one day National Seminar	DTU	March
Applied Physics, Convener:	on "Frontiers in Applied Science and		22, 2016
Dr. Rishu Chaujar	Technology (FAST-2016)		

## 9. List of Candidates Awarded Ph.D. Degree

Name of Student	Nationality	Gender (Male/ Female)	Category (Gen/SC/ ST/PD)	Title of thesis
Srividya Sridhar	Indian	Female	Gen	Growth and Characterization of Carbon Nanotubes for Improved Field Emission
Kamal Kishor	Indian	Male	Gen	Characterization of Photonic Crystal Fibers and Metamaterials: Theory and Experiment
Ved Prakash	Indian	Male	Gen	Effect of dust charge fluctuations on excitation of electrostatic and electromagnetic waves in plasma
Than Singh Saini	Indian	Male	OBC	Application Specific Specialty Optical Fibers and Waveguides

## 10. (i) Completed Sponsored Research Projects

Principal Investigator	Title of Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees`)
Prof. Suresh C. Sharma	"Theoretical Investigations for Correlating the Plasma Parameters with the Growth, Structure and Field Emission Properties of Carbon Nanotubes (CNTs)"	Department of Science & Technology (DST), Govt. of India, New Delhi	11.52
Dr. Rishu Chaujar	Design, Development and Integration of Industry Standard Compliant Solutions for a Smart Grid	IEEE	USD 800
Dr. Rishu Chaujar	Design and Development of Smart Green Vehicle	DTU	2.7
Dr. Rishu Chaujar	Design and Fabrication of Autonomous Surface Vehicle for participation in 5th Robot International Competition	DTU	2
Dr. M. Jayasimhadri	Development of Efficient and Environmental Friendly Phosphors and Nanophosphors for White Light Emitting Diodes		12.04

## (ii) Continuing Sponsored Research Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Prof. Suresh C. Sharma	"Role of plasma in the growth and field emission properties of graphene"	Department of Science & Technology (DST), Govt. of India, New Delhi	16.05
Prof. R.K. Sinha / Dr. Yogita Kalra	National Program on MEMS And Smart Structure	DRDO initiative coordinated by IISc Bangalore	40
	Characterization of PCF for Telecom and Sensing Application	UGC	10.48
	From Plasmonic and Dielectric to Hybrid Nanoantennas: Novel approaches to control Electromagnetic Waves and Light	DST-RFBR (Indo- Russian)	22.56
	All dielectric plasmonic and hybrid photonic nanostructures	DST-RMES (Indo-Russian)	65.04
	Modeling and simulation of single Mode CW High Power Fiber Lasers	LASTEC, DRDO	10.00

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Dr. M.S. Mehata	External Electric field effect on the photoinduced charge transfer dynamics	DAE-BRNS	17.52
Dr. Pawan Kumar Tyagi	Graphene-Based Flexible, Transparent Electrodes For Organic Light Emitting diodes and Photovoltaics" under Indo-Portuguese Programme of Cooperation in Science and Technology, Rs. 5.30 Lacs: Ongoing (2013-16)	DST-FCT	5.30
	Synthesis of Structural Defects Free Single Layer Graphene for Applications in Nanoelectronic Devices, SR/FTP/PS-055/2012, Rs. 27.10 Lacs, DST- Fast Track, : Ongoing (2013-16)	DST	27.10
Dr. Pawan Kumar Tyagi (Mentor), Dr. ZainabNaqvi ( Principle Investigator	FABRICATION OF BIOSENSORS FOR CANCER DETECTION USING SINGLE LAYER GRAPHENE, BT/Bio-CARe/05/10190/2013-14: Ongoing (2014-17)	DBT	23.00
Dr. Rishu Chaujar	Characterization, Simulation and Equivalent Circuit Analysis of Silicon Nanowire Transistors For High Performance Applications in Wireless and RF Technology	DST	18.6
Dr. Ajeet Kumar	Design, modeling and characterization of highly nonlinear fibers for all-optical high bitrate networks	DST-Tunisia	13.5
	Specialty Large-Mode-Area Rectangular Waveguides and Fibers for High Power Applications	DST	25.3
Dr. Amrish K. Panwar	Development of alternative cathode materials for high energy density lithium ion battery technology	SERB, DST	25.00
Dr. Nitin Kumar Puri	"Investigation of origin of Circular Rydberg States (CRS) in Beam Foil Excitation"	DAE-BRNS, Govt. of India	25
Dr. Nitin Kumar Puri	"Origin of Circular Rydberg states in Beam Foil Excitation"	IUAC, Delhi	6.04
Dr. M. Jayasimhadri	Development of Versatile Alkaline Earth Phosphate Micro and Nanophsophors for Energy Saving near UV-based White LEDs	SERB-DST, Govt. of India, New Delhi	30

## (iii) New Sponsored Research Projects

Nil

## (IV) Consultancy Projects

Nil

# 11. Important Professional Affiliations:

### Prof. S.C. Sharma:

- Member of the National Academy of Sciences (MNASc), India
- Member of the Institute of Electrical and Electronics Engineers (IEEE), USA (IEEE. Member #93626831).
- Member of the International Association of Engineers (IAENG), Hong Kong (Membe Number: 161614).
- Life Member Plasma Science Society of India (PSSI) (Life Membership Number: LM- 708).
- Life Member- Indian Science Congress Association(ISCA)( Life Membership Number: L28117).
- Life Member- Indian Society for Technical Education(ISTE), New Delhi (Life Membership Number: LM 106978).

### Mr. Vinod Singh:

- Member of Material Research Society (MRS), Pennsylvania, USA.
- Member of American Chemical Society (ACS), Washington DC, USA
- Member of American Nano Society (ANS), USA.
- Life member of Materials Research Society of India (MRSI).
- Life member of Indian Society for Technical Education (ISTE).
- Life member of The Indian Science Congress Association (ISCA).

- Life member of Electron Microscope Society of India (EMSI).
- Life member of Indian Association of Physics Teachers (IAPT).

#### Dr. M.S. Mehata:

- Life member-laser and spectroscopy of India (LASSI)
- Life member National Laser Association (NLS)
- Life member- Indian JSPS Alumni Association (IJAA)
- Life member- Indian Society for Radiation and Photochemical Sciences (ISRAPS)

### Dr. Rishu Chaujar:

- Life Member-Indian Society for Technical Education (ISTE), India
- Life Member-Institution of Electronics & Telecommunication Engineers (IETE), India
- Life Member- Indian Women Scientists' Association, India.
- Life Member- Indian Science Congress Association, India.
- Life Member- Semiconductor Society of India, India.
- Life Member-Materials Research Society of India.
- Member IEEE Communication Society, USA (2008-Till Date)
- Member International Association of Engineers, Hong Kong (2008-Till Date)
- Senior Member IEEE Professional Organization, USA (2016-Till Date)
- Member, National Academy of Sciences, India(2016)
- Member-American Nano Society, USA (2011-Till Date)
- Member-Green ICT Community, IEEE (2014-Till Date)

- Member- IEEE Council on RFID (2014-Till Date)
- Executive Member- IEEE Electron Devices Society (2015-till date)

### Dr. M. Jayasimhadri:

- Life Member Luminescence Society of India (LSI)
- Life Member Materials Research Society of India (MRSI)
- Life member National Environmental Science Academy (NESA)

#### Dr. Amrish K. Panwar:

 Life Member- Materials Research Society of India (MRSI)

- Life Member Electron Microscopy Society of India (EMSI)
- Life Member Indian Society of Technical Education (ISTE)

### Dr. Ajeet Kumar:

- Member, Optical Society of America (OSA)
- Life Member-Indian Society for Technical Education
- Life Member- Optical Society of India

## 4.4 Department of Biotechnology

(Academic staff-07; students admitted: UG-100, PG-102, Ph.D-25, Publications: Journals/Papers –100, conference/symposium-8, New projects-01)

#### 1. Salient Features:

Department of Biotechnology under Delhi Technological Universitywas founded in 2004 with a vision to make an impact through research and technology based training, is successfully conducting undergraduate and postgraduate programmes in various disciplines. The Department is running various programmes in Biotechnology, Bioinformatics, Biomedical Engineering and Industrial Biotechnology. Department of Biotechnology is also running research oriented Ph.D programme.

The faculty members of the department are excellent teachers and research scientists, and they have published papers in high impact factor .The department undertaken sponsored projects funded by ICMR, CSIR, DST, UGC, etc. The department has 10 state-of-the-art laboratories, viz. Nanobioelectronics Laboratory, Stem Cell Biology Laboratory, Functional Genomics and Molecular Nanoscience Laboratory, Environmental Biotechnology Laboratory, Plant Molecular Biology Laboratory, Computational Biology Laboratory, Biochemistry Laboratory, **Immunotherapeutics** Laboratory Genome Informatics Laboratory. Dr. Yasha Hasija is the editor executive of International Journal of Advanced Biotechnology and Bioinformatics", an open access peer reviewed journal seeks to rapidly publish research that has made a difference to the present scientific scenario .lt endeavors to bring forth the best contributions which are being made by scientific community and the biotech industry at large. The department regularly organizes scientific

lectures & symposia in which renowned scientists and academicians are invited. The department conducts annual technical festival KARYON in which the students and experts from industry participate in academic deliberations to enhance Industry- University interactions. Such useful interactions help the students for industrial trainings and job placements.

#### 2. Academic Staff:

### **Professors**:

**Dr. Devendra Kumar,** HoD, Ph.D., Polymer Science & Technology, dkumar@dce.ac.in

**Dr. B. D. Malhotra, Ph.D.,** Fellow, Indian National Science Academy

#### **Associate Professors:**

**Dr. Pravir Kumar**, MS (BHU), Ph.D. (Germany), PDF/Faculty (Boston, USA) Molecular Medicine, Neuroscience, Functional Genomics, Drug screening and discovery, Cardiovascular Physiology, Neurooncology Email: pravirkumar@dce. edu Pravir.Kumar@tufts.edu

**Dr. Jai Gopal Sharma,** Ph.D. Bioremediation, Water Quality Management, Larviculture, Radiation Biology

#### **Assistant Professors:**

**Dr. Asmita Das,** Ph.D. Immunodiagnostics and therapeutics

**Dr. Navneeta Bhardwaj,** Ph.D. Email: navneetab@dce.ac.in

**Dr. Yasha Hashija,** Ph.D. Biotechnology, Bioinformatics Email: yashahasija@dce.edu

# 3. Honors and Awards to Faculty Members:

### **Prof B D Malhotra:**

- Fellow, Indian National Science Academy
- Fellow, National Academy of Sciences, India.
- Academician , Asia Pacific Academy of Materials
- Materials Research Society of India (MRSI) Medal Lecture 2004
- National Research Development Corporation Meritorious Award May 2005 for the invention on 'Blood Glucose Biochemical Analyzer' at the National Physical Laboratory, New Delhi
- Editor-in-Chief- The Open Analytical Chemistry Journal Member
- Member
- Advisory Board, Nature Publishing Group-Asia Materials
- Advisory Board, Biotechnology Journal (Wiley)
- Number of Publications in refereed journals: 254
- Citations (30Dec2014) > 7700; h- Index:
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### **Dr. Pravir Kumar**

- Adjunct Faculty, Tufts University School of Medicine, Neurology Department, Boston, MA (USA)
- Citations (30 Apr 2015): 940; h- Index: 10
- Editorial and Professional Assignments:
- Associate Editor, Journal of Alzheimer's disease (JAD; 01/2015)

- Editor, International Journal of Neurology Research
- Editor,International Journal of Hematology Research
- Editor, Journal of Clinical Trials & Patenting
- Associate Editor, American Journal of Research Communication
- Associate Editor, Advances in Obesity, Weight Management & Control
- Editor, International Journal of Advanced Biotechnology and Bioinformatics
- Academic Editor, International journal of Bioinformatics
- Editor, Austin Journal of Biotechnology and Bioengineering

#### Dr. Asmita Das

- Edited manuscripts as part of Fellows Editorial Board in National Cancer Institute, NIH, USA
- Invited reviewer for PLOS one (impact factor 4.1)
- Editorial Board Member of Journal of Biosciences GSTF, Singapore
- Editorial Board Member of International Association of Innovation Research
- Course on Translational Research in Clinical Oncology conducted by National Cancer Institute (NIH), USA

### Dr. Smita Rastogi Verma

 Reviewer, Journal of Biology and Nature; Plant Cell Biotechnology and Molecular BiologyAdvances in Research; Annual Research & Review in Biology; African Journal of Biotechnology; International Journal of Plant & Soil Science

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## 4. Visit of Faculty Members to Other Institutions

Name of faculty	Name of Institute / Organization visited	Purpose of visit	Dates
Dr. Jai Gopal Sharma	Barkatullah University, Bhopal	On lien	Oct 14, 2014 - Nov 13, 2015
Dr. Pravir Kumar	UGC-Academic Staff College, University Jamia Millia Islamia, New Delhi	Invited Speaker	May 5 –25, 2015
	IIIT, Allahabad	Invited Speaker	May9 -13, 2015
	NIMHANS Bangalore	Invited Speaker	Nov 1 -3, 2014
Dr. Navneeta Bharadvaja	Department of Botany, Delhi University	External Examiner	
Dr. Asmita Das	INMAS	Selection board member DRDO cash awards 2014	Feb 9, 2015
	INMAS	Expert committee member DRDO fellowship review board	Jan29, 2015
	IGNOU	Paper setter Ph.D entrance test in in Engineering and Technology.	May 2013
	National Physical Laboratory	Invited lecture at the Industry- Academia meet	Dec13, 2012
Dr. Yasha Hasija	Department of Biomedical Sciences, Bhaskaracharya College of Applied Sciences, Delhi University	External Examiner, Human Genetics Practical Examination of B.Sc. (H) Biomedical Sciences VI Semester	April 29, 2015
	Miranda House	Invited lecture for the add-on course on Bioinformatics and in silico medicine	Feb 2014
Dr. Vimal Kishor Singh INSPIRE Faculty	IISER, Mohali	Network-cum Discussion meeting for INSPIRE awardees	March 15 -16, 2015

# 5. Participation of Faculty Members in Conference / Seminars / Symposia / Workshops / Guest Lecture.

Name of Faculty	Details of Conference/Seminars/Symposia/ Workshops/Guest lecture	Venue	Dates
	Attended 2nd workshop on advanced materials and instrumentation in bio medical engineering	IIIT Allahabad	May 9-13 , 2015
	National Seminar on Recent Advances in Physics.	DTU	Feb 16, 2015
Dr. Navneeta Bharadvaja	Attended National Conference on Solid state chemistry and allied areas.	Delhi University	May 8-10, 2015
	Attended One day National Seminar on Recent Advances in Physics (NSRAP-2015)	DTU	Feb 16, 2015
Dr. Asmita Das	Attended International Conference: South Asian Biotechnology Conference (2015) Novel approach to target periodontitis and Atherosclerosis: One trigger, two targets. Komal Chauhan and Asmita Das (corresponding author)	South Asian University	Feb 12-14, 2015
	Attended Conference on Recent Trends in Parasitology organized by Jawaharlal Nehru University from March 20-21, 2015. Vaccine development for Periodontitis to target Atherosclerosis. Komal Chauhan and Asmita Das (corresponding author)	Jawaharlal Nehru University.	March 20-21, 2015
	Attended 4th International symposium on Pattern Recognition	Indian Statistical Institute, Kolkata	Jan 4- 7, 2015.
	Attended UGC-sponsored one day national seminar on Recent Advances in Physics (NSRAP-2015)	DTU	Feb 16, 2015
	Attended4th International symposium on Biofuels and Bioenergy	Petroleum Federation of India and UOP and IOCL	Nov 17-18, 2014
Dr. Yasha Hasija	Attended UGC-sponsored one day national seminar on Recent Advances in Physics (NSRAP-2015)	DTU	Feb16, 2015

## 6. Participation of Faculty in Short Term Courses

Name of faculty	Name of courses	Place	Dates
Dr Navneeta Bharadvaja	Attended Short Term Training Program on The Idea Tree: Journey from Inception to Publication Sponsored by UGC	Department of Humanities, DTU	Feb 9-13, 2015
	TEQIP-II Sponsored Faculty Development Program on "Automation in Manufacturing" (AIM-2015)	DTU	May 4-15, 2015
	Refresher course (TEQIP) "Modelling and Decision Making Techniques in Engineering and Management"		
	Faculty Development Programme (TEQIP) 2 week refresher course on "Automation in Manufacturing"	DTU	May 14-15, 2015
Dr.Yasha Hasija	TEQIP-II Sponsored Faculty Development Program on "Automation in Manufacturing" (AIM-2015)	DTU	May 04-15, 2015
	UGC-Sponsored Short Term Training Program on "The Idea Tree: Journey from Inception to Publication	DTU	Feb 09 – 13, 2015
Dr. Smita Rastogi Verma	TEQIP-II Sponsored Faculty Development Program on "Automation in Manufacturing" (AIM-2015)	DTU	May 04 -15, 2015

## 7. Visitors to the Department

Name of faculty	Affiliation	Purpose	
Dr. Aseem Bhatnagar	Scientist G, Institute of Nuclear Medicine and Allied Sciences, DRDO, Delhi-54	Attended Stem Cell Research laboratory for Collaboration for a joint project on the development of lifesaving products/devices	
Dr. Laxman Singh	Thomas-Berry & Simpson, Fellow, Departmentof Human Metabolism Academic Unitof Bone Biology Universityof Sheffield, Sheffield,South yorkshire		
Dr. Birendra Yadav	Scientist, Blood Bank services, Rajiv Gandhi Cancer Institute and Research Center	Research Coordination	
Dr. Subhash Ghosh	Associate Professor, Department of Textile Technology, Indian Institute of Technology Delhi, New Delhi, India - 110016		
Dr. Ramakrishnan Sitaraman	Associate Professor Programme Coordinator, M.Sc. Plant Biotechnology Programme Department of Biotechnology TERI University	Research Coordination	

# 8. Conference / Seminars / Symposia / Workshops Organized by the Department

Organizing Secretary	Details of Conference/Seminars/Symposia/ Workshops/Guest lecture	Venue	Dates
Prof.B.D Malhotra	Dr Birender Yadav Scientist & Manager (Biorepository) at Rajiv Gandhi Cancer Institute & Research	Department of Biotechnology	March 2015
Dr.JaiGopal Sharma (Coordinator)	20th GISFI Standardization Meeting & Workshop on "India's 5G Vision: 2020" at Bhopal, Madhya Pradesh India	Barkatullah University, Bhopal	March 13-15, 2015

## 9.1 List of Candidates Awarded Ph.D. Degree

Name of the student	Nationality	Gender (male/ Female)	Title of thesis	
Saurabh Srivastava	Indian	Male	Carbon nanomaterial for Food Toxin Detection	
Azhar Ali	Indian	Male	Nanostructured metal oxide based microfluidic biosensor for point of Care diagnostics.	
Aditya Sharma	Indian	Female	Quantum Dots Based Biosensors for Cancer Detection	
Mr. Manoj Patel	Indian	Male	Nucleic acid biosensors for the detection of pathogen	
KushiAnand	Indian	Male	Characterization and screening of biomolecules for cancer therapy	
Sonia Angeline	Indian	Female	Rotenone induced Parkinson's disease model and differential expression of molecular chaperones	
Aditi Sarkar	Indian	Female	Neuroprotective effect of biomolecules (Naringenin and Quercetin) under hypoxic stress conditions	

## **9.2 Completed Sponsored Research Projects**

Principal Investigator	Title of project	Sponsoring Agency	Outlay ( Amount in lakhs of Rupees)
Prof B. D Malhotra	Development and Manufacture of Cost effective Glucose Biosensor For clinical Diagnostics	ICMR	1.45

### 9.3 Continuing Sponsored Research Projects

Principal Investigator	Title of project	Sponsoring Agency	Outlay (Amount in lakhs of)
Co-Pl: Dr. Jai Gopal Sharma (Prof. Reena Chakraborti (DU)	"Development of Pelleted Diet for Labeo rohita and Clarias batrachus Using Achyranthes aspera and Evaluation of Its Immunostimulatory Properties in Pond Culture System"	DBT, India	70.00
Dr.Asmita Das	Tumor cell mediated Immuno modulation	DST-SERB	20.6
Co investigator Dr.Asmita Das Principal Investigator (Dr. Tulika Prasad,JNU)	"Studies on elucidating Silver Nanoparticle as potent inhibitor of hyphal morphogenesis and drug resistance in opportunistic fungal pathogen, Candida and potential host cell toxicity"	JNU-UPE	11.00
Dr.Yasha Hasija	Tuberculosis: Genetic Susceptibility and Pharmacogenomics Databases.	CSIR-OSDD	12.82
	Role of Human Genetic Variations in Age- Related Disorders.	Science and Engineering Research Board (SERB) under OYS Scheme	15.00
Dr.Vimal Kishor Singh	Rakat Nirman: Production of Blood: (Development of strategies for Synthetic universal Blood & blood products useful in battlefield and civil tragedies).	DST/INSA	35.00

# 9.4 Summary of Major Sponsored Research Schemes and Consultancy Projects.

a) **Title of the project:** Tumor cell induced Natural Killer cell receptor modulation

#### Introduction

Tumor immunotherapy principally involves CTLs and NK cells. NK cell activity is determined by the interplay of positive and negative signals from activating and inhibitory receptors present on NK cells. Each NK cell expresses a multitude of these receptors acquired during NK development in a stochastic manner. Any alteration in the expression levels of these receptors will change the outcome of NK-target interaction. This alteration of receptor expression will lead to alteration in cytotoxic

activity and also cytokine production by NK cells. Although it has been known for some time that tumor cells alter NK receptor expression, tumor derived factors have not been studied in detail for NK receptor modulation.

In the present study, our work aims to investigate tumor induced modulation of NK receptor expression in detail.

### **Expected Outcomes:**

- Study of tumor cell extract responsible for NK receptor expression and activity will allow better anti-tumor drug design, especially immune anti-cancer therapeutics.
- ii) NK receptor modulation studies will generate active component identification responsible for altered receptor levels in NK cells.

- iii) Tumor induced NK activity modulation studied in detail will be useful in improving tumor therapeutics, adoptive transfer using NKT and CTL cells as well.
- Title of the project: Tuberculosis:
   Genetic Susceptibility and
   Polymorphism Databases

Funding Agency: CSIR-OSDD PI: Dr Yasha Hasija

### Summary

Tuberculosis is a major deadly disease effecting the developing world. Since the establishment of genetic factors is a key player in TB, sufficiently large amount of work has been done elucidating the role of individual genes in TB susceptibility. However, we still trail behind our goal of reaching a consensus regarding the genes involved in TB susceptibility. To bring an end to this prevailing disagreement; the utmost need is to compile the data on genetic variants involved in Tuberculosis susceptibility. To date, no such systematic and comprehensive effort has been made in this regard. We have, thus, comprehensively curated all genetic variations reported to be associated with Tuberculosis susceptibility in human genome and established a novel Locus Specific Database that stores all Human genes and genetic variants associated with Tuberculosis (HGV&TB). It currently houses information on 307 variations in 98 genes, where 101 of these variations are exonic and 78 of them fall in intronic regions, supported with pertinent patient data, obtained after an exhaustive literature study. In addition, the database concludes the pathogenicity of the genetic variations investigating their phenotypic consequences and ethnic origin, concluding 299 genetic variants in 71 genes to be pathogenic. Using integrative analysis, we have shown that the disease

associated variants are selectively enriched in the immune signaling pathways which are crucial in the pathophysiology of TB. HGV&TB is an endeavor to provide an inter-operable platform towards involving a larger community of researcherswho would contributetheir time and expertise curating variants, and also see how these genetic variations could potentially beused in diverse clinical applications. We are open for scientific collaborations which facilitate exchange of data and resources. We foresee the potential integration of data in resources which could enable automated whole genome sequence analysis.

The database is available at: URL:http://genome.igib.res.in/hgvtb/index.html.

**c. Title of the project:** Role of Human Genetic Variations in Age-Related Disorders

Funding Agency: SERB (under OYS Scheme)

PI: Dr Yasha Hasija

### Summary

Ageing is an inevitable process usually characterized with the rise of age-related disorders (ARDs) such as cardiovascular diseases, cancer, arthritis, diabetes and neurodegenerative diseases. The incidence of ARDs increases rapidly with ageing thereby making them as one of the key social and economic trouble for our elderly population. Moreover, the variation in the diseases incidence, prognosis, therapeutic response and toxicity in individuals due to the variations in the genetic makeup further poses the challenges for our ageing population. Thus, to address the needs of our ageing population, necessitates the understanding of the biology of ageing and the identification of the biomarkers/ variations responsible for varying response of individuals to the environment and drug.

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Post the successful completion of the human genome project and the HapMap project, many genome-wide studies have been carried out to find the association of genetic markers with various diseases, response to the drug and the environment/ lifestyle. A compendium of knowledge exists in the realm of public domain in the form of reports, databases and datasets, publications, research etc., however, there is still a paucity of databases that integrate information in user-friendly formats. Therefore, we have made an attempt to manually curate information from these sources and develop a pipeline for addressing the issues of ageing and ARDs.

The databases that we have developed in-house are - i) Database of Aging and Age-Related Disorders, dbAARD (http:// genomeinformatics.dtu.ac.in/dbAARD/), variants cataloguing information on (especially SNPs) associated with ageing and age-related diseases, ii) dbPGX (http:// genomeinformatics.dtu.ac.in/dbPGx/) harboring data for human genetic variants modulating the drug therapy response and iii) NutriGene, housing the information on the various polymorphisms and their interaction with diet supplementation and the resulting phenotype. We have also developed a tool, (http://genomeinformatics.dtu.ac.in/ AGP/), an online tool for the prediction of genes associated with Age-Related Disorders, which calculates the individual probability of association for each gene with ARDs in human and a mobile app, Shake App, to monitor some basic human activities and distinguish it from the abnormal, which can help in monitoring and diagnostics of various diseases like Parkinson and also help researchers to collect data from patients or users. On the whole, the project aims at connecting the distinct spots in the space to form an informative pattern to solve the

maze of human aging and ARDs. We believe that by integrating all these databases, tools and involving computational analysis, we can better understand the biology of ageing and ARDs and can achieve our rationale of personalized nutrition and medicine, and eventually healthy ageing.

**d. Title of the project:** Development and Manufacture of Cost Effective Glucose Biosensor for Clinical Diagnostics

In the present investigation, we attempted develop an amperometric sensing electrode based device targeted for the detection of blood glucose concentration. This ICMR sponsored project aimed at the fabrication of affordable biosensor that could yield accurate information of glucose in blood samples. The designed strips were supposed to be very sensitive, stable for 6-12 months at a cost < Rs. 5 per test. This technology/facility was created and would have been proved to be helpful for the development of glucose test strips, which could be used by both diabetics and nondiabetics. The project was for duration of two years from 2012-2014 extendable up to three year. The development of the hardware part i.e. is glucometer was completed and sensor strip experiments was in process of completion. The project was terminated in mid year by ICMR in 2014.

## 10. Important Professional Affiliations:

### Dr. Jaigopal Sharma

- The Society of Aquaculture Professionals (SAP)
- Biotechnology Society of India (Life Member).
- Asian Fisheries Society, Philippines.
- Indian Science Congress Association, India (Life Member).
- World Aquaculture Society, U.S.A.

- Association of Aqua culturists, CIFA, India (Life Member).
- Indian Fisheries Association, CIFE, India (Life Member).
- Marine Biological Association of India, CMFRI (Life Member).
- Electron Microscope Society of India (Life Member).
- Nutrition Society of India (Life Member).
- Indian Society of Remote Sensing (ISRS) (Life Member).
- Indian Society for Radiation Biology (Life Member).
- Indian Red Cross Society (Life Member).
- Coldwater Fisheries Society of India (Life member).

### **Dr. Asmita Das**

· Life member Indian Immunology society.

### Dr. Yasha Hasija,

- Life member, Indian Society of Human Genetics (ISHG) (Membership No.L/1459/2009).
- Life member, Society of Biological Chemists (SBC) (Life Membership No. 2227).
- Life member, The Indian Science Congress Association (Membership No. L17164)

### Dr. Monica Sharma:

 Lifetime member of Association of Microbiologist of India (Since 2005)

### Dr. Saurabh C Saxena:

- Member of American Society of Plant Biology, USA
- Life Member of Society of Biological Chemists, India

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### 4.5 Department of Civil Engineering

Academic Staff: 25; Students Admitted: UG- 125, PG- 60, Ph.D. 0; Publications: Journals/Papers- 7; Conference/Symp.-2;

### 1. Salient Features

Traditionally Civil Engineering has played an important role in improving the civic life of society by harmonizing the natural resources available on earth. Some of the major areas in the field of Civil Engineering are design and construction of various structures like bridges, buildings, roads, tunnels and dams, developing construction technologies, Design and development of Foundation systems, Geotechnical Engineering, Transportation and Traffic Engineering, Municipal and Sanitary services, surveying, GIS and Remote Sensing, and Hydraulics and Water Resources Engineering. Besides the basic and engineering sciences the curriculum in Civil Engineering covers various professional subjects on structures, foundations, construction, works management and cost, transportation engineering, irrigation engineering, hydraulics, environmental engineering and earthquake technology etc.

The intake at undergraduate level in the Department during the current academic year is 122. The Department offers M. Tech. degree level programmers in Hydraulics and Flood Control, Structural Engineering, Environmental Engineering, and Geotechnical Engineering. The sanctioned intake in these four areas of specialization is 88 students. The M. E. programmers now Called M. Tech. Programmes, for the last 30 years, have contributed significantly to the manpower development in highly relevant areas of national importance.

The department also provides opportunity to working engineers for upgrading their

qualification under Continuing Education Programme on part time basis, these programmes are: M. Tech. in daytime, and B.Tech. in evening time.

The Department well equipped is with laboratories related to Structure, Concrete testing, Soil Mechanics, Highway Engineering, Experimental Stress Analysis, Computational Mechanics, Education Technology, Photogrammetric and GIS facilities, Environmental Engineering and Hydraulics Laboratories. The department undertakes to organize special lectures and discussion by eminent persons from the field and industry.

The department of Civil Engineering lays greater emphasis on quality research of industrial design and development. Excellent facilities are available to conduct research for the award of Ph.D. degree in the disciplines of Civil Engineering, Structural Engineering, Structural Dynamics, Earthquake Engineering, Water Resources Engineering, Environmental Engineering, Experimental Mechanics, Geotechnical Engineering and other interdisciplinary areas.

### 2. Academic Staff

### **Professors**

**Dr. Nirender Dev,** B.Tech, M.Sc (Engg.), Ph.D., Structural Engineering, Email: nirendradev@dce.ac.in

**Dr. V.K. Minocha** (On Diverted Capacity to CBPCE), BE, M.Tech, Ph.D. Water Resources Email: vkminocha@dce.ac.in

**Dr. S.K.Singh**, B.E., M. Tech., Ph. D., FIEE, FICS, FIAH, FIE, FUWAI, FIGS, Solid waste processing, Waste water treatment designs,

Water treatment designs, Water quality modeling, Solar detoxification, EIA & Auditing Email: sksingh@dce.ac.in

**Dr. Ashutosh Trivedi,** B.Sc (Engg.), M.Tech, Ph.D. Geotechnical Engineering, Email: atrivedi@dce.ac.in

**Dr. Ashok Kumar Gupta** I, B.Tech, MS, Ph.D., Structure Engg., Email: akgupta@dce.ac.in

**Dr. Ashok Kumar Gupta,** B.Tech, M.Tech, Ph.D. IIT Bombay, Geotechnical and Geoenvironmental Engineering, Head, Dept. of Environmental Engineering,

**Dr. K.C. Tiwari,** ME (CAD), Ph.D. Microwave / Optical Remote Sensing, GIS, Expert Systems, Image Processing, Email: kcchtphd@gmail.com

**Dr. Anil Kumar Sahu**, B. Tech, M.Tech., Ph.D. Geotechnical Engineering Concrete Technology, Email: sahuanilkr@yahoo.co.in

### **Associate Professors**

**Sh. Rakesh Mehrotra,** B.Tech, M.Tech Environmental Engineering & Waste Water Engg.

**Dr. Rakesh Kumar,** M.Tech, Ph.D. Fluid Mechanics Email: rakeshkumar@dce.ac.in Mr. Alok Verma, M.Tech Structural Engg. Email: alokverma@dce.ac.in

**Mr. G.P. Awadhiya**, M.Tech Structures Email: gpawadhiya@dce.ac.in

**Dr. Awadhesh Kumar,** ME, PhD Specialization: Structural Engineering Email: awadheshk@dce.ac.in

### **Assistant Professors**

**Dr. Amit Kumar Shrivastava**, M.Tech, Geo-Technical Engg., Email: aksrivastava@dce. ac.in

**Mr. A.R. Kongan,** BE, ME, Soil Mechanics & Foundation Engg., Email: arkongan@dce. ac.in

**Mr. Naresh Kumar,** ME, Soil Mechanics, Email: nareshkumar@dce.ac.in

**Mr. S. Anbu Kumar,** BE, M.Tech, Transportation, Email: sanbukumar@dce. ac.in

**Mr.B. R.G. Robert,** BE, Civil Engineering, Email: brgrobert@dce.ac.in

**Mr. Narad Muni Prasad,** BE, ME Specialization: Transportation Email: nmprasad@dce.ac.in

**Dr. Susheel Kumar,** ME Transportation, Email: sushilkumar@dce.ac.in

**Dr. Bharat Jhamnani,** BE, ME, Email: bjhamnani@dce.ac.in

**Dr. Raju Sarkar** (On Deputtaion), BE, ME, Ph.D. Soil Mechanics

**Dr. Munendra Kumar,** ME, Ph.D. Fluid Mechanics

**Mr. T. Vijaya Kumar,** ME, Enviroment engineering

Dr. Ritu Raj (Contract), B.Tech, M.Tech, P.hD.

## 3. Honors and Awards to Faculty Members

### Dr Amit Kumar Shrivastava

- Reviewer of International Journal of Geotechnical and Geological Engineering, published by Springer.
- Reviewer of International Journal of Geomeatics, natural hazard and risk, published by Taylor & Francis.

### Sh. Anbu Kumar

- 3. Reviewer for International Journal of Science Technology and Engineering
- 4. Reviewer for Universal Researchers in Engineering
- Honorary Advisory Editorial Board Member Albert Science International Organization (An International Publication House)
- 6. Scientific committee member International Scientific Academy of Engineering & Technology (ISAET)

## 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Nil	Nil	Nil	Nil

## 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture / Visiting Scholar

Name of the Faculty	Organizing Secretary/ Host	Details of Conference/Seminar/ Symposia / Workshop/ Guest Lecture/ Visit	Venue	Dates
Dr Amit Kumar Shrivastava	National University, Jaipur	International Conference on Recent Trends in Engineering and Material Sciences (ICEMS-1016)	NU, Jaipur	17–19 March 2016
Dr Munendera Kumar	National University, Jaipur	International Conference on Recent Trends in Engineering and Material Sciences (ICEMS-2016)	NU, Jaipur	17–19 March 2016

### 6. Participation of Faculty in Short Term Courses

Name of Faculty	Name of Courses	Place	Dates
	Non-linear analysis of concrete/ metal structures using finite element methodes	DTU	July 13-17, 2015
Dr Alok Verma	Automation in manufacturing	DTU, Delhi	Two week May 4-15, 2015
	Skill development of technical staff in manufacturing technology (SDTSMT-2015)	DTU, Delhi	One week Nov 23-27, 2015
Dr Awdwsh Kumar	Non-linear Analysis of Concrete/ Metal Structures using Finite Element Method	DTU Delhi	July 13-17, 2015
Sh. S. Anbu	skill development of technical staff in Manufacturing	DTU,	23-27 Nov
Kumar	Technology, Department of Mechanical Engineering	Delhi	2015
Dr Amit Kr	Automation in manufacturing	DTU,	Two week May
Shrivastava		Delhi	4-15, 2015
Dr Munendera	Automation in manufacturing	DTU,	Two week May
kumar		Delhi	4-15, 2015
Mr. Vijay	Automation in manufacturing	DTU,	Two week May
Kumar		Delhi	4-15, 2015
Mr. S. Anbu	Automation in manufacturing	DTU,	Two week May
Kumar		Delhi	4-15, 2015

Dr Amit Kr	skill development of technical staff in Manufacturing	DTU,	23-27 Nov
Shrivastava	Technology, Department of Mechanical Engineering	Delhi	2015
Dr Munendera	skill development of technical staff in Manufacturing Technology, Department of Mechanical Engineering	DTU,	23-27 Nov
kumar		Delhi	2015
Mr. Vijay	skill development of technical staff in Manufacturing Technology, Department of Mechanical Engineering	DTU,	23-27 Nov
Kumar		Delhi	2015
Mr. S. Anbu	skill development of technical staff in Manufacturing	DTU,	23-27 Nov
Kumar	Technology, Department of Mechanical Engineering	Delhi	2015

## 7. Visitors to the Department

Name	Affiliation	Purpose	Dates
NIL	NIL	NIL	NIL

## 8. (i) Consultancy Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Sh. BRG Robert	TPQA from GT Karnal Road to Auchandi Border	PWD, Delhi	50.00
	Construction of ACR in Govt. Schools	PWD, Delhi	140.00
Prof. A.K. Gupta	Construction of 3 Nos. additional clover leaves at SaritaVihar Fly Over	DDA	65.00
Dr. Munendra Kumar	Concrete Mix Design of M10, M15, M25 and M30	KAY PEE CON.	1.35
	Concrete Mix Design of M10, M30 and M40	DSIIDC	1.37
	Concrete Mix Design of M10, M30 and M40	DSIIDC	1.35
Prof. K.C. Tiwari	Third Party Investigating Agency Work - Prembari Pul to Azadpur	PWD	90.74
	Third Party Investigating Agency Work - Mukarba Chowk to Wazirabad Chowk	PWD	199.99
	Third Party Investigating Agency Work - Parallel Road (Mukarba to Wazirabad)	PWD	69.99

### 4.6 Department of Computer Science and Engineering

Academic Staff: 23; Students Admitted: UG-335, PG-64, Ph.D. 06; Publications: Journals/Papers/ Conference/ Symp.- 54; New Projects- 0:

### 1. Salient Features:

The Department of Computer Science and Engineering endeavors to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. The curriculum defined, lays greater emphasis on design principles and development of system software for operating systems, Database management systems, data mining, computer graphics and networks. Department has developed state-ofthe-art laboratories in the various fields of Computer **Engineering-Computer** Architecture Lab, Network Lab, Designing Lab, Computation and programming Lab, Operating System Lab, Artificial Intelligence Lab and many others. Currently the department offers Doctorate, post-graduate & under-graduate courses in fields of Computer Engineering; Information Technology & Software Engineering & Technology. The department also has an active student chapter of Computer Society of India (CSI) and contributes significantly in professional activities undertaken by IEEE and IET students chapters.

### 2. Academic Staff

#### **Professors:**

**Dr. O.P. Verma,** B.E.,M.Tech(IITD),Ph.D. Image Processing, Signal Processing, Soft Computing, Artificial Intelligence, Email: opverma@dce.ac.in

**Dr. Daya Gupta**, M.Sc, Post M.Sc. Diploma(Computers Sc.),Ph.D. Software Engineering , Artificial, Intelligence, Data Mining and Security Engineering, Email: dgupta@dce.ac.in

### **Associate Professors:**

**Dr. Rajini Jindal,** MCA, ME, Ph.D. Database Systems, Data Mining and Operating Systems

**Dr. Kapil Sharma,** B.E., M.Tech, Ph.D. Software Engg., Optimization, Soft Computing Techniques, Email: kapil@ieee. org

### **Assistant Professors:**

**Mr. Vinod Kumar,** BE, M.Tech Computer Network, Email: vinodkumar@dce.edu

**Mr. Manoj Kumar,** B.Tech, M.Tech Information Security, Email: mkg1109@ rediffmail.com mkumarq@dce.ac.in

**Dr. Akshi Kumar,** BE, M.Tech, Ph.D., Email: akshikumar@dce.ac.in

Dr. Ruchika MCA, Malhotra, Ph.D. Software Testing, Software Engineering, OOSE, Software Quality Management, Software Requirement and Estimation, Machine Learning, Database, Management Systems, Email: ruchikamalhotra@dce.edu

**Ms. Abhilasha Sharma,** B.Tech, M.Tech Software Engineering, Software Testing, DBMS, Web Technology, Web Security, Email: abhilasha\_sharma87@yahoo.com

**Mr. Rajesh Kumar Yadav,** B.Tech, M.Tech Computer Network, Email: rkyadav@dce. edu

**Ms. Divyashikha Sethia,** M.Tech, Email: divyashikha@dce.edu

**Sh. Rahul Katarya,** M.Tech., Information System, Multimedia, Internet Technology, Web Mining, Data Mining Software Engineering, Email: rahuldtu@gmail.com

**Ms. Ritu Agarwal,** M.Tech, Information Security Information Security, Digital Forensics, Email: ritu.jeea@gmail.com

**Ms. Anamika Chauhan,** M.Tech. (IT) B.Tech, Email: letter4ana@gmail.com

Ms. Seba Susan Ranjan, Ph.D, IIT Delhi, Pattern Recognition, Image Processing, Soft Computing, Email: seba\_406@yahoo.in Mr. Anil Singh Parihar, B.Tech., ECE, M.E. Soft Computing, Digital Image Processing Biometric System & Intelligent System Evolutionary, Email: anilparihar@dce.ac.in parihar.anil@gmail.com

### **Programmer**

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**Dr. S. K. Saxena,** Ph.D., M.E., PGDCA, CPF (I) Computer Graphics & Object Oriented Programming, Email: saxena58@gmail.com

**Mr. Manoj Sethi,** M.Sc. (OR), M.E. (CTA), LMCSI Database Management Systems, Email: manojsethi@dce.ac.in Contractual Faculty

Rahul Gupta, M.Tech., Artificial Intelligence, Data Mining, Data Analytics, Email: rahulgupta100689@gmail.com

Ram Murti Rawat, M.Tech., Specialization: Microelectronics Engnieering Email: rammurtiieju05@gmail.com **Geetanjali Bhola,** M.Tech., Image Processing, Graphics, OCR, Andoid & Database Management, Email: geetanjali. getz@gmail.com

**Kusum Lata,** M.E. (CTA), Data Mining, Email: er.kusum82@gmail.com

Geetanjali Garg, Indu Singh,

## 3. Honors and Awards to Faculty Members

### **Prof O P Verma**

 Invitee Talk in 4th IEEE National Conference on Emerging Trends in Engineering and Technology (ETET– 2015). SBIT, Sonepat, 7 Feb 2015

### Dr. Kapil Sharma

- Session Chaired in IEEE international Conference INDIACom March 11-13 2015 held at BVICM, Delhi
- Expert Lecture at faculty Development Program 5st June 2015, YMCA University of Science & Technology, Faridabad.

## 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Dr O.P. Verma	NIELIT,Govt of India,Delhi	To attend Single Module E-certificate.	June 3, 2015
	PDA College Of Engg Gulverga, Karnataka	To Evaluate PhD Thesis	April 20, 2015
	IISc, Bangalore	To attend appraisal workshop for ISEA phase –II	June11-12, 2015
	School of Computer and Information Science, Indira Gandhi Open University	BoS Meeting	June 2016
	SGT University, Gurgaon	BoS Meeting	June 2016
	Government Engineering College, Azamgarh, UP	BoG Meeting	Dec 2015
Divyashikha Sethia	Global Convention on Intellectual Property invited by TIFAC, DST	Poster and Demo for invention commercialization	7-9 Jan 2016

# 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Name of the Faculty	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Prof O P Verma	Management Capacity Enhancement Programme (MCEP)	IIM Udaipur	March 4 - Apri 15, 2015
	IEEE 50th Annual Conference on Information Science and Systems (Received TEQIP Conference Financial Support)		March 16-18, 2016
	TEQIP / CEP sponsored one day symposium on "Current Trends in Machine Learning",		March 01, 2015
Mr. Anil Singh Parihar	TEQIP / CEP sponsored one day symposium on "Current Trends in Machine Learning",	IIT Delhi	March 01, 2015
Mr R K Yadav	TEQIP / CEP sponsored one day symposium on "Current Trends in Machine Learning",	IIT Delhi	March 01, 2015
Dr Ruchika Malhotra	Proceedings of 18th International Conference on Information Technology and Computer Science (Received TEQIP Conference Financial Support)	Venice, Italy	April 11-12, 2016
Divyashikha Sethia	e-Health Conference (Received TEQIP Conference Financial Support)	Madeira, Portugal	July 1 - 3, 2016

## 6. Participation of Faculty in Short Term Courses

Name of Faculty	Name of Courses	Place	Dates
Rahul Katarya	Recent Advances and challenges in Power & Energy for Sustainable Growth	DTU	June. 1-5, 2015
	Automation in Manufacturing (AIM-2015)	DTU	May 4-15, 2015
	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016
Abhilasha Sharma	Recent Advances and challenges in Power & Energy for Sustainable Growth	DTU	June. 1-5, 2015
Dr. Kapil Sharma	TEQIP-II sponsored FDP	DTU	May 04- 15, 2015
	TEQIP-II sponsored one week FDP "Recent Advances and challenges in Power & Energy for sustainable Growth"	DTU	June 1-5, 2015
	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016

Name of Faculty	Name of Courses	Place	Dates
Anil Singh Parihar	TEQIP-II sponsored two week FDP Automation in Manufacturing (AIM-2015)	DTU	May 4-15, 2015
	TEQIP-II sponsored one week FDP "Recent Advances and challenges in Power & Energy for sustainable Growth"	DTU	June 1-5, 2015
	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22 , 2016
Ritu Agarwal	TEQIP-II sponsored two week FDP Automation in Manufacturing (AIM-2015)	DTU	May 4-15, 2015
	The Idea Tree: Journey from inception to publication	DTU	Feb 09- 13, 2015
	TEQIP sponsored FDP on "Advances in Information Security	DTU	January 18 - 22 , 2016
	TEQIP-II sponsored two week FDP Automation in Manufacturing (AIM-2015)	DTU	May 4-15, 2015
	TEQIP-II sponsored one week FDP "Recent Advances and challenges in Power & Energy for sustainable Growth"	DTU	June 1-5, 2015
	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016
Seba Susan	TEQIP sponsored "Workshop on Big data and Ontology"	IIT Delhi	19th Sept 2015
	Workshop on Cyber Security	IIT Delhi	4th – 6th Nov 2015
Divyashikha Sethia	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016
Rajni Jindal	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016
Manoj Kumar	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016
Ruchika Malhotra	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22, 2016

## 7. Visitors to the Department

Name	Affiliation	Purpose	Dates
Prof. K.K Vishwas	IIT,Delhi	Workshop on curriculum revision	March 4, 2015

# 8. Conference/Seminar/Symposia/Workshops Organized by the Department

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Prof O P Verma	TEQIP sponsored FDP on "Advances in Information Security	DTU	Jan 18 - 22 , 2016
	Workshop on Intel Sponsored 'Parallel Programming – Basics' in partnership with Calligotech, Bangore	DTU	Aug 26, 2015

### 9. List of Candidates Awarded Ph. D. Degree

Name of Student	Nationality	Gender (Male/ Female)	Category (Gen/SC/ ST/ PD)	Title of thesis
Ankita Bansal	Indian	Female	General	Development of Techniques and Models for Improving Software Quality
Rinki Diwedi	Indian	Female	General	Configuring situational specific methods
Deepika Prakash	Indian	Female	General	Eliciting information requirements for data warehouses

## 10. (i) Completed Sponsored Research Projects

Principal Investigator	Title of Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Prof O P Verma	Information Security and Education Awareness Project	DIT, Govt of India	23

## (ii) New Sponsored Research Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Prof. O.P.	Information Security and	Department of Electronic and	50
Verma	Education Awareness	Information Technology, Govt of	
	Project(Phase-II)	India	

## 11. Important Professional Affiliations:

Prof. O.P Verma, member IEEE Mr. Rahul Katarya, member IEEE Mr. R K Yadav, member ISTE Mr. Anil Singh Parihar, member IEEE
Ms. Ritu Agarwal, member IEEE
Dr Daya Gupta, senior IEEE member
Divyashikha Sethia, member IEEE, member
ACM

### 4.7 Delhi School of Management

Academic Staff: 06; Students Admitted: PG-MBA -59, MBA (E) - 18, Ph.D. - 02 Publication: Papers Journals: 10, Conference/Symp: 09

### 1. Salient Features

Delhi School of Management (DSM) was established in 2009 with a vision to provide for management education and research and training by inculcating a passion for innovation, research and experimentation in the future managers who can take leadership roles in organizations for their sustainable development and growth. Through its two years full time programme and executive MBA programme, DSM is providing support for industry, government, manpower suited for NGOs, skilled meeting the challenges of organizations of tomorrow by identifying pertinent and critical business problems and resolve them through appropriate managerial skills and competencies. Besides, DSM carries out sponsored research studies to provide solutions to the contemporary problems of government departments and industry.

### 2. Academic Staff:

### Professors:

**Dr. Pradeep Kumar Suri,** M.Tech, Ph.D.E-Governance, Project Management, Quantitative Methods, Email:pksuri@dce. ac.in

### **Associate Professors:**

Dr. Richa Mishra, MBA, Ph.D.

**Dr. Rajan Yadav,** MBA,Ph.D., Services Marketing, Sales and Distribution Management, Rural Marketing, Social Marketing, Retail Management, Email:raj\_yadav1974@yahoo.co.in

### **Assistant Professors:**

**Dr. Shikha N. Khera,** MBA, NET, Ph.D., Organizational Behaviour, Organizational Development, Email:shikhankhera@yahoo.co.in

Mr. Vikas Gupta, MBA, NET Knowledge Management, Innovation Management, Business Process Re-engineering, Corporate Social Responsibility, Email: vikasquptadtu@qmail.com

**Dr. Archana Singh,** MBA (Finance), Ph.D. Corporate Finance, Financial Accounting, Security Analysis,Email:sarchana03@yahoo.co.in

### 3. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Prof. PK Suri	Indian Institute of Public Administration (IIPA), Delhi on 18 March, 2016	Delivered a talk on "High Impact Change through eGovernance"	18 March, 2016
	Institute of Secretariat Training and Management (ISTM)	Delivered a talk on " Project Management"	Jan 1, 2016
	Sri Guru Gobind Singh College of Commerce, University of Delhi on	Chaired a Technical Session  "Problems and Prospects of Emerging Retail and e-commerce"	Feb 2, 2016

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Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Prof. GC Maheshwari	Academic Staff College, North- Eastern Hill University, Shillong	Delivered an invited talk " Ethics in Research"	Nov 3-4, 2015
	Indian Accounting Association, University Business School, Chandigarh University	Delivered a talk on "Accounting Education and Research"	Dec 6, 2015
	Indian Association for Management Development, India Habitat Centre, New Delhi	Delivered keynote address on Make in India-the challenges ahead	Jan 3, 2016
	Dept of Commerce, Sikkim University, Gangtok	Delivered an invited talk " Accounting Research"	Feb 10, 2016
	Dept of Commerce, Central University of Jharkhand	Valuation Issues in Mergers and Acquisition	Feb 12, 2016

# 4. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Dr. RK Pilliania	Dr. Rajan Yadav presented a paper on "Role of Advertising in Consumer Evaluation of Brand Extensions and Brand Image Strategies", in international marketing conference on Emerging Themes in Strategy,	Management Development Institute, Gurgaon	Feb. 25- 26, 2016
Dr. LD Mago	Dr. Rajan Yadav presented a paper on " Mobile Commerce Adoption : Literature Review" in an international conference	Trinity Institute Of Professional Studied, Delhi	March 19, 2016
Dr. HP Singh	Dr. Rajan Yadav attended workshop on "Online Marketing Analytics and Entrepreneurship Development"	NIESBUD, Min. of Skill Development and Entrepreneurship, Govt. of India	Dec. 19- 22, 2015.
Dr. Raju Sarkar	Dr. Archana Singh, Dr. Shikha N Khera ,Meha Joshi and Abhinav Chaudhary attended One week TEQIP – II sponsored FDP on "Recent Trends in Geoenvironment engineering"	Department of Civil Engineering, Delhi technological University, Delhi.	18-22 April, 2016
Dr. JP Kesari	Dr. Archana Singh, Dr. Vikas Gupta and Abhinav Chaudhary attended One week TEQIP – II sponsored FDP on "Recent Advances in Alternative & Renewable Energy Technologies"	Department of Mechanical, Production, Automobile and Industrial Engineering, Delhi Technological University, Delhi.	7-11 Dec 2015,
Dr. Mahim Sagar	Dr. Rajan Yadav and Meha Joshi attended TEQIP II certificate course on "Branding and Corporate communication"	DMS, IIT Delhi	8-9 Aug 2015

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Prof. Anu Singh Lather	Dr. Vikas Gupta presented two papers on "Knowledge Management Practices and Balanced Scorecard Outcomes – An Organizational Performance Perspective" and "Managing Succession through Knowledge Management" in National Conference on Changing Organizations through Strategic, Technological, Structural and Behavioural Interventions	GGSIPU, Delhi	
	Dr. Vikas Gupta and Meha Joshi attended PHD Chamber-Purdue University Panel Discussion on Reimagining the Future	PHD House, New Delh	Oct 30, 2015
Prof. (Dr.) C. Gopinath	Dr. Shikha N Khera presented a paper on "Tacit and Explicit Knowledge: The significant entities for Organizational Development Interventions" in Twelfth Knowledge Globalization Conference" on Managing in Diverse Cultures"	O.P Jindal Global University, Sonipat, Haryana	13-14 Aug, 2015
Ms. Archana Shukla & Mr. M Akbar	Dr. Shikha N Khera presented a paper on "Tacit versus explicit knowledge sharing in it organizations: Analysis of Training methods " 4th Biennial Indian Academy of Management Conference"	Indian Institute of Management, Lucknow – Noida Campus	11-13 Dec, 2015
Dr. Shalini Shrivastava & Dr. Shikha Bhatia.	Dr. Shikha N Khera presented a paper on "Role of Demographic characteristics on Tacit Knowledge Sharing behavior of employees of IT organizations in India: An empirical study" "International Conference on The Role of Social Media for Organizational Sustainability (ICROSMOS)-2016	Jaipuria Institute of Management.	12-13 Feb, 2016
Dr. Puja Khatri	Dr. Shikha N Khera presented a paper on "Role of Training Methods in enhancing Tacit and Explicit Knowledge Sharing behavior in IT organizations" National Conference on Management By Optimism"	University School of Management Studies – GGSIP University, New Delhi	19 Feb, 2016
Prof. (Dr.) C. Gopinath	Dr. Shikha N Khera presented a paper on "Measuring generation Y life priorities and work preferences: An empirical analysis in Indian context"— Twelfth Knowledge Globalization Conference" on Managing in Diverse Cultures	O.P Jindal Global University, Sonipat, Haryana	13 – 14 Aug, 2015

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Mr. Jatin Vaid & Dr. Ramanpreet Singh	Dr. Shikha N Khera presented a paper on "Drivers and outcomes of engagement: Empirical evidence in the context of Generation Y employees" – "National Conference on Sustainable Business Practices for Emerging Global Markets"	Vivekananda Institute of Professional Studies. (VIPS). New Delhi	27 – 28 Nov, 2015
Ms. Archana Shukla & Mr. M Akbar		Indian Institute of Management, Lucknow – Noida Campus	11 – 13 Dec, 2015
Dr. Puja Chhabra Sharma	Dr. Shikha N Khera presented a paper on "The Relationship between Perceived Job characteristics and Job engagement among Gen Y Employees" – International Conference on Global Business, Innovation & Knowledge Management" – (ICBIK 2016)	Ansal University, Gurgaon, Haryana.	11 – 12 Feb, 2016
Dr. Puja Khatri	Dr. Shikha N Khera presented a paper on "Intrinsic job dimensions and employees' organizational engagement: A study on generation Y employees in India" – National Conference on Management By Optimism	University School of Management Studies – GGSIP University, New Delhi	19th Feb, 2016

## **5.** Visitors to the Department

Name	Affiliation	Purpose	Dates
Mr. Rajeev Tupsakri	Globel HR Head: HCL Services	Guest Lecture on Recruitment Requirments in IT Industry	15/10/2015
Mr. Sanjay Diwan	Senior Business Leader and Vice President DCE, DTU Alumni Association	Guest Lecture on Market Advocacy & Managing Stakeholder Relationship	02/11/2015
Dr. Rajesh Chaddha	Sr. Scientist, National Council of Applied Economic Research	Value added lecture on International Business Environment	Feb 21, 2016
Prof. Sushil	DMS, IIT Delhi	Value added lecture on Strategic Management	Feb 27, 2016
Brigadier Surendra Mutreja	Motivational speaker and Consultant	Value added lecture on Motivation and Time Management	March 3, 2016
Dr. S. C Sharma	Associate Prof., SRCC, DU	Value Added Lecture on Derivatives and Risk management	April, 2016

## 6. Conference/Seminar/Symposia/Workshops Organized by the Department

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Dr. Shikha N Khera	Business Plan Competition	DSM	Feb 02, 2016
Dr. Archana Singh, Dr. Vikas Gupta	Markethon 2016	DSM	Feb 24-25, 2016
Dr. Archana Singh, Dr. Vikas Gupta	Budget Panel Discussion	DSM	March 3, 2016
Dr. Rajan Yadav, Dr. Shikha N Khera	Panel Discussion on Start-ups	DSM	March 09, 2016
Dr. Rajan Yadav, Dr. Shikha N Khera	AD MAD Show : Manageria 2016	DSM	March 09, 2016

### 7. List of Candidates Awarded Ph.D. Degree

Name of Student	Nationality	Gender (Male/ Female)	Category (Gen/SC/ ST/PD)	Title of thesis
Vaishali Sharma	Indian	Female	Gen	Remanufacturing : Economic Environment and Trade Aspects in Indian Context

## 8. Important Professional Affiliations:

### Prof. P.K. Suri

- Editor-in-Chief of the Journal "Value based Management"
- Member of Governing Council of Global Institute of Flexible Systems Management (GIFT) Society

 Member of Managaging Committee of the Global Journal of Flexible Systems Management

### Dr. Rajan Yadav

 Life member Global Institute of Flexible Systems (GIFT) society

### 4.8 Department of Electronics and Communication Engineering

Academic Staff: 21; Students Admitted: UG- 195, PG- 60; Ph.D.36; Publications: Journal Papers67; Conference/ Symp.90;

### 1. Salient Features:

The Department of Electronics and Communication Engineering has seen considerable growth since its inception 1976.This department offers in UG/ PG and Ph.D programmes. Currently the Department has 11 well equipped curricuulam laboratories and 4 research laboratories. Frontal areas of the advance level research in the department are Micro strip antenna design, Sensor Networks, Image processing and Analog and digital system design. The Department regularly seminars, workshops organizes training programs to keep pace with the new developments and recent trends in relevant technologies.The Department plans to have center of excellence in the field of robotics, machine vision, medical electronics and VLSI in collaboration with industry. The department is planning to impart training program in cutting edge technologies for creating a talent hub to meet industrial manpower needs. Department is striving to utilize the power of brilliant minds at DTU and its networked institution/research laboratories for design and development of future electronics.

### 2. Academic Staff

### **Professors**

**Dr. Asok De** (On Lien), B.E., M.E, Ph.D. Communication & Microwave, Email: asokde@dce.edu

**Dr.Rajiv Kapoor** (On diverted capacity to AIACT, Delhi), BE, ME, Ph.D. Electronics & Communication, Email: rajivkapoor@dce. ac.in

#### **Associate Professors**

**Mr. Prem R Chadha**, BE, M.Tech Electronics & Communication Email: prchaddha@dce. ac.in

Mr. Rajesh Rohilla, BE, M.Tech Electronics & Communication, Email: rajesh@dce.ac.in

**Dr. N.S. Raghava,** Ph.D. Antenna and Propagation, Microwave Engineering, Digital Communication, Wireless comm., Cloud Computing, Information Security, Email: nsraghava@dce.ac.in

**Dr. S. Indu**, B.Tech, M.Tech, Ph.D. Computer Vision, wireless sensor networks, Image Processing, Email: sindu@dce.ac.in

**Mr. Jeebananda Panda,** ME Applied Electronics, Email: jpanda@dce.ac.in

#### **Assistant Professors**

**Dr. Rajeshwari Pandey,** B.Tech, ME Linear Integrated Circuits, Fiber Optical Communication, Email: rpandey@dce.ac.in

**Dr. Neeta Pandey,** Ph.D. Analog Electronics

**Mr. Mahipal Singh** Choudhary, B.Tech, M.Tech Antenna and Propagation, Email: msc\_1976@yahoo.com

**Mr. Rajesh Birok,** B.Tech, M.Tech Biomedical Instrumentation, Email: rbirok@gmail.com

**Mr. Alok Kumar** Singh, BE, M.Tech Linear Integrated Circuits, Fiber Optical Communication, Email: aksingh@dce.ac.in

**Mr. Deva Nand,** B.Tech, M.Tech Micro Electronics, VLSI Design, Email: devkamboj71@gmail.com

**Mr. Dinesh Kumar** Vishwakarma, B.Tech, M.Tech, Ph.D. Computer Vision, Human-Computer Interaction, Human Pose and

Gesture Analysis, Machine Learning, Image Quality Improvement and Artificial Intelligence., Email: dinesh@dtu.ac.in , dvishwakarma@gmail.com

**Mr. Avinash Ratre** (Study leave under QIP), B.Tech, M.Tech Digital Signal Processing, Email: avinash.ratre@gmail.com

**Mr. Ajai K. Gautam,** B.Tech, M.Tech Electronics & Communications, Email: ajai. gautam@gmail.com

**Ms. N. Jayanthi,** M.Tech, Electronics & Communication.

**Dr. Prlyanka Jain,** B.Tech, M.Tech, Ph.D. Microwave Engineering, Digital Signal Processing, Email: priyajain2000@ rediffmail.com

**Dr. Sudipta Majumdar,** B.Tech, M.Tech, Ph.D. Electronics & Communications, Email: korsudipta@rediffmail.com

**Dr. Malti Bansal,** B.Tech, M.Tech, Ph.D. Electronics & Communications.

**Dr. Nidhi Taneja** (On Lien), Ph.D. Electronics & Communications

## 3. Honors and Awards to Faculty Members

### Dr. Neeta Pandey:

### **Technical Program committee member:**

- 3rd International Conference on Signal Processing and Integrated Networks, SPIN-2016
- Second International Symposium on Emerging Topics in Circuits and Systems

### **Reviewer (International Journals)**

- IEEE Transactions on VLSI
- Electronics Letters
- Microelectronics Journal (Elsevier)
- International Journal of Electronics (Taylor and Francis)
- AEUInternational Journal of Electronics and Communications (Elsevier)

- Analog Integrated circuits and signal processing(Springer)
- Advances in Electrical and Electronic Engineering
- Turkish Journal of Electrical Engineering & Computer Sciences

### **Reviewer (International Conferences)**

- 2016 International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT) - VLSI Design and Automation
- 3rd International Conference on signal processing and integrated networks, 2016
- 2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)
- Second International Symposium on Emerging Topics in Circuits and Systems (SET-CAS'16)

### **Session Chair**

- 2016 International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT)
- 2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)

### Best paper award/ prizes

- OTRA based shadow filters in 2015 Annual IEEE India Conference (INDICON), Dec 2015
- Flash ADC employing FVF based Current Comparator, in National Conference on Advances in Electronics and Computer Applications, pp. 1-6, 2016.
- Operational Transresistance Amplifier based Ackerberg Mossberg biquad implementation" Recent Trends In Communication And Technology (RTCT-2015)" PDM College of Engineering, Bahadurgarh, March 27, 2015. 3rd Prize

 OTRAbasedsecondorderdelayequalizer in Recent Trends In Communication And Technology (RTCT-2015)" PDM College of Engineering, Bahadurgarh, March 27, 2015. 2nd Prize

### Dr. N.S. Raghava

- Faculty Advisor for sponsored research on autonomous aerial vehicle development project by multidisciplinary students for the past six years
- Faculty Advisor for sponsored research on RORO project by multidisciplinary students
- Outstanding Scientist Award (in the category of Engineering/Antennas) organized by Venus International Foundation Research Awards (VIFRA-2015)

### Dr. S. Indu:

 Reviewer of Sadhana - Academy Proceedings in Engineering Science

### **Reviewer (International Conferences)**

- NCVPRIPG 2015
- ICVGIP 2016
- IEEE ICCC 2015
- Technical Chair of IICIP 2016
- Examiner of Ph.D Viva Voce examination of Anna University
- Member of Initial Screening Committee for evaluating different projects at Technology Development Board,

Department of Science and Technology

 Selection committee member for recruitment to various Group-A S&T and Non-S&T posts in National Institute of Electronics and Information Technology – during 19-21July 2016

### Dr. Rajeshwari Pandey:

### Reviewer

- International Conference SPIN 2015
- International Conference on Signal Processing and Communication 2015

**Best paper Award for** OTRA based shadow filters in 2015 Annual IEEE India Conference (INDICON), Dec 2015

- Voltage mode universal first order filter employing single operational transresistance amplifier" Recent Trends In Communication And Technology (Rtct-2015)" PDM College of Engineering, Bahadurgarh, March 27, 2015. 2nd Prize
- Operational Transresistance Amplifier based Ackerberg Mossberg biquad implementation" Recent Trends in Communication and Technology (RTCT-2015)" PDM College of Engineering, Bahadurgarh, March 27, 2015. 3rd Prize
- OTRAbasedsecondorderdelayequalizer in Recent Trends in Communication and Technology (RTCT-2015)" PDM College of Engineering, Bahadurgarh, March 27, 2015. 2nd Prize

## 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Dr. D. K. Vishwakarma	Galgotia College of Engineering Technology, Greater Noida, Uttar Pradesh, India.	Invited talk on "Computer vision: Opportunity and Challenges" in a DST sponsored Twoday National Seminar on "Advancement in Semiconductor Devices, Antenna, Power Control and Networks for Engineering Application	

Dr.S. Indu	SBIT	"Wireless Sensor Networks" "Embedded System and Design"	March 18, 2015
		Invited Lecture in 5 th IEEE	March 27, 2015
		NationalConference on Emerging Trends in Engineering and Technology (ETET— 2016) on 5-	

# 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Name of Faculty	Details of Conference/Seminar/ Symposia / Workshop/Guest Lecture	Venue	Dates
Mr. J. Panda	5Th International Symposium on Fusion of Science and Technology,	New Delhi.	Jan 18-22, 2016
Dr. S. Indu	Attended guest lecture by Sh. Veer Bhartiya on Entrepreneurship	DTU	25 May, 2016
	International Conference PReMI 2015 Warsaw University of Technology, Warsaw,	Poland	June 30 – July 3, 2015
	One Day Workshop on Network on Chip	IIIT Delhi	Mar 29, 2015
Dr. Neeta	Annual IEEE India Conference (INDICON)	JMI Delhi	Dec, 2015
Pandey	IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)	DTU	July, 2016
	2016 International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT)	GGSIPU	Mar, 2016
	Workshop on SCOPUS and Mendeley DTU	DTU	April 17, 2015
	Synopsys University Symposium 2015,	Synopsis	April 30, 2015
Dr. Rajeshwari	Workshop on SCOPUS and Mendeley	DTU	April 17, 2015
Pandey	Synopsys University Symposium 2015,	Synopsis	April 30, 2015
	Int. Yoga Day	DTU	June 21, 2015
	IEEE International Conference on Control. Communication and Computing (ICCC 2015)	Trivandrum	Nov. 19- 21,2015
Mr. A. K. Singh	5Th International Symposium on Fusion of Science and Technology,	New Delhi.	Jan 18-22, 2016
	Annual IEEE India Conference (INDICON)	JMI Delhi	Dec, 2015
	2nd Indian National conference on applied Mechanics-INCAM 2015	IIT,Delhi	July 13-15, 2015
	National Workshop on Power Electronics(NWPE-2015)	DTU	Nov. 6-7, 2015

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Name of Faculty	Details of Conference/Seminar/ Symposia / Workshop/Guest Lecture	Venue	Dates
Ms. N. Jayanthi	BIG DATA and ONTOLOGY	IIT, Delhi	Sept. 19, 2015
	"How to Publish a Technical paper with IEEE"	IIT, Delhi.	Aug. 11, 2015
	"Current Trends in Machine Learning" under the sponsorship of TEQIP-II	IIT Delhi.	Mar. 1, 2015
	UGC sponsored one day National Seminar on "Recent advances in Physics(NSRAP-2015)"	DTU	Feb 16, 2015
	One day Synopsys University Symposium 2015	New Delhi	April 30, 2015
Mr. Devanand	IEEE sponsored one day national seminar on "Frontiers in Applied Scienceand Technology (FAST-2016)"	DTU, Delhi	March 22, 2016.

## 6. Participation of Faculty in Short Term Courses

S. No	Name of faculty	Name of course attended	Venue	Date
1.	Mr. Rajesh	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
2	Mr. J. Panda	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Urban Environmental Challenges and Their Control Strategies	DTU	July 13-17, 2015
		Automation in Manufacturing	DTU	May 4-15, 2015
3	Dr. N. S. Raghava	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
4.	Dr. S. Indu	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
5	Dr. Rajeshwari Pandey	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Automation in Manufacturing	DTU	May 4-15, 2015
		Recent Advances and Challenges in Power and Energy forSustainable Growth	DTU	June 1-5, 2015.
6	Dr. N. Pandey	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Automation in Manufacturing	DTU	May 4-15, 2015
7	Mr. M. S. Choudhury	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
8.	Mr. R. Birok	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016

S.	Name of	Name of course attended	Venue	Date
No	faculty	rame of course attended	Venue	Date
9.	Mr. A. K.	Automation in Manufacturing	DTU	May 4-15, 2015
	Singh	Recent advance and challenges in power and energy for sustainable growth	EED, DTU, Delhi	June 1-5, 2015
		"Supply Chain Management for Sustainable Performance "	DTU	July 6-10, 2015
		Recent Trends in Geo-environment Engineering (RTGE-2016)	DTU	April 18-22, 2016
		Statistical Methods & a Brief on LaTeX	DTU	July 18-22 2016
	Mr. D. K. Vishwakarma	Nature inspired algorithms and their applications	EED, DTU	July 13-17, 2015
10		Recent Trends in Geo-environment Engineering (RTGE-2016)	DTU	April 18 - 22, 2016
		Matlab based optimization and Statistical data processing	MNNIT, Allahabad U.P	June 12-17, 2015
		Recent advance and challenges in power and energy for sustainable growth	EED, DTU, Delhi	June 1-5, 2015
		Automation in Manufacturing	DTU	May 4-15, 2015
		Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Introduction to System Design	AIACTR	April 4-8, 2016
		Advances in Information Security	DTU	Jan 18-22, 2016
		Statistical Methods & a Brief on LaTeX	DTU	July 18-22, 2016
11	Ms. N. Jayanthi	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Advances in Information Security	DTU	Jan 18-22, 2016
12	Mr. Deva Nand	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Automation in Manufacturing	DTU	May 4-15, 2015
		Nature inspired algorithms and their applications	EED, DTU	July 13-17, 2015
		Recent advance and challenges in power and energy for sustainable growth	EED, DTU, Delhi	June 1-5, 2015
		Advances in Information Security	DTU	Jan 18-22, 2016
		Introduction to System Design	AIACTR	April 4-8, 2016
		Recent Trends in Geo-environment Engineering (RTGE-2016)	DTU	April 18-22, 2016
13	Dr.Sudipta Majumdar	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016

S. No	Name of faculty	Name of course attended	Venue	Date
14	Mr. Ajai Gautam	Recent advances and challenges in power & energy for sustainable growth	DTU	June 1-5, 2015
		Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016
		Nature inspired algorithms and their applications	EED, DTU	July 13-17, 2015
15.	Dr.Priynka	Automation in Manufacturing	DTU	May 4-15, 2015
	Jain	Recent Trends in Pattern Analysis and Machine Learning	DTU	July 11-15, 2016

## 7. Visitors to the Department

Name	Affiliation	Purpose	Dates
Mr. Kishore Jayaraman	President Rolls-Royce India and South Asia	Speaker, Student Professional Awareness Conference	Feb. 22, 2016
Mr. Suresh Rajpal,	Former President HP India & Description of the Board of Visnova Solutions Pvt. Ltd		Feb. 22, 2016
Mr.Manmohan Gupta	Co-Founder & amp; Head of Engineering, Nagarro and	Speaker, Student Professional Awareness Conference	Feb. 22, 2016
Mr.SanjeevArora	Business Head and Vice president of ABB India	Speaker, Student Professional Awareness Conference	Feb. 22, 2016
Mr.RohanBhargava	Co-Founder of Cashkaro. com and Pouring Pounds	Speaker, Student Professional Awareness Conference	Feb. 22, 2016
Dr. Howard Michel Dr. Jim Prendergast, Mr. Harish Mysore Mr. Ravi Kiran	President and CEO of IEEE, Executive Director and COO, IEEE Director India Operations	To look out for the avenues for mutual cooperation	Aug 10,2015
	Secretary R10 Region		

# 8. Conference/Seminar/Symposia/Workshops Organized by the Department

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Dr. S. Indu	TEQIPII sponsored FDP Advances in InformationSecurity	DTU	Jan 18- 22, 2016
Dr. N. Pandey Dr. R. Pandey	TEQIPII sponsored expert lecture series on VLSI	DTU	Jan 18- 29, 2016
Dr. N. S. Raghava Dr. P. Jain	TEQIPII sponsored expert lecture series on Microwave and RF Technologies	DTU	Apr. 6-11, 2016
Dr. D. K. Vishwakarma Mr. M. S. Choudhary Mr. R. Birok	Faculty Development Programme (FDP) on "Recent Trends in Pattern Analysis and Machine Learning"	DTU	July 11-15, 2016
Dr. S. Indu Dr. N. Pandey	Skill Development Program funded by IEEE R10 WIE Support Fund 2015	Bawana region	Sept Oct, 2015
Prof. R. Kapoor	Workshop on Embedded Systems and VLSI	DTU	Nov. 7-8, 2015
Dr. S. Indu Mr. J. Panda Dr.R. Pandey Dr.N. Pandey	Visit of President of IEEE, Dr. Howard Michel	DTU	Aug. 10, 2015
Dr.R. Pandey Mr. A. K. Singh Mr. Devanand Ms. N. Jayanthi Dr. N. Pandey	Student professional awareness conference through IEEE DTU student branch	DTU	Feb 21, 2016
Dr. S. Indu Mr. J. Panda Dr.R. Pandey Dr.N. Pandey	IEEE Delhi Student Congress 2015	DTU	Jan 10-11, 2015

## 9. (i) Completed Sponsored Research Projects

Principal Investigator	Title of Project	Sponsoring Agency	Outlay (amount in Lakhs of)
Dr. S. Indu	Surveillance application DCE-NRB	NRB	12 Lakhs

## (ii) Continuing Sponsored Research Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of `)
Dr. N.S. Raghava	UAV project	Lockheed Martin	1 Crore
Dr. S. Indu	Development of OGC standards based sensor network for intelligent traffic management	DST	20 lakh
Dr. S. Indu	Managing Intangible Cultural Assets through Ontological Interlinking	DST (through IIT, Delhi)	3 lakh
Prof. R. Kapoor	Real Time Infrared Image Enhancement for Vehicle Classification	DRDO, TBRL	Rs.50 Lakhs

## 10. Important Professional Affiliations:

Name of Faculty	Professional Society Membership
Prof. P.R.Chadha	Institute of Electrical and Electronics engineering (IEEE,USA)
Dr. S. Indu	Sr. Member : Institute of Electrical and Electronics Engineering (IEEE,USA) IETE Life Member ISTE - Life-member
Mr. J. Panda	Institute of Electrical and Electronics Engineering (IEEE,USA)
Dr. N.S. Raghava	IETE Life Member ISTE - Life-member
Dr. Neeta Pandey	Sr. Member : Institute of Electrical and Electronics Engineering (IEEE,USA) ISTE - Life-member
Dr. Rajeshwari Pandey	Institute of Electrical and Electronics Engineering (IEEE,USA) IETE Life Member ISTE - Life-member
Mr.A.K.Singh	Institute of Electrical and Electronics Engineering (IEEE,USA)

### 4.9 Department of Electrical Engineering

Academic Staff: 29; Students Admitted: UG-235, PG-41, Ph.D.10; Publications: Journals/Papers-44; Conference/ Symp.-47;

### 1. Salient Features

- The department of Electrical Engineering has grown significantly since its inception in 1941. The year 2016 marks the 75th year of Excellence (Platinum Jubilee) for both the university and the department in academic, research and innovation. The goal of the department is to provide quality education at undergraduate and postgraduate levels and undertake cutting edge research in various areas of Electrical Engineering. The department also aims to develop active collaboration with various industries in the power sector. The department has (developed an important place) earned itself a very good reputation in the National Capital Region of Delhi. Currently, the department has an annual intake of 150 and 100 students in the B.Tech programmes in Electrical Engineering and Electrical and Electronics Engineering, respectively. The department is also offering B.Tech (Evening) with an intake of 46 students. The graduates of the department are occupying important positions in both government as well as corporate sector with many of them having joined programs of higher studies in India and abroad.
- Atthe post graduate level, the department is offering two M.Tech programmes in Control and Instrumentation and Power Systems with a combined intake of 48 students. The department is also running part time (evening) PG program in Power Electronic Systems for DMRC (under MOU) since 2012-13. In addition to the above, the department offers regular

- Ph. D programmes in various areas of specialization in Electrical Engineering. These include Intelligent control, Optimization, Power quality, Renewable Energy Sources, Smart grids, Power System Operation and Control, Power System Dynamics and Stability, Flexible AC Transmission (FACTS), HVDC, Electric Drives and Hybrid Electric Vehicles.
- The department currently has 17 laboratories equipped with state-of-the art equipment and latest version of latest software platforms. Currently, sponsored projects from the DST and the AICTE amounting to more than Rs. 1.3 crores are currently underway in the department. The department also organizes National and International Conferences, Faculty Development Programmes, Workshops and Expert Lectures from time to time. The department recently organized the IEEE International Conference on "Power Electronics, Intelligent Control And Energy Systems" during July 4-6, 2016. The department also conducted the first GIAN course at DTU on "Challenges and Opportunities in Renewable Energy: Role of the Smart Grid" recently. Three Faculty Development Programmes were organized by the department in the last academic year. Fourteen 'Lectures by Eminent Persons' were organized by the department in the last academic year.

### 2. Academic Staff

#### **Professors**

**Dr. Madhusudan Singh,** B.Sc (Engg.), ME, Ph.D. Control & Instrumentation, Email: madhusudan@dce.ac.in

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**Dr. N.K. Jain,** B.Sc (Engg.), M.Sc (Engg), Ph.D. Power Systems, Email: n.k.jain@dce.edu

**Dr. Narendra Kumar**, B.Sc (Engg.), M.Sc (Engg.), PhD Specialization: Power System & Drives Email: narendra.kumar@dce.edu

**Dr. Pragati Kumar,** M.Tech, Ph.D. Control & Instrumentation, Email: pragati.kumar@dce. edu

**Dr. Uma Nangia,** BE, ME, Ph.D. Power Systems, Email: umanangia@dce.ac.in

**Dr. Vishal Verma,** M.Tech, Ph.D. Power Electronics, Email: vishalverma@dce.ac.in

**Dr. Narendra Kumar (II),** BE, ME, Ph.D. Instrumentation, Control & Power Electronics Applications, Email: narendrakumar@dce. edu

#### **Associate Professors**

Mr. Neeraj Kumar Bhagat, B.Sc (Engg.), M.Tech Control Systems, Email: n.k.bhagat@dce.edu.

**Dr. Rachna Garg,** M.Tech, Ph.D. Control & Instrumentation Email: rachna.garg@dce. edu .

Dr. Bharat Bhushan, **M.Tech Control &** Instrumentation, Email: bharat@dce.ac.in.

**Dr. Suman Bhowmick,** ME Electrical Machines, Email: suman.bhowmick@dce.ac.in.

**Dr. Alka Singh,** BE, M.Tech, Ph.D. Power System

**Dr. Madan Mohan Tripathi,** B. Tech, M.Tech, Ph.D. Restructuring power systems, Artificial Intelligence, Email: mmtripathi@dce.ac.in

**Dr. Mukhtiar Singh,** Ph.D. Electrical Engineering, Email: mukhtiarsingh@dce. ac.in

**Dr. Dheeraj Joshi,** BE, ME, Ph.D. Power Electronics, Electric Drives, Renewable Energy Systems, Email: joshidheeraj@dce.ac.in

**Dr. S.T. Nagrajan,** B.Sc (Engg.), BE, ME, Ph.D. Power system, High Voltage Engineering, Email: s.t.nagarajan@dce.edu Mr. Sudarshan Kumar Babu Valluru, B. Tech, M.Tech Control & Instrumentation, Email: valluru.sk@gmail.com

#### **Assistant Professors**

**Mr. Ram Bhagat,** B.Tech, ME Control & Instrumentation, Email: ram.bhagat@dce. edu

Mr. J.N. Rai, M.Tech, Email: jnrai@dce.ac.in Dr. Priya Mahajan, ME Power System, Email: mahajan@dce.edu

**Mr. Duli Chand Meena,** B.Tech, M.Tech Power Systems, Email: Meena@dce.edu dcmeena@dce.ac.in

**Dr. Mini Sreejeth K.,** ME Electrical Machines. **Mr. Prem Prakash** (Study leave under QIP), BE, M.Tech Engg. Systems, Email: prem. prakash@dce.edu

**Ms. Bhavnesh Jaint,** BE, ME Electrical Engg.

Mr. Ashish Rajeshwar Kulkarni, ME Control Systems, Intelligent Transportation Systems, Microcontrollers & Embedded Systems, Robotics, Email: ashishkulkarni@dce.edu

Mr. Aniruddha Barun Kumar Bhattacharya, a.b.bhattacharya@dce.edu

**Mr. Ramjee Lal Meena** (On Lien under QIP), BE, M.Tech Power Quality, Email: r.l.Meena@dce.edu

**Dr. Mohammad Rizwan,** B.Tech, M.Tech, Ph.D. Power System Email: rizwaniit@ yahoo.co.in rizwan@dce.ac.in

Ms. Garima, BE, M.Tech Analog, VLSI.

## 3. Honors and Awards to Faculty Members

### Dr. M. Rizwan

- UGC Research Award 2015-16
- Awarded Raman Fellowships for Post-Doctoral Research for Indian Scholars in USA for the Year 2016.

- Elevated to Senior Membership of IEEE.
- Received best paper award in 12<sup>th</sup> IEEE India International Conference, 2015 (INDICON 2015) entitled Electronics, Energy, Environment, Communication, Computer, Control (E<sup>3</sup>-C<sup>3</sup>), e organized by Jamia Millia Islamia, Delhi, India during December 17-20, 2015.
- Best paper Award presented in National Conference on Emerging Trends in Electrical and Electronics Engineering at Jamia Millia Islamia, New Delhi on February 3, 2015.
- Awarded Scholarship from Central Wakf Council, Ministry of Minority Affairs, Govt. of India during 1999-2002.

- Awarded Merit Scholarship, Jamia Millia Islamia, New Delhi.
- Dr. Zakir Hussain Scholarship, New Delhi.
- Expert Member, Maulana Azad National Urdu University (Central University), Hyderabad.
- Expert Member, Anna University, Chennai.
- Expert Member, National Productivity Council, Govt. of India.
- Member Board of Studies, Al-Falah University, Faridabad.
- Member of Editorial boards, reviewer of refereed international journals, books and conferences including IEEE Transactions, Elsevier, Taylor & Francis, Wiley etc.

### 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Prof. Narendra Kumar-I	Jamia Milia Islamia Central university	Evaluation of Ph.D. thesis and conducted Viva-Voce examination	April 19, 2016
Prof. Narendra Kumar-I	N.I.T. Hamirpur (H.P.)	Evaluated two M.Tech Dissertations and conducted Viva-Voce examination	July 12, 2016
Prof. Narendra Kumar-I	MSIT, Janak puri, Delhi	I.P. University Expert member, Joint Assessment Committee	May 27, 2016
Prof. Narendra Kumar-I	MAIT, Rohini, Sector-22, Delhi	I.P. University Expert member, Joint Assessment Committee	May 12, 2016
Prof. Narendra Kumar-I	BPIT, Rohini, Sector-11, Delhi	I.P. University Expert member, Joint Assessment Committee	May, 2015
Prof. Narendra-I Kumar	GTBIT,G-8 Area, Rajouri Garden New Delhi - 110064	I.P. University Expert member, Joint Assessment Committee	May, 2016
Prof. Narendra Kumar-I	Delhi Technical Campus, Greater Noida	I.P. University Expert member, Joint Assessment Committee	June 2016
Dr. M. Rizwan	Syed AmmalEngg. College, Ramanathapuram (Anna University), TN.	Evaluated one Ph.D. thesis and conducted Viva-Voce examination	Jun 5. 2015
Dr. Rachana Garg	BharatiVidyapeeth college of Engineering	Judging technical paper presentation	Feb12, 2015
Dr. Rachana Garg	MSIT, Delhi	Delivering expert lecture on "Recent trend in railway electric traction system"	Feb25, 2015

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Dr. Rachana Garg	GBU, Delhi	As RDC expert of PhD students of EED.	Jan, 2015
Dr. Pragati Kumar	MNIT Jaipur	Member selection committee for assistant professor	March 2015
Dr. Bharat Bhushan	BPIT, Delhi	External Examiner	April, 2015
Dr. Bharat Bhushan	NIEC, Delhi	External Examiner	April, 2015
Dr MM Tripathi	UPCON-ICEEE-2015, UP	Technical Chair of 1st Uttar Pradesh Conference - IEEE International Conference on Energy Economics and Environment	March 26- 28, 2015

# 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Dr. M. Rizwan	National Conference on Emerging Trends in Electrical and Electronics Engineering	JMI, Delhi	Feb 3, 2015
Dr. Rachana Garg	National Conference on Emerging Trends in Electrical and Electronics Engineering	JMI, Delhi	Feb 3, 2015
Prof. Narendra Kumar-I	1st IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2016), Delhi Technological University, Delhi,	DTU, Delhi	July. 4-6, 2016.
Prof. Nrendra Kumar-I	UGC funded National Workshop on "University Governance", organised by Ambedkar University, Delhi	Casuarina, India Habitate Centre, Lodi Road, New Delhi	March 29- 30, 2016
Prof. Narendra Kumar-I	3rd World Summit on Accreditation-2016, (WOSA-2016), "Quality Assurance through Outcome Based Accreditation", organized by National council for Accreditation, Govt. of India	The Leela Ambience Hotel, Gurgaon	March 18- 20, 2016.
Dr.Bharat Bhusan	1st IEEE International Conference on "Power Electronics, Intelligent Control And Energy Systems"	EED, DTU	July 4-6, 2016
Dr. M. Rizwan	GIAN course at DTU on "Challenges and Opportunities in Renewable Energy: Role of the Smart Grid"	EED, DTU	June 3-8, 2016
Dr. S. Bhowmick & Dr. Rachna Garg	Series of Expert Lectures for B. Tech (EE & EEE) Courses in IV and VI Semester	EED, DTU	March-April 2016

Dr. M.M. Tripathi & Dr. M. Singh National Workshop on Power Electronics   EED, DTU (NWPE - 2015) under National Mission on Power Electronics Technology (NAMPET-Phase II) of Department of Electronics and Information Technology (Deity), Govt. of India
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## **6. Participation of Faculty in Short Term Courses**

Name of Faculty	Name of Courses	Place	Dates
Dr. Bharat Bhusan, Dr. Dheeraj Joshi & Ms. Garima	Organised TEQIP II Sponsored Faculty Development Program on Nature Inspired Algorithms & Their Applications (NIATA-2015)	EED, DTU	July 13-17, 2015
Dr. M.M. Tripathi & Dr. M. Singh	Organised TEQIP-II sponsored Faculty Development Programme on Recent Advances and Challenges in Power & Energy for Sustainable Growth	EED, DTU	June 1-5, 2015
Mr. S. K. Valluru	Attended TEQIP-II sponsored Faculty Development Programme on Recent Advances and Challenges in Power & Energy for Sustainable Growth	EED, DTU	June 1-5, 2015
	Attended TEQIP II Sponsored Faculty Development Program on Nature Inspired Algorithms & Their Applications (NIATA-2015)	EED, DTU	July 13-17, 2015
	Attended TEQIP II Sponsored Short Term Training Programme on PLC, HMI, SCADA and AC Drives	EED, DTU	June 13-17, 2016
	Attended one week Short Term Course on Nonlinear Control System Design	Department of Avionics, IIST, ISRO, Thiruananthapuram	June 20- 24, 2016
Dr.S. Bhowmick	Attended TEQIP II Sponsored Short Term Training Programme on PLC, HMI, SCADA and AC Drives	EED, DTU	June 13-17, 2016
	Attended TEQIP II Sponsored Faculty Development Program on Nature Inspired Algorithms & Their Applications (NIATA-2015)	EED DTU	July 13-17, 2015
	Attended TEQIP-II sponsored Faculty Development Programme on Recent Advances and Challenges in Power & Energy for Sustainable Growth	EED, DTU	June 1-5, 2015
Mr. Ashish Kulkarni & Dr. Mini Sreejeth	Organised TEQIP II Sponsored Short Term Training Programme on PLC, HMI, SCADA and AC Drives	EED, DTU	June 13-17, 2016

Name of Faculty	Name of Courses	Place	Dates
Ms. Garima	Attended TEQIP II Sponsored Short Term Training Programme on PLC, HMI, SCADA and AC Drives	EED, DTU	June 13-17, 2016
Dr. Mini Sreejeth	Attended TEQIP II Sponsored Faculty Development Program on Nature Inspired Algorithms & Their Applications (NIATA-2015)	EED DTU	July 13-17, 2015
Dr. M.M. Tripathi	Attended TEQIP II Sponsored Faculty Development Program "Automation in Manufacturing"	PIED, DTU	May 4-15, 2015
	Attended TEQIP II Sponsored Faculty Development Program on Nature Inspired Algorithms & Their Applications (NIATA-2015)	EED, DTU	July 13-17, 2015
	Attended TEQIP II Sponsored Faculty Development Program on "Advances in Information Security"	COED, DTU	Jan 18-22, 2016
	FDP on Achieving Academic Excellence	IIM, Raipur	March 23- 28, 2015

## 7. Visitors to the Department

Name	Affiliation	Purpose	Dates
Dr. Ishwar D. Aggarwal	University of North Carolina USA	Delivered an expert lecture on "Recent Advances in Fibre optics & optoelectronics"	July 14, 2016
Dr. Adel Nasiri	Electrical Engineering Department, University of Wisconsin, USA	Delivered an expert lecture on "Converter Topologies for Grid Connected PV Systems"	June 1, 2016
Dr. Pukhraj Singh	Suzlon Energy GmbH Germany	Delivered an expert lecture on "R&D in areas of Power Generation, Grid interconnections of Wind Farms, Electrical & Electronic Components for onshore Wind Turbines"	May 4, 2016
Mrs. Minaxi Garg	Power System Operation Corporation Ltd. (POSOCO)	Delivered an expert lecture on "Challenges for Large Scale Integration of Renewables"	April 26, 2016
Mr. Puneet Tyagi	Power Grid, Gurgaon	Delivered an expert lecture on "HVDC Systems"	April 25, 2016
Prof. Mini Thomas	EE Department Jamia Millia Islamia New Delhi	Delivered an expert lecture on "Energy Management Systems"	April 22, 2016
Dr. Subir Sen	Power Grid, Gurgaon	Delivered an expert lecture on "Power Systems"	April 21, 2016

Mr. Abhay Kumar	Power Grid, Gurgaon	Delivered an expert lecture on "FACTS Devices"	March 29, 2016
Prof. Sukumar Mishra	EE Department, IIT Delhi	·	
Prof. Sudip K. Mazumder	Department of Electrical and Computer Engineering University of Illinois, Chicago, USA	Delivered an expert lecture on "Inverter Topologies"	Dec 22, 2015
Dr. Kulbhushan Kumar	PWC Pvt. Ltd.	Delivered an expert lecture on "Energy Conservation Technologies:- Practices And Recent Technology Trends In Energy Efficiency Industry"	Oct 19, 2015
Prof. B. Das	EE Department, IIT Roorkee	Delivered an expert lecture on "FACTS Devices"	Oct 6, 2015
Prof. Sukumar Mishra	EE Department, IIT Delhi	Delivered an expert lecture on "Trends in Microgrid Control" Aug 2015	
Prof. Bhim Singh	EE Department, IIT Delhi	Delivered an expert lecture on "Grid Integration of Renewable Energy Sources"	June 9, 2015

## 8. Conference/Seminar/Symposia/Workshops/Short Term Courses Organized by the Department

Organizing Secretary	Details of Conference / Seminar / Symposia / Workshop/ Guest Lecture		Dates
Dr. M. Rizwan	GIAN course at DTU on "Challenges and Opportunities in Renewable Energy: Role of the Smart Grid"	EED, DTU	June 3-8, 2016
Dr. Bharat Bhushan	1st IEEE International Conference on "Power Electronics, Intelligent Control And Energy Systems"	EED, DTU	July 4-6, 2016
Dr. M. M. Tripathi & Dr. M. Singh	National Workshop on Power Electronics (NWPE - 2015) under National Mission on Power Electronics Technology (NAMPET-Phase II) of Department of Electronics and Information Technology (DeitY), Govt. of India		Nov 6-7, 2015
Dr. Alka Singh	TEQIP II Sponsored Curriculum Development Workshop 08th March, 2015		March 2015

## 9. List of Candidates Awarded Ph.D. Degree

Name of Student	Nationality	Gender (Male/ Female)	Category (Gen/SC/ ST/PD)	Title of thesis
Ms. Mini Sreejeth	Indian	Female	Gen	Design and Development of Distributed drive system
Ms. Priya Mahajan	Indian	Female	Gen	Digital Model of Railway Electric Traction System and Sensitivity Studies

# 10. (i) Completed Sponsored Research Projects

Principal Investigator	Title of Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Prof. Vishal Verma	Feasibility and Environmental Impact Study of Broadband on Power Lines (BPL) for rural Information Centers	Technology GOI and is being	106
Prof. Madhusudan Singh & Prof. Parmod Kumar	Modernization of Electrical Drives Laboratory under MODROB	AICTE	10
Prof. Narendra Kumar-I	Enhancing Power System Performance Using Flexible AC Transmission Systems(FACTS) Devices	AICTE Funded R&D Project	12
Dr. M. Rizwan	Modernization of Power Systems Laboratory	AICTE	17.42
Dr.M.Rizwan	Some Investigations on RES Based Power Systems	AICTE	12.97
Dr. Alka Singh	Modelling and Control of Power Electronic based Controllers for Interfacing Renewable Energy Systems to Utility Grid.	DST	23

# (ii) Continuing Sponsored Research Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Prof. Vishal Verma	Reliable and Efficient Systems for Community Energy Solutions - RESCUES	DST	Rs.41.80 Lakhs
Dr. M. Rizwan	Modernization of Power Systems Laboratory	AICTE	Rs.17 Lakhs
Dr. M. Rizwan	Modelling And Development Of Controller For PV System Integration into Electricity Distribution Networks.	DST	Rs.26.6 Lakhs
Dr. Alka Singh	Modelling and Control of Power Electronic based Controllers for Interfacing Renewable Energy Systems to Utility Grid.	DST	Rs.23 Lakhs
Dr.M.Rizwan	Some Investigations on RES Based Power Systems	AICTE	Rs.13.5 Lakhs
Prof. Vishal Verma	Development of Autonomous Power Electronic Controller for Single Phase Induction Generator for Seamless Transfer of Power with Supply and building Hybrid interface with Battery Bank/ Solar Panel	AICTE	Rs.10.35 Lakhs

#### (iii) Consultancy Projects Completed

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of Rupees)
Prof. Parmod Kumar, Prof. Narendra	T hird party quality	UPSIDC(A U.P.	5
Kumar-I, Prof. Madhusudan Singh	checking of various	Government	
and Dr. Pragati Kumar	electrical works	Undertaking.)	

# 11. Summary of Major Sponsored Research Schemes and Consultancy Projects

- Consultancy Segregation of Technical & Commercial Losses on the NDPL Network: Rs1.2 Lakhs.
- 2. Prof. Parmod Kumar, Prof. Narendra Kumar, Prof. Madhusudan Singh and Dr. Pragati Kumar carried out third party quality checking of various electrical works executed by UPSIDC(A U.P. Government Undertaking.).The total amount of consultancy is Rs.5 Lakhs
- 3. Development of an automatic dispensing machine for fair price shops in close association with Designinnova (A unit of *Arrow weighing system Pvt Ltd.*

# 12. Important Professional Affiliations:

- Senior Member, Institution of Electrical & Electronics Engineers (IEEE), USA
- 2. Life Member, Indian Society for Technical Education (ISTE), India

Name of Faculty	Name of Professional Society
Prof. Madhusudan Singh	Fellow, IE (India) Life Member, ISTE, Delhi Member, IEEE, USA
Prof. Vishal Verma	Member, IEEE, USA
Dr. Alka Singh	Member, IEEE, USA
Dr. Dheeraj Joshi	Member, IEEE, USA
Dr. Rachana Garg	Member, IEEE, USA
Dr. S. Bhowmick	Member, IEEE, USA
Dr. Rizwan	Member, IEEE, USA
Dr. Priya Mahajan	Member, IEEE, USA
Dr. Mini Sreejeth	Member, IEEE, USA

#### **Books Published:**

- Dr. Suman Bhowmick, "Flexible AC Transmission Systems (FACTS): Newton power-Flow Modeling of Voltage-Sourced Converter-Based Controllers", May 2016, CRC Press, Boca Raton, Florida, USA
- 2. Dr. M.M. Tripathi, "Restructured Power System and Electricity Market Forecasting", CreateSpace Independent Publishing Platform, May 2015
- 3. Dr. M.M. Tripathi, "Neural Network and Electricity Market Forecasting", Kindle Edition, Amazon Digital South Asia Services, Inc., May 2015
- 4. Dr. M.M. Tripathi, "Advance Switching Schemes for Inverters", Kindle Edition, Amazon Digital South Asia Services, Inc., June 2015

### 4.10 Department of Environmental Engineering

Academic Staff: 07; Students Admitted: UG- 60; PG- 20; Ph.D.: 04, Publications: Journals/Papers-50, Conference/Symp: 7

#### 1. Salient Features

The Department of Environmental Engineering was created in February-2012. The Department at present is offering B.Tech, M.Tech and Ph.D programs. The Department provides opportunity working engineers for their academic upgradation by offerring part time PG course. Department is actively involved in Research and Development. Department has well established laboratories in all the areas of Environmental Engineering.

#### 2. Academic Staff

#### **Professor**

**Prof. A. K. Gupta,** HoD, B.Sc, B.Tech, M.Tech, Ph,D. Geotechnical Engineering, Email: akgupta@dce.edu

**Prof. S. K. Singh,** B.E., M. Tech., Ph. D., FIEE, FICS, FIAH, FIE, FUWAI, FIGS Solid waste processing, Wastewater treatment designs, Water treatment designs, Water quality modeling, Solar detoxification EIA & Auditing, Email: sksingh@dce.ac.in

**Dr. Anubha Mandal,** M. Tech., Ph.D. Areas of interest: Air Pollution, Indoor air pollution,

Occupational health. Email: anubhamandal@dce.ac.in

#### **Assistant Professors**

**Dr. Anil Kumar Haritash,** M.Sc., M. Tech., Ph.D., Areas of interest: Environmental microbiology, Bioremediation, Email:akharitash@dce.ac.in

**Ms. Geeta Singh,** B. Tech., M. Tech., Ph.D. (Pursuing) Areas of interest: Environmental hydraulics, Ground water pollution, Email: geeta.singh@dce.ac.in

Dr. Rajeev Kumar Mishra, M. Tech., PhD (IIT Roorkee) Areas of interest: Environmental implications of urban transport systems, Urban air pollution analysis & modeling, Traffic noise pollution modeling, Acoustics & barrier designing, Email:rajeevkumarmishra@dce.edu, rajeevmishraiitr@gmail.com

**Ms. Loveleen Gupta,** B.E., M.S. (Lehigh University, USA)Areas of interest: GHG emissions, Human Health Risk Assessment, Treatment of contaminants in surface water and groundwater, Solid waste management. Email: lgupta@dce.ac.in

## 3. Visit of Faculty members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
Dr. Rajeev Kumar Mishra	National Science Centre, Delhi	Invited as Judge by National Science Centre, Delhi, for the evaluation of science projects/ models in Northern India Science Fair (NISF 2015- 16) organized by National Science Centre	Jan 19, 2016
	Vivekanand School, Anand Vihar, Delhi	Invited as Judge by Vivekanand School, Anand Vihar, Delhi, for the evaluation of CBSE National Level Science Exhibition	Feb 8-9, 2016
Dr. A. K. Haritash	TERI University, Delhi	Member, Selection Committee, M. Sc. Admissions - 2016	June 14- 16, 2016

# 4. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

S. No.	Name of Faculty (Designation)	Organizing Secretary	Details of Conference/ Seminar/Symposia/ Workshop/Guest Lecture	Venue	Dates
1.	Dr. Rajeev Kumar Mishra	Texas A & M University, USA & AISECT University, Bhopal, India	Spatial and Temporal Analysis of Particulate Matter in Delhi	Bhopal	March 15- 18, 2016
		Texas A & M University, USA & AISECT University, Bhopal, India	Study of Air and Noise Pollution in Mega Cities of India	Bhopal	March 15- 18, 2016
		BRCM College of Engineering and Technology, Bhiwani, Haryana	GIS Based Monitoring and Assessment of Vehicular Pollution	Haryana	Nov 28- 29, 2015
2.	Ms. Geeta Singh	DTU, Delhi	National workshop on Power Electronics	Delhi	Nov 6-7, 2015
		DTU, Delhi	National seminar on frpntiers in Applied science & Technology	Delhi	March 22, 2016

## 5. Participation of Faculty in Short Term Courses

S. No.	Name of Faculty	Name of Courses	Place	Dates
1. Dr Rajeev Kumar Mishra		Automation in Manufacturing (AIM-2015)	Delhi Technological University	May 4-15, 2015
		Recent Advances and Challenges in Power & Energy for Sustainable Growth	Delhi Technological University	June 1-05, 2015
		Recent Advances in Alternative & Renewable Energy Technologies	Delhi Technological University	Dec 7-11, 2015
		Recent Trends in Geoenvironmental Engineering (RTGE-2016)	Delhi Technological University	April 18-22, 2016
2.	Dr. A. K. Haritash	Recent Advances in Alternative & Renewable Energy Technologies	Delhi Technological University	Dec 7-11, 2015
		Recent Trends in Geo-environmental Engineering (RTGE-2016)	Delhi Technological University	April 18-22, 2016
		Polluted Sites: Characterization and Remediation	IIT Bhubaneshwar, Odisha	July 25- Aug. 5, 2016

3.	Ms. Geeta Singh	Recent Advances in Alternative & Renewable Energy Technologies	Delhi Technological University	Dec 07-11, 2015
		Recent Trends in Geo-environmental Engineering (RTGE-2016)	Delhi Technological University	April 18-22, 2016
			Delhi Technological University	July 11-15, 2016
		Recent development in fluid Mechanics and hydraulics	Delhi Technological University	July 18-22, 2016
		Recent developments and challenges in material and manufacturing process	Delhi Technological University	July 25-29, 2016

### 6. Workshops:

**Dr. Rajeev Kumar Mishra, Dr. A. K. Haritash,** and **Ms. Geeta Singh** Conducted TEQIP Sponsored one week Faculty Developemnt

Programme on "Urban Environmental Challenges and Their Control Strategies" from July 13-17, 2015 in Department of Environmental Engineering at Delhi Technological University, Delhi.

#### **4.11 Department of Humanities**

Academic Staff: 4; Students Admitted: UG-1794; PG-108; Ph.D. Candidate- 6; Publications: Journals/Papers- 19, Poems-4, Book- 4, Conference Papers-17 / Symp.-1, New Projects: NIL, Book Chapter: 3;

#### 1. Salient Features

The department of Humanities was established in the year 1941 with a view to impart necessary soft skills to the graduating engineering students. Initially courses in English, Economics and Accountancy were taught to the students. With the growing impetus on new courses like Econometrics, Gender and Technology and timely revision of syllabi of subjects like Engineering Economics and Communication Skills, a crossover between technical and nontechnical aspects of learning is facilitated. The main objective is to give the students a comprehensive idea of the competition and the emerging work cultures to make them confident and market ready. To sensitize students towards technological need of poor and deprived for inclusive growth, B.Tech students of all the branches are compulsorily asked to visit slum and prepare an assignment on the problems of slum and how knowledge of their branch of engineering can be used to improve life at slum.

In the current scenario we need engineers who can develop technologies that are sustainable, user friendly, effective and adaptable with respect to changing social and cultural realities. The humanities department is therefore actively engaged in the process of research work, courses and finishing lectures which are organized throughout the year for the benefit of students and teacher alike.

#### 2. Academic Staff

#### Associate Professors Head of The Department

**Dr. Seema Singh,** M.A, Ph.D. Economics, Email: seemasingh@dce.ac.in seemasinghdce@yahoo.com seemasinghdtu@gmail.com

#### **Assistant Professors**

**Ms. Saroj Bala,** M.A, English Email: sarojbala@dce.ac.in sarojdce@rediffmail.com

Mr. Nand Kumar, M.A, English Ms. Parinita Sinha, M.A.

# 3. Honors and Awards to Faculty Members

Name	Area			
Dr. Seema Singh	Member, Editorial Board, International Journal of Humanities and Social Sciences (IJHSS); ISSN(Print): 2319-393X; ISSN(Online): 2319-3948; Impact Factor(JCC): 3.1936; NAAS Rating: 3.19			
	Member, Editorial Board, International Journal of Transformations In Business Management, e-ISSN:2231-6868, p-ISSN: 2454-468X, 5.			
	Member, Editorial Board, International Journal of Research In Social Sciences & Humanities, e-ISSN: 2249-4642, p-ISSN:2454-4671, Impact Factor- 1.5287,			
Member, Editorial Board, Multidisciplinary International Journal , p-ISSN:				
Member, Editorial Board, Amity Journal of Economics,				
	Paper Reviewer, Journal of Business and Economics, USA ISSN: 2155-7950 Academic Star Publishing Company, 228 East 45th Street, Ground Floor, #CN00000267, New York NY 10017			
	Chairperson, Girl Education, Centre for Educational Growth & Research, New Delhi			
	Vice President-I, University Women Association Delhi			
	Joint Secretary, Indian Society of Labour Economics (ISLE)			
	Vice President, Women in Science and Technology-India			

# 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/ Organization Visited	Purpose of Visit	Dates
DR. SEEMA SINGH	Parul University, Vadodra, Gujarat	To attend the seminar	Aug 21, 2015
	Central University of Kashmir, Sri Nagar	To organise and attend 57th Annual Conference of ISLE	Oct. 10-12, 2015
	Jawaharlal Nehru University, New Delhi	To deliver lecture in one- week Workshop for Principals	Oct 14, 2015
	Ch. Charan Singh University. Meerut	As a resource Person in the Seminar on "Role of Women Entrepreneurship in India- Opportunities and Challenges"	March 26- 27' 2016
	Netaji Subhash Institute of Technology	As a member of Selection Committee under CAS	March 28, 2016

# 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Name of the participants	Conference/Seminar/ Symposia / Workshop/ Guest Lecture	Details	Dates
Dr. Seema Singh	Chaired the session	The 4th Session of the CBM- 2016 (April 16-17' 2016) at IIT Delhi	April 16, 2016
	Deliver invited lecture as Resource Person	"Role of Women Entrepreneurship in India- Opportunities and Challenges", at MA. Kanshi Ram ShodhPeeth, Ch. Charan Singh University, Meerut	Mar 26-27, 2016
	Discussant	Session 3.6: Labour and employment in manufacturing sector	Oct 12' 2016
	Presented paper at the Seminar	"Tryst with Destiny: Empowering Women through Financial Inclusion in India" at the UWAV CONFERENCE on Development Model - A Woman's Perspective at Parul University, Vadodara	Aug 21-22, 2015
Saroj Bala	Paper presented at the international conference	Content-Based Instruction and Learning for Engineers at ELTAI conference on Content- Based Instruction & Learning: Redefining the English Language Curriculum	June 30-July 2, 2016
	Paper presented at the International conference	Empowering Women through the Language of Power at the 3rd ELT conference at Amity University, Lucknow Campus	March 5-6, 2016
	Paper presented at the International Conference	Brain Drain in the Globalized World at the International conference on Diaspora and Development at Punjabi University, Patiyala	Feb 24-26, 2016
	Paper presented at the International conference	Robin Sharma's Insights on Perfect Living for Social Welfare at the International conference on Making Connections: Social Welfare in the Context of English Language& Literature at Lingaya's Univ, Faridabad	Feb 26-27, 2016
	Paper presented at the international conference	21st Century Skills for Engineers at the International Symposium on Fusion of Science & Technology	Jan 18-22, 2016
	Paper presented at the International conference	M-Learning for the Digital Natives at the International symposium on the Fusion of Science and Technology at Pusa campus, New Delhi	Jan 18-22, 2016

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Name of the participants	Conference/Seminar/ Symposia / Workshop/ Guest Lecture	Details	Dates
Saroj Bala	Paper presented at the International conference	Language Learning Techniques for the new Millennium at the International Symposium on Fusion of Science & Technology at Pusa Campus, New Delhi	Jan 18-22, 2016
	Paper presented at the International conference	Skill Development through Technical Institutions at the International conference on the Emerging Trends of Management, Arts, Science, Technology & Skill Development at Sunrise University, Alwar	Dec 29, 2016
	Paper presented at the International conference	LinguisticEmpowerment of the Learners through Technology at the International conference on Corpus Linguistics & Technology Advancement at HongKong Institute of Education, HongKong	16-18,
	Paper presented at the International conference	Challenges of ELT in the new Millennium at the International ELTAI conference at RKGITW Ghaziabad, UP	July 9-11, 2015
	Paper presented at the International Conference	Multicuturalism and the Impact of Language at the International conference on English Language: A Tool for Humanizing at Lingaya's University, Faridabad.	Feb 23-24, 2015.
	Paper presented at the International Conference	Linguistic Imperialism and the Masses. International Conference of Advance Research and Innovation (ICARI-2015) organized by the International Journal of Advance Research and Innovation, 2 Bahadur Shah Zafar Marg, New Delhi 1100 02.	Jan 31, 2015
	Workshop Participation	Attended workshop on Employing Story telling & Theatre Methodologies in the Language classroom at Amity Univ. Lucknow	March 6, 2016
	Work Participation	Workshop on English Acess Microprocessing Program: A Study of Inclusion &Holistic Development steered through English Language	March 6. 2016
	Workshop participation	Connecting Shakespeare and Kuvempu through Theatre Arts at Lingayas' univ. Faridabad	Feb 27, 2016

# 6. Participation of Faculty in Short Term Courses

Name of Faculty	Name of Courses	Place	Dates
Ms. Parinita Sinha	TEQIP-II sponsored STTP on "Advanced Web Designing Techniques"	Department of Humanities DTU	July 25- 29, 2016
Ms Saroj Bala	TEQIP sponsored STTP on Recent Trends in Geo-Environmental Engineering	Department of Environmental Engineering, DTU	April 18- 22, 2016
	TEQIP sponsored STTP on Recent Advances in Alternative & Renewable Energy Techniques	Department of Mechanical Engineering, DTU	Dec 7-11, 2015
	TEQIP sponsored STTP on Urban Environmental Challenges & their Control Strategies	Department of Civil Engineering, DTU	July13- 17,2016
	TEQIP sponsored STTP on Supply Chain Management for Sustainable Performance	Department of Mechanical Engineering, DTU	July6- 10,2016

## 7. Visitors to the Department

Name	Affiliation	Purpose	Dates
Mr. Vineet Wadwa	Brocode Hospitality Solutions	For Finishing Lecture	April 26, 2016
Ms. Sangeeta Wiz	Mamging Partner SD Engineering Consultants, President WISE India	For Finishing Lecture	April 26, 2016
Dr. Poonam Juneja	Delhi University	Seminar	July 22, 2016
Dr. Sushma Moitra	Delhi University	on social responsibility	July 21, 2016
Dr. Rajesh Tandon	UNESCO Co chair on Social responsibility	of Higher	July 21, 2016
Ms Simi Anderson	Vice-Chairperson & Joint President, International Human Rights Observatory (IHRO)	Educational Institutions"	July 21, 2016
Raj Kumar Jani	Social Entrepreneur & Co-founder Barefoot Lightning India Pvt. Ltd. Jaipur, India, +91 961 000 1131 www.barefootlightning.com		July 21, 2016
Dr. Manpreet Singh Manna	Director, AICTE		July 21, 2016
Dr. Asha Prasad	BIT, NOIDA Centre		July 21, 2016
Raj K Pathak	Chairperson- Delhi NCR India Entrepreneurs Club www.indiaeclub.com		
Prof. S.N.S. Nagra,	Nihal Foundation, New Delhi		
Mr. Anupam Kaushik	Founder-Mad Resistor, New Delhi		
Dr. V.P.S. Raju	NUEPA		July 22, 2016
Dr. David A. Solomon	Coordinator: Educational Management, Leadership and Policy Stream The British University in Dubai (BUiD)		July 22, 2016
Shabana Khan	Director, Indian Research Academy,		July 22, 2016

Name	Affiliation	Purpose	Dates
Prof. V.P.S.Arora	VC, Sri Venketaswara University	STTP	July 25, 2016
Dr Anuja Pandey	AIMA, New Delhi	STTP	July 25, 2016
Dr. S. Rama Pani	Editor, University News, AIU	STTP	July 26, 2016
Dr. Anju Tikoo	Faculty of law, DU	STTP	July 26, 2016
Dr. Sunita Malhotra	World Bank	STTP	July 26, 2016
Prof. Neeti Agrawal	SoM, IGNOU, New Delhi	STTP	July 27' 2016
Dr. Pradeep Chaudhary	JNU, New Delhi	STTP	July 28 2016
Prof. Ashoka Chandra	Ex-Principal Advisor and Professor, IMI, New Delhi	STTP	July 29, 2016
Dr Amarendra Pani,	Director I/c & Head Research Division, Association of Indian Universities	STTP	July 29, 2016
Dr. Sukhdeo	Department of Electronics And Information Technology, NIC	STTP	July 27, 2016
Dr. D. Mishra	Indian Statistical Institute, New Delhi	STTP	July 29, 2016
Prof. RavinderGargesh	Department of Linguistics, University of Delhi	STTP	July 25, 2016
Prof. Anup Beniwal	IP University	STTP	July 27, 2016
Prof. Ravinder Gargesh	Department of Linguistics, University of Delhi	Department BOS member	Mar 5, 2016
Prof. Ramsh Sharma	Retd. Professor, JNU	Department BOS member	Mar 5, 2016

# 8. Conference/Seminar/Symposia/Workshops Organized by the Department

Organizing Secretaries	Details of Conference / Seminar / Symposia / Workshop/Guest Lecture	Venue	Dates
Dr. Seema Singh Mrs. Parinita Sinha	TEQIP -2 Sponsored Finishing Lecture	DTU	April 26, 2016
Dr. Seema Singh Ms. Saroj Bala Mr. Nand Kumar Mrs. Parinita Sinha	TEQIP -2 Sponsored Seminar on 'Social Responsibility of Higher Educational Institutions'	DTU	July 21- 22, 2016
Dr. Seema Singh Mr. Nand Kumar Mrs. Parinita Sinha	TEQIP -2 Sponsored STTP on 'Research and Publication'	DTU	July 25- 29, 2016

# 9. Continuing Sponsored Research Projects

Principal Investigator	Title of the Project	Sponsoring Agency	Outlay (amount in Lakhs of `)
Dr. Seema Singh	Indian Continuing Engineering Education System in context of Globalisation	AICTE	6.8 lakh

# 10. Important Professional Affiliations

Dr. Seema Singh	International – Graduate Women International National : i. Indian Economic Association
	<ul> <li>i) Indian Society of Labour Economics</li> <li>ii) Indian Association for Woman Studies</li> <li>ii) Indian Industrial Relation Association</li> <li>iv) Comparative Society of India</li> <li>v) Women in Science and Engineering (WISE)- India</li> <li>vi) University Women Association of Delhi.</li> </ul>
	e-society i. Forum for Global Knowledge Sharing
Ms Saroj Bala	Member, English Language Teachers Association Of India(ELTAI)

### 4.12 Department of Mechanical, Production & Industrial Engineering

Academic Staff: 37; Students Admitted: UG-328, PG-76, Ph.D. 51; Publications: Journals/Papers-72; Conference/ Symp. -17

#### 1. Salient Features

The Department of Mechanical Engineering and Production & Industrial Engineering has seen considerable growth since its inception in 1941 with the intake rising from 30 to 328 (186 for Mechanical, 48 for production & Industrial Engineering, and 94 for Automobile Engineering). The department of Mechanical engineering also offers Post Graduate courses with specialization in Thermal Engineering, Production Engineering, Computational Design and Renewable Energy Technology. PhD Programs in all fields of Mechanical Engineering are also offered. In addition, the department also offers four years' B. Tech. Programme for working Diploma Engineers. The department possesses modern laboratories equipped latest experimental set-ups and research facilities for instrumentation, experimental stress analysis, strength of materials, fluid mechanics, tic, engines, automotive engineering, robotics, heat transfer, solar energy, flexible manufacturing system, computational fluid dynamics supported by Software like view-flex, CAD-CAM and I.e. engine design. Cad lab has Softwares like NX-LAD, NXCAM, AUTOCAD Inventor, Catia, Techomatix, Abacus, ladino, NX-Nastran, Hyper mesh, hyper works, MDADAMS, Dynaform etc. Fluent software is available in the CFD Centre. Industrial Engineering lab has software: SPSS, Witness and lingo 7. The department has developed eco-friendly technology using alternate refrigerants in the RAC lab for re-directing global warming and Ozone depletion. Research and development is facilitated by

NT enabled workstations and competitive robots with digital controller. In addition, microprocessors, micro controllers, PIC, spectrum analyzer and logic analyzer are available for project work. The department has a modern workshop equipped with latest machinery in Fitting, Machine shop and facility of welding shop comprises of pulse TIG, ultrasonic welding and submerged arc welding. The students are given hands on experience on CNC Drilling & CNC lathe machine EDM & wire EDM.

#### 2. Academic staff

#### **Professors**

**Prof. R.S Mishra,** Ph.D. Thermal Engg., Solar Energy Email: rsmishra@dce.ac.in

**Dr. Sagar Maji** (On diverted capacity to GPEC), BE, M.Tech, Ph.D. Thermal Engineering, IC Engine Email: smaji@dce. ac.in

**Dr. S.K. Garg** (Pro. Vice-Chancellor, DTU), Ph.D. Statistical Analysis, Quantitative Methods, and Supply Chain Management Email: skgarg@dce.ac.in

**Dr. Naveen Kumar,** M.Tech, Ph.D. Thermal Engineering, Email: naveenkumar@dce. ac.in naveenkumardce@gmail.com

**Dr. Vipin** (COE, DTU), BE, M.Tech, Ph.D. Production Engineering, Email: vipin@dce. ac.in

**Dr. D.S. Nagesh,** BE, M.Tech, Ph.D. Automation, Robotics, CAD/CAM, Application of ANN & GA, Email: dsnagesh@dce.edu

**Dr. Samsher,** M.Tech, Ph.D. Power Plant, Turbo Machinery, Email: samsher@dce.ac.in

**Dr. Reeta Wattal,** BE, M.Tech, Ph.D. Production Engineering, Email: reetawattal@dce.ac.in

**Dr. Vikas Rastogi,** B.Tech, M.Tech, Ph.D., Machine Design

#### **Associate Professors**

**Dr. Atul Kumar Agrawal,** BE, M.Tech, Ph.D. Email: atulkumaragarwal@dce.ac.in

**Dr. Bharat Bhushan Arora,** BE, ME, Ph.D. Thermal Engineering, Turbo Machine, Refrigeration and Air Conditioniong, CFD, Email: bbarora@dce.ac.in

**Dr. Raj Kumar Singh,** BE, M.Tech Applied Mechanics, Email: rajkumarsingh@dce.ac.in

**Mr. Vishav Kamal,** BE, M.Tech Design Engineering, Email: vishwakamal@dce.ac.in

Dr. Rajesh Kumar Singh, BE, ME, Ph.D. Industrial Engg, Operations, Management, Supply Chain, Management, Total Quality Management, Operations Strategy, Quantitative Techniques and Operations Research, Email: rksdtu@gmail.com

**Dr. Ravinderjit Singh Walia**, BE, ME, Ph.D. AdvancedManufacturingProcesses,Human Factor Engg. FEM & Industrial Engg, Email: waliaravinder@yahoo.com

**Dr. Rajesh Kumar,** B.Tech, M.Tech, Ph.D. Thermal engineering and Refrigeration, Email:dr.rajeshmits@gmail.com

**Dr. Pushpendr Singh,** M.Tech, Ph.D. Refrigeration & Air Conditioning, Thermal, Solar Energy, Renewable energy Email: dr.psinghs@gmail.com

**Mr. P.V. Ram Kumar,** BE, ME Thermal Engineering, Email: pvramkumar@dce.ac.

**Ashok Kumar Madan,** M.Sc (Engg.) CAM/ Automation, Email: ashokmadan@dce.ac.in

**Mr. V. Jegannathan,** BE, ME, PGDMM Production Engineering, Email: v.jeganathan.dce@gmail.com

Mr. P. K. Jain, DBM, BE, ME Production Engineering, Email: pkjain@dce.ac.in

#### **Assistant Professors**

**Dr. Ranganath M.S,** BE, ME Production Engineering, Email: ranganath@dce.ac.in

**Dr. Ramesh Chander Singh,** BE, ME, Ph.D. Production Engineering, Email: rcsingh@dce.ac.in

**Dr. Rajiv Chaudhry,** M.Tech. (Hons), Ph.D. Mechanical Engineering, Email: rajivchaudhary@dce.ac.in

**Mr. Vijay Gautam,** M.Tech., Manufacturing, Email: vijaygautam@dce.ac.in

**Dr. Akhilesh Arora,** M.Tech., Thermal Engineering, Refrigeration and Air conditioning, Email: akhilesharora@dce. ac.in

**Dr. Manjunath K,** M.Tech, Ph.D. Thermal Engineering, Email: manjukmys@gmail.com

Dr. Girish Kumar, Ph.D.

**Dr. Amit Pal,** BE, ME, Ph.D. Automobile Engineering, Email: amitpal@dce.ac.in

**Dr. Pravin Kumar,** M.Tech Industrial Management.

**Dr. Mahendra Singh Niranjan**, ME Production & Industrial Engg.

Mr. Sanjay Kumar, ME Machine Design.

**Mr. Krovvidi Srinivas,** ME Design & Production, Email: srinivaskrovvidi9@gmail. com

**Mr. Naushad Ahmad Ansari,** ME Thermal Engineering.

Mr.Roop Lal, ME Machine Design.

**Mr. Mohammad Zunaid,** BE, M.Tech Thermal Engineering.

**Mr. Paras Kuma,** BE, M.Tech Machine Design.

Mrs. Sushila Rani, ME

Mrs. Navrati Gupta, ME

Mr. R. Gautam, ME Thermal Engineering.

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**N. Yuvraj,** BE (Mech), ME Production Engineering, Email: yuvraj@dce.ac.in

**Dr. Qasim Murtaza,** (On Lien) Ph.D. Production Engg,Materials,Metal Coating - Advance machining, Email: qasimmurtaza@dce.ac.in

# 3. Honors and Awards to Faculty Members:

#### Prof. R.S. Mishra

- GUEST OF HONOUR: Session:l: 27th Feb. 2016 at 10.0A. M -11.30A.M: International Conference of Advance Research and Innovations at Institutions of Engineers (India) Delhi State Centre (Engineer Bhavan) 2, Bahadur Shah Zafar Marg New Delhi.
- GUEST OF HONOUR: Technical Session –IV: Innovations, Management Strategies for skill Development and Entrepreneurship on 28th Feb 2016 at 09.30-11.30 AM: National Conference on Skill India Initiative: Challlenges, Opportunities and Strategies 27th & 28th Feb 2016, organized by S.D.College of Engineering & Technology and S.D.College of Management Studies Muzaffarnagar (UP),
- GUEST OF HONOUR: Session: VI: Environment concerns & Role of technical Institutions& Skill India and Valedictory Function on 28thFeb 2016 at 2.30P. M -5.30 PM: National Conference on Skill India Initiative: Challlenges, Opportunities and Strategies 27th & 28th Feb 2016, organized by S.D.College

- of Engineering & Technology and S.D.College of Management Studies Muzaffarnagar (U.P.)
- Prof (Dr.) R. S. Mishra, Honored "Swami Sahjanand Saraswati Global Warming Reduction Award 2016" on 07.03.2016, for his outstanding contribution in the field of appropriate refrigeration technology for sustainable development.
- Prof (Dr.) R. S. Mishra, Guest of Honor in the International conference of Advance Research and Innovations (ICARI-2015) and also Guest of Honor in National conference at SD college of Engineering, Mujaffarnagar (UP) and delivered talk on "Make India as a green country by using sustainable technologies"
- Chaired of Technical session –l international conference (ICARI-2015) at The Institution of Engineers Delhi State Centre on 31-January-2015
- Presented paper (CP-58) in technical session-4: on second law performance of ecofriendly refrigerants in appropriate refrigeration system for reducing global warming and ozone depletion.

#### **INVITED TALK**

 Dr. R.S. Mishra, Keynote speaker and Chairman, (First session), International conferences on advances in science, Engineering and Technology, 30th Jan 2016 at Haridwar and also delivered plenary lecture on thermodynamic (Energy-Exergy) analysis of solar power cooling combine generation systems.

## 4. Visit of Faculty Members to Other Institutions

Name of Faculty	Name of Institute/Organization Visited	Purpose of Visit	Dates
Dr. Manjunath K.	IIT, Delhi	ISME Conference	Nov. 2015
Prof. R. S. Mishra	IIT, Delhi	ISME Conference	Nov. 2015
N. Yuvraj	IIT, Delhi	ISME Conference	Nov. 2015
Prof. R. S. Mishra	SD College of Engineering & Technology, Mujaffarnagar	National Conference on Skill Development	28 Feb. 2016

# 5. Participation of Faculty in Conference / Seminar / Symposia / Workshops / Guest Lecture

Organizing Secretary	Details of Conference / Seminar/ Symposia/ Workshop/ Guest Lecture	Venue	Dates
Prof. R. S. Mishra	International Conference of Advance Research and Innovation (ICARI – 2016)	Institution of Engineers (India), Delhi State Centre (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi, India.	27 Feb. 2016
Mr. N. Yuvraj	International Conference of Advance Research and Innovation (ICARI – 2016)	Institution of Engineers (India), Delhi State Centre (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi, India.	27 & 28 Feb. 2016
Dr. R. C. Singh	International Conference of Advance Research and Innovation (ICARI – 2016)	Institution of Engineers (India), Delhi State Centre (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi, India.	27 & 28 Feb. 2016
Dr. Rajiv Chaudhary	International Conference of Advance Research and Innovation (ICARI – 2016)	Institution of Engineers (India), Delhi State Centre (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi, India.	27 & 28 Feb. 2016

## **6. Participation of Faculty in Short Term Courses**

Name of Faculty	Name of Courses	Place	Dates
Mohammad Zunaid	Two weeks TEQIP-II sponsored faculty development program on 'Automation in Manufacturing (AIM-2015)'.	Department of Mechanical, Production & Industrial Engineering, Delhi Technological University, Delhi.	May 4-15, 2015,
Girish Kumar	Two weeks TEQIP-II sponsored faculty development program on 'Automation in Manufacturing (AIM-2015)'.	Department of Mechanical, Production & Industrial Engineering, DTU	May 4-15, 2015,
Dr. Manjunath K.	Two weeks TEQIP-II sponsored faculty development program on 'Automation in Manufacturing (AIM-2015)'.	Department of Mechanical, Production & Industrial Engineering, DTU	May 4-15, 2015,

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# 7. Visitors to the Department

Name	Affiliation	Purpose	Dates
Dr. P. K. Jain	IIITM Jablapur	Delivered talk	5 May, 2015,
Dr. Vinod Yadav	MNIT, Allahabad	Delivered talk	5 May, 2015,

# 8. Conference / Seminar / Symposia / Workshop organized by the Department

Organizing Secretary	Chairman/ Pattern	Details of Conference /Seminar / Symposia/Workshop/Guest Lecture	Venue	Dates
Dr. M S Ranganath and Prof. Vipin	Prof. R. S. Mishra, Pattern	Two weeks TEQIP-II sponsored faculty development program on 'Automation in Manufacturing (AIM-2015)'.	Mechanical Engineering department, DTU	May 04- 15, 2015
Dr. RK Singh	Prof. R. S. Mishra, Chairman	Supply Chain Management for sustainable performance (SCM-2015	Mechanical Engineering department, DTU	July 06- 10, 2015
Dr. M S Ranganath	Prof. R. S. Mishra, Chariman	Staff Development Programme (SDP-2015)	Mechanical Engineering department, DTU	Nov 23- 27, 2015
Dr. Amit Pal	Prof. R. S. Mishra, Chariman	Recent Advances in Alternative & Renewable Energy Technologies (RARET-2015)	Mechanical Engineering department, DTU	Dec 7-11, 2015
Dr. Amit Pal	Prof. R. S. Mishra, Chariman	Latest Developments In Automobile Engineering	Mechanical Engineering department, DTU	March 1, 2016
Dr. Amit Pal	Prof. R. S. Mishra, Chariman	Innovations & Challanges in Thermal Enegineering (ICTE-2016	Mechanical Engineering department, DTU	July 7&8, 2016
Shri N Yuvraj	Prof. R. S. Mishra, Chariman	Recent Development & Challenges in Materials & Manufacturing (RDCM-2016)	Mechanical Engineering department, DTU	July 25- 29, 2016

## 9. (i) Completed Sponsored Research Projects

Principal Investigator	Title of Project	Sponsoring Agency	Outlay (amount in Lakhs of Rs)
Dr. Amit Pal,	Development of small capacity Bio-	Department of	6.95
	Diesel rector for the waste cooking oil	Environment, Govt. of	
	generated at hotels, restaurants etc.	Delhi	

## (ii) Consultancy Projects

Principal Investigator	Title of the Project		Outlay (amount in Lakhs of Rs )
Dr. Amit pal, Mr. Vijay Gautam	Design of E-rickshaw	Arihant Energy solutions Delhi	0.30

### 10. Scientific / Technical Reports under Sponsored Research Projects

Authors	Title of the Reports	Sponsored Agency	Month & Year
Dr. M S Ranganath, Prof.	Automation in	TEQUIP-II, GOI	May, 2015
Vipin and Prof. R. S. Mishra	Manufacturing		
Dr. Amit Pal, Dr. Raj Kumar	Innovations & Challanges	TEQUIP-II, GOI	Dec. 2015
Singh and Prof. R. S. Mishra	in Thermal Enegineering		
	(ICTE-2016		

# 11. Important Professional Affiliations:

#### Prof. R.S Mishra

Life Fellow The Institution of Engineers (India).

Life-Fellow Geological Society of India , Life-Fellow of Indian Institution of Environmental Engineers, Life fellow of Indian Water Resources Society

Life member of Indian Society for Technical Education (ISTE),

Life member of Solar Energy Society of India,.Bio Energy Society of India.

Life-Member of ISAE, IS Soil, Sc, II Ch.E, SSI, AFST(I), ISSoil Conservation

## **5 Centres and Other Units**

#### 5.1 TIFAC-Core

The Project on TIFAC-Centre of Relevance and Excellence (CORE) in Fiber Optics and Optical Communication is awarded to DTU Department of Applied Physics in associate with ECE department (www.tifaccore.dce. edu). The Objectives and Current Status is Summarised is below:

### **Objectives set and Current Status**

	ojectives set forth while tablishing TIFAC CORE @ DCE	Pr	esent status TIFAC-CORE@DTU
1.	Development of laboratories in the area of fiber optics and optical communication to support ongoing program at B. E. /M.Sc. /M.E. level.	1.	Laboratories in the area of fiber optics and optical communication have been set up and experiments are being offered to the students at both B. E. / B. Tech as well as M.Sc./M.E./M.Tech level since the year 2005.
2.	(a) Starting new academic program (M.E. – Microwave and Optical Communication) (b) Nano Photonic course is offered to the M.Tech. (Nanoscience & Technology) students of year 2009-2011 to till batch.	i. ii.	M.Tech programs in Microwave and Optical communication Engineering is offered since academic year 2009-2010.  Five batches from year 2011-15 have been passed out and all students are well placed in industries working on optical technologies or in the teaching jobs.  Session 2014-2016 batch: Most of the students are already placed in Industries and teaching jobs in institutes.  Year 2015-2017 batch is running with strength of 18 students.
3.	Offering special courses related to Fiber Optics & Optical Communication at B.E. /M.Sc. /M.E. catering to the emerging needs of the industry.	3.	Several short term programs/special seminars in focused area of Optical Fiber Communication Systems and network including design of futuristic optical devices have been organized for students/teachers of this university as well as teachers/technical manpower of other academic institutions since 2006 onwards, which includes training on optical fiber cutting and splice workshop.
4.	Ph.D. programs supported by experiments and simulation work in the field related to Fiber Optics, Optical Communication Systems and networks.		a). Eleven Ph.D. thesis have been completed since the inception of TIFAC CORE lab. Currently, Eight Ph.D. students are working in the field of fiber optics and optical communication systems covering both experimental and simulation work after 2005.  Currently two scientist from one from NPL and One from LASTEC, DRDO are also working as a Ph.D. students in our labs. Further two faculty members of University of Delhi are pursuing their Ph.D in our labs.
5.	Under taking joint R&D projects in collaboration with industrial partner and other academic / scientific organizations.	5.	Research work is being carried out with other academic institutions including NIT/IITs/IISc Bangalore and some of the leading R&D organizations like NPL and DRDO labs, which are evident from joint publications/workshop and training programs. Bilateral projects have also been sanctioned by DST, Govt. of India.

Objectives set forth while establishing TIFAC CORE @ DCE	Present status TIFAC-CORE@DTU
6. Exploring and establishing international collaborations.	6. Student's chapters of professional societies OSA and SPIE have been started and students have been presenting their research work every year in international conferences organized by these professional societies. In addition to these, research papers with joint authorship have been published with Glasgow University, UK, Hokkaido University, Japan, Rice University USA, Tunisian and Russian Scientist as well.
7. To conduct workshops, short term training programs, organize seminars and conferences related to the general area of optics and telecommunication systems.	<ol> <li>Several workshops, short term / training oriented courses in the areas covering fiber optics and optical communication have been conducted.</li> </ol>

# Technology/Experiments Developed/Added

- i) Experimental set up on the planar waveguide fabrication has been added to the Fiber Optics and Optical Communication Laboratory for B. Tech. (EP) and M. Tech. (MOCE) students
- ii) RP Fiber software has been added to the TIFAC-CORE labs for carrying project/ research work by B. Tech. (EP), M. Tech. (MOCE) and Ph. D. students

### **Academic Programs**

- 3. M.Tech program in Microwave and Optical communication Engineering Currently M.Tech 1st year and M.Tech 2nd year students with a total intake of over 39 students are pursuing their M.Tech Program and are involved in Minor and Major project related with advanced topics of Photonics and Telecommunication Technologies.
- M.Tech program in Nanoscience and Technology and B.Tech. (Engg. Physics) is offered with focus on Nanophotonics and Nano Scale Devices
- 5. B.Tech (Engineering Physics) with minor in Photonics. This category of students have already done their summer project during June/July on the basics of Fiber

Optics and Optical Communication and it is expected that a some of them will be involved for their major and minor projects in the area related to Fiber Optics and Photonics. The fiber optics & optical communication labs are running for B.Tech (EP) 6<sup>th</sup> semester, since the year 2011 and a few new experiments on the fabrication of planar waveguides has been added during 2015-2016

# Awards and Fellowships/Grants received by students in the year 2015-2016

[Ph.D. students working under Prof. R.K.Sinha/Dr Ajeet Kumar/Dr Yogita Kalra]

- a) Preeti Rani, Ph.D. student has participated and presented her research work in Seigman Lecture on "Laser" at Amberger Congress Centrum, Amberg, Germany in the year 2015.
- b) Preeti Rani, a Ph.D. student also received FIO/LS leadership award 2015 from OSA enabling her to present her research work and education, training and research work in the area of optics and photonics@ TIFAC-CORE-DTU.
- c) Neerad Nandan selected for Optics and Photonics Leadership award 2015 representing SPIE DCE Chapter@

- DTU in which he will be present his research work and activities of TIFAC-CORE@DTU in the areas of Optics and Photonics at San Diego, USA during August 13-16, 2015.
- d) Kamal Kishor, a Ph.D. student received "travel award" in October 2015 by OSA, to attend short term educational program on "Photonics and Optical Information Technology" at ITMO, SAINT Petersburg, Russia.
- e) Than Singh Saini, a Ph.D. student also received a special award of US\$ 2000 for enhancing his research work in the area of Optics and Photonics in 2015
- f) Than Singh Saini received DST SERB-National Post Doctoral Fellowship (N-PDF) in July 2016

# Delegates/ Visitor of TIFAC-CORE Labs:

- Prof. Anurag Sharma, Dean (Acad) of IIT Delhi also visited TIFAC-CORE Labs and interacted with teachers and students.
- Prof. Shatendra Sharma, Director USIC, JNU also visited TIFAC-CORE Labs and interacted with teachers and students.
- Prof A.K.Sharma, Director, NIT, Delhi Interacted with Ph.D. students in the area of Photonics.
- Prof. Sukhdev Roy, Department of Physics & Computer Science Dayalbagh Educational Institute (Deemed University) Dayalbagh, Agra, Interacted with Ph.D. students in the area of Photonic Crystal Fiber.
- Dr. Sergey Makarov, Deputy Head of All-dielectric Nanophotonics Division Department of Nanophotonics and Metamaterials, ITMO University St. Petersburg, Russia, visited the TIFAC-CORE labs at Delhi Technological University and delivered talk related to research activities at ITMO, Russia.

 Dr. Roman Saveliev, Senior Research Fellow, Department of Nanophotonics and Metamaterials, ITMO University St. Petersburg, Russia, visited the TIFAC-CORE labs at Delhi Technological University and delivered talk related to Nanophotonics and Metamaterials at ITMO, Russia

#### **Summer/Winter Project**

Over 20 students have carried out their summer project on optoelectronic devices/ simulation of optical communication systems and network during summer and winter vacation in 2015-2016

# Faculty members associated with TIFAC-CORE Department of Applied Physics/ECE

- a) Prof. R.K.Sinha [On lien]
- b) (Chief Coordinator TIFAC-CORE@DTU)
- c) Presently Director CSIR-Central Scientific Instruments Organisation,
- d) Dr. Yogita Kalra , Coordinator, TIFAC CORE@DTU
- e) Dr. Ajeet Kumar
- f) Dr. Priyanka Jain, ECE Department
- g) Dr. M.S. Mehata
- h) Dr P.K.Tyagi
- i) Dr. Kamal Kishor

# Grants/donation/aid received during 2015-2016 as Resource-Generation:

Smart Structure – a DRDO initiative coordinated by IISc Bangalore has identified TIFAC-CORE@DTU/DCE as Photonic Design Center and has offered three major software package called (a) RSoft-BEAM Prop (iii) Comsol-Multi physics (iii) Intel suite and these are being effectively used in the center for teaching and research job (Approx:

- Rs. 40.00 Lakh) continued form 2010 to till date
- ii) Major R&D project grant from UGC on "Characterization of PCF for Telecom and Sensing Application", Rs 10.48 Lakh for during 2009-2010 and continued till date
- iii) DST sponsored Fast Track Project on "Specialty Large-Mode-Area Rectangular Waveguides and Fibers for High Power Applications" (Approx. 20.00 Lakh) Pl: Dr. Ajeet Kumar
- iv) Bilateral Research Project "From Plasmonic and Dielectric to Hybrid Nanoantennas: Novel approaches to control Electromagnetic Waves and Light" as DST-RFBR (Indo-Russian) Project, Rs 22.56 Lakh, 2015-2017
- v) Bilateral Research Project "All dielectric plasmonic and hybrid photonic nanostructures" as DST-RMES (Indo-Russian) project, Rs.65.04 Lakh
- vi) "Modeling and simulation of single Mode CW High Power Fiber Lasers", CARS project from LASTEC, DRDO Labs, Rs. 10.00 Lakh, 2015-2017.
- vii) Financial support is also received by professional chapters of SPIE, USA and The Optical Society, USA to promote educational, research and development activities in the area of Optics and Photonics.

# Thesis/Projects Awarded and Submitted

- a) Ph.D. Thesis Awarded and Submitted:
- i) "Growth and Characterization of Carbon Nanotubes for Improved Field Emission"- Srividya Sridhar, 2016 (awarded), University of Delhi Supervised by: Prof- R. K. Sinha
- ii) "Preparation, Characterization and Tailoring Nanostructured Films of Metals and Metal Oxides for Application

- to Biosensor" Rachna Sharma, 2016 (awarded) to Delhi Technological University Supervised by: Prof- R. K. Sinha & Dr Ved Varun Agrawal (NPL)
- iii) "Characterization of Photonic Crystal Fibers and Metamaterials: Theory and Experiments"- Kamal Kishor, University of Delhi in 2016 (awarded) Supervised by: Prof- R. K. Sinha
- iv) "Integrated Plasmonic Waveguides and Devices" - Venus Dillu, submitted to Delhi Technological University in 2015, Supervised by: Prof- R. K. Sinha
- v) "Application Specific Specialty Optical Fibers and Waveguides" — Than Singh Saini, 2016 (awarded) to Delhi Technological University, Supervised by: Dr. Ajeet Kumar & Prof- R. K. Sinha
- vi) "Modeling of Photonic Crystal based Logic Gates and optical Devices" – Preeti Rani, 2016 (to be submitted) to Delhi Technological University, Supervised by: Dr. Yogita Kalra & Prof-R. K. Sinha.
- b) M.Tech Projects submitted:
- i) "EnhancedImageResolutioninPhotonic Crystal Structure by Modification of the surface structure and Application as a sensor" Ashwini Agarwal, 2016 supervised by Dr. Yogita Kalra
- ii) "Design of All Optical Logic Gates using NAND gate in Photonic Crystal Waveguides" Shiba Fatima, 2016 supervised by Dr. Yogita Kalra
- iii) "Design and Analysis of All Optical Dielectric Cylindrical Nanoantennas" Inder Devi, 2016 supervised by Dr. Yogita Kalra
- iv) "Mie Resonance based Dielelectric Nanocylinders" Paras Kumar, 2016 supervised by Dr. Yogita Kalra

- v) "Design and analysis of chalcogenide based waveguides for generation of slow light" Apurva Tiwari, supervised by Dr. Ajeet Kumar
- vi) "Design and analysis of highly nonlinear photonic crystal fiber for super continuum generation: visible to mid IR" Purniya Jamatia, supervised by Dr. Ajeet Kumar
- vii) "Super continuum generation in specialty optical fibers: Design and analysis" AGN Chaitanya, supervised by Dr. Ajeet Kumar
- viii) "SBS based slow light generation in photonic crystal fiber" Sandeep Yadav, supervised by Dr. Ajeet Kumar
- ix) "Design and Modeling of application specific optical waveguides" Himanshu Pandey, supervised by Dr. Ajeet Kumar

# National and International Collaboration:

- TUN-IND joint research proposal Tunisia-India entitled "Study of nonlinear effects in microstructured photonic crystal fibres" (PI: Dr. Ajeet Kumar & Prof. R.K. Sinha as Co, PI)
- ii) Research work carried out in association with IITs, IISc Bangalore, DRDO Labs-LASTEC, and NPL during this period. Joint publications of research papers have appeared with scientist/faculty from University of Glasgow, UK, Rice University USA, NPL Delhi have appeared during the period 2015-2016
- iii) DST sponsored Indo-Russian bilateral project under DST-RMES program on "All dielectric, plasmonic and hybrid photonic nanostructures for three years (2014-2017) (PI: Prof. R. K. Sinha, Co, PI Dr Yoqita Kalra)

- iv) DST sponsored Indo-Russian bilateral project under DST-RFBR program on "From plasmonic to dielectric and hybrid nanoantennas: Novel approaches to control electromagnetic waves and light" for three years (2014-2017).(PI: Prof. R. K. Sinha, Co, PI Dr Yogita Kalra)
- v) CARS-Contract for Acquisition of Research Services Project is also approved from LASTEC, DRDO Lab on Modeling and design of Single Mode Continuous wave High Power Fiber Lasers (2015-2017). (PI: Dr Yogita Kalra)
- vi) "Indo-Portuguese International Joint Research Project through DST and Foundation for Science and Technology, Portugal on "Graphene based Flexible, Transparent Electrodes for Organic Light Emitting Diodes and Photovoltaic's" as PI (DR P.K.Tyagi) and Co-PI (Prof. R.K.Sinha) Rs 5.29 Lakh+hospitality, 2014-2017
- vii) "External electric field effect on the Photo induced charge transfer dynamics" sponsored by BRNS, Department of Atomic Energy, Rs. 17.50, 250/ during period 2012-2015, as Co-PI (Dr. R. K. Sinha)along with PI Dr M.S. Mehata

## 5.2 Solar Energy Centre

Installation, Commisioning, Testing And Operation And Maintainence Of 100 Kw Solar Photovoltaic Power Plant.



Technological Delhi University has initiated steps towards renewable energy research, development and application and has decided to install 100 KWp Solar PV Photovoltaic Grid Power Plant. DTU has floated e-tender for 100 KW grid connected SPV plant and the tender was awarded to Photon Energy Systems Ltd. The work is being executed by SBD Green Energy and Infra India Pvt Ltd. A 40 KWp system is already commissioned in the month of June 2015 and the remaining 60 KWp will be commissioned in the due course of time. A 40 KW Solar photovoltaic power plant has been installed at the rooftop of the administrative building of Delhi Technological University as shown above. Two inverters of 20 KW each has been connected to the above shown solar photovoltaic panels. The control room has been built on the ground floor at the back of the building. The DC power so generated by the SPV plant is converted into AC power by the SSE model inverters and fed to the 3 phase Delhi Technological grid. The system is controlled in such a way that whenever the solar power is available, it has priority and preference over the conventional grid power and so it will be directly fed to the DTU grid. It means that DTU is saving the power from the conventional electricity grid and taking that much power from the solar PV plant hence saving the electricity cost. This is done keeping in consideration the need of the hour due to deteriorating global Climatic Conditions, Pollutions, Use of Scarce natural resources, Use of Fossil fuel etc and to use the abundant Solar Radiation available in Delhi in particular and in India in generalthrough out the year. Commissioning of 100 KWp power plant will generate approx. 1,50,000KWp in a year and will add to the supply of electricity in Delhi. Though this is small step but the beginning of the initiative alongwith other initiatives in the field of renewable energy by the university. Uses of 1,50,000 KWp Conventional electricity means consuming

15 Tonnes of Coal and 1700 Thousand Litres of Water. Burning of Each Kg of Coal for Producing electricity not only consumes scarce resources but also emits Gases like CO2, SO2 NOxetc detrimental to the environment.

This plant is installed by university's own source of Funding and strong efforts are underway to get the appropriate subsidy part through, EE-REM, Energy Efficiency and Renewable Energy Management under department of power, Delhi Government and MNRE, Government of India. Commissioning of this project will help in creating awareness amongst the students, faculties and visitors towards solar. It will also be helpful to students and faculties in research projects related to Solar power System.

#### 5.3 Kitchen Waste Plant

Setting Up of 0.5 Tonne per Day Kitchen Waste Based Bio-Methanation Plant at Delhi Technological University in Collaboration with BARC, Govt. Of India.





Delhi Technological University and Bhabha Atomic Research Centre (BARC) jointly took up the project of installation of Nisargrunatype biogas Plant at DTU campus in the backyard of main canteen having capacity of 0.5MT/day. Nisargruna technology is a method of processing biodegradable waste developed by BARC It is an environment friendly technology. which delivers two valuable products i.e. Methane and Manure. Presently the waste generated in Delhi Technological University is mainly kitchen waste from the main kitchen area. This kitchen waste is fed in the installed biogas Plant. This plant was installed and commissioned in April 2014. Initially, the system started functioning with about 50 kg waste per day and slowly it moved to more than 100 kg per day and in due course of time it will reach to its full capacity i.e. 500 kg per day. The equal amount of water is also mixed with the waste. It is mixed and grinded and then fed to the plant. The methane gas so generated by this plant is fed to the kitchen of the main canteen. Initially the gas was fed for an hour and now it is fed for more than 2-3 hours.

BiomethanationTechnology is a successful combination of aerobic and anaerobic process. It could be very useful to sabzimandi and Municipal Corporations to process their vegetable waste as most of biodegradable waste can be utilized as raw material for the plant. Biogas and manure is valuable product. Nevertheless whole technology creates various types of opportunities for different prospects. Biogas can also be used for the generation of Electricity. Waste segregation at the source is another major issue which needs proper attention. Biogas production is faster because of combination of aerobic and anaerobic digestion technology. Electricity generation from biogas is also one of the potential benefits. This technology development will save environment to greater extent. It will also provide benefits in the form of Biogas,

reduction in GHG emission, health benefits, social benefits and benefits in terms of financial investments. In future there will be scope for extra benefits like subsidies and benefits like carbon credits, which will give high rate of return on total investment. Entrepreneurs will excel in their ventures by selling services and products related Technology. In comparison with other waste processing technologies, Nisargruna seems to be sustainable in all aspects including social and business aspects. DTU is in contact with some other organizations to provide consultancies in this area. The DTU students have already produced some research papers. Few students are doing their M.Tech and PhD on this subject and on this installation.

#### **5.4 University Computer Centre**



DTU has a well equipped centralized computer center to cater to the needs of high profile students and faculty in the University. It is housed, in a magnificent state-ofthe-art building having specialized laboratories to provide variety of platforms and computing environment for UG, PG and Research students. The center possesses HP ML370, ML570 standalone servers & DL360 rack servers. Dell blade servers (power edge 1000e) and about 200 desktop computer systems of Dell computers of latest configuration (Optiplex 980/990, i5). These are working on Windows 7/8/8.1 and Linux platforms. In addition to this, the center has 4 SUN CAD workstations for research and project works.

#### **DTU Campus wide Network**

The center is networked through highend intelligent CISCO/Dax/Avaya/D-Link manageable switch, and possesses round the clock two leased lines of 50 Mbps (Bharti Airtel) and 1Gbps link of NKN (shared bandwidth) in different pipes for the Wi-Fi connectivity in the Library, Academic, Departments, Administrative and Hostel blocks of the campus, with internet facilities on all the nodes.

Access for internet is given to end user after secure authentication. Recently, the traffic is being monitored & controlled by full version of checkpoint (UTM).

Presently all the 200 computers are connected through LAN in its two floors providing internet access. It is providing programming facilities to all the departments of the college, predominantly COE, IT, ECE, EE, Physics and Mathematics departments.

The departments / academic / library / administrative blocks and all the hostels of DTU are interconnected using 48 core & 6 core optical fiber cable(OFC) and Wi-Fi with 75 number of access points.

The present network setup satisfies the needs of the University's rudimentary Internet connectivity and maximum resource sharing for the connected departments. To put DTU on par with IITs and reputed NITs, it is necessary to use Information Technology as the backbone for its academic, research, consultancy and administrative ventures.

#### **DTU Website**

Computer Centre maintain DTU websites (www.dtu.ac.in), alumni portal, departments portal, library portal, faculty portal, hostel portal, student portal, DTU times portal, NPTEL portal and other related intranet web services. The DTU website is updated by this centre on daily basis. The information on the website displayed after the approval of the concerned department, faculty or administrative offices.

Computer Centre provides mail services to the university teaching communities and administrative officers. The traffic is being monitored & secure by full version of checkpoint (UTM).

# **5.5 Central Library Salient Features:**

The Central Library of Delhi Technological University acquires a prominent place among the students and faculty. Situated in the heart of the DTU a three stories centrally air-conditioned building spread over an area of 5000 square meters, it is a central place for academic and research activities. The Library has a very rich collection of print as well as electronic books and journals satisfying the information needs of the faculty and students. The total collection of books is approx 2, 08, 800 consists of 1, 40, 077 main collection, 55, 246 Book Bank, 9,057 SCP Book Bank, and 3,620 donated books. Library also subscribes a large number of reputed magazines & news papers. Keeping in view the fast changes in technology, the knowledge base of the library is updated regularly by way of adding new literature in the form of text books, reference books, reports, proceedings. abstracts and indexes. encyclopedias, data books, standards (National and International), Journals and database on CD-ROM. Apart from adding the new literature, the basic literature is also procured for the new programmes along with current one.

## **Central Library Staff**

Librarian

Dr. Rama Kant Shukla

**Documentalist** 

Mrs. Geeta

**Assistant Librarian** 

Dr. Mrs Lalita

Counter Assit.

Mrs. Taruna

Mrs. Rampati Nain

Mrs. Neeru Malik

Mrs. Neeru Vij

Mr. Abdul Aleem

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#### Following were added in the library:-

## **Books Acquisition**

Year	No. of Books Purchased	Total Expenditure
01.04.2015- 31.03.2016	3040	Rs. 21,51,739.00

## **Expenditure on Books and E-Resources**

Financial Year	Online - Resources (in Rs.)	Books (in Rs.)	Total (in Rs.)
2014-2015	1,84,17,700.78	21,51,739.00	20,56,9439.00

### Issue, Re-Issue and Return

Year	Issue	Re-issue	Return
01.04.2014-31.03.2015	52675	22656	55806

# No. of E-Resources Subscribed by DTU Library

S. No.	Database	No. of Journals
1	Access Engineering (McGraw-Hill)	647
2	ACM	48
3	American Chemical Society	55
4	American Institute of Physics	19
5	American Physical Society	13
6	ASCE	36
7	ASME	29
8	ASTM	8
9	Business & Company Resource Centre	11187
10	Cambridge University Press	224
11	EBSCO	1351
12	Emerald Management Xtra	298
13	ICE	33
14	IEEE/IEL	464
15	INDIANJOURNALS	54
16	Institute of Physics	46
17	IWA Publishing Journals (12)	12
18	J-Gate	9289
19	Oxford University Press	262
20	SCIENCEDIRECT	893
21	SIAM	14
22	SPRINGERLINK	1438
23	Taylor & Francis Journal	1079
24	The Optical Society	18
25	Wiley Blackwell Publishing	915
	Total Journals=	28432

**Resources are also available from** J-Gate & Business & Company Resource Centre

#### **Services**

Newspaper clipping, Monthly scholarly publication, Current Awareness Service, Monthly new arrivals bulletin, Bibliographical Services, Browse reading materials in open access environment, Browsing CD ROM, Document Borrowing, Inter-Library Loan Service, Library Membership, Reference, Referral and Information Service, and E-referencing, Reservation of books, Text book Service, Use of special collections, Xeroxing Service, Reprography services like Photocopy, Printing, Scanning, Spiral binding, Lamination etc. were provided.

The library also provides access to reference material like Encyclopedia, Handbook, Standards, Reports, Proceeding, Abstracts and Indexing, Data book, research papers and theses, Lecture Notes on Computer Science (LNCS)

Assistance in the use of e-Resources, Cubic for research scholars, 30 Terminals for Internet Access, access to Theses and Dissertation

Plagiarism checking (similarity index checking) also made available to the users. During this financial year 2281 documents from 36 Instructor and 35 Students were checked the similarity index by Turnitin.

### **Library Promotion**

The library conducted Information Literacy programme, workshops and other activates as follows:-

Information Literacy programme:- On various e-Resources like Science Direct, Emerald Insight, ICE, Springer-Link and DELNET etc

Workshop:- on SCOPUS, Proquest, Grammarly, RemoteXs, Moodle, Wiley GRE, ICI and Pearson e-books etc.



Library Book Bank



Central Library



Library Reading Room

### 5.6 Centres for Advanced Studies & Research in Automotive Engineering

Energy security is considered as the most important factor ensuring all-round economic development of a nation. The reasons are not far to seek. Energy is a basic input for almost all the economic activities. In fact one of the indicators of economic

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growth has all along been the per capita consumption of energy. Fossil fuels such as coal, petroleum and biomass have been the energy sources of the world for centuries. However, in the third millennium, there has been a growing recognition of the dangers inherent in continuing with indiscriminate consumption of fossil fuels for more than one reasons, of late, world opinion has been growing in favor of looking for alternatives to fossil fuels that would ensure eco-friendly and sustainable development on the one hand and energy security on the other. Recent surge in crude petroleum prices & local and regional environmental concerns such as air pollution, water pollution, land degradation, waste generation and global environmental concerns such as the growth in atmospheric concentration of the Green House Gases (GHGs) leading to climate change have again brought renewable energy to the Centre state. The broad goals of the Government of India under "Energy for All" concept assumes an increasing role for renewables, particularly for meeting the energy needs of rural areas and for environmental conservation by setting up decentralized power plants. Under the influence of programmes of the UN Framework Convention on Climate Change (FCCC) and the Kyoto Protocol, there is an urgent need for promoting renewable technology for sustainable development. Center for Advanced Studies & Research in Automotive Engineering established by Delhi College of Engineering now Delhi Technological University which in 2003, has made great stride in the area of alternative fuels and renewable energy and has a distinctive position not only in India but abroad also.

#### **Achievements of Centre**

- Potential of producing 10,000 liters of biodiesel from its own cultivation.
- Training programmes (3 Nos.) conducted for self help group of women, farmers and ex. defense personnel in 2004-05.
- Biodiesel processing units developed with production capacities ranging from 5 liters per batch to 5000 liters per day based upon homogenized catalyzed technology.
- Research on heterogeneous catalysts and super critical biodiesel production process underway.
- Ministry of New and Renewable Energy, Govt. of India Sponsored project "Development of an efficient biodiesel reactor for rural application and utilization of multi feedstock derived biodiesel in medium capacity diesel engine" successfully completed at the centre. Grant sanctioned Rs. 20.92 lacs.
- PCRA Sponsored project "Development & process optimization of a medium capacity state of art biodiesel processing unit" successfully completed at the centre. Grant sanctioned Rs. 15 lacs.
- Yanmar Co. Ltd., Osaka, Japan project Performance funded Endurance Tests on a Yanmar 10 KW diesel Generator set fuelled with neat biodiesel (B100)" successfully completed at the centre. During this project, a Yanmar 10 kW diesel engine was run for 6,500 hours on neat jatropha biodiesel to assess the suitability of B100 application in diesel engine. The project was aimed towards development of a biodiesel specific engine. Grant sanctioned Rs. 41 lacs.

- 20,000 kms Trial completed on Maruti Zen Diesel on B20.
- Trials completed on Tata Indica on B20.
- Fully fledged laboratory to evaluate different physico-chemical properties of biodiesel in accordance with ASTM D-6751.
- Development of nursery of high yielding Jatropha and Karanja saplings.
- Studies on Life Cycle Analysis (LCA) of Jatropha and Karanja biodiesel.
- Development of cooking stove running on neat Jatropha oil/biodiesel

- Research on Algae Biodiesel in progress and a Photo-bioreactor already developed.
- Research on H<sub>2</sub> production from biological material is underway.
- Development of Hydrogen Fuelled SI Engine.
- Development of HCCI Engine
- Indo-Spanish Collaborative Research Project "Application of supercritical technology for the synthesis of biodiesel from non edible oils (Jatropha curcas and Pongamia pinnata) using heterogeneous catalysts" completed.

# **6.1 Balance sheet (Unaudited)**

F.Y. 2015-16	Delhi Techonological University		Delhi Techonological University	
Liabilities	As ON 31-Mar- 2016	Assets	As ON 31-Mar-2016	
Capital Account	Nil	Fixed Assets		557369498.00
Loans (Liability)	Nil	Investments		1023945977.00
Current Liabilities	13359098.00	Current Assets		565380629.74
Corpus Funds	331755288.00	Innovation Project Funds		4723640.00
Deposit Received	79056411.00			
Other Funds	254496022.37	Loans and Advances		2656384.00
Sponsored Project Funds	10340346.00			
AICTE Project	50419821.00	Interest Bearing Advances		
Consultancy Funds	98173979.00	Student Fund A/c		
Development Fund	157062500.00	Profit & Loss A/c		187476154.30
Income & Expenditure Account	911811961.07	Opening Balance	(-)815181.00	
INCUBATION CENTRES GRANT	15000000.00			
Scholarship Fund	11957664.00	Current Period	188291335.30	
TEQIP-II FUND	30832777.00			
UGC GRANT	2334107.00			
Unspend Balance				
Diff.in opening Balance				
Total	2154076128.74	Total		2154076128.74

# 6.2 Details of Plan Expenditure (Unaudited) Details of Expdr. Under Plan Scheme of G.I.A. FY 2015-16

S. N.	Sub - Head of Exenditure	Items of Expenditure	Unspent Balance of GIA 13-14 Rs. 10,26,64,494/- + Receipts of Fin. Yr. 2014-15 Rs. 93,86,05,892/- = Rs .1,04,12,70,386/-	Budgeted Expenditure During the Period	Actual Expenditure During the Period	Amount Available
1	Book Bank & Library					
		Books E-Journals, Mag Newspapers for Librar		24000000.00 Cr	20734090.26 Dr	3265909.74 Cr
		Total -		2400000.00 Cr	20734090.26 Dr	3265909.74 Cr
2	Capital (Construction Works Civil & Electrical) 2(A)					
		Construction Work of Building - Capital		80000000.00 Cr	43505174.00 Dr	36494826.00 Cr
		Electric Work of Building - Capital		10900000.00 Cr	3010614.00 Dr	7889386.00 Cr
		Fixture & Furnishing of Building-Capital		810000.00 Cr		810000.00 Cr
		Structural Design for New Building - Capital		8290000.00 Cr		8290000.00 Cr
		Total -		100000000.00 Cr	46515788.00 Dr	53484212.00 Cr
3 (a)	Civil, Electrical & Horticulture (Repair & Maitenance) 2(B)					
		Horticulture Work		3500000.00 Cr	762340.00 Dr	2737660.00 Cr
		Maintenance of Building-Civil		40000000.00 Cr	35703101.00 Dr	4296899.00 Cr
		Maintenance of Building -Electrical		33650000.00 Cr	31122422.00 Dr	2527578.00 Cr
		Total -		77150000.00 Cr	67587863.00 Dr	9562137.00 Cr
3 (b)	Direction and Administration					
		Advertising and Publicity		3000000.00 Cr	1594922.00 Dr	1405078.00 Cr
		AMC of Office Equipment		1000000.00 Cr	336319.00 Dr	663681.00 Cr
		Awards to Faculties		100000.00 Cr		100000.00 Cr
		Awards to Meritiorious Students				
		Conveyance to Staff		150000.00 Cr	31293.00 Dr	118707.00 Cr

S. N.	Sub - Head of Exenditure	Items of Expenditure	Unspent Balance of GIA 13-14 Rs. 10,26,64,494/- + Receipts of Fin. Yr. 2014-15 Rs. 93,86,05,892/- = Rs 1,04,12,70,386/-	Budgeted Expenditure During the Period	Actual Expenditure During the Period	Amount Available
		Electricity Expenses		57000000.00 Cr	56534540.00 Dr	465460.00 Cr
		Honorarium & TA to Guest Lecturers and Commitee Members		4500000.00 Cr	3940350.00 Dr	559650.00 Cr
		Installation and AMC of Solar Light and Water Heter Etc.		500000.00 Cr		500000.00 Cr
		Leave on LTC Encashment		2000000.00 Cr	1273492.00 Dr	726508.00 Cr
		Leave Salary & Pension Contribution		1200000.00 Cr	995562.00 Dr	204438.00 Cr
		LTC Expenses		6500000.00 Cr	3948917.00 Dr	2551083.00 Cr
		Maintenance of Vehicles		800000.00 Cr	291345.00 Dr	508655.00 Cr
		Medical		8500000.00 Cr	7363900.00 Dr	1136100.00 Cr
		Misc. Expenses		7500000.00 Cr	7354365.00 Dr	145635.00 Cr
		Office Equipment		1100000.00 Cr	644855.00 Dr	455145.00 Cr
		Office Furniture		500000.00 Cr		500000.00 Cr
		Office Stationery		4200000.00 Cr	2606673.00 Dr	1593327.00 Cr
		Office Store		400000.00 Cr	26641.00 Dr	373359.00 Cr
		O. T. A.		200000.00 Cr	7286.00 Dr	192714.00 Cr
		Other Allowances (Honoarium/Bonus/ Wages)		1000000.00 Cr	827897.00 Dr	172103.00 Cr
		Outsourcing of Attendants/ Computer Operator		35000000.00 Cr	29150177.00 Dr	5849823.00 Cr
		Payment of Newspapers, Magazines for Head of Offices, PRO		300000.00 Cr	188556.00 Dr	111444.00 Cr
		Payment on Seminars, Conferences, Workshop Etc.		100000.00 Cr		100000.00 Cr
		Payment to Professionals		1000000.00 Cr	929584.00 Dr	70416.00 Cr
		Petrol & Fuel Charges		600000.00 Cr	223339.00 Dr	376661.00 Cr
		Providing Facilities in Hostel		500000.00 Cr		500000.00 Cr
		Purchase of Vehicles				

S. N.	Sub - Head of Exenditure	Items of Expenditure	Unspent Balance of GIA 13-14 Rs. 10,26,64,494/- + Receipts of Fin. Yr. 2014-15 Rs. 93,86,05,892/- = Rs 1,04,12,70,386/-	Budgeted Expenditure During the Period	Actual Expenditure During the Period	Amount Available
		Remuneration for Coaching/ Part-Time/ Evening Classes		26000000.00 Cr	24307471.00 Dr	1692529.00 Cr
		Salary - Pay & Allowances		372500000.00 Cr	368612141.00 Dr	3887859.00 Cr
		Sanitation - Maintanance of DTU / Campus		16000000.00 Cr	15365807.00 Dr	634193.00 Cr
		Security Charges		16500000.00 Cr	15852811.00 Dr	647189.00 Cr
		Student Welfare Fund Expenses		18000000.00 Cr	12639424.00 Dr	5360576.00 Cr
		TA-DTE/FTE		800000.00 Cr	337038.00 Dr	462962.00 Cr
		Telephone Charges		1600000.00 Cr	1352048.00 Dr	247952.00 Cr
		Total -		589050000.00 Cr	556736753.00 Dr	32313247.00 Cr
4	Examination Cell					
		Strengthening of Examination Cell		16500000.00 Cr	13699649.00 Dr	2800351.00 Cr
		Total -		16500000.00 Cr	13699649.00 Dr	2800351.00 Cr
5	Faculty Development & Student Welfare Programme					
		Faculty Development Programme		2000000.00 Cr	905333.00 Dr	1094667.00 Cr
		Reimbursement of Registration Fees, Books, Laptops Etc. to Faculty				
		Student Welfare Programme -Expenses For Sc-St (Students) Coaching Classes		1200000.00 Cr	1013000.00 Dr	187000.00 Cr
		Total -		3200000.00 Cr	1918333.00 Dr	1281667.00 Cr
6	Honorarium to Samsung Classes					
		Total -				

S. N.	Sub - Head of Exenditure	Items of Expenditure	Unspent Balance of GIA 13-14 Rs. 10,26,64,494/- + Receipts of Fin. Yr. 2014-15 Rs. 93,86,05,892/- = Rs 1,04,12,70,386/-	Budgeted Expenditure During the Period	Actual Expenditure During the Period	Amount Available
7	Modernisation of Machinery , Equipment & Information Technology					
		AMC of the Electronics, IT Equipment		2500000.00 Cr		2500000.00 Cr
		Consumable Stores for Labs, Library Etc.		4500000.00 Cr	3554369.00 Dr	945631.00 Cr
		Cost of Repair and Spare Parts for Machinery & Equipment		1200000.00 Cr	1047919.00 Dr	152081.00 Cr
		Furniture and Stores for Lab/ Library / Hostel - Stores & Materials		10000000.00 Cr	854802.00 Dr	9145198.00 Cr
		Internet Expenses		5500000.00 Cr	2467079.00 Dr	3032921.00 Cr
		Non -Consumables Stores for Labs,Library Etc.		1500000.00 Cr	313051.00 Dr	1186949.00 Cr
		Purchase of Computer, Servers - Information Technology		25000000.00 Cr	22637833.00 Dr	2362167.00 Cr
		Purchase of Consumables for IT		1000000.00 Cr	37561.00 Dr	962439.00 Cr
		Purchase of Machinery and Equipments for the Departments, Labs, Excellent Centers, Workshop Etc.		26100000.00 Cr	22796960.00 Dr	3303040.00 Cr
		Total -		77300000.00 Cr	53709574.00 Dr	23590426.00 Cr
8	Reimbursement of Registration Fees, Books, Laptops Etc. to Faculty					
		Total -				

S. N.	Sub - Head of Exenditure	Items of Expenditure	Unspent Balance of GIA 13-14 Rs. 10,26,64,494/- + Receipts of Fin. Yr. 2014-15 Rs. 93,86,05,892/- = Rs .1,04,12,70,386/-	Budgeted Expenditure During the Period	Actual Expenditure During the Period	Amount Available
9	Scholarship & Stipend to PG & Research Scholar					
		Scholarship to PG & Research Scholars		30000000.00 Cr	14964832.00 Dr	15035168.00 Cr
		Total -		30000000.00 Cr	14964832.00 Dr	15035168.00 Cr
10	Technical Education EDUSAT Network and Knowledge Park					
		Expenses on Develop Infrastructure and Pur of Tools & Equipment Edu-Sat and Studio	chase	0. cr		100000.00 Cr
		Expenses on Develop Infrastructure- Knowle		200000.00 Cr		200000.00 Cr
		Payment to Outsource Staff/ Maintenace/ service Chages-Edu-Sat and Studio		2500000.00 Cr	374158.00 Dr	2125842.00 Cr
		Payment to Outsource Service Charges-Knov				
		Total -		2800000.00 Cr	374158.00 Dr	2425842.00 Cr
11	Unspend Balance					
		Total -				
		Total Recurring -	920000000.00 Cr	776241040.26 Dr	143758959.74 Cr	920000000.00 Cr
		Total Non Recurring -				
		Grand Total Recurring & Non- Recurring -	920000000.00 Cr	776241040.26 Dr	143758959.74 Cr	92000000.00 Cr

## 6.3 Income & Expenditure (Unaudited) Statement 2015-16 of DTU

	Delhi Techonological University		Delhi Techonological University
Particulars	1-Apr-2015 to 31-Mar-2016	Particulars	1-Apr-2015 to 31-Mar-2016
Opening Stock		Indirect Incomes	14051063.00
Other Charges	51221.26	Fees From Students	523378127.82
Pay and Allowances		Rent and Incidental Charges	4061288.00
Administrative Expenses		Other Receipts	13093118.00
Information Technology		Grant in Aid	410000000.00
Book Bank & Library	20734090.26	Closing Stock	14051063.00
Building Construction & Maintenance Work of Building - Capital ( Non- Recuring)			
Capital (Construction Works Civil & Electrical) 2(A)	46515788.00		
Civil, Electrical & Horticulture (Repair & Maitenance) 2(B)	67587863.00		
Direction and Administration	556736753.00		
Educational Facilities			
Examination Cell	13699649.00		
Faculty Development & Student Welfare Programme	1918333.00		
Modernisation of Machinery , Equipment & Information Technology	30912614.00		
Professional Development Fund			
Purchase of Machinery and Equipments for the Departments, Labs, Excellent Centers, Workshop Etc.	22796960.00		
Scholarship & Stipend to PG & Research Scholar	14964832.00		
Student Welfare Student Fund Expenses			
Technical Education EDUSAT Network and Knowledge Park	374158.00		
Excess of Income over Expenditure	188291335.30		
Total	964583596.82	Total	964583596.82

6 University Accounts

### 7 Sponsored Research, Consultancy and Projects

#### **7.1 Sponsored Projects**

S. No.	Title of the Research project	Principal Investigators/ Co Principal Investigators	Sponsored agency	Total amount	Year of sanction
1.	Development of Environment Friendly Rigid Polyurethane Foam for Multipurpose Use	Dr. Raminder Kaur (PI) Dr. R.S. Walia (Co- PI)	DRDO	Rs 32,34,000/-	Feb 4,2016
2.	Graphene Based Lab-on-Chip Platforms for Detection of Cancer Biomarkers	Dr. Chandra Mouli Pandey	DST	Rs. 35,00000/-	Feb 3, 2016
3.	Diabetes	Dr. Rashmi K. Ambasta	CSIR- Scientific officer pool scheme	Rs20 Lakh (Approx.)	July 1, 2016
4.	Development of alternative sustainable fish feeds to promote human health using novel non-conventional indigenous ingredients	Dr. Jai Goapl Sharma	DBT-India	56.50 Lakhs	April 26, 2016
5.	Development of pelleted diet for Catla Catla and Clarias batrachus using Achyranthes Aspera and evaluation of its immunostimulatory properties in pond culture system	Dr.Jai Goapl Sharma	DBT-India	73.62 Lakhs	Jan 29, 2015
6.	All dielectric Plasmatic hybrid nano Structures	Prof. R.K. Sinha and Dr. Yogita Kalra	DST	65,04 Lac	Feb 20, 2015
7.	Plasmatic to Dielectric	Prof. R.K. Sinha and Dr. Yogita Kalra	DST	22,56 Lac	2015
8.	Modelling & semulation of Single mode high power fiber lasers	Dr. Yogita Kalra	DRDO	10 Lac	May 26, 2015
9.	Photovoltaic and multiferroic properties of multilayered BFO/BTO thin films swift heavy icn irradiation	Dr. Nitin Kumar Puri	UGC-IUAC	6.08 Lac	2015
10.	Luminescent materials	Dr. M. Jayasimhadri	DST-SERB	26,36,800/-	March 2, 2015
11.	TBRL Sponsored Project	Prof. Rajeev Kapoor	TBRL- DRDO	50Lac	April 2016

#### **7.2 Consultancy Projects**

S. No.	Title of the Research project	Principal Investigators / Co Principal Investigators	Sponsored agency	Total amount	Year of sanction
1	Design mix for M-10, M-30 & M-40grade of concrete	Dr. Munendra Kumar, P.I	M/s Gawar Construction Ltd.	1,71,000/-	2015-16
2	Mix Design of M-15 (PPC), M35 (OPC) Grade concrete	Dr. Amit Kumar Shrivastva	Executive Engineering, PWD	1,71,000/-	2015-16
3	Concrete Core Testing	Mr. S. Anbu Kumar, P.I		1,00,000/-	2015-16
4	Improvement of existing road & demolishing and reconstruction of RCC storm water drain from GT Karnal Road to village Siruspur in Alipur Block.	Dr. Awadesh Kumar	Irrigation and flood control department, Govt. Of NCT Delhi	10,19071/-	2015-16
5	Design Mix of grade M-10 & M-35	Dr. Awadesh Kumar	M/s Samiah International Builders Pvt. Ltd.	33,708/-	2015-16
6	CPWD (Improvement & UP gradation of colony Roads, back lanes	Mr. Kongan Aryan	PWD	13,03,026/-	2015-16
7	Mix design of M10, M30 & M40 grade of concrete	Dr. Munendra Kumar, Prof. Nirendra Dev, Dr. Amit Kumar Srivastva	Mr. R.S. Chauhan, Executive Engineering (O&M)	1,34,832/-	2015-16
8	Concrete mix design for M-25,M-30, M-35 & M-40	Mr. Naresh Kumar		17,750/-	2015-16
9	Construction of additional classroom in existing of Delhi	Mr. Robert	PWD		2015-16
10.	Construction of HIG Houses including Internal development & Electrification	Mr. Naresh Kumar	Simplex Infrastructures Limited	2,30,000/-	2016

#### 7.3 TEQIP II Project

Brief Introduction and Objective

- TEQIP-II Project started in DTU in July 2013 with the issue of office order DTU/TEQIP/2011/430/514052 dated 05.07.2013. The main objectives of TEQIP-II Project at DTU are:
- a) Strengthening PG Education, Research and Innovation
- b) Industry Partnership in Education and

Research.

- Building Quality Faculty Capacity Faculty "inspired to teach and driven to research"
- An Orientation program at NPIU for all officials of DTU TEQIP Team was organized on September 20, 2013.
- The institute is covered under Sub component 1.2 which is meant for scaling-up Postgraduate Education and demand driven R&D and innovation.

#### **Meetings**

- QEEE meeting at Indian Habitat Centre attended by Prof. Vikas Rastogi on November 18, 2013 which was headed by Hon'ble Minister of HRD.
- 2. SPFU Meeting attended by Prof. Vikas Rastogi and Sh. O.P. Shukla on December 12, 2013.
- Prof. Naveen Kumar and Dr. M.M. Tripathi attended QEEE meeting at IHC, New Delhi on 16.07.2014. The Institution

- is to participate in 2nd phase of this very important programme.
- 4. A Review meeting was held on 21st July, 2014 with Chairman BoM (Prof. R.P. Aggarwal) on the progress of TEQIP –II Project.
- Hon'ble Chairman, BOM Shri R.P. Aggrawal and Prof. Vikas Rastogi attended two day's workshop on Good Governance, Leadership and Management at Metropolitan Hotel, New Delhi, from October 12 – 13, 2014.

#### **Finance Details**

1. The different activities along with funds allocations of TEQIP-II Project are summarized as under:

S. No.	Activities	Allocations
1.	Procurement	5.625 crore
2.	Assistance ship	2.50 crore
3.	R& D	0.625 crore
4.	Faculty and Staff development	1.25 crore
5.	Industry institute Interactions	0.625 crore
6.	Capacity Development	0.25 crore
7.	Reforms	0.125 crore
8.	Academic Support for weak students	0.25 crore
9.	Incremental Operating Costs	1.25 crore
	Total	12.5 Crore

Five Bank Accounts have been opened for smooth completion of TEQIP-II Project. The details of Bank Account Opened for TEQIP-II Project are as under:

S. No.	Account Name	Account Number
1.	DTU- TEQIP-II	33602463417
2.	Corpus Fund- TEQIP-II	33602465528
3.	Faculty Development Fund —TEQIP-II	33602467296
4.	Equipment Replacement Fund-TEQIP-II	33602468868
5.	Maintenance fund TEQIP-II	33602470796

Funds 4.5 Crores (31.3.2014) and 1.5 Crores (25.3.2014) have been received in last week of March, 2014.

2	The allocation	of funds for	capital Procurement	and other	items is as under
۷.	The anocation	or runus ior	capital i loculcincin	and other	items is as under.

S. No	Name of Department	Proposal Approved (Rs.)
1.	Mechanical Engineering	1,55,45,000.00
2.	Electrical Engineering	1,76,03,910.00
3.	Electronics and Communication	1,01,00,000.00
4.	Civil Engineering	70,50,000.00
	Sub Total (Equipment)	5,02,98,910.00
5.	QEEE-PILOT Programme	2,55,755.00
6.	Library	38,68,040.00
7.	Furniture	2,50,000.00
	Sub Total (5+6+7)	43,73,795.00

The above proposal has been approved by Board of Management in its meeting held on June 12<sup>th</sup>, 2014.

- 3. Financial Power of Rs. 1 Lakh has been granted to Coordinator, TEQIP-II Project as far as purchase of consumables/equipments is concerned.
- Financial Power of Rs. 1 Lakh has been granted to Coordinator, TEQIP-II Project for salary of staff working under TEQIP-II Project and petty expenses subject to verification of the Accounts Branch.
- Delegation of Power has been granted to Coordinator, TEQIP-II Project for nominating faculty members of the University for attending various Management Development Program, Faculty Development Program, Training Programs conducted by various Institutions under TEQIP-II Project in March, 2015.
- 6. A Review meeting was held on March 10th, 2015 with all Nodal Officers of TEQIP-II Project on Finalizing the Requirement of Remaining Grant for F.Y. 2015-16 under TEQIP-II Project as desired by NPIU along with details of action taken report on Procurement during current F.Y. 2014-15.

#### Staff in TEQIP Cell

Interview to 4 Project posts e.g. MIS Officer, Data Entry Operator, Accountant and Office Attendant are working in TEQIP Cell for more than a year. To complete data records of Academic Sections for onwards entries in MIS, two Data Entry Operator has also been engaged.

## International Conferences outside India

The following Sixteen (16) International visits have been attended by the faculty members with financial support from TEQIP-II Project:

- An Adaptive Mesh Strategy for convention (Modelling 2014) International Conference at Czech Republic from June 2 – 6, 2014 by Dr. Vivek Kumar Aggarwal
- Bondgraph Modeling and Simulation (ICBGM-2014) under 2014 Summer'sim at Monterey, CA, USA during July 6 – 10, 2014 by Prof. Vikas Rastogi
- The World Aquaculture Adelaide 2014" at Adelaide, Australia during June 7–11, 2014 by Dr. Jai Gopal

- 4. Green Supply Chain (GSC-2014) at Arras, France during June 25 27, 2014 by Dr. Rajesh Kumar Singh
- The 2014 ISRM European Rock Mechanics Symposium" at Vigo, Spain during July 27-29, 2014 by Dr. Amit Kumar Srivastava
- 6. 6th IEEE Conference on Power Electronics Systems and Applications (PESA) during December 13 – 19, 2015 at Hong Kong, Polytechnic University by Prof. Vishal Verma
- 50th Annual Conference on Information Sciences and Systems (CISS) from March 16-18, 2016 at Princeton University, NJ USA by Prof. O.P. Verma
- 8. 18th International Conference on "Information Technology & Computer Science" from April 11-12, 2016 at Italy by Dr. Ruchika Malhotra
- 12th International Conference on "Approximation Theory and its Applications" at Sibiu, Romania from May 26 – 29, 2016 by Dr. Naokant Deo
- London International Conference for Advanced Research in Business at University of London, UK during June 20 – 21, 2016 and also visit Imperial College and Excel Management Ltd. during June 22 – 24, 2016 by Prof. S.K. Garg
- 11. 8th International Conference on e-Health at Funchal, Madeira, Portugal during July 1-3, 2016 by Dr. Divyashikha Sethia
- 12. 29th International Conference on "Advances and Trends in Engineering Materials and their Applications (TORONTO'2016 AES-ATEMA)" at Toronto, Canada from July 4-8, 2016 by Dr. R.S. Walia
- 13. 29th International Conference on "Advances and Trends in Engineering

- Materials and their Applications (TORONTO'2016 AES-ATEMA)" at Toronto, Canada from July 4-8, 2016 by Dr. Rajesh Kumar
- 14. 14th International Conference on Software Engg. Research and Practice (SERP'16) at Las Vegas, USA during July 25-28, 2016 by Dr. Daya Gupta
- Prof. S.K. Garg (PVC), Prof. A. Trivedi, (Dean-IRD), Prof. Vishal Verma, (Dean Academics-PG) and Shri O.P. Shukla, (Jt. Director, TTE) to visit for Research Collaboration in USA from July 24 to August 06, 2016
- 16. International visit for delivering the Expert lecture in University of South Florida, Tampa, USA from August 22 – 29, 2016 by Prof. Naveen Kumar

## The following two (2) International visits are under process:

- ACEM16-International Conference on "Advanced Environmental Science & Technology" (AEST) at ICC Jeju, Jeju Island, South Korea from August 28 to September 01, 2016 by Dr. A.K. Haritash
- 2. International Travel for Networking & doing Joint Research and Consultancy in collaboration at France from September 5 13, 2016 by Prof. Rajeev Kapoor

#### **Conferences within India**

The following six (6) International Conferences within India have been attended by the faculty members with financial support from TEQIP-II Project:

- Dr. R. S. Walia has attended 19<sup>th</sup> Annual Conference on Society of Operations Management (SOM) at IIM, Calcutta from December 11 - 13, 2015
- Dr. R.S. Walia and Shri Vijay Gautam have attending National Conference on "All India Manufacturing Technology,

- Design & Research 2014" at IIT Guwahati from December 12-14, 2015
- Shri Pradeep Kumar Jain, Shri Jeebananda Panda, Shri Sanjay Kumar, Ms. Saroj Bala and Shri Alok Kumar Singh have attended "5<sup>th</sup> International Symposium on Fusion of Science and Technology (ISFT 2016)" at National Agriculture Science Centre (NASC) Complex, New Delhi held on January 18-22, 2016
- Shri N. Yuvraj has attended International Conference on "Materials, Design and Manufacturing Process 2016" at Anna University, Chennai during February 17 to 19, 2016
- 5. Shri Paras Kumar has attended International Conference on "Recent Trends in Engineering and Materials Science 2016" at National University, Jaipur during March 17 to 19, 2016
- 6. Ms. Sushila Rani has attended International Conference on "Processing of Materials, Minerals and Energy" at PACE Institute of Technology and Sciences Ongole, Prakasam District, Andhra Pradesh during July 29 30, 2016.
- 12<sup>th</sup> International Conference on "Image and Signal Processing" (ICISP-2016) at Visvesvaraya College of Engineering, Bangalore during August 19-21, 2016 by Shri Mahipal Singh Chaudhary.
- 8. International Conference on "Communication and Computing Systems" (ICCCS-2016) at Dronacharya College of Engineering, Gurgaon during September 9 11, 2016 by Dr. Rajeev Kumar Mishra

#### **Faculty Development Programme**

The following Nineteen (19) Faculty Development Programme has been organized under TEQIP-II Project:

- 1. Modeling and simulation for dynamical systems and optimization (June 9-13, 2014.)
- 2. Renewable Energy & Alternative Fuels (June 16 20, 2014)
- 3. Recent advance in pattern Recognition and Image Processing (July 7 11, 2014)
- 4. Precision Manufacturing: Manufacturing for better Tomorrow (July 14-18, 2014)
- 5. Advance Web Designing Techniques (July 14-25, 2014)
- 6. Recent Trends in Switchgear and Protection (July 21-25, 2014)
- 7. Frontiers Areas in chemical and Polymer Sciences (December 15-26,2014)
- 8. Intelligent control technique and their application (December 22-26,2014)
- 9. Automation in Manufacturing (May 4-15, 2015)
- 10. Recent Advances and Challenges in Power & Energy for Sustainable Growth (June 1-5, 2015)
- Supply Chain Management for Sustainable Performance (July 6-10, 2015)
- 12. Nature Inspired Algorithms & Their Applications (July 13-17, 2015)
- 13. Urban Environmental Challenges and Their Control Strategies (July 13-17, 2015)
- Skill Development of Technical Staff in Manufacturing Technology (November 23-27, 2015)
- 15. Recent Advances in Alternative & Renewable Energy Technologies (December 7-11, 2015)
- 16. Advances in Information Security (January 18 22, 2016)
- 17. Recent Trends in Pattern Analysis & Machine learning (July 11-15, 2016)
- 18. Statistical methods and a brief on LaTex (July 18 22, 2016)

- Recent Development and Challenges in Materials and Manufacturing process (July 25-29, 2016)
- 20. Advance in Microelectronics and Plasma Diagnostics (August 29 to September 2, 2016)

#### Short Term Training Program/ Seminar/Workshop

The following Short Term Training Program/ Seminar/Workshop has been organized under TEQIP-II Project:

- One day workshop on Curriculum Development on 08.03.2015 by Electrical Engg. Deptt.
- 2. STTP on Recent Trends in Geoenvironmental Engineering from April 18 – 22, 2016 by Civil Engg. Deptt.
- 3. One day workshop on "Curriculum Revision and Development" on 22.04.2016 by Electrical Engg. Deptt.
- 4. Two days seminar on "Innovations and Challenges in Thermal Engineering" from July 7 8, 2016 by Mechanical Engg. Deptt.
- 5. STTP on Geotechnical Engineering for Urban Infrastructure from July 11-15, 2016 by Civil Engg. Deptt.
- 6. STTP on PLC, HMI, SCADA & AC DRIVES from June 13 17, 2016 by Electrical Engg. Deptt.
- 7. STTP on Recent Development in Fluid Mechanics and Hydraulics from July 18 – 22, 2016 by Civil Engg. Deptt.
- 8. Two days seminar on "Social Responsibility of Engineering Institutions" from July 21-22, 2016 by Humanities Department
- 9. Workshop on "Research and Publication" from July 25–30, 2016 by Humanities Department

One day seminar on "just a wprd...
plastics. Great today and fantastic
tomorrow" on sep. 9, 2016 by Applied
Chemistry and Polymer Technology.

## **Equity Actions: Strengthening Academics/Education**

- Md. Tausif Ahmad (Ph.D. Research Scholar) attended training "Advance in Control and Instrumentation Education" at NIT Surat during February 24 – 28, 2014
- Conducted remedial classes for weaker students of B.Tech second semester (Group B1–B10) during May 3-4, 2014 by Electrical Engineering Department.
- 3. Two lectures of finishing school have been conducted on March 24, 2014 and August 26, 2014 by Humanities Department.
- 4. A technical talk on Modern Power Electronics Devices & Integrated Protection schemes of Mr. K.P. Kamath, Managing Director at Semikron Electronics Pvt. Ltd. on 3<sup>rd</sup> September 2014 for PG and Ph.D students in EE/ EEE branch.
- 5. Remedial classes have been organized in "Engineering Graphics" for B.Tech First Year students in Mechanical Engineering Department during November 1- 9, 2014.
- 6. Remedial Classes for weaker students of B. Tech Second Year in the subject of Analog Integrated Circuits (EC-211) during the month of April/May, 2015 (18<sup>th</sup> April, 19<sup>th</sup> April, 25<sup>th</sup> April, 26<sup>th</sup> April, 2<sup>nd</sup> May, 3<sup>rd</sup> May, 2015) in Electronics & Communication Engineering Department.
- A Nuclear Magnetic Resonance (NMR) spectroscopy, and Gas Chromatography-Mass spectroscopy

- (GCMS) has attended by Alhassan Yahaya, PhD at IIT, Delhi.
- 8. A Lecture on "Automotive Industry R&D" by Dr. Gagan Syal, Mercedes Benz, Germany on October 29, 2015 in Mechanical Engg. Deptt.
- Mr. Rahul Verma (B. Tech) has attended 19<sup>th</sup> Annual Conference of the Society of Operations Management" (SOM) at IIM, Calcutta during December 11 to 13, 2015.
- Mr. Ashish Gupta (PhD Research Scholar) has attended 12<sup>th</sup> International Conference on Vibration problems-2015 at IIT Guwahati, India during December 14-17, 2015.
- Niraj Kumar Jha & Saurabh Kumar Jha have attended workshop on "Advances in Computational Neurochemistry and Neurobiology" (SNCI-ACNN 2015) at North-Eastern Hill University Shillong, Meghalaya from December 16 – 21, 2015 from Department of Biotechnology.
- 12. Ms. Shagufta Khan and Md. Tausif Ahmad, Ph.D. Research Scholar have attended IEEE Conference INDICON-2015 at Jamia Millia Islamia, New Delhi from December 17-20, 2015 by Department of Electrical Engineering.
- 13. Ms. Indu Kumari & Mr. Nitish Goel have attended 5<sup>th</sup> International Symposium on Fusion of Science and Technology (ISFT 2016)" at National Agriculture Science Centre (NASC) Complex, New Delhi during January 18-22, 2016 from Electronics & Communication Engineering Department.
- 14. A series of expert lecture in the subject of VLSI Design for M. Tech students from January 18 31, 2016 successfully conducted by Electronics & Communication Engineering Department.

- 15. Ms. Shruti Jaiswal (Ph.D Scholar) has presented the paper in International Conference "ComNet- 2016, Issues and Challenges with IOT revolution" at Ahmedabad during February 20-21, 2016 from Department of Computer Science and Engineering.
- 16. Mr. Nitish Kumar, B. Tech student of CSE Deptt. has presented the paper in International Conference on "Communication & Networks – ComNet 2015-16" at Ahmedabad during February 20-21, 2016.
- 17. Mr. Pranavsesh. V.S. and Mr. Rohit Kumar, M. Tech students of ECE Deptt. have presenting the paper in "IEEE International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT 2016)" at Dwarka, New Delhi during March 11-13, 2016.
- 18. Mr. Nitish & Mr. Aman Raj, B. Tech students of ECE Deptt. have presenting the paper in "IEEE International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT 2016)" at Dwarka, New Delhi during March 11-13, 2016.
- 19. Mr. Shrey Gupta, B. Tech student of CSE Deptt. has presented the paper in "10<sup>th</sup> INDIACom-2016; 3<sup>rd</sup> International Conference on Computing for Sustainable Global Development" at Bharti Vidyapeeth's, New Delhi during March 16-18, 2016.
- 20. A Nuclear Magnetic Resonance (NMR) spectroscopy, and Gas Chromatography-Mass spectroscopy (GCMS) etc. shall attend by Shri Raghvendra Gautam, Assistant Professor & PhD scholar at IIT, Delhi.

- 21. Ms. Nikita Gupta (Ph.D Scholar) has presenting the paper in International Conference on Intelligent Communication, Control and Devices-2016 at Dehradun during April 2-3, 2016 from Electrical Engineering Department.
- 22. Lectures series in the area of RF and Microwave Technology for M. Tech student during April 6–11, 2016 by Electronics & Communication Engineering Department.
- 23. Finishing lectures by Prof. Budd Hall on April 14, 2016 (Half day) by Humanities Department.
- 24. Finishing lecture on **"Enhancing Entrepreneurship Skills among Engineering students"** 14.04.2016 (Half day) by Humanities Department
- 25. Ms. Jaya Gautam, M. Tech student has presented the paper in International Conference on "Springer Advances in Intelligent Systems and Computing Series" at Bangalore during April 8-9, 2016.
- 26. Ms. Priyadarshani, M. Tech student of ECE Deptt. has presented the paper in IEEE International Conference on "Computing Communication and Automation" (ICCCA 2016) at Galgotia University, Greater Noida, UP during April 29-30, 2016.
- 27. Ms. Devika Singh, M.Tech student of CSE Deptt. has presented the paper in IEEE International Conference on "Computing Communication and Automation" (ICCCA 2016) at Galgotia University, Greater Noida, UP during April 29-30, 2016
- 28. Ms. Jigyasa Grover, B. Tech student of CSE Deptt. has selected for Research Mobility Programme with Mitacs, Canada for summer 2016 duration is 12 weeks.

- 29. Mr. Parvesh Ali (Ph.D. scholar, MED) has presented the paper in International Conference on "Advancements in Aeromechanical Materials for Manufacturing" (ICAAMM-2016) at Hyderabad, Telangana during July 7 9, 2016
- 30. Mr. Tanmay Mishra, M. Tech student of EE Deptt. has presented the paper in International Conference on "Power Electronics, Intelligent Control and Energy System" (ICPEICES 2016) at Delhi Technological University during July 4 6, 2016.
- 31. Mr. Saurabh Gupta, M. Tech student of EE Deptt. has presented the paper in International Conference on "Power Electronics, Intelligent Control and Energy System" (ICPEICES 2016) at Delhi Technological University during July 4 6, 2016.
- 32. Mr. Prakash Chittora (Ph.D. scholar, EED) has presented the paper in International Conference on "Power Electronics, Intelligent Control and Energy System" (ICPEICES 2016) at Delhi Technological University during July 4 6, 2016.
- 33. Ms. Kirti Bagla, M. Tech student of EE Deptt. has presented the paper in International Conference on "Power Electronics, Intelligent Control and Energy System" (ICPEICES 2016) at Delhi Technological University during July 4 6, 2016.

# The following Equity Actions: Strengthening Academics/Education is under process:

 Special Guest Lectures for M.Tech 3<sup>rd</sup> semester for academically weaker studentsinElectronics&Communication Engineering Department.

- Remedial classes shall organize for academically weaker students in the various subjects during the even semester 2016 in Applied Mathematics Department.
- 3. Two Finishing lectures on "Technological Innovation & Human Rights" and "Engineering Education for Sustainable Development Goal" on 23.08.2016, 28.09.2016 respectively by Humanities Department.
- 4. Presented the paper in International Conference on "Power Electronics, Intelligent Control and Energy System" (ICPEICES 2016) at Delhi Technological University during July 4 6, 2016 by Mr. Manoj Kumar, Mr. Avinash, Mr. Ambrish Devanshu, Mr. Rishabh Jain, Ms. Kshitijaa Ranjan and Mr. Ajishek Raj who are students of B.Tech & M.Tech, EED for Ex-post facto approval.
- 5. Presented the paper in 2nd International Conference on "Advances in Management & Decision Sciences" at School of Management, Gautam Buddha University, Greater Noida during July 16 & 17, 2016 by Mr. Deepak Kumar who is a student of M.Tech, MED for Ex-post facto approval.
- 6. Presenting the paper in "India International Conference on Information Processing (IICIP-2016) at DTU during August 12 14, 2016 by Mr. Prince Garg, M.Tech student of ECE Deptt.

#### **Trainings and Development**

- Dr. R.K. Shukla attended Training on Management Capacity Enhancement for Administrators from September 23-27, 2013 at IIM Lucknow, Noida Campus.
- MIS training at ICT Mumbai attended by Prof. Vikas Rastogi and Dr. Rajesh Kumar from October 9-10, 2013.

- 3. Training of QEEE Implementation at IIT Madras attended by Dr. Rajesh Kumar and Dr. M.M. Tripathi from December 17-18, 2013.
- 4. Prof. Naveen Kumar attended two weeks Leadership Development Program first part of which was conducted at IIM Lucknow, Noida Campus (December 2–6, 2013) and second part at University of Indiana, Bloomington, USA. (December 9 -13, 2013).
- Prof. Pragati Kumar and his team attended procurement training at NPIU on December 30, 2013 to get familiarized with PMSS.
- Dr. R.C. Singh and Shri Pradeep Jain attended Training on Management Capacity Enhancement for Administrators from January 13-17, 2014 at IIM Lucknow, Noida Campus.
- 7. Shri K. Srinivas and Dr. M. Rizwan have attended one week Management Development Program at IIM Lucknow, Noida Campus from June 9-13, 2014.
- Dr. Rajesh Kumar and Dr. Rajiv Chaudhary attended Training on Management Capacity Enhancement for Administrators from September 23-27, 2014 at IIM Lucknow, Noida Campus.
- Prof. Naveen Kumar and Dr. Vishal Verma have attended a workshop on Student, Faculty and Non-Teaching Staff Satisfaction Survey on 23 September 2014 at Bangalore.
- Dr. Dheeraj Joshi, Electrical Engineering Department had attended training Program on "Wind Resource Assessment" (WRA) during 15<sup>th</sup> to 17<sup>th</sup> April, 2015 at Gurgaon.
- 11. Dr. M.M. Tripathi & Prof. A.K. Gupta had attended 6<sup>th</sup> batch of "Faculty Development Program for Achieving

- Academic Excellence" during March 23-28, 2015 at IIM Raipur.
- Shri. Saurabh Agrawal has attended the program on "Selection of locations of collection centers for reverse logistics using GTMA" at Hyderabad from March 14-15, 2015.
- 13. Dr. R.S. Walia, Shri Sanjeev Sharma & Prof. O.P. Verma had attended 3<sup>rd</sup> "Management Capacity Enhancement Program" during 30.03.2015 to 04.04.2015 at IIM Udaipur.
- 14. The Management Capacity Enhancement Programs have attended by Dr. Pravin Kumar & Sh. Raghvendra Gautam at IIM Trichy from October 12 to 16, 2015.
- 15. The Management Capacity Enhancement Programs have attended by Dr. Amit Pal & Dr. Pushpendra Singh at IIM Indore from October 5 to 11, 2015.
- 16. The Management Capacity Enhancement Programs has attended by Prof. H.C. Taneja at IIM Raipur from October 12 to 17, 2015.
- 17. The Management Capacity Enhancement Programs have attended by Dr. S. Indu & Dr. B.B. Arora at IIM Lucknow (Noida Campus) October 5 to 9, 2015.
- 18. The 14<sup>th</sup> Management Capacity Enhancement Programs has attended by Dr. Ruchika Malhotra at IIM Kozhikode from October 26 to 31, 2015.
- 19. The Management Capacity Enhancement Program have attended by Dr. Rishu Chaujar, Dr. S. Sivaprasad Kumar and Dr Rajesh Kumar Singh at IIM Indore (November 16 to 22, 2015), IIM Trichy (Chennai Campus) (November 16 to 20, 2015) and IIM Lucknow (Noida Campus) (November 16 to 20, 2015) respectively.

- 20. The Residential Training Programme on "Project Management & Strategic Financial Planning" has attended by Prof. O.P. Verma & Shri Susheel Kumar at Port Blair, Andaman & Nicobar from November 16-20, 2015.
- 21. The Residential Training Programme on "Project Management & Strategic Financial Planning" has attended by Shri Sanjeev Sharma & Shri Manoj Kumar at Gangtok, Sikkim during May 02-06, 2016.
- 22. The Residential Training Programme on "Effective Office Administration & Financial Management" has attended by Prof. Vishal Verma and Shri Nand Kishore at Leh, Ladakh, during June 6-10, 2016.
- 23. A training programme on 'Uncertainty, Complexity and Risk in Projects' has attended by Prof. S.K. Garg at IIM Ahmadabad during April 25-28, 2016.
- 24. A course on "Nonlinear Control System Design" has attended by Shri Sudarshan Kumar Babu Valluru at Indian Institute of Space Science and Technology (IISST), Thiruvanthapuram, Kerala during June 20 to 24, 2016.
- 25. A Residential Training Programme on "Productivity & Competitiveness Measurement for Organizational Excellence" has attended by Shri Anil Kumar and Prof. D. Kumar at Puri, Odisha during July 25 – 29, 2016.
- 26. "Management Capacity Enhancement Programs" at IIM Trichy (Chennai Campus), July 25 to 29, 2016 by Shri P.V. Ram Kumar and Shri Vijay Gautam.
- 27. "Management Capacity Enhancement Programs" at IIM Raipur, July 25 to 30, 2016 by Dr. Girish Kumar.

## The following Trainings and Development programs is under process:

- A Communication and Soft Skill Training proposed by Dr. M.M. Tripathi for all students of DTU
- 2. Establishment of "Advanced Embedded Systems Laboratory" for strengthening student's skills by Dr. M.M. Tripathi
- 3. Establishment of "SPSS and Language Lab" by Dr. Seema Singh, Humanities Department
- Management Capacity Enhancement Program at IIM Indore from August 23 – 29, 2016
- A Residential Training Programme on "Project Financing & Strategic Financial Management" at Goa from September 26 – 30, 2016

#### **Enhanced Interaction with Industry**

- 1. An Industrial visit has been arranged to M.Tech, (3<sup>rd</sup> SEM, Thermal) students at IIP Dehradun from 29<sup>th</sup> September, 2014 to 2<sup>nd</sup> October, 2014.
- 2. An Industrial visit has been arranged for B.Tech students at Aravali Power Company Pvt. Ltd., at Jhajjar, Haryana for EE/EEE branch on 29<sup>th</sup> October, 2014.
- 3. A visit has been arranged for students of Mechanical Engineering Department in the "3<sup>rd</sup> TCOE India Innovation Meet 2015" at C-DOT Campus, New Delhi on 30<sup>th</sup> October, 2015.
- An Industrial Visit has been arranged for EE/EEE students at NTPC's National Capital Power Station (NCPS), Dadri on 29<sup>th</sup> December, 2015.

## Reports Submission and Participation

 Good Governance Self Review for DTU has been submitted

- 2. Financial Management Report has been successfully submitted till July, 2016
- Action Plan has been submitted on 10 plan indicators
- 4. Financial plan from July, 2014 to October, 2016 also submitted
- 5. AICTE CII survey successfully submitted in 2014, 2015
- Disclosure Management and Analysis of weak student report has been submitted
- 7. DTU has also signed MoU with IIT Delhi in collaboration with NPIU
- 8. Governance Development Plan has been submitted to NPIU as it is a prerequisite for the workshop to be held at October 12 to 13, 2014
- DTU participated in Online Web Based Satisfaction Survey for Students, Faculty, Technical Staff
- 10. DTU has also submitted 12 Performance Assessment Indicators.
- 11. The Financial Management Indicators Report for the F.Y. 2014-2015 (01/04/2014 to 30/09/2014, 01/10/2014 to 31/03/2015) and F.Y. 2015-2016 (01/04/2015 to 30/09/2015, 01/10/2015 to 31/03/2016) has been successfully submitted
- 12. Progress Report for Centrally Sponsored Schemes for the month of October to December 2014-2015 has been successfully submitted in January, 2015
- 13. Budget Provision of State for F.Y. 2015-16 for the requirement of fund has been sent to NPIU/SPFU in April, 2015
- Budget Provision of State for F.Y. 2016 for the requirement of fund has been sent to NPIU/SPFU in June, 2016
- 15. The Provisional Utilization Certificate for the F.Y. 2013-2014, 2014-2015 & 2015-16 has been successfully submitted

- 16. Quarterly e-Financial Monitoring Report for the F.Y. 2014-2015 (01.04.2014 to 30.09.2014, 01.10.2014 to 31.12.2014 and 01.01.2015 to 31.03.2015) and F.Y.2015-2016 (01.04.2015 to 30.06.2015, 01.07.2015 to 30.09.2015, 01.10.2015 to 31.12.2015, 01.01.2016 to 31.03.2016) and F.Y. 2016-2017 (01.04.2016 to 30.06.2016) has been submitted electronically i.e. through the e-FMR software
- 17. The survey of Questionnaire for Institutions has been recorded in Oct., 2015
- 18. The survey of Questionnaire for Environmental Management & Practices has been recorded in Nov., 2015

#### **Procurement**

## The following procurement has been done are as under:

- Programmable Grid-tie Source-Sink Bidirectional Power Supply in simulation lab
- Purchase of Digital pendulum Control System and Twin Rotor MIMO System in Control System Lab of the Electrical Engg Deptt.
- 3. Purchase of "E-Books Pearson Think Tank Custom Collection" in Library, DTU
- 4. Purchase of BS 5 Modules on DVD-ROM

## The following procurements are committed:

- 1. High Voltage Impulse Generator
- 2. Helicopter Model
- 3. Ball & Plate models
- 4. Magnetic Levitation
- 5. Minor Items for Electrical Engg.
- 6. DGPS System (Quantity -2 No.)
- 7. Spectrum Analyzer (Quantity -2)

- 8. Stereo Camera
- 9. PTZ Network Camera
- 10. Kinectic Cameras
- 11. MATROX Imaging
- 12. Electrical work in Simulation Lab
- 13. Civil works in Simulation Lab of EED

## The following procurements are under process:

- 1. CNC Machine Centre
- 2. CNC Lathe Trainer
- 3. Super Critical Transestification Reactor
- 4. Clean Energy Trainer
- 5. Totally Computer Controlled Rock Triaxial Testing System (axial loading as well as cell pressure computer controlled)
- 6. Multi-Channel Anaysis of Surface Waves
- Axial Loading Machine (Compression Machine), auto pacing with stress and strain control facility, Capacity-3000kN
- 8. Core Drilling Machine for Civil Deptt.
- 9. Three gang bench type consolidation meter
- 10. Standard Penetration Test Equipment
- 11. Hydraulic Jack for Civil Deptt.
- 12. Minor Items for Civil Desiccators
- 13. Ball & Beam and Coupled Tank
- 14. GPS-Aided Interial Navigation System
- 15. Ball & Hoop and
- 16. Houillon Capillary Cisco meter
- 17. Flammability Test Apparatus
- 18. DAQ for E & C Deptt.
- 19. Construction of Prefabricate Porta Cabin Structure on 3rd Floor in EED
- 20. Robot Items for E & C Deptt.
- 21. Microsoft Kinet Sensors
- 22. Grid Simulator
- 23. Table Top and CNC

- 24. Hydraulic Press with 100 capacity (50 Ton Ram + 50 Ton Blank holder capacity), MED
- 25. Flammability Test Apparatus, MED
- 26. Cold Flow Property Analyzer, MED
- 27. Houillon Capillary Cisco meter, MED
- 28. Programmable Grid-tie Source-Sink Bidirectional Power Supply, EED
- 29. Impulse Generator and Computerized CTU testing Rig, EED
- 30. Control Study Station, Computer control & data Acquisition, Magnetic Levitation and Accessories, EED
- 31. PV and Battery Emulator Software Compatible with Regatron make bidirectional power supply for conducting experiments & Research work in Simulation Lab

#### Miscellaneous

- The Procurement Committee for TEQIP-II Project has been formed.
- Guidelines for International Conference have been finalised by TEQIP—II Project, Coordinator (Prof. Naveen Kumar), Dean IRD (Prof. A.Trivedi), Dean(IC) and Prof. Rajiv Kapoor, HOD (E&C & Comp. Engg.).
- 3. Attending workshop on "Medical Imaging-Techniques and Clinical Application-2015" at IIT Delhi during April 3-4, 2015 by Shri Mahipal Singh & Shri Rajesh Birok in Electronics & Communications Engineering Department (without any financial support from TEQIP-II Fund).
- Attending training on "17th ISME Conference on Advances in Mechanical Engineering" at IIT Delhi during October 3-4, 2015 by Shri N. Yuvraj & Shri Vijay Gautam in Mechanical Engineering Department (without any financial support from TEQIP-II Fund)

- Attending workshop on "Medical Imaging-Techniques & Image Processing Workshop 2016, at IIT Delhi during March 25-27, 2016 by Shri Mahipal Singh & Shri Rajesh Birok in Electrical & Communications Engineering Department (without any financial support from TEQIP-II Fund).
- Attending workshop on "Medical Imaging-Techniques & Image Processing Workshop 2016, at IIT Delhi during March 25-27, 2016 by Dr. L.N. Das in Applied Mathematics Deptt. (without any financial support from TEQIP-II Fund).
- 7. Appointment of Prof. A.K. Gupta, Head, Environmental Engineering Department as Coordinator, TEQIP-II Project in place of Prof. Naveen Kumar w.e.f. 25.05.2016.
- 8. Appointment of Shri Nand Kishor, DR (F&A), DTU as Nodal Officer, Finance, TEQIP-II Project w.e.f 01.01.2016.

#### **Audit and Visits**

- Prof. K.D.P. Nigam visited DTU for mentoring on January 10, 2014. He met with VC (DTU), TEQIP Team, UG/PG students, research scholars and staff of the university.
- 2. Prof. K.D.P, Nigam visited DTU to meet Board of Management on February 7<sup>th</sup>, 2014.
- 3. First round of Performance and Data auditing has been completed on May 2-3, 2014.
- 4. Second round of Performance and Data auditing has been completed on October 26-27-28, 2014.
- 5. Second round of Mentor Visit of Prof. K.D.P. Nigam during January 22-24, 2015.

- 6. Visit of officers from World Bank and MHRD/NPIU on 20<sup>th</sup> May, 2015.
- Third round of Mentor Visit of Dr.
   N. C. Shivaprakash, Professor, IISc, Bangalore during September 8-9, 2015.
- 8. Internal Audit & Statutory Audit for the F.Y. 2014-15 has been completed in December, 2015.
- Fourth round of Mentor Visit of Dr.
   N. C. Shivaprakash, Professor, IISc, Bangalore on February 3, 2016.

#### 7.4 MoU Details

Delhi Technological University is having memorandum of understanding with following institution and universities as listed below:

S. No.	MoU
1	Intel Laboratory
2	INMAS
3	Harare institute of Technology
4	Samsung Laboratory India
5	National University of Singapore
6	National Physical Laboratory (NPL)
7	School of Business and Engineering Vaud (University of Applied Science Western Switzerland)
8	St. Microelectronics Pvt Ltd
9	CNU, Korea
10	UT and FICCI
11	Intel
12	Texas instruments
13	Freescale
14	St. Micro Electronics
15	Mentor Graphics
16	Hitech Robotics
17	Enseeiht (University of France)
18	invidia
19	University of South Florida
20	Chaoyang University of Technology

#### 8 Student Amenities and Facilities

#### 8.1 Students Welfare Societies

The university not only concentrates on academic activities, but also places an emphasis on an all round development of its students. The Institute has therefore, created excellent infrastructure for a variety of co-curricular and extra-curricular activities and various technical societies are functioning in the University under the faculty advisors and mentors. The DTUSA alongwith its different technical societies of various department generally plan, organize and manage the various student activities throughout the year.

The various societies working in the University are:

- i) Computer Society of India, DTU Chapter
- ii) The Institution of Engineering and Technology, IET, DTU Chapter
- iii) Robotics Society, SR-DTU
- iv) IEEE, DTU
- v) Society of Manufacturing Engineering, DTU
- vi) SAE, DTU Chapter
- vii) ASME, DTU Chapter
- viii) International Society for Optical Engineering (SPIE)
- ix) Society for Experimental Mechanics (SEM)
- x) American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), DTU Chapter
- xi) Society of Plastics Engineers (SPE) DTU
- xii) American Society of Civil Engineers (ASCE), DTU Chapter
- xiii) Society for Environmental Engineering, DTU

The various societies have organised their annual function in Jan-Feb, 2016 and later they have also organised the Technical festival from 19-21 February, 2016.

DTU has participated in various international events like ASME HPVC WEST 2016 held in USA, Formula Car Racing "Defianz" in London (UK), DTU-SAE events and many such events by different teams

#### **ASME HPVC WEST in USA**

Team Raftaar is a team of undergraduate students of our university who designed and developed a Human Powered Vehicle (HPV) for the Human powered vehicle challenge (HPVC) conducted by American society of Mechanical Engineers (ASME). The vehicle (Pegasus) conceived, designed and fabricated by Team Raftaar participated in the ASME HPVC WEST 2016 held in USA. Team Raftaar had a phenomenal performance in its maiden international participation where they represented DTU and India. They bagged the overall 19th position after competing with the world's top most teams from the best universities. They stood 12th in the design event of competition and were ranked 14th in the drag race. The sponsors of Team Raftaar for the season were Vactech Composites Pvt Ltd who sponsored them with their premium quality Vacuum Bagging Composites. Team Raftaar was also sponsored by Knorr Bremse, who showed their support to the team through cash sponsorship. The team is mentored by Dr. Rajesh Kumar, Professor, DTU.



Human Powered Vehicle (HPV) for the Human powered vehicle challenge (HPVC) conducted by American society of Mechanical Engineers (ASME), USA





Students Team Members: Vimanyu Chadha(2K13/ME/181), Akshay Sharma(2K13/ME/023), Sumiran (2K13/ME/163), Krishan Gupta(2K14/ME/079), Wajid Ali Shah(2K14/ME/191), Rishabh Batra(2K14/AE/068), Ankur Singh(2K14/ME/028), Tarun Saxena(2K14/AE/088), Kavya Gupta(2K14/AE/038), Bhawna Bagri(2K14/EP/020).

## Defianz at the Indian Auto Expo in Feb.2016

Team Defianz Racing displayed their car, the DR'16 at the Indian Auto Expo 2016.

The team was allotted with Hall No. 2, Stall No. E1M. The expo was set up from the 5th to the 9th of February, 2016 at the India Expo Mart in Greater Noida. Over 30 manufacturers were present for the latest edition of India's largest Auto Show. This was the largest Indian auto exhibition ever with around 65 exhibitors present while the previous edition saw a participation of 55 exhibitors. The expo saw a footfall of over 7.0 lakh people who witnessed the unveiling of a record 80 new launches.



## Defianz at the Buddh Circuit in Jan.2016

Team Defianz Racing participated at the Formula Student India competition held at the Buddh International Circuit, Greater Noida from 23<sup>rd</sup> to 29<sup>th</sup> January 2016. The team bagged the first runners-up trophy in the Business Plan Presentation event and were adjudged 5<sup>th</sup> in the Design event. The team received a lot of appreciation for our maiden complete aerodynamic package. The team secured an overall position of 7.

## Defianz at Silverstone, LONDON in July, 2016

The team participated at the Formula Student competition held at the Silverstone Circuit, London, UK in July 2016. The competition saw a participation of over 150 teams from around 30 countries. With the gloomy London weather,

formidable competition and a load of other unanticipated obstacles, the team put up it's best performance ever and was ranked 51st overall. The team was placed as the Best Asian team at the competition. The team clocked an acceleration time of 5.1 seconds and were ranked 28th in the Business Plan Presentation. Their performance at the competition earned them a lot of adulation and support from industry leaders and other participating teams.

## BAJA STUDENT INDIA 2016 Design Contest:

The team SAE-BAJA of DTU participated in Baja Student India 2016 Design Contest in Dec 2015 and bagged 4th Position in Design and and overall 11th Rank in the contest where most of IITS and other Premier Institutes participated.

## 8.2 National Service Scheme (NSS)

NSS DTU is the Delhi Technological University chapter of the National Service Scheme, institutionalized under the Ministry of Youth Affairs & Sports Govt. of India. It was inaugurated on 13th February 2013 to establish a meaningful linkage between the campus and the community.NSS DTU upholds the need for selfless service and appreciation of the other person's point of view and also to show consideration for fellow human beings. It underlines that the welfare of an individual is ultimately dependent on the welfare of society on the whole. NSS-DTU is mentored and headed by faculty advisor, Dr. Rajan Yadav. The enthusiastic student volunteers form an integral part of the NSS team whose relentless contribution and dedication make each event successful. Following is the brief of major activities carried out by NSS DTU during 2015-16: The overall aim of NSS-DTU is to give an extended dimension to the higher education system and orient the students towards community service while they are studying in the institution, more precisely, to establish a meaningful linkage between the campus and the community so that their interaction with the common villagers and slum dwellers will expose the students to the harsh realities of poverty-stricken life and bring about a change in their social perception.

Here is the brief of all the activities done so far:

- I. Cleanliness Drive 5/10/2015
  As part of Swachh Bharat Abhiyan, Swachh DTU Day, NSS DTU conducted a clean-up around the campus.
- Orphanage visit 10/10/2015
   NSS DTU visited an orphanage at Panchsheel Marg, Ghaziabad. We tried to create awareness among the children about dengue and its prevention, cleanliness and hygiene. The orphanage has 40 children in the 4-14 age group. The visit was organised in collaboration with Rotaract Club of Delhi Ashoka.
- 3. Women's Safety Workshop 14/10/2015 A workshop on Women's Safety (Bystander Intervention) was organised by NSS-DTU and HopeInU in collaboration with Crowd Guard. The workshop was held to create awareness among the students about the fundamental issue of Women's Safety and what we, as active citizens, can do about it. Instead of being a bystander, we should try to be an upstander.
- Blood Donation Camp 3/11/2015
   NSS DTU organised a blood donation camp with Blood Connect. 163 enthusiastic volunteers from our

university donated their blood.

- 5. **Diwali Celebrations** 11/11/2015
  As the holy occasion of Diwali approached and the atmosphere filled with the spirit of mirth and love, NSS DTU shared the happiness with the children of daily workers who are dedicated to keep the services of DTU intact with their toiling efforts. DTU is like home for them and they are a part of this 'One Big Family'.
- EWS Nursery Admissions January 2016
   We read about parents of EWS students
   facing difficulties with online nursery
   admissions.

NSS DTU set up a camp on 16th and 17th January in JJ Colony, Suraj Park, Badli district to help parents register for the online EWS (Economically Weaker Section) admission application. In private schools, 25% seats are reserved for the students from the economically weaker section. About 200 registrations were done by our spirited volunteers. The event was covered by media outlets such as Hindustan Times, The Times of India, and Total TV.

 Organ Donation Awareness Campaign February 2016

A Proud Collaboration of NSS DTU with ORGAN India from the Parashar Foundation.

8. Toys from Trash Workshop at Shubhakshika Bal Ashram Grah 18/2/2016

Fever of Engifest could not halt the momentum of NSS volunteers. After volunteering in the 3 day annual cultural fest, we visited Shubhakshika Bal Ashram Grah near the university campus on 18 February, and organized

- a workshop "Toys From Trash", inspired from Arvind Gupta toys and books and his art of toy making from waste material. We prepared and demonstrated creative toy models like simple rocket, cup helicopter, roaring bottle, balloon bugle and tumbler. We interacted with the children, played games, sang songs, shared anecdotes and toffees and inspired them to pursue higher education.
- Voter ID Registration Camp at Maharana Pratap Chowk, Shahbad Daulatpur 27-28/2/2016

On 27th and 28th February, our volunteers set up a Voter ID registration camp at Maharana Pratap Chowk, an area that we have adopted, in Shahbad Dairy, with the aim to enable the locals to practise their right to vote. Due to the efforts of our diligent volunteers, 145 people would soon get their voter ID's.

Our team members had the support and guidance of Shri Satya Prakash Pandey, Secretary, All India Parents' Association.

- 10. Holi Celebrations 18/3/2016
  - Celebrated an early Holi with underserved children at Bapa Ashram near GTB Nagar Metro Station. A collaboration with Youth for Seva, "Holi Milan" also kickstarted the "Teach For India" Programme undertaken by NSS this semester. NSS volunteers will teach these children when they return to the ashram after holi break.
- 11. Book Donation Drive. March, 2016"A hand with pencil and a mind with dreams can make a huge difference."
- 12. Kalam Ko Salam 9/4/2016

Celebrating Kalam ko Salam with Shubhakshika Educational Society.

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"Let us sacrifice our today so that our children can have a better tomorrow". - Dr. A.P.J. Abdul Kalam. Keeping the Vision of this great man in mind, NSS-DTU in collaboration with Shubhakshikha Education Society started its educational program 'Kalam Ko Salam'. This program will cover under its purview, teaching science through experiments, English as well as moral education to the children of this open shelter. Shubhakshika Educational Society shelters children of beggars, rag pickers amongst others, who are unable to provide basic amenities to their children, 'Kalam Ko Salam' is an initiative to enlighten the future of these children and to broaden their horizon.

## 13. Adolescent Awareness Session 10/4/2016

An "Adolescent Awareness Session" was organized by NSS-DTU at Shubhakshika Educational Society on 10th April 2016. Volunteers communicated with girls of age group 13-16 related to puberty changes, superstitions related to menstruation, health and hygiene, women rights etc. by showing videos, presentation, quiz, pamphlet distribution and one to one interactions. NSS-DTU feels proud to take an initiative to change the ideology of people about the sensitive issue.

# 14. India Road Safety Campaign 3/5/2016 On 3rd May, NSS-DTU organized a presentation on "Indian Road Safety Campaign" in collaboration with NSS IITD and TRIPP (Traffic Research Injury Prevention Programme). This awareness campaign aims at sensitizing the student community at school and college level about the various problems of road safety. IRSC provides internship opportunities

to students to work with NGOs and premier companies like Hero, Maruti etc. to solve issues on road safety.

#### 15. Teach India Campaign 10/5/2016

NSS-DTU's Teach\_India campaign in association with the NGO "Youth For Seva" has been progressing in full swing since Holi celebrations at Harijan Sewak Sangh School near GTB Nagar Metro Station. We've been teaching Grade II to V students every Sunday for two hours. The campaign has successfully completed half of the 25 hours promised by our team and will resume after the kids return from their summer vacation.

#### 8.3 Cultural Council

#### **ENGIFEST 2016**

True to its tradition, this year too, the much awaited Engifest'16, annual cultural festival of Delhi Technological University, was held from 13th to 15th of February. Engifest'16 was a wave of activities, competitions, realization of passions & talents and nourishment of cultures where enthusiastic youngsters from all over India came and participated to be a part of this extravaganza. The preparations were in full swing from the beginning of the semester during which auditions were conducted and rehearsals were held. From electrifying performances to heart wrenching onstage acting, Engifest symbolizes the potential and skill of the youth in today's India.

#### **List of Events:**

- 1. Inauguration Ceremony
- 2. Kavi Sammelan
- 3. Spandan Solo Dance Competition
- 4. Stand-up Comedy
- 5. Battle of bands
- 6. Creative Writing
- 7. FEMINA- Miss India Auditions

- 8. LIVE WIRE Vishal and Shekhar
- 9. Anushthan The Classical Dance Competition
- 10. Paridhan The Fashion Parade
- 11. Spandan The Western Dance Competition
- 12. EDM Night
- 13. Shake Down
- 14. Battle of DJ
- 15. Rock Night by Lagori Band
- 16. Stage Play
- 17. Street Play
- 18. STFU judged by Boogie Frantick

#### **Inauguration Ceremony**

The cultural spectacle started with inauguration ceremony, gracious а beginning to the most high on energy fest. It was presided over by honorable Vice Chancellor, Professor Yogesh Singh. Ever ready to inspire and motivate he did just that in his addressing speech. The ceremony was also graced by the esteemed presence of Sh. Manish Sisodia, Deputy Chief Minister of NCT Delhi who imparted some pearls of wisdom to the excited audience and gave them valuable advice on how to be a good leader. Sh. Sandeep Kumar, Minister of Women, Child and SC/ST Welfare and Sh. Ved Prakash, MLA of Bawana Constituency were the guests of honour. The Cultural Secretary, Mr. NalinChoudhary delivered an inspiring speech which kept the audience enthralling.



Inauguration of ENGIFEST- 2016, Hon'ble Deputy Chief Minister of Govt. of Delhi

#### DAY 1

#### DoReMiPa: A Musical Extravaganza

Madhurima, The Music Society of DTU in collaboration with ENGIFEST'16 brings the musical saga to the floor. Music is a moral law. It gives soul to the universe, wings to the mind, flight to the imagination, and charm and gaiety to life and to everything. Turning up their vocal chords, the contestants filled the audience with thrill and delight.

The extravaganza consisted of various musical events:

- Vocalicious, the western solo singing competition
- 2. Balladeers Western group singing competition
- 3. Vrind Indian Group Singing
- 4. Engildol-Indian solo singing competition





#### **NUKKAD - Street Play**

Pratibimb, the dramatics society of DTU organized NUKKAD – Street play competition. No Cultural Festival is complete without Street Play- arguably one of the oldest and most powerful forms of theatre in existence. With young artists coming out in the open and delivering powerful and breath-taking performances, NUKKAD amused not only the theatre enthusiasts but also the rest of the audience.





#### Syaahi - The Literary Fest

Founded with the spirit to encourage literary talent and explore the arena of poetry and prose, Syaahi – The Literary

Society of DTU brought together students from a multitude of fields with one common passion: Language. Brimming with ardent literary enthusiasts, Syaahi witnessed an outpour of logical, linguistic and debating prowess. SYAAHI has a resplendent past of well-organized events of interesting formats that have received overwhelming attention and participation.





## Spandan – The Western Dance Competition

Saltare, the western dance society of DTU in collaboration with ENGIFEST'16 organized the western dance competition: Spandan. Dance is the language of the soul and ENGIFEST'16 gave every soul a beautiful platform to express, a competetive environment for every dancer to showcase their talent. It consisted of two categories:

Solo dance competition Western group dance competition.





#### The Engi Quiz

Engifest'16 in association with Quizzing Inc and Cognitive Minds presented "The Engi Quiz". On the very first day of the fest, the youngstersgot their wits sharpened and knowledge replenished as the quiz spread over 9 rounds with two prelims slots to thoroughly test their mind.

#### Shakedown

In collaboration with Delhi Technological University, Souls of Speed organized Shakedown: one-of-a-kind roadshow, the fantastic enactment of which left everyoneabsolutely enticed as daredevil stunts were pulled off with glib skill and sheer valour. It consisted of numerous racing events like Car Drag Racing Event, Super Bike Show, Car & Bike Stunts, Car show and Car Audio Event.

## Campus Princess - Miss India Organization

Campus Princess'- a preliminary round for Femina Miss India, where the top 20 participants were shortlisted on the basis of their profiles, and walked the ramp to be shortlisted for subsequent rounds. It was judged by the supremely talented Miss India World 2015 - Aditi Arya. With varied aspirations, passions and rock solid attitude, the contestantswon everyone's heart.





#### **Live Wire**

Star Power- in its most tangible form. Famed personalities like Vishal Dadlani and ShekharRavjianigraced the event, giving us an evening of start-studded splendour. It was the most anticipated event of the fest, attracting huge crowds and adding a generous splash of glamour. It was a night full of energy, buoyancy and life.





# DAY 2 Anushthaan : Classical Dance Competition

Indian classical dance is an umbrella term for various codified art forms rooted in sacred Hindu musical theatre styles. Anushthaan, organized by Nrityangana, The Classical Dance Society of DTU, truly depicts the glorified culture and traditions of India. With performances ranging from Gujarat's Garba to Punjab's Bhangra, from the mesmerizing moves of Bharatnatyam to the graceful Kathak, the classical and folk dance competition, Anushthaan, has been and will continue to add colours to the Engifest.



#### Kaleidoscope Film Festival

Kaleidoscope was the official film festival of Engifest, conducted by Parchhayi, the photography and film making society of DTU. Magnificent works of art in the form of short films were showcased and judged by prominent figures in the film industry.

#### Paridhan – The Fashion Parade

A celebration of style, confidence and grace; Paridhan, the much awaited fashion parade took place on the second day of the fest. Young confident girls carried themselves with such flawless elegance, that their beauty and grace mesmerised the audience and captivated all hearts. PARIDHAN is a celebration of beauty and grace.





**DAY-3**Natya: Stage Play
Pratibimb, the dramatics so

Pratibimb, the dramatics society of DTU, in collaboration with engifest'16 organized

Natya-Stage Play .NATYA was a zenith of heart-stopping, enthralling performances that brought the house down in sheer awe. The audience witnessed some enthralling performances by teams from not just Delhi colleges but from all across the nation.

#### Switch the Funk Up

One of the most fanatical street dance event took place on the last day of the fest. Boogie Frantick, one of the known poppers from California USA was invited as a special judge for the event. Around 200 dancers across the country participated in the event and battled with each other.





#### War Of DJs

For the very first time, Engifest 2k16 brought forth,"BATTLE OF DJS", a clamour of some very fine DJs- A perfect juncture to sway to the "groove of djs". DJing is not just about choosing a few tunes, it is about generating shared moods, about understanding the feelings of a group of people and directing them to a better place.





#### **LAGORI – Band performance**

Engifest'16 presented LAGORI - one of the youngest talented groups of the country. LAGORI makes music that reflects the face of modern Indian youth and blends Indian classical melodies with rock music. An interesting combo of soulful energetic and catchy music, they truly took us on a euphoric ride. Intensity of enthusiasm of both, the band members and the crowd, was sky high that night.

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#### Freshers' Week 2016

Fresher's week brimming with ecstasy and rejoice. The preparations were in full swing from the beginning of the semester during which auditions were conducted and rehearsals were held. The various events included the Boys' and Girls' Marathon, 'Raise you voice', Flash Mob, Standup Comedy and an interactive session with the bestselling novelist Mr. Anurag Garg. The week ended with the exquisite fresher's night which featured an electric mélange of activities i.e. awe-inspiring dance and band performances by the talented lots, enchanting fashion parade etc.

#### **Dandiya Night**

On 19th of October, DTU saw its first ever Dandiya Night! It started with a small folk garba-raas performance which was followed by non-stop dancing including dandiya, garba, and obviously, jam session in the end, sending the dancers into a trance, especially when the music and dance was in its rawest form. It created a fascinating aura of festiveness in the campus with colourful, musical sticks and traditional attire.

#### Farewell Night 2016

For the seniors from Btech, Mtech and MBA, a Farewell week was organized. It was a fiesta devoted to the years spent

in DTU to reminisce the joyous moments. The various events included 'Scribbling Day' where their special ones scribbled their affection on their t-shirts as a memory forever; 'Light it up' where wish lanterns flooded the campus of DTU; 'Prom night' a musical venture where the seniors danced their heart out with their beloved ones; 'DJ Night' where everyone danced along with full zeal for one last time and 'DTU Roast' which filled the auditorium with laughter and humor.

#### 8.4 Training and Placement

#### Head, T&P:

Dr. R. S. Walia Associate Professor **Infrastructure** 

Group Discussion Rooms	:	2
Interview Rooms	:	4
A/C Presentation Halls	:	1
Office	:	1
Head Office	:	1
Placement Coordinator Room	:	1
LED Projectors	:	1
Interview Cabin	:	10

## Computer Center for Online Test comprising of 140 computers.

Marching from strength to strength Delhi College of Engineering, DCE is now "Delhi Technological University". The up gradation of DCE into a technical university provides the necessary academic and administration autonomy to empower DCE to march on the path of academic and research excellence, as also to accelerate the pace of innovations. DTU because of the quality of its students and strong corporate relations entered the 2015-16 placement seasons with confidence. The placement season of DTU, started in the beginning of academic year in August. Till June, 2016, a total of 261 organizations have taken part in campus placements and have offered 1211

jobs. Students from Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), Master of Business Administration (MBA) programs in various fields of engineering and technology, participated in the placement process.

The process began in June 2015 with sending an invitation to companies to visit the University for Pre-placement Talks and provide their job announcements. The talks provided avenue for interaction and familiarization of students with the recruiting organizations and their work profile. The company interview process began from August 1, 2015 onwards.

#### **Core Engineering and Technology**

The students of DTU continued to demonstrate a strong commitment to their core educational background in the choice of employment. Majority of students opted for science, engineering and technology oriented jobs, with the recruiting companies operating in various sectors of the economy. Some companies that visited campus are Schlumberger, Turner, L&T, Samsung Engineering and R&D, Daimler.

#### IT and IT Enabled Services

Over 126 leading consulting firms, including several global leaders, visited DTU for campus placement this year. These organizations work with large corporations across the world and help them resolve complex business problems. Management Consulting companies especially carry a reputation of being very selective in their choice of campuses and of having extremely high standards in their recruitment process. Over 693 offers were made in the software and consulting sector including management consulting like, Google, Amazon, Directi, Epic, , Flipkart, Zomato, Adobe, McKinsey, KPMG, PWC.

#### **Data Analytics**

The well deserved reputation of superior analytical and reasoning skills of DTU graduates continued to draw recruiters from the rapidly growing field of data analytics. There were 137 job offers from 35 organizations making it one of the biggest recruiters after engineering and information technology. This trend seen in the last two years seems to have taken strong roots at DTU. Some companies that visited are Deloitte, ZS Associates, and EXL.

#### **Financial Services Sector**

Continuing the trend of last few years, the finance sector was a major recruiter this year too. With many of the top global companies of this sector visiting DTU for campus placements, the sector saw a rush among the top-level as well as the mid-level companies to recruit the brightest and the best from the campus. A variety of profiles were opened up in the sector as these companies have begun to appreciate the analytical and quantitative analysis acumen of the DTU students. Over 50 offers were made by financial services sector to DTU students. Companies like Café Coffee Day, Havells, and Saint Gobain visited campus.

#### **Education**

DTU has continued to provide faculty to several educational institutions and universities through campus placement over the past several years. Many post-graduate students have been offered jobs with public and private educational institutions through campus placement. The following educational institutes visited our campus Manav Rachna, UPES, FIIT JEE, Aakash.

#### **Diverse Recruiters**

While the placement season has seen recruiters from the entire spectrum of

the job industry, the initial part of the season was dominated by a variety of firms from sectors like engineering and manufacturing, computer software, data analytics, management consulting, finance/banking and FMCG. Most of these firms are world leaders in their respective domains like Nestle, Coca-Cola, Varun Beverages, Ernst and Young.

#### **Preparing All Rounders**

This year a key focus of the Department of Training and Placement was to prepare the students for their placement. DTU students are expected to excel in not just technical knowledge but also in leadership, teamwork and other attributes. A large number of preparatory activities were conducted this year for the graduating students, including refresher lectures on various technical subjects. In addition, workshops to enhance communications skills, interview skills and group dynamics were also organized. Several talks with alumni working in diverse sectors were also organized to orient the students regarding different job requirements.

#### **Placement Training Session**

Placement training sessions conducted by Department of Training and Placement, DTU were attended by more than 400 students which comprised of 15 sessions and included sessions on group discussions, mock interviews, case study, and resume writing. The sessions were addressed by faculty and many fourth year students who are currently placed at different companies.

Two Months marketing and financial skill development programme organized by leading marketing firm Markit India in at Delhi School of Management, DTU which comprised of sessions on financial management, market analysis and risk management.

TCS Gold Medal – Best Student of the Year and Best Project.

OPJEMS (O.P. Jindal Scholarship for meritorious students) won by 3 students from DTU this year.

The Department of Training and Placement organized the Accenture Day in DTU.

The successful student placement in 2015-2016 clearly demonstrated the demand of DTU graduates among the top recruiters in various segments of the economy. The recruiters appreciated the knowledge and training of our students. A majority of our past recruiters held their faith in our student's abilities and came to recruit in large numbers. The year also saw several new organizations visiting DTU for the first time, and we look forward to fostering long-term relationship with all these organizations.

The achievement of the Department of Training and Placement, combined with excellent academic system and the opportunity for all-round development, has also contributed to making DTU as a preferred destination of students and industries.

The success of the placement endeavor can be attributed to the outstanding quality of our students as well as the tremendous support provided by the Institute administration, academic units, faculty and staff, alumni and other well-wishers. The Department of Training and Placement thanks them and looks forward to their continued support.

## Training and Placement Office's Visit for Building Corporate Relationship

**Directi** – Directi is an Internet domain name Registrar Company founded in 1998 by Bhavin Turakhia, who single-handedly wrote an advanced Fraud-detection algorithm,

and was instrumental in the adoption of the seventy-day grace period for businesses concerned with the registry of IANA and ICANN. Directi is the first ICANN accredited registrar in India. People from the training and placement department met the CEO of Directi Mr. Bhavin Turakhia. The aim of the visit was – "to increase employability of students from DTU."

**Anglo** *Eastern Management* - leading, independent provider of ship management

services to ship owners around the world and is one of the largest ship management companies in the world, with more than 700 ships under third party management Dr.R.S. Walia Head, T&P attended the Anglo Eastern TPO meet on 13/8/2016 to establish a cordial relationship with them and to invite them for our placement session.

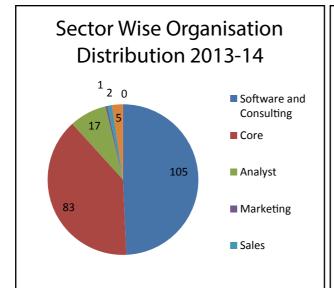
Some other companies visited by the training and placement department are Accenture, Shri Ram Piston, Bechtel and Continental Engines and many more.

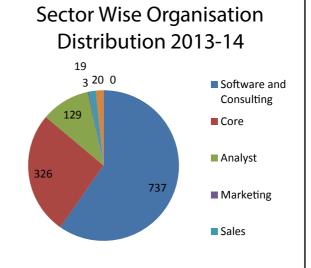
#### **Program-wise Placement Data for 2015-2016**

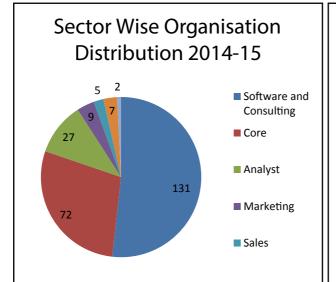
Program	Offers Made	Highest Package Offered
B.Tech.	1029	1,90,000 US \$
M.Tech.	129	30 LPA.
MBA	53	14 LPA.

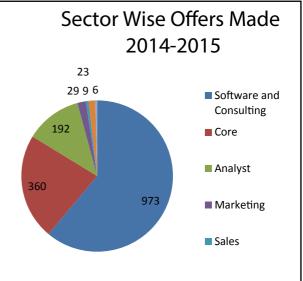
#### **Placement Detail Sector-wise**

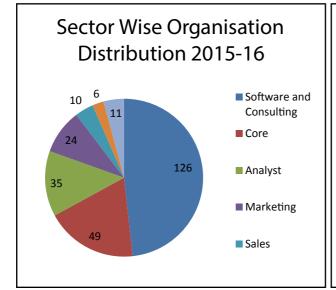
S. No.	Sector	Number of Organizations	Number of Offers Received
1	Software and Consulting	126	693
2	Core	49	225
3	Analyst	35	137
4	Marketing	24	57
5	Sales	10	38
6	Education	6	32
7	Research	11	29
	Total	261	1211

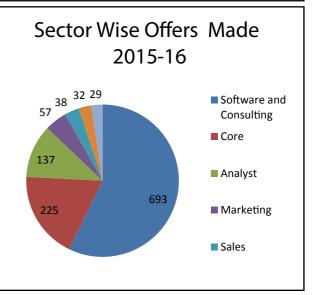












#### **9 Central Facilities**

#### 9.1 Dr. Bhimrao Ambedkar Auditorium

The University has equiped; fully airconditioned, state of art audio visual infrastructure for web casting in an auditorium having seating capacity of six hundred and fifty.



#### 9.2 Sports and Gymnasium

- 1. Facilities
- 2. Sports Competition during 2015-16

#### 1. Facilites

The students of Delhi Technological University are provided with excellent facilities and encouraged to take part in the tournaments held in and around NCR Delhi, particularly, engineering institutions. Delhi Technological University is having 450 m track, ground for Football, Hockey, Cricket, two courts for Volley Ball, two courts for Basketball, three courts for Tennis and five courts for Badminton. Table Tennis rooms, Chess rooms, Carom rooms and Gyms are also available in the each hostel of the DTU campus. Sports council of DTU has organized several tournaments during 20115-16 academic sessions. The university has well equipped gymnasium modern equipments. university students, faculty and staffs utilise

this facility. There are two full gymnasium in the university, one is situated in the sports ground and yet another is situated in the faculty residential area which is general use by girls students also.

## 2. Sports Competition during 2015-16

Sports council of Delhi Technological University has organized several tournaments during 2015-16 academic sessions, metioned below;



The DTU Gymnasium

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#### D.T.U. 2015-16: SPORTS PERFORMANCE

- a) Sports council of D.T.U. organize football tournament for 2<sup>nd</sup> year students during 18<sup>th</sup> Sept. to 1<sup>st</sup> Oct., 2015. Total 12 teams of various branches of D.T.U. participated in the tournament. Department of COE was the winner and ECE was the runners up of the tournament
- b) D.T.U. students participated in I.I.T. Kanpur, Sports Fest during 2<sup>nd</sup> Oct. to 4<sup>th</sup> Oct., 2015. D.T.U. students got 2<sup>nd</sup> place in the Badminton.
- c) D.T.U. Students in All India G.V.M. Shooting Championship during 3<sup>rd</sup> to 6<sup>th</sup> Oct. 2015; Dushyant Singh of B.Tech (5<sup>th</sup> Sem. Civil) D.T.U. participated in Delhi State Shooting Championship; which was held at Dr. Karni Singh Shooting Range, Tughlaqabad, N. Delhi during 3<sup>rd</sup> to 6<sup>th</sup> Oct; 2015; participate in 5 events of pistol shooting and won 5 gold medals in the championship.
- d) D.T.U. Sports Council Organise 'Super' Cricket Tournament Season 5; during 8<sup>th</sup> Oct; to 15 Oct. 2015 in the Sports Complex, D.T.U. Total 32 team participated in the tournament from various institute of Delhi and NCR. DTU cricket team got 1<sup>st</sup> place in the tournament and IPES (Ghaziabad) got 2<sup>nd</sup> place.
- e) D.T.U. Sports Council organize Football tournament for the 1<sup>st</sup> year students during 10<sup>th</sup> to 15<sup>th</sup> Oct; 2015. Total 18 teams of various department of DTU participated in the tournament. Group B-4 was the winner and Group A-6 was the runner of the tournament.
- f) DTU Sports Council organizes 'FOOTSOUR-2016'; during 1st to 5th Feb.

- 2016 in the Football ground of DTU Sports Complex.
- g) DTU Sports Council organize 'RANBHOOMI- 2016', Inter Hostel Sports, during 2<sup>nd</sup> to 8<sup>th</sup> Feb. 2016 in the Sports Complex for various games i.e. Badminton, Cricket, Football and Vollyball.
- h) DTU Sports Council Organise "DTU Cricket League Season during 6<sup>th</sup> to 10<sup>th</sup> March, 2016 in the Sports Complex of DTU. Total 16 team of Delhi and N.C.R. of professional colleges participated in the tournament.
- i) DTU Cricket team participates in Sports Feet I.I.T. Roorkee during 1<sup>st</sup> April to 3<sup>rd</sup> April, 2016.
- j) DTU Sports Council organizes sports ARENA – 2016 during 3<sup>rd</sup> April to 8<sup>th</sup> April 2016.

#### 9.3 Health Centre

The DTU is having a modest Health Centre manned by well experience medical Doctors. Services of five medical practitioners are available to the students throughout day and evening. The University health centre is also visited by specialized medical practitioners for ENT, Eye, Dental care etc. for expert advice and treatment. University is also having tie up with nearby leading hospitals for emergency. A large number of hospitals are in the vicinity of the University; some of them are Dr. Bhim Rao Ambedkar Hospital, Saroj Hospital, Mahavir Hospital, Jaipur Golden Hospital, Satyam Hospital etc.

A new sports medicine-cum-physiotherapy centre has been added to provide the necessary expert advice. The following Doctors engaged in the university health centre.

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S. No.	Name	Expert	Days
1	Dr. Ravi Bansal	General Physician	Monday to Saturday (6 days in a week)
2	Dr. Rajesh Singhai	General Physician	-do-
3	Dr. Arpana Bansal	Eye Specialist	Monday, Wed and Friday ( 3 days in a week)
4	Dr. Bharat Bhushan Sethi	Dentist	-do-
5	Dr. Subodh Mor	Sports Medicine- cum- Physiotherapist (MPT)	Monday to Saturday (6 days in a week)

#### 9.4 Transport Office

The university has established a transport office with the following vehicles which are available in the University for Official Duties time to time.

S. No.	Type Vehicle	Registration No.	Attached with	Drivers	
1	Honda city	DL-10CA-2100	Hon'ble VC	Amrender Jha (Out Source)	
2	Omni Van	DL-5CD-9975	General Pool	Ravinder Kumar(Out Source)	
3	Ambassador	DL-8C-NA-3902	Deans & Pro-VC	Mukesh Singh (Permanent)	
4	Ambassador	DL-8C-J-3827	General Pool	Updesh Saini (Contractual)	
5	Scorpio	DL-4C-NB-4918	General Pool	Sukhwant Singh (Contractual)	
6	TATA Indica	DL-8CL-1369	General Pool	Sukhwant Singh (Contractual)	
7	Ambulance	DL-1A-2507	Emergency & Trauma	Shri Bhagwan (Permanent)	

The University also maintains a 35 seater CNG Bus (Swaraz Mazda, DL-1PC-3419) for the transportation of the University students and staff from nearest metro station to the university campus four times in a day the bus is also provided for various educational and industrial tours by the students in the nearby areas.

A Circular was issued vide F.No.DTU/Reg./ Circular/2014-15/7504-12 dated 10.08.2015 and a reminder of the same vide F.No. DTU/PO/OO/2015-16/Vol-II/16487-95 dated 12.02.2016.

Vide above quoted circular, all were informed that University has limited number of vehicles and drivers. Large numbers of requests for vehicles were received at the last moment so all were requested to send their requisition 24 hours in advance. A Performa of indent for University vehicles was also circulated. Soft copy of the same is appended below:

## 9.5 Estate and Work Review of Existing Infrastructure

The Delhi Technological University Campus at Bawana Road, was raised in 1997-98. While the total campus plot area is 163.87 acres (663154.03 sqm), only a part of it was constructed in the first phase of construction keeping in mind a target student population of 3,000 at that time. The approved area utilization norms followed are as under:

Academic: 45% (73.23 Acres)
Residential: 25% (40.68 Acres)
Green/Open: 15% (24.41 Acres)
Sports/Cultural: 15% (24.41 Acres)

Accordingly, the first phase of construction which was completed around 1997-98 comprised of a total built up area of 1,58,840.41Sqm with the break-up as follows:

Academic Area 69,146.03 Sqm.

**162** 9 Central Facilities

- Hostel Area 50,607.40 Sqm.
- Residential Area 39,086.98 Sqm.

The details of administrative and academic blocks of Delhi Technological University

along with its corresponding approximate ground coverage and covered area details are as given below:-

#### **Administrative and Academic Blocks**

S. No.	Type of Block	Total Gr. Coverage (SqM)	Total Covered Area on all Floors (SqM)
(a)	Administrative Block	1879.40	4063.66
(b)	Electrical Block	9628.64	23684.49
(c)	Electronics	9628.64	23684.49
(d)	Civil Engineering Block	9628.64	23684.49
(e)	Mechanical Engineering Block	4208.83	14291.10
(f)	Workshop Block	3416.20	3416.20
(g)	Science Block	2817.43	8667.78

Photographs of Existing Administrative and Academic Blocks



Administrative Block



Mechanical Engineering Block



Electrical, Electronics And Civil Engineering Blocks



Workshop Block



The details of various central administrative and academic facilities at Delhi Technological University along with its corresponding approximate ground coverage and covered area details are as given under:-

Science Block

#### **Central Administrative and Academic Facilities**

S. No.	Description of Block	Student Capacity	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
(a)	Main Library	400	2000.00	5500.00
(b)	Computer Centre	300	1500.00	3000.00
(c)	Multipurpose Lecture Theatre cum Seminar Hall (Auditorium)	550	2500.00	3000.00
(e)	Senate Hall	45	72.00	72.00
(f)	Exposition Hall	45	84.00	84.00
(g)	Smart Class room -I	90	144.00	144.00
(h)	Smart Class room -II	90	144.00	144.00
(i)	Seminar Hall (RN 307)	25	112	112
(j)	Edusat Hall	40	-	-



Main Library



Multipurpose Lecture Theatre Cum Seminar Hall (Auditorium)



**Computer Centre** 



Senate Hall

9 Central Facilities



**Exposition Hall** 





Smart Class Room -I

Seminar Hall

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The details of existing hostel accommodation

for boys and girl students including capacity of each hostel and corresponding approximate ground coverage and covered area details are as given below:-

S. No.	Hostel Name	Capacity	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
(a)	VVS Boys Hostel	178	11875.02	47500.08
(b)	JCB Boys Hostel	178		
(c)	VMH Boys Hostel	178		
(d)	CVR Boys Hostel	178		
(e)	BCH Boys Hostel	178		
(f)	HJB Boys Hostel	166		
(g)	Ramanujan Boys Hostel	65		
(h)	Aryabhatt Boys Hostel/ Type-I	168		
(i)	Type – II B – 5, Boys Hostel	24		
Total	Boys:-	1313		
(j)	KCH Girls Hostel	45	776.83	3107.32
(k)	SNH Girls Hostel	99		
(l)	Type-III Block 1 Girls Hostel	70		
(m)	Type-III Block 2 Girls Hostel	48		
(n)	Type – II Block – 1 Girls Hostel	66		
(o)	Type – II Block –2,3, 4 Girls Hostel	72		
Total	Total Girls :-			
Gran	d Total :-	1713		

## **Photographs of Existing Hostels**





JCB Hostel



VMH Hostel



**CVR** Hostel



**BCH Hostel** 



HJB Hostel



Ramanujan Hostel



Aryabhatt Hostel



Type – II B – 5



SNH Hostel



KCH Hostel



Type-III Block 1 & 2 Girls Hostel

The details of residential accommodation for faculty and staff members including numbers of different type of houses with its corresponding approximate ground coverage and covered area details are as given below:-

#### Residences

S. No	Туре	No	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
1	Type VI Residence	1	200.00	250.00
2	Type V Residence	56	2984.68	11938.72
3	Type IV Residence	60	15650.56	6262.24
4	Type III Residences	45	878.28	3513.12
5	Type II Residence	105	1679.37	6717.48
6	Type I Residence	60	803.12	3212.48
7	Total	327		

### **Residential Area Photograph**



Type-I, Residence



Type-IV, Residence



Type-II, Residence



Type-V, Residence



Type-III, Residence



Type-VI, VC Residence

The details of various central amenities provided in the campus for residents boys and girl students including capacity of each hostel and corresponding approximate ground coverage and covered area details are as given below:-

S. No.	Description of Blocks	Total Gr. Coverage (SqM)	Total Covered area on all floors (SqM)
1	Guest House (8 Double Bedded Rooms)	414.46	828.92
2	State Bank of India	2984.68	2984.68
3	Post Office	878.28	878.28
4	12 bedded hospital	782.40	1267.00
5	Nursery School (currently under occupation with PWD)	800.00	800.00
6	Main Canteen	700.00	1500.00



State Bank of India



Post Office



12 Bedded Hospital



Nursery School (Currently used by PWD)



Main Canteen

### Central Amenities area Photograph Master Plan 2021: Delhi Technological University

The overall master plan envisaged for the Delhi Technological University to be constructed in different phases is summarised below: -

Total Site Area 6 58 581 Sc	Total Site Area 6 58 581 Sq.m.						
Development control for Ur	niversity	/ Campus	es as per Mas	ter Plan 2	021		
Permissible	Land	Area	Ground Cov.		FAR		Height
	(%)	(Sq.m.)	(Sq.m.)		(Sq.m.)		(Mts.)
Academic	45%	2 96 361	88 908	30.00%	3 55 634	120.00%	37
Residential	25%	1 64 645	54 876	33.33%	3 29 291	200.00%	NR
Community Spaces, Sports and cultural	15%	98 787	9 879	10.00%	14 818	15.00%	26

Total Site Area 6 58 581	Sq.m.						
Parks and Landscaped open Area	15%	98 787					
Total		6 58 581	1 53 663		6 99 742		
Existing	Land	Area	Ground Cov.		FAR		Height
	(%)	(Sq.M.)	(Sq.M.)		(Sq.M.)		(Mts.)
Academic	45%	2 96 361	30 673	10.35%	69 146	23.33%	16
Residential	25%	1 64 645	25 284	15.36%	89 694	54.48%	14.8
Community Spaces, Sports and cultural	15%	98 787	850	0.86%	850	0.86%	3.6
Parks and Landscaped open Area	15%	98 787					
Total		6 58 581	56 807		1 59 689		
Proposed	Land	Area	Ground		FAR		Height
			Cov.				
	(%)	(Sq.M.)	(Sq.M.)		(Sq.M.)		(Mts.)
Academic	45%	2 96 361	39 425	13.30%	2 41 069	81.34%	36.45
Residential	25%	1 64 645	29 310	17.80%	1 89 166	114.89%	41.85
Community Spaces, Sports and cultural	15%	98 787	4 060	4.11%	5 846	5.92%	15
Parks and Landscaped open Area	15%	98 787					
Total		6 58 581	72 795		4 36 081		
Total	Land	Area	Ground		FAR		Height
	(%)	(Sq.M.)	Cov. (Sq.M.)		(Sq.M.)		(Mts.)
Academic	45%	2 96 361	70 098	23.65%	3 10 215	104.67%	36.45
Residential	25%	1 64 645	54 594	33.16%	2 78 860	169.37%	41.85
Community Spaces	15%	98 787	4 910	4.97%	6 696	6.78%	15
Ancillary Services	15%	98 787					
Total		6 58 581	129 602		5 95 771		

# Infrastructure proposed to be constructed in Phase II

A proposal for construction of various academic and hostel buildings is under active consideration of the Govt of NCT Delhi. The second phase of construction at DTU submitted to the Govt includes construction of:

i) Boys and Girls Hostels.

- ii) Academic Blocks for the Newly Added UG and PG programs.
- iii) Built-up space for the ongoing and future research and development centres.
- iv) Built-up space for School of Management and Centre for Innovation and Techno-entrepreneurship.

The buildings proposed in Phase - II (Stage-I) and proposed area statement is as given below: -

S. No.	BUILDING NAMES	Ground Coverage (Sq.m)	Built Up Area (Sq.m.)	No. of Storey
1	Boys Hostel H5	519	5895	B+G+11
2	Girls Hostel HG5	426	5937	B+G+11
3	Girls Hostel HG6	426	5937	B+G+11
4	Academic Block AB3	1809	18436	B+G+8
5	Academic Block AB4	2285	23198	B+G+8
	Total	5465	59403	

#### **Expansion of DTU campus Ph-II: Phase-wise Construction plan**



Fig.1: Phase-1 Existing Buildings



Fig. 2: Proposed Buildings in Phase II with Existing Buildings of Phase-I

# Construction Works (Capital & Maintanance) Undertaken in 2015-16

Phase-II Permanent construction is likely to take time to get executed and therefore to address the present emergent requirement of enhancing the infrastructure capacity, constructions of various temporary SPS (semi-permanent structures) classrooms have been undertaken. These works are being executed by PWD as deposit works. The progress on construction of these temporary SPS classrooms along with the status of fund utilisation in 2015-16 is given below.

S. No.	Name of Work	Budgeted Amount (Rs.)	Expenditure Incurred (Rs.)	Physical progress
1	Construction of 2 Nos. SPS Hall Multi Purpose Hall in Delhi Technological University	2,73,38,900.00	2,73,38,900.00	100%
2	Construction of 4 Nos. SPS Classrooms in Delhi Technological University Campus, Bawana Road, Delhi	2,25,03,300.00	2,25,03,300.00	100%
3	C/O 8 Nos.SPS Classrooms in Delhi Technological University Campus, Bawana Road, Delhi	1,06,43,400.00	50,89,120.00	95%
4	02 Nos. Lecture Halls (IIT Pattern) Out Of UGC	1,74,85,500.00	1,60,00,000.00	100%
5	Major repair and renovation of 56 toilet blocks in all the Hostels	1,68,30,942.00	1,45,64,653.00	100%





Construction of 2 Nos. SPS Hall Multi Purpose Hall





Construction of 4 Nos. SPS Classrooms





Construction of 2 Nos. Lecture Halls (IIT Pattern)



Capital Works under Planning for FY in 2016-17

The list of capital works which are being examined for undertaking during the FY 2016-17 either as deposit works through PWD or by the Engg. Cell, DTU subject to availability of funds and prioritisation are as under:-

### **Capital Works - Civil**

S. No.	Name of the Works
1	Widening and re-carpeting of roads and footpath in DTU campus
2	Addition alteration and relaying of sewage lines within DTU campus
3	Addition alteration and relaying of water pipe lines in DU campus
4	Addition, alteration and relaying of sewage shaft and pipe lines in toilets in academic and administrative buildings of DTU
5	Phase-I : addition, alteration and relaying of sewage shaft and pipe lines in Type- I to Type III residential quarters of DTU
6	Phase-II : addition, alteration and relaying of sewage shaft and pipe lines in Type- IV and V residential quarters of DTU
7	Extension of SNH Mess, provisioning of temporary roofing in Canteen, provisioning of temporary roofing and creation of offices at FOT Building
8	Relaying of footpath in OAT and Sports stadium
9	Phase-I : Implementation of enhanced specifications of floor and wall tiles in Drawing/ Dining, Kitchen and bathrooms in Type- IV and Type V residential quarters of DTU
10	Phase-II : Implementation of enhanced specifications of floor and wall tiles in Drawing/ Dining, Kitchen and bathrooms in Type- I to Type III residential quarters of DTU
11	Phase-wise implementation of enhanced specifications of floor and wall tiles in DTU Hostels
12	Phase-wise implementation of addition alteration of carpentry works in DTU Hostels
13	Addition, alteration of stage and sound proof wall panels in auditorium
14	Development of Ecological park behind the hostel area with security huts and lighting.

### **Capital Works - Electrical**

S. No.	Name of the Works
1	Phase-wise up-gradation of Substations, provisioning additional substations
2	Phase-wise up-gradation of UG cable infrastructure and internal/external wiring in administrative and academic buildings
3	Installation of energy efficient AC plant, capacity augmentation, repair/replacement in existing AC plant for auditorium and smart class rooms
4	Addition alteration, replacement of existing corridor lightings in academic and administrative buildings by energy saving LED lightings
5	Addition, alteration of state of the art sound systems in auditorium
6	Addition alteration, up-gradation of AC in Senate Hall
7	Planning and installation of lighting for sports complex

### **Establishment of DTU East Delhi Campus/Constituent College**

A piece of land measuring 4852-8 sqm has been allotted initially in ITI Mayur Vihar Campus for Establishment of East Delhi Campus/Constituent College of Delhi Technological University by the DTTE. For development of Campus the soil investigation work has already been carried out by PWD. It is proposed to construct 4 to 7 storied building semi-permanent in nature with steel structure and newly innovative materials which may full fill the requirement of DTU and additional floors shall be utilized in future the building is expected to be completed by the end of March 2017 so that Academic session can be started next vear.

#### 9.6 Purchase Office

This university have various committees of the faculties/officers for making purchases:

- Central Purchase Committee (CPC): The committee has been constituted consisting of the senior faculty members for the purpose of scrutiny/ evaluation of all the purchase proposals of all the department of the University, which are having the estimated cost of the item more than Rs. 25 Lacs and submits its recommendation to the Vice Chancellor, DTU.
- 2. Computer and Computer Peripherals Committee (CCPC): The committee is constituted for the purposes of evaluation of all the purchase

proposals pertaining to Computer and its peripherals and submits its recommendation to the Competent Authority.

- 3. Departmental Purchase Committee (DPC): The committee has been constituted at the department level under the Chairmanship of respective HOD of the Departments to securitize/ evaluate technical /financial bids of all the purchase proposals pertain to their departments, which are below Rs. 25 lacs and to submit its recommendation to the Competent Authority.
- 4. Other than the above mentioned committees, the following committee are also constituted, as per details:
- i) Stationery & Printing Committee and Miscellaneous items Committee.
- ii) Liveries Committee
- iii) Chemical & Glassware Committee.
- iv) Sports Council.

The Purchase office consists of the following employees for its smooth functioning.

Officer in charge stores and purchase

Chief stores Keeper

Stores Keeper

Assistant stores Keeper

### **10 Other Facility**

#### 10.1 EDUSAT

#### **Edusat Network at a Glance**

EDUSAT, a satellite specially designed for facilitating distance education in India has been launched in September 2004. It is planned to setup high capacity satellite based interactive network to meet the requirements of various user in education sector across the country and run it as an application project for implementing distance education.

#### **Services Being Offered**

Live and recorded lectures are broadcasted on the daily basis from the EDUSAT HUB to different remote sites, students of different institutes can interact with the teacher and ask their queries related to the subject simultaneously other remote sites can saw their interaction. A large number of recorded lectures are also available and it is being telecasted time to time. Complete courses on different subjects taught by renowned faculties of I.I.T, Delhi are also available in the HUB.

#### Utilization

Live as well as recorded lectures are telecasted on the daily basis from the HUB to different Engineering Institutes, Management Institutes, Diploma Institutes. Industrial Training Institutes of Delhi state. Lectures are being telecasted from EDUSAT delivered by experts and renowned faculty educational institutes/industries. from Apart from that lectures/conferences of renowned scientists and eminent experts from different specialization are being recorded under "Distinguish Public Lecture Series: by EDUSAT and all are telecasted through network.

#### Infrastructure

At present EDUSAT having facility of two studios at DTU where lectures can be recorded simultaneously. In one studio there are facilities of teleprompter, digital note pad (which can be used as blackboard), chroma keying with virtual studio sets. EDUSAT is equipped with sophisticated high end broadcasting quality equipments for production.

#### **Future Plans & Initiatives**

- 1. Digitalization of education.
- 2. To develop facilities for on line accessing of lectures 24X7 through net.
- To develop a complete ENG setup (including cameras and other equipment required for outdoor shooting).
- To design and develop instructional resources which includes lectures, assignments and tutorials etc of different important subject.

At present recorded lectures are being telecasted on the daily basis from the HUB to different Engineering Institutes, Management Institutes, Diploma Institutes, Industrial Training Institutes of Delhi state. Facilities - EDUSAT Hub



Facilities - EDUSAT Hub

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#### **10.2 GUEST HOUSE**

The guest house within the campus is meant for the staying purpose of individuals visiting DTU. The rooms are comfortable with all modern facilities available within. It consists of eight double beded rooms. Shri. Raghvendra Gautam, Assistant Professor in Department of Mechnical Engineering is the officer incharge.



The DTU guest house



Guest House (8 Double Bedded Rooms)

10 Other Facility

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#### **Journals**

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### 1 Neha

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- 23. "Impact of Heterogeneous Gate Dielectric and Gate Metal Engineering on Analog and RF Performance of GAA TFET", Jaya Madan, R.S. Gupta and Rishu Chaujar, 18th International Workshop on Physics of Semiconductor Devices (IWPSD-2015), December 7-10, 2015, Indian Institute of Science, Bangalore, India
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#### **Department of Humanities**

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- 19. Gaurav Dawar, Seema Singh, "Corporate Social Responsibility and Gender Diversity: A Literature Review", Journal of IMS Group, 13(1), pp. 61-71.

# Conferences / Seminar / Symposia / Workshop

- Dr. Seema Singh, "Chaired the session", The 4th Session of the CBM- 2016 (April 16-17' 2016) at IIT Delhi April 16, 2016.
- Dr. Seema Singh, Deliver invited lecture as Resource Person, "Role of Women Entrepreneurship in India-Opportunities and Challenges", at MA. Kanshi Ram ShodhPeeth, Ch. Charan Singh University, Meerut Mar 26-27,2016.
- Dr. Seema Singh, Discussant, "Session 3.6: Labour and employment in manufacturing sector" October 12' 2016.
- Dr. Seema Singh, Presented paper at the Seminar, ""Tryst with Destiny: Empowering Women through Financial Inclusion in India" at the UWAV CONFERENCE on Development Model

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- Ms. Parinita Sinha, The Role of Literature in Self regulated Learning, "International Conference of Advance Research and Innovation (ICARI-2015) Feb 27, 2016
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- 15. Sinha P and Kumar N, Language in the Domain of Gender: A Critical Perspective. The International Conference of Advance Research and Innovation (ICARI-2105) / IJARI, Institutions of Engineers (India), 2, Bahadur Shah Zafar Marg, Delhi, January 31st, 2015.
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#### Department of Mechanical, Production & Industrial and Automobiles Engineering

# Journals / Conferences / Seminar / Symposia / Workshop

- V. Jeganathan, R.S. Mishra, "Friction Stir Process Opper Studies with Carbon Neno Tubes", International Nation Journal of Advanced Production and Industrial Engineering, Vol. 1, No. 3, July 2016, pp.32-36
- 2. Anubhav Uppal, JP Kesari, R.S. Mishra,(2016) "Design and Performance Analysis of Solar Parabolid Dish Concentrator System for Process Heating, In ternational journal of Mechanical and Civil engineering,Vol-2, Issue-5, June-2016, pp.6-15
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