

CURRICULUM VITAE

Dr. Mohammad Zunaid
(Asst. Prof.)

Ph.D., M.Tech. (Thermal Science), B.E. (Mechanical Engineering)
ISHMT, ISTE, SESI, ISHRAE, IEL, SFST, ISME, IAENG

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Details of Current Research Areas:

Computational Fluid Dynamics (CFD), Computational Heat Transfer and Fluid Flow, Microfluidics, Fluid Flow in Microchannels, Phase Change Materials for Thermal Energy Storage, Fluid Mechanics, Fluid Dynamics, Refrigeration and Air Conditioning, Power Plant Engineering, Thermal Engineering.

COMMUNICATION

DTU URL:
<http://www.dtu.ac.in/Web/Departments/Mechanical/faculty/mohdjunaid.php>

DTU-IRINS:
<https://dtu.irins.org/profile/67045>

ORCID ID:
<https://orcid.org/0000-0001-8156-8615>

GOOGLE SCHOLAR:
https://scholar.google.co.in/citations?hl=en&user=4znYyPUAAAAAJ&view_op=list_works&gmla=AJsN-F56zEZYCBrrregpbbj4Gwx_0PFokl3-1NY9UUHrln5JTxficF1rKb4O-uY5WsORB3BgD7h1IFZ5JA-J--vBizHENx-IH-dJAOCHQ5Ck3TZ59yVvkLfk

SCOPUS ID:
<https://www.scopus.com/authid/detail.uri?authorId=14023880200>

EDUCATION

Degree	Institution	Year	Discipline	Performance
Ph.D.	Delhi Technological University, Delhi, India.	2018	Mechanical Engineering	Awarded
M. Tech.	Aligarh Muslim University, Aligarh (U.P.), India.	2005	Thermal Science	1 st Div.
B.E.	Aligarh Muslim University, Aligarh (U.P.), India.	2003	Mechanical Engineering	1 st Div.

AWARD/ SCHOLARSHIP

- Received commendable research award on April 6, 2023 for excellence in research from Delhi Technological University, Delhi.
- Received commendable research award on 3 March 2022 by Delhi Technological University, Delhi.
- Received commendable research award from DTU in recognition for the research during the year 2017.
- Received Graduate Aptitude Test of Engineering (GATE) scholarship during M.Tech. from MHRD.

EXPERIENCE (17+ Years)

University / Organization	Designation	From	To	Nature of Experience
Department of Mechanical Engineering, Delhi Technological University, Delhi (Formerly Delhi College of Engineering), Delhi (INDIA)	Assistant Professor	09-03-2009	Till Date	Teaching, Research and Administrative work
Aligarh College of Engineering and Technology, Aligarh (U.P)	Lecturer	11-09-2008	06-03-2009	Teaching, Research and Administrative work
Manufacturing Design Solutions, Gurgaon, (Haryana)	Finite Element Analysis Development Engineer (coder)	11-02-2008	29-08-2008	FEA software (NAGSIM 3D) development in 'C' language.
Zeus Numerix Pvt. Ltd. Mumbai (Maharashtra)	Computational Fluid Dynamics (CFD) Engineer	06-08-2007	06-02-2008	Projects related to aerodynamic, hydrodynamics, aerospace and naval Industries.
Sir Chhotu Ram Institute of Engineering and Technology, Meerut, (U.P)	Lecturer	18-04-2006	31-07-2007	Teaching, Research and Administrative work
IIMT Engineering College, Meerut, (U.P)	Lecturer	09-11-2005	17-04-2006	Teaching, Research and Administrative work

Membership of Professional Societies:

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| i). | Life member of Indian Society of heat and mass transfer (ISHMT), membership no. LM- 722. |
| ii). | Life member of Indian Society for Technical Education (ISTE), membership no. LM 82172. |
| iii). | Life member of Solar Energy Society of India (SESI), membership no. LM/2046/2014. |

iv).	Member of Indian Society of Heating refrigeration & Air Conditioning Engineers (ISHRAE), membership no. 21819.
v).	Life member of 'The Institution of Engineers, India (IEI), ', membership no. M- 1533457.
vi).	Life member of 'Society for Fusion of Science and Technology (SFST)', life membership no. LM/ 2017/ 106.
vii).	Life member of 'Indian Society of Mechanical Engineers (ISME)', life membership no. L-1223.
viii).	Member of Society for International Association of Engineers (IAENG), membership no. 248647.

RESEARCH GUIDANCE			
Level of Guidance		Completed	Ongoing
i).	Doctoral Level	03	07
ii).	Masters Level	19	00
iii).	Bachelor's Level	40	04

RESEARCH PUBLICATIONS (h-index: 10, i10-index: 11)	
Paper Published in National/ International Journals in 2022-23:	
i).	Sachin Rana, Mohammad Zunaid, Rajesh Kumar. 'Enhancement of thermal energy storage in a phase change material heat exchanger having elliptical and circular tubes with & without fins', Journal of Energy Storage, 56 (2022) 105856, (SCIE, Impact Factor: 9.4)
ii).	Mustafa, M.G., Zunaid, M. and Gautam, S., 2023. Numerical Analysis and Moth Flame Optimization of Passive T-Micromixer with Twist and Bend mixing channel. Chemical Engineering and Processing-Process Intensification, p.109436, (SCI, Impact Factor: 4.6).
iii).	Ranjan Prakash, M. Zunaid and Samsher. 'Design and Simulation of the Spiral Micromixer with Chaotic Advection', Journal of Applied Fluid Mechanics, Vol. 16, No. 4, pp. 739-749, 2023. doi: 10.47176/jafm.16.04.1450, (SCIE, Impact Factor: 1.2, ISSN 1735-3572).
iv).	Shwetanshu Gaurav, R.S Mishra & M. Zunaid (2023): Enhancement of microstructure and mechanical properties of similar and dissimilar aluminum alloy by friction stir welding/processing using nanoparticles: a review, Journal of Adhesion Science and Technology, DOI: 10.1080/01694243.2023.2186756, (SCIE, Impact Factor: 0.42).
v).	Akash Sinha, Zunaid M, Afzal Husain. Numerical Study and Comparison of Passive Mixing in Helical Micromixers. Journal of Polymer & Composite, Vol. 10 (Issue 1), (2022), pg. S76–S92, doi: 10.37591/JoPC, (ESCI, Impact Factor: 0.07).
vi).	Mohammed Al-Harrasi, Afzal Husain and M. Zunaid. 'Thermal performance investigation of enhanced receiver tube for concentrated solar collector', Advances in Energy Research, Vol. 8, No. 3 (2022) 137-144, ISSN: 2287-6316, doi: 10.12989/eri.2022.8.3.137, (ESCI, Impact Factor: 0.08).

Paper Published in National/ International Conference Proceedings in 2022-23:	
i).	Anmol Prabhakar, Arya Shekhar, Bhuvan Jain, Mohammad Zunaid and Naushad Ahmad Ansari (2022). Numerical Analysis of Aerodynamic Drag for the Hyperloop System. Advanced Production and Industrial Engineering, Proceedings of ICAPIE 2022, Advances in Transdisciplinary Engineering Series, Volume 27, doi: 10.3233/ATDE220733, (Scopus Index proceeding).
ii).	Kaushik, S., & Zunaid, M. (2023). The Numerical Examination for Mixing Characteristics of Modified T Micromixer with Offset and Triangular Obstructions. In Advances in Manufacturing Technology and Management (pp. 372-381). Springer, Singapore. (Scopus Index proceeding).
iii).	Ayaz Mehmood, Mohammad Zunaid, Ashok Kumar Madan (2022). A bibliometric analysis of cold spray coating process using VOSviewer, Materials Today: Proceedings. ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2022.12.135 , (Scopus Index proceeding).
iv).	Farzan, R., Wangdi, P., Chauhan, R.K., Zunaid, M. (2023). CFD Analysis of Two-Phase Ejector Impacts of C-D Nozzle Geometry. In: Kumar, A., Zunaid, M., Subramanian, K.A., Lim, H. (eds) Recent Advances in Manufacturing and Thermal Engineering. RAMMTE 2022. Lecture Notes in Mechanical Engineering. Springer, Singapore, (Scopus Index proceeding).
v).	Mehmood, A., Zunaid, M., & Madan, A. K. (2022, November). A Brief Review of Technical Parameters and Its Applications Used in Cold Spray Process. In International conference on Advances in Materials and Manufacturing (pp. 243-255). Singapore: Springer Nature Singapore, (Scopus Index proceeding). ISBN 978-981-99-2920-7.
Paper Published in National/ International Journals in 2021-22:	
i).	Kumar, D., Zunaid, M., & Gautam, S. (2021). Thermal Performance Exploration of Air Foil Shape of Pillars using Impinging Jet in Heat Sink. Tobacco Regulatory Science, 7(5), 2794-2807, (SCIE, ISSN: 2333-9748 (Online)).
ii)	Kumar, D., Zunaid, M., & Gautam, S. (2021). Performance Evaluation of Thermal Attributes in Impinging Jet Heat Sink using Airfoil Pillars with and without Nano Fluid. Tobacco Regulatory Science, 7(5), 2808-2820, (SCIE, ISSN: 2333-9748 (Online)).
iii)	Prakash, R., Zunaid, M., & Samsher, S. (2021). Numerical study of mixing index in offset inlets 3-DT mixer with bend shape mixing channel. JOURNAL OF ENGINEERING RESEARCH, 9, 131-141, DOI : 10.36909/jer.ICARI.15275, (SCIE, Online ISSN: 2307-1885).
iv)	Shwetanshu Gaurav, R. S. Mishra and M. Zunaid. (2022). A critical review on mechanical and microstructural properties of dissimilar aluminum (Al)-magnesium (Mg) alloys. Journal of Adhesion Science and Technology, (SCIE), doi: 10.1080/01694243.2022.2067437.

Paper Published in National/ International Conference Proceedings in 2021-22:	
i).	Choudhary, A., Jaiswal, A., Kant, A., Zunaid, M., & Ansari, N. A. (2022). Coupled thermal and structural analysis of disc brake rotor with varying angle of rotation of ventilation holes. <i>Materials Today: Proceedings</i> , 56, 834-844. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2022.02.490, (Scopus Index proceeding).
ii).	Bhatt, H., Bist, H., Gola, H., & Zunaid, M. (2022). Variation of heat transfer characteristics of a microchannel heat sink with geometry. <i>Materials Today: Proceedings</i> , 56, 936-942. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2022.02.631, (Scopus Index proceeding).
iii).	Jain, H., Yadav, K., Kumar, K., & Zunaid, M. (2022). Performance analysis of inclined microjet impingement heat sink with porous medium. <i>Materials Today: Proceedings</i> , 56, 3604-3611, doi: 10.1016/j.matpr.2021.12.066, (Scopus Index proceeding).
iv).	Prakash, R., & Zunaid, M. (2022). Numerical investigation on mixing phenomena in an offset inlets spiral microchannel. <i>Materials Today: Proceedings</i> , 61, 21-26, doi: 10.1016/j.matpr.2022.03.299, (Scopus Index proceeding).
v).	Sinha, A., & Zunaid, M. (2022). Numerical study of passive mixing in a 3-dimensional helical micromixer with two inlets at offset. <i>Materials Today: Proceedings</i> , 56, 3676-3681, doi: 10.1016/j.matpr.2021.12.437, (Scopus Index proceeding).
vi).	Husain, A., Al-Rawahi, N., Al-Azri, N., Zunaid, M., & Ansari, M. Z. (2022). Mixing performance enhancement and parametric investigation of swirl-inlets split-and-recombine micromixer with pulsatile flow. <i>Materials Today: Proceedings</i> , 56, 609-616, doi: 10.1016/j.matpr.2021.12.195, (Scopus Index proceeding).
vii).	Rana, S., Zunaid, M., & Kumar, R. (2022). CFD analysis for heat transfer comparison in circular, rectangular and elliptical tube heat exchangers filled with PCM. <i>Materials Today: Proceedings</i> , 56, 637-644, doi: 10.1016/j.matpr.2021.12.412, (Scopus Index proceeding).
viii).	Sinha, A., Zunaid, M., Tokas, S., & Ansari, M. A. (2022). Numerical study of microscale passive mixing in a 3-Dimensional spiral mixer design. <i>Materials Today: Proceedings</i> , 56, 851-856, doi: 10.1016/j.matpr.2022.02.508, (Scopus Index proceeding).
ix).	Sinha, A., & Zunaid, M. (2022). Numerical study of 3-D helical passive micromixer having both inlets at offset with blood as fluid. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2022.04.431, (Scopus Index proceeding).
x).	Sharma, N., Bhadana, R., Singh, R. K., & Zunaid, M. (2022). Mathematical analysis of mixing index for 3D-helical micromixture with rectangular cross-section by providing convergent divergent profile. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2022.06.449, (Scopus Index proceeding).
xi).	Rai, R., Pathak, R., Singh, N. K., Kumar, P., & Zunaid, M. (2022). Non-Newtonian flow through an artery with three stenosis. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2022.07.034, (Scopus Index proceeding).
xii).	Rana, S., Zunaid, M., & Kumar, R. (2022). CFD approach for the enhancement of thermal energy storage in phase change material charged heat exchanger. <i>Case Studies in Thermal Engineering</i> ,

	33, 101921, doi: 10.1016/j.csite.2022.101921, (Scopus Index proceeding).
xiii).	Harshit Jain, Kanishk Yadav, Kapeesh Kumar, M. Zunaid. (2021). Performance analysis of inclined microjet impingement heat sink with porous medium. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2021.12.066, (Scopus Index proceeding).
xiv).	Kumar, D., Zunaid, M., & Gautam, S. (2021). Analysis of airfoil pillars with impinging jets in a heat sink. <i>Materials Today: Proceedings</i> , 45, 4498-4503, doi: 10.1016/j.matpr.2020.12.1000, (Scopus Index proceeding).
xv).	Kumar, D., Zunaid, M., & Gautam, S. (2021). Heat sink analysis in jet impingement with air foil pillars and nanoparticles. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2021.01.582, (Scopus Index proceeding).
Paper Published in National/ International Journals in 2020-21:	
i).	Tokas, Sulekh, Mohammad Zunaid, and Mubashshir Ahmad Ansari. "Numerical investigation of the performance of 3D-helical passive micromixer with Newtonian fluid and non-Newtonian fluid blood." <i>Asia-Pacific Journal of Chemical Engineering</i> (2020): August 2020, e2570, (SCIE, Impact Factor is 1.06 (JCR 2019), Online ISSN: 1932-2143).
ii)	Husain, A., Zunaid, M., Brashdi, M. A., Maqbali, F. A., Al-Jabri, E., & Al-Mahrizi, A. (2020). Computational investigation of solar updraft tower for power generation in sultanate of Oman. <i>Indian Journal of Engineering & Materials Sciences</i> , vol. 27, August 2020, pp. 837-843. (SCIE, Impact Factor is 0.521 (JCR 2019), Print ISSN: 0971-4588).
iii)	Sulekh Tokas, and Mohammad Zunaid. "Computation Analysis of Passive Mixing in T-Micromixer with Non-Newtonian Blood" <i>International Journal of Mechanical and Production Engineering Research and Development</i> . Vol. 10, Issue 3, August 2020, pp. 9889–9898, (Scopus).
iv).	Syed Farhan Javed, and Mohammad Zunaid. "Numerical Investigation Inside Spiral Passive Micromixer Using Nanofluid", <i>International Journal of Mechanical and Production Engineering Research and Development</i> . Vol. 10, Issue 3, August 2020, pp. 9825–9834, (Scopus).
Paper Published in National/ International Conference Proceedings in 2020-21:	
i).	Kumar, G., Kumar, H., Mandia, K., Zunaid, M., Ansari, N. A., & Husain, A. (2021). Non-Newtonian pulsatile flow through an artery with two stenosis. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2021.01.697, (Scopus Index proceeding).
ii).	Meena, L., Niranjana, M. S., Kumar, G., & Zunaid, M. (2021). Numerical study of convergent-divergent nozzle at different throat diameters and divergence angles. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2021.01.432, (Scopus Index proceeding).
iii).	Kumar, D., Zunaid, M., & Gautam, S. (2021). Analysis of airfoil pillars with impinging jets in a heat sink. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2020.12.1000, (Scopus Index

	proceeding).
iv).	Zunaid, M., Husain, A., Chauhan, B. S., & Sahu, R. (2021). Numerical analysis of inclined jet impingement heat transfer in microchannel. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2020.12.048, (Scopus Index proceeding).
v).	Kumar, R., Kumar, G., Zunaid, M., & Ansari, N. A. (2021). Numerical analysis of quadcopter in different weather conditions of regions in India. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2020.11.681, (Scopus Index proceeding).
vi).	Khan, M., Zunaid, M., & Murtaza, Q. (2021). Examination of titanium powder with different particle sizes for velocity. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2020.11.682, (Scopus Index proceeding).
vii).	Rana, S., Zunaid, M., & Kumar, R. (2021). CFD simulation for heat transfer enhancement in phase change materials. <i>Materials Today: Proceedings</i> . doi: 10.1016/j.matpr.2021.02.006, (Scopus Index proceeding).
viii).	Ranjan Prakash, Mohammad Zunaid, Samsher (2021). Simulation analysis of mixing quality in T-junction micromixer with bend mixing channel. <i>Materials Today: Proceedings</i> , doi: 10.1016/j.matpr.2021.03.172. ISSN 2214-7853, (Scopus Index proceeding).
ix).	M. Khan, M. Zunaid, Q. Murtaza, Simulation of cold spray coating for powder pre-heat and impact velocity, <i>Mater. Today Proc.</i> (2021). https://doi.org/10.1016/j.matpr.2021.01.780 , (Scopus Index proceeding).
x).	Tokas, S., Zunaid, M., & Ansari, M. A. (2021). Non-Newtonian fluid mixing in a Three-Dimensional spiral passive micromixer. <i>Materials Today: Proceedings</i> . https://doi.org/10.1016/j.matpr.2021.03.656 , (Scopus Index proceeding).
xi).	Zunaid, M., Singh, P., & Husain, A. (2021). Numerical Analysis of Inclined Jet Micro-channel Heat Sink Using Nanofluids. In <i>Recent Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering</i> , Springer Nature Singapore, (pp. 851-860).
xii).	Javed, S. F., Zunaid, M., & Ansari, M. A. (2021). Mathematical Analysis of a Spiral Passive Micromixer. In <i>Recent Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering</i> , Springer Nature Singapore, (pp. 805-812), (Scopus Index proceeding).
xiii).	Nambiar, A., Kumar, A., Chopra, R., Zunaid, M., & Murtaza, Q. (2021). Nozzle Design for Intake Manifold for KTM 500 EXC Engine. In <i>Recent Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering</i> , Springer Nature Singapore, (pp. 371-383), (Scopus Index proceeding).
xiv).	Kumar, D., Zunaid, M., & Gautam, S. (2021). Heat sink analysis in jet impingement with air foil pillars and nanoparticles. <i>Materials Today: Proceedings</i> (2021). https://doi.org/10.1016/j.matpr.2021.01.582 , (Scopus Index proceeding).
xv).	Kumar, G., Kumar, A., Ansari, N. A., & Zunaid, M. (2021). Comparative numerical study of flow characteristics in shell & helical coil heat exchangers with hybrid models. <i>Materials Today:</i>

	Proceedings. https://doi.org/10.1016/j.matpr.2021.01.775 .
xvi).	Md. Nazeem Khan, Mohammad Zunaid, Amit Pal (2021), 'Fabrication of Rapid Compression Machine with Variable Compression Ratio -A Review'.
Paper Published in National/ International Journals in 2019-20:	
i).	Gaurav Krishnayatra, Sulekh Tokas, Rajesh Kumar, Mohammad Zunaid. "Parametric Study of Natural Convection Showing Effects of Geometry, Number and Orientation of Fins on A Finned Tube System: A Numerical Approach." Journal of Thermal Engineering (ACCEPETD). (Scopus)
ii)	Sulekh Tokas, Gaurav Krishnayatra, Mohammad Zunaid "Numerical Investigation of Thermal Performance of Extended Surfaces for a Novel Heat Exchanger." Heat Transfer. (Scopus), DOI: 10.1002/htj.21879.
Paper Published in National/ International Conference Proceedings in 2019-20:	
i).	Gaurav Krishnayatra, Sulekh Tokas, Rajesh Kumar, Mohammad Zunaid "3 Dimensional CFD analysis of Laminar flow Natural Convection of Hollow Cylinder with Annular Fins" from 15-17, August, 2019, in Proceedings of the 5th World Congress on Mechanical, Chemical, and Material Engineering (MCM'19), Lisbon, Portugal, Paper No. HTFF 181, doi: 10.11159/htff19.181. (Scopus Index proceeding)
ii).	M. Zunaid and Md. Gulam Mustafa, "Mathematical Analysis of Wind Turbine Blade at various Angle of attack and Reynold Number" in Proceedings of the IOP Conf. Series: Materials Science and Engineering 804 (2020) 012005, through International Symposium on Fusion of Science and Technology (ISFT 2020), doi:10.1088/1757-899X/804/1/012005. (Scopus Index proceeding)
Paper Published in National/ International Journals in 2018-19:	
i).	M. Zunaid, Qasim Murtaza, Samsher, Afzal Husain. "Numerical Analysis of Forced Draft Parallel Flow Shower Cooling Tower with Varying the Water to Air Mass Flow Ratio" International journal of advanced production and industrial engineering. Vol. 3, Issue 4, 2018, pp. 32-34.
ii).	M. Zunaid, Haeng Muk Cho, Afzal Husain, Anant Jindal, Rohit Kumar, Bhupendra Singh Chauhan. "Computational Analysis of Liquid Jet Impingement Micro-channel Cooling" Materials Today: Proceedings. Vol. 5, 2018, pp. 27877-27883.
Paper Published in National/ International Conference Proceedings in 2018-19:	
i).	Mohammad Zunaid, "Numerical Analysis of Shower Cooling Tower with Varying the Inlet Relative Humidity for Industrial Application" from December 10-12, 2018, in 7 th International and 45 th National Conference on Fluid Mechanics and Fluid Power (FMFP-2018), in IIT Bombay,

	Mumbai, India.
Paper Published in National/ International Journals in 2017-18:	
i).	M. Zunaid, A. Jindal, D. Gakhar ¹ , A. Sinha. “Numerical study of pressure drop and heat transfer in a straight rectangular and semi cylindrical projections microchannel heat sink” Journal of Thermal Engineering. Vol. 3, No. 5, 2017, pp. 1453-1465.
ii).	P. Halder, A. Husain, M. Zunaid, and A. Samad. “Newtonian and Non-Newtonian Pulsatile Flows through an Artery with Stenosis.” The Journal of Engineering Research. Vol. 14, No. 2, 2017, pp. 191-205.
iii).	Mohammad Zunaid, Afzal Husain, Anant Jindal, Avinash Gupchup. “Investigations of Fluid Flow and Convective Heat Transfer in Wavy Micro-Channel at Different Reynolds Numbers.” International Journal of Advanced Production and Industrial Engineering.” Vol. 2, Issue 1, 2017, pp. 23-28.
iv).	Mohammad Zunaid. “Energy and Exergy Analysis of Shower Cooling Tower with Variation in Inlet Air Dry Bulb Temperature for Industrial Application.” International Journal for Research in Applied Science & Engineering Technology. Vol. 6, Issue III, 2018, pp. 582-588.
v).	Mohammad Zunaid. “CFD Analysis of Three Dimensional Shower Cooling Tower with Varying the Inlet Water Temperature.” International Journal of Modern Trends in Engineering and Research. Vol. 5, Issue 04, 2018, pp. 1-5.
vi).	Mohammad Zunaid. “Energy and Second Law Analysis of Shower Cooling Tower Used for Air Cooling Application for Human Comfort with Variation in Water to Air Mass Flow Ratio.” International Journal for Research in Applied Science & Engineering Technology. Vol. 6, Issue III, 2018, pp. 1302-1311.
vii).	Mohammad Zunaid. “Mathematical Analysis of Shower Cooling Tower With Varying the Inlet Water Temperature for Industrial Application.” International Journal of Modern Trends in Engineering and Research. Vol. 5, Issue 04, 2018, pp. 57-61.
viii).	Mohammad Zunaid. “CFD Analysis of Shower Cooling Tower with Varying the Inlet Air Relative Humidity for Industrial Application.” International Journal for Research in Applied Science & Engineering Technology. Vol. 6, Issue IV, 2018, pp. 1523-1526.
Paper Published in National/ International Conference Proceedings in 2017-18:	
i).	Afzal Husain, M. Zunaid, Raghvendra Gautam. “Microjet Impingement with flow extraction.” 1st International conference on new frontiers in engineering, science and technology (NFEST-2018) in New Delhi, India from January 08-12, 2018, pp. 381-383.
Paper Published in National/ International Journals Till July 2017:	
i).	Zunaid, M., Murtaza, Q., & Gautam, S. (May 2017). Energy and performance analysis of multi droplets shower cooling tower at different inlet water temperature for air cooling application. Applied Thermal Engineering, 121, 1070-1079, doi:

	10.1016/j.applthermaleng.2017.04.157, Elsevier.
ii).	Zunaid, M., Murtaza, Q., & Samsheer. (July 2017). Energy and Second Law of Thermodynamics Analysis of Shower Cooling Tower with Variation in Inlet Air Temperature. International Journal of Engineering (IJE) Transactions A, 30(7), 1090-1097, doi: 10.5829/idosi.ije.2017.30.07a.19.
iii).	Kumar, R., Zunaid, M. (October 2016) CFD Analysis of Wavy Microchannel Heat Sink with Hemispherical Obstructions and Comparing it with Experimental Results of Rectangular Microchannel Heat Sink. International Journal of Research and Scientific Innovation, 03(10), 19-26, ISSN: 2321–2705.
iv).	Uppal, A., Kesari, J. P., & Zunaid, M. (2016). Designing of Solar Process Heating System for Indian Automobile Industry. International Journal of Renewable Energy Research (IJRER), 6(4), 1627-1636.
v).	Shams, M.N., Singh, R.K., Zunaid, M., Mustafa, M.G. (2017). CFD Modeling of Flow through S-Shaped Duct with Tangential Blowing. International Journal of Advanced Engineering Research and Applications, 2(11), 605-615, ISSN: 2454-2377.
vi).	Zunaid, M., Husain, A., Ansari, N.A., Jindal, A., Gupchup, A. (2017). Investigations of Fluid Flow and Convective Heat Transfer in Wavy Micro-Channel at Different Reynolds Numbers. International journal of advanced production and industrial engineering. , 2(1), 23-28, ISSN: 2455–8419.
vii).	Published research paper on “CFD Modeling of flow through S-Shaped Duct” in International Journal of Advanced Engineering Research and Applications, Volume 1, Issue 10 (February-2016), PP 413-423.
viii).	Published research paper on “CFD Simulations of Flow over Passenger Vehicle with Airfoils for Aerodynamic Lift Reduction” in International Journal of Applied Engineering Research, Volume 10, Issue 22 (2015) PP 43152-43156.
ix).	Published research paper on “CFD Analysis and Optimization of Geometrical Modifications of Ahmed Body” in IOSR Journal of Mechanical and Civil Engineering, Volume 12, Issue 5 (October-2015), PP 37-49.
x).	Published research paper on “Flow Visualization around Perforated Circular Finned Tubes by CFD” in International Journal of Innovative Research in Science, Engineering and Technology, Vol. 3, Issue 6, June 2014, Pages 13507-13513.
xi).	Published research paper on “Numerical Study of the Generic Sports Utility Vehicle Design with a Drag Reduction Add-On Device” in Journal of Computational Engineering, Volume 2014, Article ID 785294.
xii).	Published research paper on “Simulation of Injector in Cold Spray Process by Fluent-6” in International Conference of Advance Research and Innovation (ICARI-2015) on 31 January 2015 in Institution of Engineers (India), Delhi State Centre, (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi-110002, India.
xiii).	Published research paper on “Numerical Simulation of Hybrid Micro-Channel Jet” in International Conference & Exhibition on Cutting Edge technological Challenges in Mechanical

	Engineering (CETME) on 21-22, March 2015, organizes by Department of Mechanical Engineering, NIET, Greater Noida.
xiv).	Published research paper on “CFD Simulation of Flow around External Vehicle: Ahmed Body” in Journal of Mechanical and Civil Engineering Volume 12, Issue 4 Ver. III, PP 87-94.
Paper Published in National/ International Conference Proceedings Till July 2017:	
i).	Zunaid, M., Mustafa, M.G., Ansari, N.A. Numerical Analysis of Wind Turbine Blade at Different Angle of Attack and Reynold Numbers Using Ansys. International Conference on Recent Advances in Mechanical Engineering (RAME-2016) held on 14-15 October 2016 in Delhi Technological University, Bawana Road, Delhi-110042, India.
ii).	Singh, R.K., Zunaid, M., Mustafa, M.G., & Singh, J. CFD Analysis and Optimisation of Operational Parameters for an F1 Racing Car’s Front Wing to Maximize Its Aerodynamic Performance. International Conference on Recent Advances in Mechanical Engineering (RAME-2016) held on 14-15 October 2016 in Delhi Technological University, Bawana Road, Delhi-110042, India.
iii).	Zunaid, M., Husain, A., Ansari, N.A., Jindal, A., Gupchup, A. CFD Analysis of Wavy Edge Rectangular Micro-Channel Heat Sink at Different Reynolds Number. International Conference on Recent Advances in Mechanical Engineering (RAME-2016) held on 14-15 October 2016 in Delhi Technological University, Bawana Road, Delhi-110042, India.
iv).	Zunaid, M. (2017). Numerical Analysis of Cold Spray Process. International Conference of Advance Research and Innovation (ICARI-2017) on 29 January 2017 at Delhi State Center, Institution of Engineers (India), New Delhi -110002, India.
v).	Zunaid, M. (2017). Computational Fluid Dynamics Analysis of Hybrid Cooling over. International Conference of Advance Research and Innovation (ICARI-2017) on 29 January 2017 at Delhi State Center, Institution of Engineers (India), New Delhi -110002, India.
Participation in Conferences, Seminars, Workshops in 2022-23:	
i).	Attended one day national “seminar on Urban Emissions, Climate and Health Hazards” (SUCH-2023)” on 21 February 2023, organized by Department of Environmental Engineering, Delhi Technological University in collaboration with IIC.
ii).	Attended one day workshop “Application of Renewable Energy Systems in EV Charging Infrastructure” on 22 February 2023, organized by CoE for Electrical Vehicles and Related Technologies, Department of Electrical Engineering, Delhi Technological University, Delhi.
iii).	Attended one day seminar to celebrate “Innovative Rural Application of Clean Energy” on 25 February 2023, organized by Centre for Energy and Environment, Department of Mechanical Engineering, Delhi Technological University, Delhi.

iv).	Taken “Say Yes to Life, No to Drugs” pledge on June 27, 2023 and committed himself to consciously cooperate in stopping drug abuse and stay away from drugs to live a healthy life.
Participation in Conferences, Seminars, Workshops in 2021-22:	
i).	Contributed as organizing secretary in the 3rd International Conference on ‘Recent Advances in Materials, Manufacturing and Thermal Engineering (RAMMTE-2022)’ during 8 th - 9 th July 2022, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.
ii).	Attended one day online seminar cum workshop on ‘Prototype/ Process Design and Development- Prototyping’ on 26 May 2022, organized by Department of Mechanical Engineering and DTU-IIF, Delhi Technological University, Delhi, recommended by Ministry of Education (GoI).
iii).	Online presented research paper titled “Non-Newtonian flow through an artery with three stenosis” in International Conference on Materials Science and Sustainable Manufacturing Technology (ICMSSMT 2022), on 20 and 21 May 2022 at Coimbatore, Tamil Nadu, India.
iv).	Virtually presented research paper titled “Performance analysis of inclined microjet impingement heat sink with porous medium” in the First International Conference on Design and Materials (ICDM)-2021, organized at Delhi Technological University, Delhi, India, held during 27-30 January 2022.
v).	Online presented research paper titled “Mixing Enhancement in Vortex Serpentine Micromixer Having Two and Four Non-aligned Inlets” in International Conference on Thermo-Fluids and System Design (ICTFSD 2022), during 22-23 March 2022 at Birla Institute of Technology, Meshra, Ranchi, India.
vi).	Virtually presented research paper titled “Effect of Nitrogen and Helium Mixer on the Pre Heat Temperature and Impact Velocity in the Cold Spray Coating Process” in International Conference of Advance Research and Innovation (ICARI 2022), organized by Journal of Advance Research and Innovation held on 5 th March 2022.
vii).	Online presented research paper titled “Design and Analysis of FSAE Full Aerodynamic Package” in International Conference on Materials Science and Sustainable Manufacturing Technology (ICMSSMT 2022), on 20 and 21 May 2022 at Coimbatore, Tamil Nadu, India.
viii).	Presented research paper titled “Thermal Performance Investigation of Enhanced Receiver Tube for Concentrated Solar Collector” in the 3rd International Conference on ‘Recent Advances in Materials, Manufacturing and Thermal Engineering (RAMMTE-2022)’ during 8 th - 9 th July 2022, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.
ix).	Presented research paper titled “Numerical Study and Comparison of Passive Mixing in Helical Micromixer” in the 3rd International Conference on ‘Recent Advances in Materials, Manufacturing and Thermal Engineering (RAMMTE-2022)’ during 8 th - 9 th July 2022, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.

x).	Virtually presented research paper titled “Numerical Analysis of Mixing Performance in Three Dimensional T-Microchannel” in International Conference of Advance Research and Innovation (ICARI 2022), organized by Journal of Advance Research and Innovation held on 5 th March 2022.
xi).	Online presented research paper titled “CFD Simulation to Enhance the Heat Transmission in Solar Storage Heat Exchanger with PCM Addition” in International Conference of Advance Research and Innovation (ICARI 2022), organized by Journal of Advance Research and Innovation held on 5 th March 2022.
xii).	Online presented research paper titled “Application of Nano Fluid in Jet Impingement Technology Using CFD” in International Conference of Advance Research and Innovation (ICARI 2022), organized by Journal of Advance Research and Innovation held on 5 th March 2022.
xiii).	Presented research paper titled “CFD Analysis of Two Phase Ejector Impacts of C-D Nozzle Geometry” in the 3rd International Conference on ‘Recent Advances in Materials, Manufacturing and Thermal Engineering (RAMMTE-2022)’ during 8 th - 9 th July 2022, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.
xiv).	Presented research paper titled “Experimental Performance Investigation of Compound Parabolic Cavity Receiver Having Single Absorber Tube” in the 3rd International Conference on ‘Recent Advances in Materials, Manufacturing and Thermal Engineering (RAMMTE-2022)’ during 8 th - 9 th July 2022, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.
xv).	Presented research paper titled “Material and Model Simulation of Redesigned Intake Manifold with Dimpled Surface of I.C. Engine” in the 3rd International Conference on ‘Recent Advances in Materials, Manufacturing and Thermal Engineering (RAMMTE-2022)’ during 8 th - 9 th July 2022, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.

Participation in Conferences, Seminars, Workshops in 2020-21:

i).	Attended one-day E -Workshop on “Innovation and Startup Ecosystem Enablers from Region/ State/ National Level” held on June 23, 2021 organized by Department of Electronics & Communication Engineering, Delhi Technological University, Delhi, India.
ii).	Worked as joint organizing secretary in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
iii).	Worked as the treasurer in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
iv).	Worked as the reviewer in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.
v).	Worked as the session coordinator in technical session 12 (RE-5) in 2nd International Conference on Recent Advances in Mechanical Engineering held on September 18-19, 2020.

vi).	Contributed as a Session Chair in Technical Session I & II Track A/B/C/D for "International Conference of Advance Research and Innovation (ICARI-2021)" organized by "Meerut Institute of Engineering and Technology, Meerut (Affiliated to Dr. Abdul Kalam Technical University, Lucknow)" with International Journal of Advance Research and Innovation (www.ijari.org), held online at MIET, Meerut, India, January 30th 2021.
vii).	Presented research paper, "A Sensor Based Assessment of Ignition Delay for Pure Diesel and Biodiesel Blends in an Isochoric Combustion Box" in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), is being organised by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
viii).	Presented research paper, "Mathematical Analysis of a Spiral Passive Micromixer" in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), is being organised by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
ix).	Presented research paper, "Numerical Analysis of Inclined Jet Micro Channel Heat Sink Using Nanofluids" in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), is being organised by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
x).	Presented research paper, "Nozzle Design for Intake Manifold for KTM 500 EXC Engine" in 2nd International Conference on Recent Advances in Mechanical Engineering (RAME- 2020), is being organized by Department of Mechanical & Production Engineering, Centre for Energy and Environment, Delhi Technological University, New Delhi, India during September 18-19, 2020.
xi).	Presented research paper entitled "Fabrication of Rapid Compression Machine with Variable Compression Ratio -A Review" for "International Conference of Advance Research and Innovation (ICARI-2021)" organized by "Meerut Institute of Engineering and Technology, Meerut (Affiliated to Dr. Abdul Kalam Technical University, Lucknow)" with International Journal of Advance Research and Innovation (www.ijari.org), held online at MIET, Meerut, India, January 30th 2021.
xii).	Presented research paper entitled "Numerical investigation of mixing quality in offset inlets 3-D T mixer with bend mixing channel" for "International Conference of Advance Research and Innovation (ICARI-2021)" organized by "Meerut Institute of Engineering and Technology, Meerut (Affiliated to Dr. Abdul Kalam Technical University, Lucknow)" with International Journal of Advance Research and Innovation (www.ijari.org), held online at MIET, Meerut, India, January 30th 2021.
xiii).	Worked as the coordinator in TEQIP-III one-day online seminar on 'NEP-20 theme Vocational Education & Technology', organized by Department of Mechanical Engineering, Delhi Technological University, Delhi, on February 23, 2021.
Participation in Conferences, Seminars, Workshops in 2019-20:	

i).	Presented research paper, “Numerical Analysis of Three-Dimensional Counter flow Multi Droplet Shower Cooling Tower with Variation in Inlet Water Temperature for Industrial Application” in International Conference on Atomic, Molecular, Optical & Nano Physics with Applications (CAMNP 2019), Organized by Department of Applied Physics, Delhi Technological University, New Delhi, India on December 18th - 20th, 2019.
ii).	Presented research paper, “Numerical Evaluation of Inclined Jet Microchannel Heat Sink Using Nanofluids” in International Conference on Atomic, Molecular, Optical & Nano Physics with Applications (CAMNP 2019), Organized by Department of Applied Physics, Delhi Technological University, New Delhi, India on December 18th - 20th, 2019.
iii).	Presented research paper, “Numerical Analysis of Microchannel Heat Sink With Pillars” at 4 th International Conference on Advanced Production and Industrial Engineering (ICAPIE-2019) organized by Centre for Advance Production and Industrial Engineering Research (CAPIER), Delhi Technological University, Delhi, held at Delhi Institute of Tool Engineering, Okhla, Delhi, India during 20-21 December 2019.
iv).	Presented research paper, “Numerical Evaluation of Three-Dimensional Counter flow Shower Cooling Tower with Variation in Inlet Water to Air Mass Flow Ratio for Industrial Application” at 4 th International Conference on Advanced Production and Industrial Engineering (ICAPIE-2019) organized by Centre for Advance Production and Industrial Engineering Research (CAPIER), Delhi Technological University, Delhi, held at Delhi Institute of Tool Engineering, Okhla, Delhi, India during 20-21 December 2019.
v).	Presented research paper, “Performance analysis of Solar Updraft Tower for Power generation in Sultanate of Oman” at 4 th International Conference on Advanced Production and Industrial Engineering (ICAPIE-2019) organized by Centre for Advance Production and Industrial Engineering Research (CAPIER), Delhi Technological University, Delhi, held at Delhi Institute of Tool Engineering, Okhla, Delhi, India during 20-21 December 2019.
vi).	Presented research paper, “Energy and Exergy Analysis of Three-Dimensional Counter flow Shower Cooling Tower with Variation in Inlet Air Relative Humidity for Human Comfort” at 4 th International Conference on Advanced Production and Industrial Engineering (ICAPIE-2019) organized by Centre for Advance Production and Industrial Engineering Research (CAPIER), Delhi Technological University, Delhi, held at Delhi Institute of Tool Engineering, Okhla, Delhi, India during 20-21 December 2019.
vii).	Presented research paper, “Mathematical Analysis of Wind Turbine Blade at various Angle of attack and Reynold Number” in 8 th International Symposium on Fusion of Science and Technology (ISFT-2020) at J.C. Bose University of Science and Technology, YMCA NH-2, Sector-6, Mathura Road, Faridabad- 121006, Haryana, India from January 6 - 10, 2020.
viii).	Presented research paper, “Mathematical Analysis of Three-Dimensional Counter flow Multi Droplet Shower Cooling Tower with Variation in Inlet Air Dry Bulb Temperature for Human Comfort” in 6 th International Conference of Advance Research and Innovation (ICARI-2019), organized by the International Journal of Advance Research and Innovation held at Delhi State Centre, Institution of Engineers (India), New Delhi, India, on January 20 th 2019.
ix).	Presented research paper, “Numerical Analysis of Three-Dimensional Counter flow Multi Droplet Shower Cooling Tower with Variation in Inlet Air Relative Humidity for Industrial Application”

	in International Conference of Advance Research and Innovation (ICARI-2020), on 19th January, 2020, (Sunday) at Institution of Engineers (India), Delhi State Centre, (Engineers Bhawan), 2, Bahadur Shah Zafar Marg, New Delhi-110002, India.
x).	Presented research paper, “Numerical Analysis and Surface Modelling of Air Plane Wings” in International Conference of Advance Research and Innovation (ICARI-2020), on 19th January, 2020, (Sunday) at Institution of Engineers (India), Delhi State Centre, (Engineers Bhawan), 2, Bahadur Shah Zafar Marg, New Delhi-110002, India.
xi).	Presented research paper, “Heat Transfer Characteristics of Microjet Impingements with Flow Extraction” in International Conference of Advance Research and Innovation (ICARI-2020), on 19th January, 2020, (Sunday) at Institution of Engineers (India), Delhi State Centre, (Engineers Bhawan), 2, Bahadur Shah Zafar Marg, New Delhi-110002, India.
xii).	Presented research paper, “Fabrication of Rapid Compression Machine with Variable Compression Ratio -A Review” in International Conference of Advance Research and Innovation (ICARI-2020), on 19th January, 2020, (Sunday) at Institution of Engineers (India), Delhi State Centre, (Engineers Bhawan), 2, Bahadur Shah Zafar Marg, New Delhi-110002, India.
xiii)	Attended TEQIP-III sponsored two days international workshop on “Geohazards Risk Reduction Initiatives in South and South East Asia (GeoRiskSEA-2019)” organized by Department of Civil Engineering, Delhi Technological University, Delhi, India on November 21-22, 2019.
Participation in Conferences, Seminars, Workshops in 2018-19:	
i).	Presented research paper, “Numerical Analysis of Industrial Used Counter Flow Shower Cooling Tower for Different Inlet Water to Air Mass Flow Ratio” in 6 th International Conference of Advance Research and Innovation (ICARI-2019), organized by the International Journal of Advance Research and Innovation held at Delhi State Centre, Institution of Engineers (India), New Delhi, India, on January 20 th 2019.
ii).	Presented research paper, “Numerical Analysis of Effect of Cooling Fluid and its Blowing Ratio on Gas Turbine Blade Cooling” in 6 th International Conference of Advance Research and Innovation (ICARI-2019), organized by the International Journal of Advance Research and Innovation held at Delhi State Centre, Institution of Engineers (India), New Delhi, India, on January 20 th 2019.
iii).	Presented research paper, “Numerical Analysis of Hyperloop Transportation System” in 6 th International Conference of Advance Research and Innovation (ICARI-2019), organized by the International Journal of Advance Research and Innovation held at Delhi State Centre, Institution of Engineers (India), New Delhi, India, on January 20 th 2019.
iv).	Participated as a Session Chair in technical session II (post lunch) in 6 th International Conference of Advance Research and Innovation (ICARI-2019), organized by the International Journal of Advance Research and Innovation held at Delhi State Centre, Institution of Engineers (India), New Delhi, India, on January 20 th 2019.
v).	Presented research paper, “Micro-scale cooling: a short review” at the 3 rd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2018) organized by Centre for

	Advance Production and Industrial Engineering (CAPIER), Delhi Technological University, Delhi, India during 05-06 October 2018.
vi).	Presented research paper titled “Mathematical Analysis of Air Cooling Application Parallel Flow Shower Cooling Tower for Different Inlet Droplet Diameter” at the 3 rd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2018) organized by Centre for Advance Production and Industrial Engineering (CAPIER), Delhi Technological University, Delhi, India during 05-06 October 2018.
vii).	Presented research paper titled “CFD Analysis of Counter Flow Shower Cooling Tower with Varying the Inlet Air Relative Humidity for Air Cooling Application” at the 3 rd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2018) organized by Centre for Advance Production and Industrial Engineering (CAPIER), Delhi Technological University, Delhi, India during 05-06 October 2018.
viii).	Worked as Joint Organizing Secretary at the 3 rd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2018) organized by Centre for Advance Production and Industrial Engineering (CAPIER), Delhi Technological University, Delhi, India during 05-06 October 2018.
ix).	Participated as a Session Chair in the 3 rd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2018) organized by Centre for Advance Production and Industrial Engineering (CAPIER), Delhi Technological University, Delhi, India during 05-06 October 2018.
x).	Attended the International Conference on Recent Advances in Pre and Applied Mathematics (ICRAPAM 2018), held during 23-25 October, 2018, organized by Department of Applied Mathematics at Delhi Technological University, Delhi, India.
xi).	Attended one day seminar cum workshop on “Product Design (PRODE’18)” organized by Centre for Advance Production and Industrial Engineering, Delhi Technological University, Delhi, India on August 11, 2018.
xii).	Attended TEQIP-III sponsored one day international workshop on “Networking of Technology and Education for Sustainable Development” organized by Department of Civil Engineering, Delhi Technological University, Delhi, India on October 12, 2018.
xiii).	Attended three days course on “e-waste training for the Govt. officials” organized by National Institute of Electronics and Information Technology, Delhi Centre, Ministry of Electronics and Information Technology, Government of India, during August 28-30, 2018.
xiv).	Participate in TEQIP-III sponsored 2 nd International conference on “Sustainable Technologies for Environmental Management (STEM-2019)” organized by Department of Environmental Engineering, Delhi Technological University, Delhi, India during March 25-26, 2019.
xv).	Deliver a talk titled ‘Introduction to CFD, and CFD analysis of shower cooling tower for human comfort’ on 30 November 2018 in continuing education program entitled ‘Recent Advancement to Improve Habitability in Extreme Environments’ organized by Defence Institute of Physiology and Allied Sciences (DIPAS), Defence Research Development Organisation (DRDO), Govt. of India, Ministry of Defence, Lucknow Road, Timarpur, Delhi held during 28-30 November 2018.

Participation in Conferences, Seminars, Workshops in 2017-18:	
i).	Participated and presented research paper on “Computational Analysis of Liquid Jet Impingement Micro-Channel Cooling” in International Conference on Composite Materials: Manufacturing, Experimental Techniques, Modeling and Simulation (ICCMEMS) on 15-17 March 2018 in Lovely Professional University, Phagwara, Punjab, India.
ii).	Participated and presented research paper on “ Exergy and energy analysis of shower cooling tower used for air cooling applications for human comfort with variation in inlet air dry bulb temperature ” in 15 th International Ergonomics Conference on Humanizing Work and Work Environment (HWWE-2017) on 08-10 December 2017 in Aligarh Muslim University, Aligarh, (UP), India.
iii).	Invaluable contribution as lead speaker during 15th international ergonomics conference on Humanizing Work and Work Environment (HWWE-2017) hosted by AMU, Aligarh during December 08-10, 2017.
iv).	Participated and presented research paper on “Numerical Heat Transfer Analysis of Wavy Microchannel at Different Reynolds” in the 2nd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2017) organized by Centre for Advance Production and Industrial Engineering (CAPIER), held on 06-07 October 2017, at the Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
v).	Participated and presented research paper on “Fuel Injection Pressure and Injection Timing Effects on Diesel Engine Performance” in the 2nd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2017) organized by Centre for Advance Production and Industrial Engineering (CAPIER), held on 06-07 October 2017, at the Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
vi).	Contributed as a Session Chair in the 2 nd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2017) organized by Centre for Advance Production and Industrial Engineering (CAPIER), held on 06-07 October 2017, at the Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
vii).	Worked as member, organizing committee at the 2 nd International Conference on Advanced Production and Industrial Engineering (ICAPIE-2017) organized by Centre for Advance Production and Industrial Engineering (CAPIER), held on 06-07 October 2017, at the Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
viii).	Attended two days TEQIP-III sponsored international seminar on “Sustainable Technologies for Environmental Management (STEM-2018)” during 27-28 March 2018, organized by Department of Environmental Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
ix).	Deliver a talk titled Significance of Alternative Energy Sources in Current Scenario in national workshop on Recent Advances in Alternative Energy Sources held at Department of Mechanical Engineering, DTU, Delhi, on 29th January 2018.
x).	Contributed as organizing secretary in national workshop on Recent Advances in Alternative Energy Sources held at Department of Mechanical Engineering, DTU, Delhi, on 29th January 2018.
xi).	Participated in a National workshop on Recent Advances in Alternative Energy Sources on 29 January 2018, at the Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
xii).	Attended international conference of advance research and innovation (ICARI-2018) held at Institution of Engineers, Delhi State Centre, New Delhi, on 28th January 2018.

xiii)	Participated in workshop E-Resources: A Gateway for Research, 2017, organized by Central Library, DTU held from 4-8 September 2017.
Participation in Conferences, Seminars, Workshops Till July 2017:	
i).	Received award for outstanding contribution for being the Co-Course Coordinator and successfully organized the TEQUIP-II sponsored national seminar on “Innovation and challenges in thermal engineering” (ICTE-2016) on 07-08 July, 2016, at the Department of Mechanical, Production & Industrial and Automobile Engineering, Delhi Technological University, Delhi.
ii).	Received award of appreciation for outstanding contribution for being the Treasurer and successfully organized the International Conference on Recent Advances in Mechanical Engineering (RAME-2016) held on 14-15 October 2016, at the Department of Mechanical, Production & Industrial and Automobile Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
iii).	Contributed as a member of technical committee at International Conference on Advanced Production and Industrial Engineering (ICAPIE-2016) held on 09-10 December 2016, at the Department of Mechanical, Production & Industrial and Automobile Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
iv).	Received award of appreciation for being Chair of the technical session of the International Conference on Recent Advances in Mechanical Engineering (RAME-2016) held on 14-15 October 2016, at the Department of Mechanical, Production & Industrial and Automobile Engineering, Delhi Technological University, Bawana Road, Delhi-110042, India.
v).	Participated in five days’ workshop on ‘E-Resources: A Gateway for Research’ from 05-09 September 2016, organized by Central Library, Delhi Technological University, Delhi.
vi).	Attended one day workshop on “Advances in Friction Stir Welding/ Processing (AFSWP-2017)” on 23 March 2017, organized by Central for Advanced Production and Industrial Engineering Research, Delhi Technological University, Delhi.
vii).	Attended one day workshop Advances in Tribological Studies (ATS-2017) on 29 th March 2017, organized by Department of Mechanical Engineering, Delhi Technological University, Delhi.
viii).	Participated and presented research paper on “CFD Analysis of Cooling Tower by Varying Fill Zone Height” in International Conference of Advance Research and Innovation (ICARI-2016) on 27 February 2016 in Institution of Engineers (India), Delhi State Centre, New Delhi-110002, India.
ix).	Participated and presented research paper on “CFD Analysis of Cooling Tower by Varying Rain Zone Height” in International Conference of Advance Research and Innovation (ICARI-2016) on 27 February 2016 in Institution of Engineers (India), Delhi State Centre, New Delhi-110002, India.
x).	Participated and presented research paper on “Effect of Fouling on the Performance of Vapour Absorption Refrigeration System” in International Conference of Advance Research and Innovation (ICARI-2016) on 27 February 2016 in Institution of Engineers (India), Delhi State Centre, New Delhi-110002, India.
xi).	Participated in two days ‘National workshop on Power Electronics (NWPE-2015)’ from 6-7 November 2015, organized by Department of Electrical Engineering, Delhi Technological University, Delhi.
xii).	Participated and presented research paper on “Simulation of Injector in Cold Spray Process by Fluent-6” in International Conference of Advance Research and Innovation (ICARI-2015) on 31 January 2015 in Institution of Engineers (India), Delhi State Centre, (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi-110002, India.

kiii).	Participated in UGC sponsored one day 'National Seminar on Recent Advances in Physics (NSRAP-2015)' organized by Department of Physics, Delhi Technological University, Delhi.
xiv).	Organize HACKTRACK 2014 workshop in collaboration with Tech Defence Pvt. Ltd. from 12-13 April 2014 in Dr. B.R. Ambedkar Auditorium, Delhi Technological University, Delhi.