
Puneet Tandon

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IIITDM Jabalpur

Affiliations:

deLOGIC Lab: <https://www.iiitdmj.ac.in/delogic.iiitdmj.ac.in/index.html>

Social Innovation (Soln) Lab: <https://www.iiitdmj.ac.in/soln.iiitdmj.ac.in/index.html>

Innovations in Design and Manufacturing (IDM): <http://idm.iiitdmj.ac.in/>

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Scopus ID: 16643702300

Web of Science ResearcherID: A-5523-2012

Google Scholar ID: bDELRhMAAAAJ

SERB Qualified Unique Identification Document (SQUID): SQUID-1966-PT-6064

Areas of Interest

- ◆ *Product Design and Innovation, Design Thinking*
- ◆ *Advanced Hybrid Manufacturing Processes and Technologies: Dieless Manufacturing, Additive Manufacturing*
- ◆ *Computer Aided Design and Analysis: Design Intent, Intelligent CAD, Biologically Inspired Design, Bio-CAD, Medi-CAD, Human Factors in CAD, Humanizing Engineering Design*

Education

- *Ph.D.*, Department of Mechanical Engineering, Indian Institute of Technology Kanpur (2003)
- *Post Graduate Diploma in Management*, Indira Gandhi National Open University, New Delhi (1996). Specialization: Systems Management
- *M.Tech. (Mechanical Engineering)* Indian Institute of Technology Kanpur (January 1995)
- *Certificate Course in German*, Kurukshetra University, Kurukshetra (1993)
- *B.Tech. (Hons.) (Mechanical Engineering)* Regional Engineering College (R.E.C.), Kurukshetra, (now, National Institute of Technology, Kurukshetra) India (1988)

Scholastic Achievements

- ❑ Obtained a CPI of 10.0 out of 10.0 in Ph.D.
- ❑ Topped the batch in M.Tech. program at I.I.T. Kanpur (CPI: 9.38/10.0)
- ❑ Obtained Government of India fellowships to pursue Master and Doctorate at I.I.T. Kanpur
- ❑ Obtained 4th rank in the class of 85 in B.Tech.
- ❑ Awarded Best Project award for the B.Tech. project
- ❑ Secured 4th rank in the Board in Higher Secondary (10+1)
- ❑ Secured a position in the Merit List in High School (Haryana Board)
- ❑ Bagged Government Scholarship for attaining merit positions in High School & Higher Secondary Exams
- ❑ Qualified National Talent Search Examination (N.T.S.E.) conducted by the Government of India

Working Experience

Total Work Experience: 34+ years

- Working as Professor of Mechanical Engineering & Professor of Design at PDPM Indian Institute of Information Technology, Design and Manufacturing (IIITDM), Jabalpur since June 2009
- Worked as Associate Professor at IIITDM Jabalpur, August 2005 – May 2009
- Worked as Associate Professor (ex-Assistant Professor) of Mechanical Engineering at National Institute of Technology (NIT) Kurukshetra, August 2000 – July 2005
- Worked as Senior Lecturer at the R.E.C. (NIT) Kurukshetra from January 1995 to July 1998
- Worked as Project Research Associate, CAM Lab, I.I.T. Kanpur October 1993 to Jan 1995
- Worked as Lecturer Mechanical Engineering, R.E.C. Kurukshetra-August 1988 to July 1993
- Worked as Graduate Engineer Trainee in Escorts Limited, Faridabad (May to July 1988)

Professional Accomplishments

✦ LEAP

- ◆ Attended **Leadership for Academician Programme (LEAP)** of Ministry of Human Resource Development (MHRD), Government of India, organized by IIT Kharagpur in collaboration with IfM, University of Cambridge, UK, 11-22 November 2019 and 6-10 January 2020

✦ Fellowship

- ◆ Awarded **2020 DUO-India Professor Fellowship Award** with UNIVERSITA DEGLI STUDI DI PADOVA (UNIPD) (Padova University, Italy) (Partner Awardee Prof. Manuele Dabalà) [June 22 -July 21, 2022]

✦ GIAN COURSES

1. Coordinator, **GIAN Course on “Development of Theory and Technologies for Hybrid Metal Forming Processes”**, Resource Person: Professor Alexandar Pesin, Professor, NMSTU Russia, March 20-26, 2023, PDPM IIITDM Jabalpur India
2. Coordinator, **GIAN Course on “Designing Cyber-Physical Systems for general Societal and Personal Utilization”**, Resource Person: Professor Imre Horváth, Professor, Delft University of Technology, the Netherlands, September 1-11, 2020, PDPM IIITDM Jabalpur India
3. Coordinator, **GIAN Course on “Production Logistics: Theoretical and Practical Approach to the Theory of Constraints”**, Resource Person: Professor Alexandar Pesin, Professor, NMSTU Russia, September 1-8, 2018, PDPM IIITDM Jabalpur India

✦ PROJECTS

PROJECTS IN PROGRESS

1. Principal Investigator, Department of Science & Technology (DST) and Russian Science Foundation (RSF) Project – **Development of low weight nanostructured Functionally Graded Materials for high strength applications by hybrid asymmetric rolling and incremental forming methods**, 36 months, INR 4.773 million [TPN/64741] [Sanctioned: 18 February 2022]
2. Principal Investigator, Science and Engineering Research Board (SERB) Core Research Grant (CRG) Project – **Development of low-cost 3D printing technology for personalized nutritious food preparation**, 2023-26, INR 3.9 million (INR 38,61,264) (Co-PI: Dr. K. Ponappa).
3. Principal Investigator, Department of Science and Technology (DST), Policy Coordination and Programme Management (PCPM), National Science and Technology Management

Information System (NSTMIS) Project – **Additive Manufacturing and Internet of Things based Flexible Healthcare and Effective Pandemic Management**, 2023-26, INR 2.66 million (INR 26,59,402) (Co-PIs: Prof. V.K. Gupta and Dr. P. Khanna)

4. Mentor, Biotechnology Industry Research Assistance Council (BIRAC) Project – **Portable and Minimally Invasive Device to treat Pneumothorax, Hydropneumothorax and Hemothorax**, INR 4.34 million (INR 43.37 lakhs), 2023-24, BIRAC/FITT01011/BIG-19/21 (PI: Yogesh Kumar Bhanu, Enthudes Design Private Limited) (wef January 27, 2023)
5. DST (FIST Scheme), **Center for Excellence in the field of Smart Manufacturing and Condition Monitoring** (*FIST Engineering Sciences Level I Project*), 2018-23, INR 19.44 million (PI – V.K. Gupta)

PROJECTS COMPLETED

1. Principal Investigator, IMPRINT-India Project – **Development of Adaptive Double Sided Incremental Forming Process for Dieless Manufacturing**, 2017-22, INR 24.772 million (Co-PIs: Dr. P.K. Jain, Dr. P.K. Kankar)
2. Mentor, SERB TARE (Teachers Associateship For Research Excellence) Project – **Scale effect approach to evaluate the erosion mechanism and performance features in micro abrasive water jet machining process: A study of new approach based on process parameters and materials microstructures**, 36 months, INR 1.830 million (PI: Dr. Yuvraj N, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, T.N.) [TAR/2020/000429] [Sanctioned: 18 November 2020]
3. Co-Principal Investigator, Department of Science & Technology, Advanced Manufacturing Technology (AMT) Program, **Development of Induction-Conduction Based Material Deposition System for Metal Additive Manufacturing**, 2018-22, INR 4.234 million (PI: Dr. P.K. Jain, Co-PI: Dr. P.K. Kankar)
4. Principal Investigator, DST-RFBR Project under India-Russian Joint Research – **Numerical modeling and development of new methods for hybrid metal forming of complex parts of ultra-high strength (UHS) materials**, 2019-21, Rs INR 1.9644 million (from Indian Funding Agency)
5. Principal Investigator, DST-JSPS under India-Japan Cooperative Science Programme (IJCSP), **In-process monitoring of Stamping Process of a thin plate**, 2017-19, INR 0.876 million (from the Indian Funding Agency) (Co-PIs: Dr. P.K. Jain, Dr. P.K. Kankar)
6. Principal Investigator, Design Innovation Center Project, **Design of a Frugal Laundry Solution**, 2017-19, INR 0.299 million
7. Principal Investigator, BRNS Project – **Process Development for the Fabrication of Free Form Components through Incremental Sheet Forming**, 2012-17, INR 8.783 million (Co-PIs: Dr. P.K. Jain) (Rs. 87,82,932)
8. Co-Principal Investigator, Department of Science and Technology (Govt. of India) Project – **Development of Additive-Subtractive Integrated RP System for Improved Part Quality**, (PI: Dr. Prashant K. Jain, Co-PI: Dr. P.M. Pandey), 2014-17, INR 1.950 million
9. Mentor, Design Clinic Scheme for MSMEs, Student Design Project, **Design of Stove / Chulha for Rural Masses of India**, 2014-15, Duration: 4 months (Amount INR 0.15 million)
10. Principal Investigator, DST-JSPS Project under India-Japan Cooperative Science Programme (IJCSP) – **Development of a micro pump with NEMS sensing function for an automatic blood collecting and measurement system**, 2010. Duration: 2 years. (Amount: INR 0.438 million - from the Indian Funding Agency)

11. Principal Investigator, Department of Science and Technology (Govt. of India) Project – **Geometric Modeling, Analysis and Design for Generic Definitions of Custom-Engineered Cutting Tools** at IIITDM Jabalpur, 2008-12, INR 2.526 million
12. Co-Principal Investigator, Ministry of Human Resource Development (Govt. of India) Project – **Development of Virtual Laboratory on Automated systems (Mechatronics)** supported by National Mission for Education through ICT (NMEICT), 2010-13 (April 01, 2010, to October 2013), INR 4.1 million (P.I.: Dr. Tanuja Sheorey, Co-PI: Dr. V.K. Gupta)
13. Co-Principal Investigator, Ministry of Human Resource Development (Govt. of India) Project – **Development of Virtual Laboratory on Manufacturing** supported by National Mission for Education through ICT (NMEICT), 2010-13 (April 01, 2010, to October 2013), INR 4.1 million (P.I.: Dr. V.K. Gupta, Co-PI: Dr. Tanuja Sheorey)
14. Co-Principal Investigator, Department of Science and Technology (Govt. of India) Project – **Geometric Modeling of Cutting Tools using Reverse Engineering** at IIT Kanpur. Period 2000-03 (Amount: INR 1.1 million)
15. Coordinator, Ministry of Human Resource Development (MHRD), Govt of India, Research Project on **Integration of Design and Analysis Phase in Product Development Cycle** (Amount: INR 1.5 million)
16. **Development of Integrated CAD/CAM Lab** at N.I.T. Kurukshetra, funding from World Bank (TECHAID IV).
17. Principal Coordinator, **Tracking and Analysis of Metro Bus Service of Jabalpur City Transport Services Ltd. (JCTSL)**, sponsored by District Administration, Jabalpur City, (Amount: INR 0.15 million), 2008-09.

INSTITUTIONAL PROJECTS

1. Coordinator, **National Resource Center (NRC) for Design**, funded by Ministry of Human Resource Development (MHRD), Government of India under the Scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) - Annual Refresher Programme In Teaching (ARPIT), 2018-20, INR 1.970 million
2. Coordinator, **Institute Project**, Startup Center at IIITDM Jabalpur, 2016-19, INR 1.50 million
3. Nodal officer, **Institute Project**, Bharat Forge Ltd., Pune, India

*** PATENTS**

Total 23 (4 Granted, 17 Published, including 5 international, and 2 filed)

1. Ankit Kumar Gupta, Swarit Anand Singh and Puneet Tandon, **Portable Experimental Heating Setup**, Design Registration #379920-001, Sub Class 23-03-Heating Equipment [Filed on 23-Feb-2023] [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
2. Mithilesh Kumar Tiwari, Puneet Tandon and Ponappa K., **A Hybrid Additive Manufacturing Incremental Forming System and a method for operation thereof**, Patent Application No. 202221071229, Filed on December 9, 2022, Published on December 23, 2022, [RFE filed on January 5, 2023] [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
3. Rahul Soni, Ponappa K. and Puneet Tandon, **An IoT enabled three-dimensional Food Printing System and a method for operation thereof**, Patent Application No. 202221059835, Filed on October 19, 2022, Published on December 2, 2022, [RFE filed on January 5, 2023]

- [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
4. Ayushi Gupta, Ridhi Singhania, Rishika Kedia, Madhura Kulkarni, Meet Patel and Puneet Tandon, **Liquid Packing Container**, Design Registration # **362215-001** [Filed on 08 April 2022] [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
 5. Yogesh Kumar Bhanu and Puneet Tandon, **A Resting Platform and method of designing thereof**, Patent Application No. **202221009512**, Filed on February 23, 2022, Published on April 1, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [RFE filed on February 23, 2022]
 6. Meet Patel, Partha Sarathi Hukai, Saurav Basumotari and Puneet Tandon, **Citrus Squeezer**, Design Registration # **354533-001**, Date: 8 December 2021, Class: 07-04 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
 7. Parnika Shrivastava and Puneet Tandon, **Process of analyzing effect of preheated microstructure vis-à-vis parameters on Orange Peel in Incremental Sheet Forming of AA1050 sheets**, Australian Patent No. **2021106070**, **Date of Grant: November 24, 2021**, Filed on August 20, 2021,
 8. Yogesh Kumar Bhanu and Puneet Tandon, **An Electric Plug and its method of unplugging**, Patent Application No. **202121025733**, Filed on June 09, 2021, Published on November 11, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [Reply to FER filed on February 15, 2023]
 9. Yogesh Kumar Bhanu and Puneet Tandon, **A System for Supporting Body Movements while Using a Toilet Seat**, Patent Application No. **202121001563**, Filed on January 13, 2021, Published on July 15, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [FER response filed on 28-09-2022]
 10. Puneet Tandon and Nimit Nitinbhai Shah, **Fluid Dispensing Device**, Patent Application No. **202021053250**, Filed on December 7, 2020, Published on June 10, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [RFE filed on August 10, 2021]
 11. Yogesh Kumar Bhanu and Puneet Tandon, **Automated External Cardiac Defibrillation System based on High-Current Rectilinear Biphasic Waveform and Method of Operation**, Patent Application No. **202021052098**, Filed on December 1, 2020, Published on June 3, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [RFE filed on July 2, 2021]
 12. Yogesh Kumar Bhanu, Puneet Tandon, Nimit Nitinbhai Shah, Prasad Gadve and Dr. Vipul Kalley, **A Device to Treat Pneumo-HydroThorax**, Patent Application No. **202021042365**, Filed on September 29, 2020, Published on April 1, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [RFE filed on July 9, 2021] [Reply to FER submitted on October 7, 2022]
 13. Rishika Kedia and Puneet Tandon, **A Collapsible Garment Hanger**, Indian Patent Application No. **202021041871**, Filed on September 26, 2020, Published on June 17, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur] [RFE filed on September 26, 2020]
 14. S. S. Panwar, A. Gupta, M. A. Ahad, T. Mathur, S. Kolgaonkar, Puneet Tandon, **A Frugal Laundry System and Method of its Operation thereof**, Patent No. **415695**, **Date of Grant: 28-12-2022**, Application No. **202021030820**, Filed on July 20, 2020, Published on January 21, 2022 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, India]

15. A.M. Pesin, V.A. Kharitonov, E.M. Drigun, D.O. Pustovoitov, N.M. Lokotunina, Puneet Tandon, H. Yu., **Production Method of Multifaceted Calibrated Steel**, Patent Application No.: **2019141343**, Filed on December 11, 2019, Published on September 15, 2020, Bull. No. 26 [Patent Holder: Nosov Magnitogorsk State Technical University, Russia]
16. A.M. Pesin, V.A. Kharitonov, E.M. Drigun, D.O. Pustovoitov, N.M. Lokotunina, Puneet Tandon, H. Yu., **Surface Treatment Method of Solids of Revolution**, Patent Application No.: **2019141341**, Filed on December 11, 2019, Published on July 21, 2020, Bull. No. 5 [Patent Holder: Nosov Magnitogorsk State Technical University, Russia]
17. A.M. Pesin, V.A. Kharitonov, E.M. Drigun, D.O. Pustovoitov, N.M. Lokotunina, Puneet Tandon, H. Yu., **Method of producing calibrated hexagonal profiles from stainless steels**, Patent Application No.: **2019141345**, Filed on December 11, 2019, Published on July 10, 2020, Bull. No. 5 [Patent Holder: Nosov Magnitogorsk State Technical University, Russia]
18. A.M. Pesin, V.A. Kharitonov, E.M. Drigun, D.O. Pustovoitov, N.M. Lokotunina, Puneet Tandon, H. Yu., **Production of Shaped Profiles of High Accuracy**, Patent Application No.: **2019136176**, Filed on November 12, 2019, Published on June 04, 2020, Bull. No. 16 [Patent No. 2722847] [Patent Holder: Nosov Magnitogorsk State Technical University, Russia]
19. Nishant Kumar and Puneet Tandon, **A Laparoscopic Clip Applicator and method thereof**, Indian Patent Application No. **201821039737**, Filed on October 22, 2018, Published on April 24, 2020 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
20. Nirmal Kumar and Puneet Tandon, **A Laparoscopic Device and method thereof**, Indian Patent Application No. **201821038853**, Filed on October 12, 2018, Published on April 17, 2020 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
21. Dawn Varghese and Puneet Tandon, **A wearable device for posture monitoring and method thereof**, Indian Patent Application No. **201821038852**, Filed on October 12, 2018, Published on April 17, 2020 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]
22. Puneet Tandon, Satwik Priyadarshi, Saurabh Verma, Prashant Kumar Jain, IIITDM Jabalpur; Joseph Jacob Roy, Mahendra Kumar Samal, BARC, DAE and Debanik Roy, BRNS, DAE, Mumbai, **A Process and System for Manufacturing of Formed Sheets and/or Components thereof with Offset Contours**, Indian Patent Application No. **201721006539 A**, Filed on February 23, 2017, Published on June 02, 2017 [Applicant: Secretary, Department of Atomic Energy]
23. Ganesh S. and Puneet Tandon, IIITDM Jabalpur, **An Improved Energy Efficient Cooking Device, Patent No. 403582, Date of Grant: 16-08-2022**, Application No.: **201621038901**, Filed on November 16, 2016, Published on May 18, 2018 [Applicant: PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur]

✦ **Consultancy**

- Automation of Ammunition Loading and Handling system for Anti-Aircraft Gun, **Gun Carriage Factory, Jabalpur**, July 5, 2021 – July 4, 2022 (Amount: INR 20,06,000) (Co-Investigator: Prof. V.K. Gupta)
- Development of Adverto outdoor Digital Advertising Platform, **Swar Innovative Pvt. Ltd., Jabalpur**, November 1 – December 31, 2018 (Amount: INR 59,000)

- Principal Consultant, Analysis and Design Review of Primer Loader, Mounting of GSS and C18, **Gun Carriage Factory, Jabalpur**, November 25, 2017 – July 24, 2018 (Amount: INR 23,57,640)
- Die design for vacuum-forming of housing of wall-mount IoT based device, **SharpNode Technologies Pvt. Ltd., Mumbai**, May 05, 2017-June 30, 2017 (Amount: INR 43,240)
- Numerical Simulation and Analysis of Indigenized Primer for SRGM Ammunition, **Naval Armament**, March 24, 2017-June 30, 2017 (Amount: INR 98,670)
- Data analysis and prototype manufacturing, **Pooja Industry, Jabalpur**, 2017, (Amount: INR 19,550)
- Principal Consultant, Design, Redesign, FEA and Design Optimization of 155 mm/52 CAL Chassis, **Ordnance Development Centre (ODC), Gun Carriage Factory, Jabalpur**, September 15, 2017 – January 15, 2018 (Amount: INR 5,66,400)
- Principal Consultant, Assistance of IIITDM in Design of Twin Barrel Air Defense Gun as per scope of work, **Ordnance Development Centre (ODC), Gun Carriage Factory, Jabalpur**, October 26, 2016 – June 30, 2017 (Amount: INR 7,08,000)
- Complete Model Manufacturing of 155 mm 45 Cal gun Dhanush Model for Assembly with moving parts, **Gun Carriage Factory Jabalpur**, 2015-16, (Amount INR 2,18,695)
- Complete Model Manufacturing of 155 mm 45 Cal gun Dhanush, **Gun Carriage Factory Jabalpur**, 2015, (Amount INR 31,461)
- Model on FDM machine, **Guru Ramdas Khalsa Institute of Science and Technology, Barela, Jabalpur**, 2014, (Amount INR 2,027)
- Mathematical Model on FDM machine, **Guru Ramdas Khalsa Institute of Science and Technology, Barela, Jabalpur**, 2012, (Amount INR 9,492)
- Design and Fabrication of 45 mm Bottle Core, **Imaginarium (India) Pvt. Ltd.**, 2010
- Dynamic System for Vehicle Tracking and Performance Analysis for Nagar Nigam, Jabalpur, **Nagar Nigam Jabalpur**, 2008-09, (Amount: INR 150,000)
- Guided and successfully completed a few consultancy projects in CAD/CIMS

✳ **Research Supervision**

- Ph.D. Supervision – Awarded: 17; Submitted: 1; Under progress: 11
- Completed research guidance to 77 M.Tech./M.Des. Students and presently supervising 1 student
- Established “Advanced Manufacturing Center” at IIITDM Jabalpur
- Developed and established laboratories. Taught & developed a number of courses
- Framed the course curriculum of a new B.Tech. Mechanical and various M.Tech. Schemes

✳ **International Exposures / Collaborations**

- Participated in **Indo-US Workshop on Best Practices in US-India Higher Education Collaboration Workshop**, December 7-8, 2021
- DUO-India Fellowship at **UNIVERSITA DEGLI STUDI DI PADOVA (UNIPD) (Padova University, Italy)** (June 22 -July 21, 2022)

- Invited to **Central South University, Changsha, China**, October 9-12, 2019. Delivered a talk on “Incremental Forming: An Innovative Metal Forming Technique” at **Central South University, Changsha, China** on October 12, 2019
- Invited to **Nosov Magnitogorsk State Technical University (NMSTU), Magnitogorsk, Russia** by Ministry of Education and Science of the Russian Federation during June 1-9, 2018 for Plenary Report in the 3rd International Youth Conference Magnitogorsk Rolling Practice 2018

✳ Publications

- Total Publications: **323**
- Published 2 Books/Monographs, 8 edited books/proceedings, 20 Book Chapters, 142 papers in International peer-refereed journals of repute, and 151 in International/National Conferences. Besides, 14 papers are published in peer-reviewed journals and presented at International Conferences.

✳ Books/ Edited Books / Proceedings

- Amarnath, C., Tandon, P., Gupta, V.K., Sheorey, T. and Ansari, M.Z., 2021, *iNaCoMM 2021 5th International and 20th National Conference on Machines and Mechanisms*, 9-11 December 2021, Abstract and Schedule Book, Springer
- Tandon, P. (2011). *Cutting Tool Geometry: 3D Perspective*. AV Akademikerverlag GmbH & Co. KG, Germany. [ISBN 978-3-8465-2878-5]
- Pesin A.M., Chukin M.V., Drigun E.M., Tandon, P., Pustovoitov D.O., Chikishev, D.N., Lokotunina, N.M. and Pesin I.A. (2018). *On the possibility of the production of machine-building products on a plate mill*. Magnitogorsk: Magnitogorsk Publishing House. NMSTU, 2018. 128 p. (In Russian) The Studies were carried out as part of DST-RFRB grant (INT/RUS/RFBR/P-349 dated 02-01-2019)
- Tandon, P., Wisnoe, W. and Furutani, R. (Eds.) (2019) *MATEC Web of Conferences, 2018*, The 5th International Conference on Mechatronics and Mechanical Engineering (ICMME 2018), Vol. 256
- Tandon, P., Wisnoe, W. and Abdullah, M.Z.B. (Eds.) (2018) *MATEC Web of Conferences, 2017*, The 4th International Conference on Mechatronics and Mechanical Engineering (ICMME 2017), Vol. 153
- Yuan, H.L., Agarwal, R.K., Tandon, P. and Wang, E.X. (Eds.) (2017) *MATEC Web of Conferences, 2016*, 3rd International Conference on Mechatronics and Mechanical Engineering (ICMME 2016), Vol. 95.
- Chen, G., Amir, H.F.A., Tandon, P., Khiew, P.S. (Eds.) (2016) *Key Engineering Materials*, (Vol. 76)
- Tandon, P., Guo, M. (Eds.) (2015) *MATEC Web of Conferences, Vol. 34, 2015*, 2nd International Conference on Mechatronics and Mechanical Engineering
- Rui, H., Tandon, P., Zhang, T.T. (Eds.) (2014) *Proceedings of International Conference on Mechatronics and Mechanical Engineering, ICMME 2014*, Trans Tech Publications Ltd., Switzerland, ISSN: 16609336, ISBN 9783038352921
- Edited and published (jointly) One conference proceedings - National Conference on Recent Advances in Mechanical Engineering, March 1997.

✳ **Editor/Guest Editor of International Journals**

- a. Member, Editorial Board, FERROUS METALLURGY. Bulletin of Scientific, Technical and Economical, Published by Central Information and Techno-Economic Research Institute for Iron and Steel Industry, (Since April of 1944), Moscow, ISSN 0135-5910 (Print), ISSN 2619-0753 (Online) <https://chermetinfo.elpub.ru/jour/index>
- b. Member, Editorial Board, Journal of Modern Mechanical Engineering and Technology, Zeal Press
- c. Editor, MATEC Web of Conferences, Volume 256 (2019), 2018 the 5th International Conference on Mechatronics and Mechanical Engineering (ICMME 2018), Wuhan, China, November 10-12, 2018 [Editors: P. Tandon, W. Wisnoe and R. Furutani (Eds.)], <https://www.matec-conferences.org/articles/mateconf/abs/2019/05/contents/contents.html>
- d. Editor, MATEC Web of Conferences, Volume 153 (2018), 2017 the 4th International Conference on Mechatronics and Mechanical Engineering (ICMME 2017), Kuala Lumpur, Malaysia, November 28-30, 2017 [Editors: P. Tandon, W. Wisnoe and M.Z. bin Abdullah (Eds.)], <https://www.matec-conferences.org/articles/mateconf/abs/2018/12/contents/contents.html>
- e. Editor, MATEC Web of Conferences, Volume 95 (2017), 2016 the 3rd International Conference on Mechatronics and Mechanical Engineering (ICMME 2016), Shanghai, China, October 21-23, 2016 [Editors: H.L. Yuan, R.K. Agarwal, P. Tandon and E.X. Wang], Published online: 09 February 2017, <http://www.matec-conferences.org/articles/mateconf/abs/2017/09/contents/contents.html>
- f. Editor, Key Engineering Materials (Volume 706), Main Theme: Materials and Technologies in Engineering Activity, August 2016. [Editors: Guojian Chen, Haider F. Abdul Amir, Puneet Tandon, Poi Sim Khiew] <http://www.scientific.net/KEM.706.-5>
- g. Guest Editor, Design for All, (Special Issue on: "Design from Waste"), February 2016, Vol. 11, No. 2, 2016 (<http://www.designforall.in/newsletterfeb2016.pdf>)
- h. Editor, 2015 2nd International Conference on Mechatronics and Mechanical Engineering, ICMME 2015, 2015, MATEC Web of Conferences, Vol. 34, Pages: 1-222, E-ISSN: 2261236X, DOI: [10.1051/mateconf/20153400001](https://doi.org/10.1051/mateconf/20153400001)
- i. Guest Editor, Design for All, (Special Issue on: "Design for the Bottom of the Pyramid), March 2015, Vol. 10, No. 3, 2015 (<http://www.designforall.in/newslettermar2015.pdf>)
- j. Editor, Applied Mechanics and Materials, 2014 International Conference on Mechatronics and Mechanical Engineering, ICMME 2014, 2014, [Editors: He Rui, Puneet Tandon and Teresa T. Zhang], Vol. 664, Issue 1, Pages: 1-458, ISSN: 16609336, E-ISSN: 16627482, ISBN 978-3-03835-292-1. DOI: [10.4028/www.scientific.net/AMM.664](https://doi.org/10.4028/www.scientific.net/AMM.664)
- k. Guest Editor, International Journal of Manufacturing Technology & Management (Special Issue on: Recent Advances in Manufacturing Technologies), Vol. 27, No. 1/2/3, 2013
- l. Applied Mechanics and Materials Journal (AMM).
- m. Communications in Control Science and Engineering (CCSE), Published by American Society of Science and Engineering (<http://www.as-se.org/ccse/EditorialBoard.aspx>)
- n. Guest Editor of the Proceedings of International Conference on Mechanics and Control Engineering, (ICMCE 2013), Published by Trans Tech Publications, Switzerland

✳ **New Courses and Curricula Design**

- Member, UCEED-CEED Formation of Syllabus and Structure Review and Revision Committee (Pan India Committee for admissions to undergraduate and graduate programs in Design (wef September 1, 2021) [Approved by UCEED-CEED Implementation Committee: August 25, 2021]
- BTech (Design) – IIT Delhi Member, Curricula Expert Committee, [Approved by IIT Delhi Senate on May 5, 2021 and IIT Delhi Board on May 20, 2021]
- Coordinator, BTech Smart Manufacturing program, IIITDM Jabalpur (2020) [Approved by Senate – May 23, 2020]
- B.Des., Delhi Technological University, Delhi (2018) [Approved by Academic Council: February 23, 2018]
- M.Des. program – PDPM IIITDM Jabalpur (2015) [Approved by Senate – August 12, 2016] [38th Senate]
- B.Des. program – PDPM IIITDM Jabalpur (2015) [Approved by Senate – May 9, 2015] [34th Senate]
- Convener, Curriculum Review Committee (2010) of the undergraduate program, IIITDM Jabalpur
- Lead architect for BDes (2015), MDes (2008) and PhD (Design) (2010) programmes, IIITDM Jabalpur
- Part of the committee that framed the curriculum of MTech (Mechanical CAD/CAM) and MTech (Mechanical Manufacturing) (2014-15), IIITDM Jabalpur
- Part of the committee that framed the curriculum of BDes (2015), IIITDM Jabalpur
- Part of the committee that revised the curriculum of MDes (2016), IIITDM Jabalpur

✳ **Conferences/Workshops/Events Organized**

- Topic Chair, **ASME International Mechanical Engineering Congress & Exposition (IMECE) 2023**, New Orleans Ernest N. Morial Convention Center, New Orleans, LA, USA, October 29 – November 2, 2023 (<https://event.asme.org/IMECE>)
- Program Coordinator, E&ICT Academy-sponsored Faculty Development Program (FDP) on Curriculum Development in the Light of NEP 2020, PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, August 8-19, 2022
- Topic Chair, **ASME International Mechanical Engineering Congress & Exposition (IMECE) 2022**, Columbus, OH, USA, October 30 - November 3, 2022 (<https://event.asme.org/IMECE>)
- Co-Chair, **2nd International Conference on Industry 4.0 and Advanced Manufacturing (I-4AM 2022)** (Online), Indian Institute of Science, Bengaluru, 10-11 January 2022
- Co-Chair, iNaCoMM2021: 5th International and 20th National Conference on Machines and Mechanisms, PDPM IIITDM Jabalpur, 9-11 December 2021 (<https://www.iiitdmj.ac.in/inacomm2021.iiitdmj.ac.in/>)
- Chair, Start-Up and Tech Briefings Track, **13th Innovations in Software Engineering Conference (ISEC 2020)**, PDPM IIITDM Jabalpur, 27-29 February 2020 (<https://isoft.acm.org/isec2020/team.html>)
- Co-Chair, **1st International Conference on Industry 4.0 and Advanced Manufacturing (I-4AM 2019)**, Indian Institute of Science, Bengaluru, 28-29 June 2019

- Coordinator, One Week Short Term Training Program (STTP) on “**Mechanical Manufacturing & Monitoring using MATLAB**” (MMM-2018), Sponsored by Electronics & ICT (E&ICT) Academy, PDPM IIITDM Jabalpur at VNIT Nagpur, December 06-11, 2018
- Coordinator, **GIAN Course** on “**Production Logistics: Theoretical and Practical Approach to the Theory of Constraints**”, Resource Person: Professor Alexandar Pesin, Professor, NMSTU Russia, September 1-8, 2018, PDPM IIITDM Jabalpur India
- Coordinator, **Author workshop** to “**Improve Research Discoveries and Identifying Paper Publication Opportunities**”, Resource Person: Priyank Taparia, IET Services (India) Pvt. Ltd., August 28, 2018, PDPM IIITDM Jabalpur
- Member, Organizing Committee, **1st International and 4th National Conference on Reliability and Safety Engineering (INCRS-2018)**, February 26-28, 2018, PDPM IIITDM Jabalpur, India
- Coordinator, One Week Short Term Training Program (STTP) on “**Mechanical Manufacturing & Monitoring using MATLAB**” (MMM-2017), Sponsored by Electronics & ICT (E&ICT) Academy, PDPM IIITDM Jabalpur at VNIT Nagpur, December 11-16, 2017
- Organized a One-day Event on nurturing startups - “**Zero to One**” in association with ‘Jabalpur Startup’, PDPM IIITDM Jabalpur, April 15, 2017
- Organized a One-day Workshop on “**IP AWAKE - An Awareness Seminar on Intellectual Property Rights for Academia**” in coordination with Confederation of Indian Industry (CII) and Intellectual Property India (IP), PDPM IIITDM Jabalpur, January 21, 2017
- Coordinator, **Design Workshop** on “**Internet of Process Centric Design and Manufacture**”, PDPM IIITDM Jabalpur, December 12-14, 2016
- Coordinator, **Design Workshop** on “**Process Centric Design and Manufacture**”, PDPM IIITDM Jabalpur, December 8-10, 2015
- Coordinator, **Design Workshop** on “**User Centric Design**”, PDPM IIITDM Jabalpur, December 8-10, 2014
- Coordinator, Workshop on “**IPR Awareness**”, PDPM IIITDM Jabalpur, February 8, 2014
- Member, Organizing Committee, **IEEE Sponsored International Conference on Control, Automation, Robotics and Embedded Systems (CARE 2013)**, December 16-18, 2013, PDPM IIITDM Jabalpur
- Member, Organizing Committee, **Mini Design Workshop (Mini DeW 2013)**, December 6-7, 2013, PDPM IIITDM Jabalpur
- Coordinator, **International Conference on Innovations in Design and Manufacturing (InnDeM 2012)**, PDPM IIITDM Jabalpur, December 5-7, 2012.
- Organized three conferences of the national level at N.I.T./R.E.C. Kurukshetra.
- Organized a 5-day Workshop on “**Design (DeW 2010)**” during October 11-15, 2010 on “**Leading-edge Theories and Practices in Design**” along with Japanese Collaborators
- Organized a Two-day Workshop on “**Design and Development of NDT Equipment for Product Development**” from the Department of Science & Technology, New Delhi on September 01-02, 2005. (Funding: Rs. 2.5 Lacs)
- Member, Organizing Committee, National Workshop on “**Future of the Past: Use of Modern Technologies in the Study of the Past**”, held at IIT Kanpur, 12 June to 7 July 2006
- Member, Organizing Committee, International Symposium on Frontiers of Research on Speech and Music (FRSM 2006), January 9-10, 2006

- Member, Organizing Committee, National Workshop on “Tsunami Rehabilitation”, September 23-25, 2005
- Member, Organizing Committee, All India Seminar on Emerging Trends In Mechanical Engineering, N.I.T. Kurukshetra, India, March 29-30, 2005
- Officer-in-Charge, Literati (Students’ Technical Symposium), N.I.T., Kurukshetra, 2003.
- Joint Secretary, Organizing Committee, National Conference on Recent Advances in Mechanical Engineering, R.E.C. Kurukshetra, March 7-8, 1997
- Member, Organizing Committee, National Conference on Operations Research in Modern Technology, R.E.C. Kurukshetra, March 8-9, 1996

✳ Conferences Chair

- (a) 2nd International Conference on Industry 4.0 and Advanced Manufacturing (I-4AM 2022), (online) Indian Institute of Science, Bengaluru, during 10-11 January 2022
- (b) Chair, Start-Up and Tech Briefings Track, **13th Innovations in Software Engineering Conference (ISEC 2020)**, PDPM IIITDM Jabalpur, 27-29 February 2020 (<https://isoft.acm.org/isec2020/team.html>)
- (c) Conference Chair, **International Conference on Mechatronics and Mechanical Engineering, ICMME 2018**, Wuhan, China, November 10-12, 2018 (www.icme.org)
- (d) Conference Chair, **International Conference on Mechatronics and Mechanical Engineering, ICMME 2017**, Kuala Lumpur, Malaysia, November 28-30, 2017 (www.icme.org)
- (e) Conference Chair, Session Chair and Keynote Speaker, **International Conference on Mechatronics and Mechanical Engineering, ICMME 2016**, Shanghai, China, October 21-23, 2016 (www.icme.org)
- (f) Conference Chair and Session Chair, **2016 International Conference on Design, Materials and Manufacturing (ICDMM 2016)**, Kuala Lumpur, Malaysia, March 25-27, 2016 (<http://www.icdmm.org/index.html>)
- (g) Conference Chair, **2015 International Conference on Mechatronics and Mechanical Engineering (ICMME 2015)**, Singapore, September 15-16, 2015 (<http://www.icmme.org>)
- (h) Conference Chair, **2014 International Conference on Mechatronics and Mechanical Engineering (ICMME 2014)**, Chengdu, China, September 6-8, 2014 (<http://www.icmme.org>)
- (i) Conference Chair, **2nd International Conference on Mechanics and Control Engineering, ICMCE 2013**, Beijing, China, September 1-2, 2013 (www.icme.org)
- (j) Conference Chair, **2nd International Conference on Microelectronics, Optoelectronics and Nanoelectronics, ICMON 2013**, Beijing, China, September 1-2, 2013 (www.icmon.org)
- (k) Conference Chair and Keynote Speaker, **International Conference on Mechanics and Control Engineering, ICMCE 2012**, Shanghai, China, August 25-26, 2012 (www.icme.org)
- (l) Conference Chair and Keynote Speaker, **International Conference on Image, Vision and Computing, ICIVC 2012**, Shanghai, China, August 25-26, 2012 (www.icivc.org)

✳ Conferences Advisory Committees

- (a) Member, National Advisory Committee, **International Conference on Artificial Intelligence, Advanced Materials, and Mechatronics Systems (AIAMMS-2023)**, 6-7 October 2023, JECRC University, Jaipur, Rajasthan (INDIA)
- (b) Member, Advisory Committee, **National Conference on Outcome Based Education- Perspectives and Practices**, 17-19 April 2023, Thapar Institute of Engineering & Technology (TIET), Patiala, India
- (c) Member, International Organizing Committee – Asia – **CAD'23 - The 20th International CAD Conference**, 10-12 July 2023, Metropolitan Autonomous University, Cuajimalpa, Mexico City, MEXICO. (<https://cad-conference.net/organization.html#.Y1IGMXbP3D4>)
- (d) Member, National Advisory Committee, **First International Conference on Material Science, Mechanics, and Technology (ICMMT 2022)**, 23-24 December 2022, Department of Mechanical Engineering, Sushila Devi Bansal College Indore, India
- (e) Member, International Organizing Committee – Asia – **The 19th International CAD Conference, CAD'22**, 11-13 July 2022, Beijing, China. (www.cad-conference.net)
- (f) Member, Advisory Committee, **International Conference on Advances in Mechanical Engineering (ICAME-22)**, 27-28 May 2022, Department of Mechanical Engineering, GH Rasoni College of Engineering, Nagpur & GH Rasoni Institute of Engineering & Technology, Nagpur, India (<https://ghrce.raisoni.net/icame-2022/index.php>)
- (g) Member, National Advisory Committee, **International Conference on Multidisciplinary Research and Management – 2022 (ICMRM-22)**, 4-5 March 2022, GH Rasoni University Saikheda, India (<https://ghru.edu.in/>)
- (h) Member, Advisory Committee, **International Conference on Industrial Engineering and Management (ICIEM-2021)**, 17-19 December 2021, Malviya National Institute of Technology, Jaipur, India (<http://iciem2021.com/>)
- (i) Member, International/ National Advisory Committee, **2nd International Conference on Industrial and Manufacturing Systems (CIMS-2021)**, 11-13 November 2021, Punjab Engineering College, Chandigarh (<https://pec.ac.in/cims-2021/>)
- (j) Member, Conference Advisory Board, **International Conference on Advanced Manufacturing and Materials Processing (CAMMP 2021)**, 24-25 July 2021, Malviya National Institute of Technology Jaipur (<https://icammp2021.in/>)
- (k) Member, International Organizing Committee – Asia – **The 18th International CAD Conference, CAD'21**, July 5-7, 2021, Polytechnic University of Catalonia, Barcelona, Spain. (www.cad-conference.net)
- (l) Member, Advisory Committee, **International Conference on Advances in Materials, Mechanics, Mechatronics and Manufacturing (IC4M 2021)**, Online, 06-07 March 2021
- (m) Member, International Organizing Committee, **Third International Conference on Smart Technologies for Energy, Environment & Sustainable Development (ICSTEESD-2020)**, December 4-5, 2020, G. H. Rasoni College of Engineering, Nagpur, India
- (n) Member, International Organizing Committee, **International Conference on Mechatronics and Artificial Intelligence (ICMAI-2020)**, October 2020, Faculty of Engineering and Technology, Shree Guru Gobind Singh Tricentenary (SGT) University, Gurugram, India
- (o) Member, International Organizing Committee – Asia – **The 17th International CAD Conference, CAD'20**, July 6-8, 2020, Polytechnic University of Catalonia, Barcelona, Spain. (www.cad-conference.net)
- (p) Member, National Advisory, **International Conference on Industrial and Manufacturing Systems (CIMS - 2020)**, June 26-28, 2020, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA

- (q) Member, Advisory Committee, **The 7th International Conference on Digital Manufacturing and Automation (ICDMA 2020)**, Osaka International Convention Center, Osaka, Japan, May 10-12, 2020
- (r) Member, National Advisory Committee, **Advances in Mechanical Engineering (AME-2020)**, Sant Longowal Institute of Engineering & Technology (SLIET), Longowal, Punjab, India, February 26-29, 2020
- (s) Member, International Advisory Committee, **International Conference on Engineering, Mathematical and Computational Intelligence (ICEMCI 2019)**, Jabalpur Engineering College Jabalpur, India, December 21-23, 2019
- (t) Member, National Advisory, **6th International Conference on Production and Industrial Engineering (CPIE 2019)**, Dr B.R. Ambedkar National Institute of Technology, Jalandhar, INDIA, June 8-10, 2019
- (u) Member, International Organizing Committee – Asia – **The 16th International CAD Conference, CAD'19**, June 24-26, 2019, Singapore. (www.cadconferences.com)
- (v) Member, Advisory Committee, **The International Conference on Advances in Mechanical Engineering and Nanotechnology (ICAMEN-2019)**, Manipal University, Jaipur, March 8-9, 2019
- (w) Member, Advisory Committee, **2nd International Conference on New Frontiers in Engineering, Science & Technology (NFEST-2019)**, organized by National Institute of Technology, Kurukshetra, February 18-22, 2019
- (x) Member, National Advisory Committee, **4th International Conference Nanocon 018 - Nanotechnology-Applications, Advances and Innovations**, organized by Bharati Vidyapeeth University, Pune, October 25-26, 2018
- (y) Member, International Organizing Committee – Asia – **The 15th International CAD Conference, CAD'18**, July 9-11, 2018, the Ecole Normale Supérieure Paris-Saclay (ENS Paris-Saclay) Paris. (www.cadconferences.com)
- (z) Member, Conference Committee, **The 2017 International Conference of Computational Intelligence and Intelligent Systems (ICCIIS'17)**, London, U.K., July 5-7, 2017
- (aa) Member, Advisory Committee, National Conference on Recent Advances in Mechanical Engineering (NCRAME 2017), National Institute of Technology, Kurukshetra, Haryana, India, June 02-03, 2017
- (bb) Member, International Advisory Committee, **3rd International Conference on Advancements and Recent Innovations in Mechanical, Production and Industrial Engineering (ARIMPIE-2017)**, I.T.S Engineering College, Greater Noida, Uttar Pradesh, India, April 21-22, 2017
- (cc) Member, Advisory Committee, **Smart and Innovative Technologies in Engineering and Sciences (SITES 2016)**, Gyan Ganga College of Technology, Jabalpur, November 11-12, 2016 (www.ggct.co.in)
- (dd) Member, The National Advisory Committee of **International Conference on Evolutions in Manufacturing: Technologies and Business Strategies for Global Competitiveness**, organized by Institution of Engineers (India), Jharkhand in association with Department of Production Engineering, Birla Institute of Technology, Mesra, Ranchi, November 12 – 13, 2016
- (ee) Member, Conference Committee, **The 2016 International Conference of Computational Intelligence and Intelligent Systems (ICCIIS'16)**, London, U.K., June 29 – July 1, 2016

- (ff) Member, Advisory Board, **International Conference on Trends in Industrial and Mechanical Engineering (IC TIME)**, February 4-6, 2016 at Maulana Azad National Institute of Technology (MANIT) Bhopal, India
- (gg) Member, Conference Committee, **The 2015 International Conference of Computational Intelligence and Intelligent Systems (ICCIIS'15)**, London, U.K., July 1-3, 2015
- (hh) Member, International Advisory Committee, **International Conference on Advancement and Recent Innovations in Mechanical, Production and Industrial Engineering**, February 27-28, 2015 at ITS Engineering College Greater Noida, India
- (ii) Member, National Advisory Committee, **3rd International Conference Nanocon 014 - Smart Materials, Composites, Applications and New Inventions**, organised by Bharati Vidyapeeth University, Pune, in association with North Carolina A & T State University, Greensboro, USA (NCAT), Tuskegee University, Alabama, USA (TU), The University of Tokushima, Japan and Centre for Materials for Electronics Technology (C-MET), Department of Information Technology, Government of India, Pune, October 14-15, 2014
- (jj) Member, Conference Committee, **The 2014 International Conference of Computational Intelligence and Intelligent Systems (ICCIIS'14)**, London, U.K., July 2-4, 2014
- (kk) Member, Advisory Committee and Technical Program Committee, **XVI Annual Conference of International Academy of Physical Science (CONIAPS 2014)** on Physical Science and Technology for Sustainable Development, held on March 20-22, 2014 at PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur
- (ll) Member, Advisory Committee – **International Conference on Mechanical Engineering: Emerging Trends for Sustainability (IC MEETS)**, MANIT Bhopal, January 29-31, 2014
- (mm) Member, Advisory Committee and Resource Person, **Workshop on Recent Trends in CAD/ CAM/CAE**, MET's Institute of Engineering, Bhujbal Knowledge City, Nasik, 2014
- (nn) Member, Advisory Committee – **The Second International Conference on Intelligent Robotics, Automation and Manufacturing (IRAM) 2013**, IIT Indore, December 16-18, 2013
- (oo) Member, Advisory Committee – **IEEE Sponsored International Conference on Control, Automation, Robotics and Embedded Systems (CARE 2013)**, December 16-18, 2013, PPDM IIITDM Jabalpur
- (pp) Member, National Advisory Committee – **Manufacturing: Vision for Future**, IIT Guwahati, October 12-13, 2013
- (qq) Member, Conference Advisory Committee, **International Conference on Emerging Materials Technology, ICEMT 2013**, Gyan Ganga Group of Institutions, Jabalpur, April 8-10, 2013 (www.ggits.org/icemt2013)
- (rr) Member, Advisory Committee – **National Conference on New Technologies and their Applications to Engineering**, Guru Ramdas Khalsa Institute of Science and Technology, Jabalpur, March 16-17, 2013. (<http://www.grkist.com/ntae2013/>)
- (ss) Member, Advisory Committee – **National Conference on Recent Trends in Industrial Design and Production**, Takshila Institute of Engineering and Technology, Jabalpur
- (tt) Member, Advisory Committee – **All India seminar on Advancement in Mechanical Engineering**, Takshila Institute of Engineering and Technology, Jabalpur
- (uu) Member, Long Term Planning Committee – **Computer Aided Design Conference and Exhibition / Journal – Computer Aided Design & Applications** (www.cadconferences.com)
- (vv) Member, National Advisory Committee, **27th National Convention of Production Engineers and National Seminar on Advancements in Manufacturing-Vision 2020 (NCPE)**, BIT, Mesra, Ranchi, May 25-26, 2012

(ww) Member, Technical Advisory Committee, **Third International and 24th All India Manufacturing Technology Design & Research Conference**, Andhra University, Vishakapatnam, India during December 13-15, 2010

✳ **Conferences Program Committees/Technical Committees/Session Chairing**

- (a) Member, Programme Committee, **9th Conference on Product Lifecycle Management in Smart, Connected and Sustainable Ecosystem (PLMSS 23)**, Aeronautical Development Agency (ADA), Bangalore, India, 6-8 December 2023 (<https://plmss.org.in/plmss-2023>)
- (b) Member, International Programme Committee, **9th International Conference on Research into Design (ICoRD' 23)**, Centre for Product Design and Manufacturing (CPDM), Indian Institute of Science (IISc) Bangalore, India, 9-11 January 2023 (<https://cpdm.iisc.ac.in/icord23/>)
- (c) Member, Technical Committee, **The 8th International Conference on Digital Manufacturing and Automation (ICDMA 2022)**, China University of Geosciences (CUG), Wuhan, China, 25-27 November 2022 (<http://www.icdma.org/>)
- (d) Session Chair, Session #3, Mechanical System Design and Mechanical Analysis in the 2022 5th International Conference on Digital Manufacturing and Automation (ICDMA 2022), School of Mechanical Engineering and Electronic Information, China University of Geosciences, Wuhan, 25-27 November 2022, on 27 November 2022, Beijing Time: 9:30 am to 11:15 am.
- (e) Session Chair, Session 02-07-01: Session #1: Innovative Product and Process Design in ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022) (Track: Advanced Manufacturing), Columbus, OH, USA, Tuesday, 1 November 2022, PET: 10:15 am to 12:00 pm (<https://imece.secure-platform.com/a/solicitations/182/sessiongallery>)
- (f) Session Chair, Session 02-07-02: Session #2: Innovative Product and Process Design in ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022) (Track: Advanced Manufacturing), Columbus, OH, USA, Tuesday, 1 November 2022, PET: 13:30 to 15:15 pm (<https://imece.secure-platform.com/a/solicitations/182/sessiongallery>)
- (g) Member, Technical Programme Committee, **International Conference on Innovations in Mechanical and Materials Engineering (IMME 2022)**, Department of Mechanical Engineering, Motilal Nehru National Institute of Technology (MNNIT) Allahabad, Prayagraj, India, 4-6 November 2022 (<http://www.mnnit.ac.in/imme2022/index.html>)
- (h) Member, Programme Committee, **VI International Youth Conference Magnitogorsk Rolling Practice 2022**, NMSTU, Magnitogorsk, Russia, 31 May - 4 June 2022 (<http://mrp.magtu.ru/en/workshop/the-programme-committee.html>)
- (i) Panelist, 'Design, Form and Chaos' - Addressing the challenges of new courses, curriculum and pedagogies for a culture of innovation, antaaya 2021 – 2nd Design Education Symposium, Department of Design, IIT Guwahati, 7-9 October 2021
- (j) Member, Programme Committee, **5th Magnitogorsk Materials Week Conference (MMW)** (in memory of Prof. Alexander Zhilyaev), Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, 5-7 April 2021 (<https://matweek.com/>)
- (k) Panelist, Online Panel Discussion on the **Implementation of National Education Policy (NEP) 2020**, PSIT College of Engineering, Kanpur, on Saturday, 13 March 2021.
- (l) Session Chair, Session 7 - AD7: Application of Design Knowledge in Practice (Automotive, Aerospace, Biomedical Devices, etc.) during **8th International Conference on Research into**

- Design (ICoRD' 21)**, IDC School of Design, Indian Institute of Technology Bombay, India, Sunday, 10 January 2021, IST:1330-1500 (<http://www.idc.iitb.ac.in/icord2021/>)
- (m) Member, International Programme Committee, **8th International Conference on Research into Design (ICoRD' 21)**, IDC School of Design, Indian Institute of Technology Bombay, India, 7-10 January 2021 (<http://www.idc.iitb.ac.in/icord2021/>)
 - (n) Member, Programme Committee, **The 5th International Youth Scientific and Technical Conference, Magnitogorsk Rolling Practice 2020**, NMSTU, Magnitogorsk, Russia, 24-27 November 2020 (<http://mrp.magtu.ru/en/workshop/the-programme-committee.html>)
 - (o) Member, Steering Committee, **2019 The 6th International Conference on Mechatronics and Mechanical Engineering (ICMME 2019)** and **4th International Conference on Functional Materials and Metallurgy (ICFMM 2019)**, Osaka, Japan, 27-30 November 2019 (<http://www.icmme.org>, <http://www.icfmm.org>)
 - (p) Member, Programme Committee, **The 12th Pacific Rim International Conference on Water Jet Technology (PRIC2019)**, 7-10 August 2019, The University of Tokyo, Kashiwa Campus, Japan (<https://www.pric2019.com/>)
 - (q) Member, International Programme Committee, **7th International Conference on Research into Design (ICoRD' 19)**, Indian Institute of Science Bangalore, India, January 9-11, 2019 (<https://cpdm.iisc.ac.in/icord19/>)
 - (r) Session Chair, Session 5: Performance/Failure Analysis of Materials in Service, February 26, 2018 (15:00-16:30) during INCRS-2018, **1st International and 4th National Conference on Reliability and Safety Engineering (INCRS-2018)**, 26-28 February 2018, IIITDM Jabalpur, India (<https://www.iiitdmj.ac.in/others/conferences/INCRS-2018/>)
 - (s) Member, Organizing Committee, **1st International and 4th National Conference on Reliability and Safety Engineering (INCRS-2018)**, 26-28 February 2018, IIITDM Jabalpur, India (<https://www.iiitdmj.ac.in/others/conferences/INCRS-2018/>)
 - (t) Member, International Organizing Committee – Asia - **Computer Aided Design Conference and Exhibition, CAD' 17**, 10-12 August 2017, Okayama, Japan (<http://www.cadconferences.com/IOCAAsia.html#.WRQZMVWGOUm>)
 - (u) Member, Scientific Programme Committee, **2017 International Conference on Physics and Mechanics of New Materials and their Applications (PHENMA 2017)**, PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, India, October 14-16, 2017 (http://phenma2017.iiitdmj.ac.in/organising_cmtee.html)
 - (v) Member, International Programme Committee, **6th International Conference on Research into Design (ICoRD' 17)**, Indian Institute of Technology Guwahati, India, January 9-11, 2017 (<http://iitg.ac.in/icord17/org.html>)
 - (w) Session Chair of the Session on Advanced Forming-3, **2015 ASME International Mechanical Engineering Congress & Exposition, 2015 IMECE**, Houston, Texas, USA, November 13-19, 2015.
 - (x) Member, Program Committee, **5th International Conference on Research into Design (ICord '15)**, January 7-9, 2015 at Indian Institute of Science (IISc) Bangalore
 - (y) Session Chair, **The Second International Conference on Intelligent Robotics, Automation and Manufacturing (IRAM 2013)**, IIT Indore, December 18, 2013
 - (z) Chair, Panel Discussion on "'CARE' - Challenges and Opportunities to our society" at **IEEE Sponsored International Conference on Control, Automation, Robotics and Embedded Systems (CARE 2013)**, December 17, 2013, PPDM IIITDM Jabalpur

- (aa) Member, Program Committee – **1st International & 16th National Conference on Machines and Mechanisms (iNaCoMM 2013)**, IIT Roorkee, December 18-20, 2013
- (bb) Session Chair, **2nd International Conference on Mechanics and Control Engineering, ICMCE 2013**, Beijing, China, September 1-2, 2013.
- (cc) Session Chair, **The 2013 International Conference of Computational Intelligence and Intelligent Systems, World Congress on Engineering, WCE 2013**, London, July 3-5, 2013.
- (dd) International Programme Committee – **Third International Conference on Product Life Cycle Management, Modeling, Simulation and Synthesis (PLMSS 2011)** to be held at PSG College of Technology, Coimbatore in December 2011
- (ee) Chairman, Technical Session on Manufacturing at **International Conference on Manufacturing Science & Technology (ICMST 2011)** held at Singapore, September 16-18, 2011
- (ff) Member, International Programme Committee – **Computer Aided Design Conference and Exhibition – CAD'11** held at Taipei (June 27-30, 2011)
- (gg) Chairman, Technical Session on “Novel Algorithms” at **Computer Aided Design Conference and Exhibition – CAD'11** held at Taipei (June 27-30, 2011)
- (hh) Chairman, Technical Session on CAD at **First International and 22nd All India Manufacturing Technology Design & Research Conference**, IIT Roorkee, India on December 22, 2006
- (ii) Keynote Speaker and Chairman, Technical Session on Mechanical Engineering at **National Conference on Futuristic Trends in Engineering and Technology**, JNCEDLM College of Engineering, Sirsa, January 28-29, 2008

✳ **Keynote/Plenary Addresses/Talks**

- Delivered a Keynote talk on “Dieless Manufacturing” on December 22, 2022 at the **4th International Conference on Smart and Sustainable Developments in Materials, Manufacturing and Energy Engineering (SME-2022)**, organized by Department of Mechanical Engineering, NITTE University and NMAM Institute of Technology, Udupi, Karnataka, India, 22-23 December 2022
- Invited as an Expert speaker and delivered a talk on “**Disruptive Disruption or Disruptive Innovation**” on December 21, 2022 at the **Industry-Academia Conclave-2022** organized by Department of Mechanical Engineering, NITTE University and NMAM Institute of Technology, Udupi, Karnataka, India
- Invited to deliver a talk on “Hybrid Manufacturing” on 5 April 2021 in the 5th Magnitogorsk Materials Week Conference (MMW) (in memory of Prof. Alexander Zhilyaev), Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, 5-7 April 2021 (<https://matweek.com/>)
- Invited to deliver a Keynote speech on “Hybrid Manufacturing” on 19 March 2021 in the **3rd International Conference on Advances in Mechanical Engineering and Nanotechnology (ICAMEN-2021)**, jointly organized by Manipal University Jaipur, India and National Institute of Technology, Uttarakhand, India, 18-19 March 2021
- Invited to deliver a talk on “Incremental Forming” at **International Seminar on Forming Technology (ISFT 20)**, coinciding with IMTEX FORMING 2020, Bangalore, India, 22 January 2020

- Invited to deliver a talk at the **International Conference on Engineering, Mathematical and Computational Intelligence**, December 21-23, 2019, Jabalpur Engineering College, Jabalpur, India
- Delivered a talk on “Incremental Forming: An Innovative Metal Forming Technique” at Central South University, Changsha, China, October 12, 2019
- Delivered a Keynote lecture on “Incremental Sheet Forming at Elevated Temperature” on 11 October 2019 at **International Conference on Lightweight Materials and Manufacture 2019 (ICLMM 2019)**, Changsha, China, October 9 - 12, 2019
- Delivered a Plenary Address on “Elevated Temperature - Incremental Forming” at **4th International Youth Workshop at Magnitogorsk Rolling Practice 2019**, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, June 04-07, 2019
- Delivered a Keynote on “Incremental Forming: An Innovative Metal Forming Technique” at **2nd Magnitogorsk Materials Week, Spring 2019**, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, March 25-28, 2019
- Delivered a Keynote speech “Revolution in Manufacturing through Additive Manufacturing and Industry 4.0” at **International Conference on Mechatronics and Mechanical Engineering (ICMME 2018)**, Wuhan, China, November 10-12, 2018 (www.icme.org)
- Delivered an Invited talk on “Advanced Metal Forming Techniques: Incremental Sheet Forming” at 3rd International Youth Workshop on Magnitogorsk Rolling Practice 2018, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, June 05-08, 2018
- National Conference on Emerging Trends in Manufacturing & Automation Engineering (NCMAE-2017), Amity University Madhya Pradesh, Gwalior, October 6, 2017
- Delivered a Keynote talk on “Dieless Manufacturing” at National Conference on Emerging Trends in Manufacturing & Automation Engineering (NCMAE-2017), Amity University Madhya Pradesh, Gwalior, October 6, 2017
- Delivered an Invited talk on “Dieless Manufacturing” at QIP Short Term Course on Recent Advancement in Product Design, Manufacturing and Maintenance Techniques (**DMMT 2017**), PDPM IIITDM Jabalpur, September 18, 2017 (<http://dmmt.iiitdmj.ac.in/index.html>)
- Delivered an Invited talk on “Design intent Capturing for Product Design” at QIP Short Term Course on Recent Advancement in Product Design, Manufacturing and Maintenance Techniques (**DMMT 2017**), PDPM IIITDM Jabalpur, September 16, 2017 (<http://dmmt.iiitdmj.ac.in/index.html>)
- Delivered an Invited talk on “Inculcating the Culture of Innovation in Technical Education” at Workshop on Innovations and the Society Organized by Jabalpur Academia Initiative (**JAI 2016**), PDPM IIITDM Jabalpur, December 5-6, 2016 (<http://innsoc2016.iiitdmj.ac.in/index.html>)
- Delivered a Keynote address “Digital Dieless Manufacturing” at Smart and Innovative Technologies in Engineering and Sciences (**SITES 2016**), Gyan Ganga College of Technology, Jabalpur, November 11, 2016 (www.ggct.co.in)
- Delivered a Keynote address “Innovations in Digital Manufacturing: Incremental Sheet Forming” at International Conference on Mechatronics and Mechanical Engineering (**ICMME 2016**), Shanghai, China, October 21-23, 2016 (www.icme.org)
- Delivered a Keynote address “Digital Design and Manufacturing: With focus on Incremental Sheet Forming” at 2016 International Conference on Design, Materials and Manufacturing (**ICDMM 2016**), Kuala Lumpur, Malaysia, March 25-27, 2016

- Delivered a Keynote address “CAD enabled Modern Sheet Metal Forming: Tools and Techniques” at International Conference on Mechatronics and Mechanical Engineering (**2015 ICMME**), Singapore, September 16, 2015
- Delivered a Lead Lecture on “Universal Design” at 12th International Ergonomics Conference - **HWWE 2014** – Humanizing Work and Work Environment December 3-5, 2014 at IIT Guwahati on December 04, 2014
- Delivered a Keynote address “Dieless Forming of Sheet Metal Products” at International Conference on Mechatronics and Mechanical Engineering (**2014 ICMME**), Chengdu, China, September 07, 2014
- Delivered Keynote speech on “CAD/CAM – Need and Applications” at the short-term course on “CAD/CAM and Advanced Machining” at Motilal Nehru National Institute of Technology Allahabad, July 01, 2014
- Delivered Keynote Speech on “Capturing Design Knowledge” at National Workshop on CAD/CAM/CAE, held on March 24-25, 2014 at MCTE Institute of Engineering, Nasik
- Delivered Keynote Speech on “Dieless Manufacturing” at XVI Annual Conference of International Academy of Physical Science (**CONIAPS 2014**) on Physical Science and Technology for Sustainable Development, held on March 20-22, 2014 at PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur
- International Conference on “Mechanical Engineering: Emerging Trends for Sustainability” (**IC MEETS**), MANIT Bhopal, January 29-31, 2014 on “*Capturing Knowledge in Design Development Process*”
- The Second International Conference on Intelligent Robotics, Automation and Manufacturing (**IRAM**) 2013, IIT Indore, December 16-18, 2013 on “*Dieless Manufacturing*”
- IEEE International Conference on Control, Automation, Robotics and Embedded Systems (**CARE 2013**), PDPM IIITDM Jabalpur, December 16-18, 2013 – Chair – Panel Discussion on “‘*CARE*’ – *Challenges and Opportunities for the Society*”
- Mini Design Workshop (**Mini DeW 2013**), PDPM IIITDM Jabalpur, December 6-7, 2013 on “*Nature Inspired Design*”
- Delivered a lecture on "Education as a Service Sector" at National Workshop on “Emerging Trends in Information Technology in University Management”, PDPM IIITDM Jabalpur, September 10, 2013
- Delivered a Keynote address “*Improvements in Abrasive Water Jet Machining Process through Suspension Jet and Thermally Enhanced Machining*” at International Conference on Mechanics and Control in Engineering (**2013 ICMCE**) and 2013 ICMON, Beijing, China, September 02, 2013
- Delivered an invited lecture on “Additive Manufacturing” at Short Term Training Programme on Product Development at MANIT, Bhopal, India, February 18, 2013
- International Design Workshop (DeW 2012) at PDPM IIITDM Jabalpur, India, December 7, 2012, on “*Y Design?*”
- Delivered a Keynote address “*Why design? Formal design methodology role and challenges ahead*” at International Conference on Mechanics and Control in Engineering 2012 (ICMCE 2012 and ICMON 2012), Shanghai, China, August 25-26, 2012

✳ **Invited Lectures in Workshops/Short-Term Courses/Faculty Development Programs**

- Expert Talk on “Effective Use of Technology in Education in the Light of NEP 2020” at FDP on Role of Outcome based Education in Technical Institutions (November 14-15, 2022), NITTE University, Mangalore, November 15, 2022
- Expert Talk on “Introduction to Profession: Computer Science and Design” at Gyan Ganga Institute of Technology & Sciences, Jabalpur, November 12, 2022
- Expert Talk on “Additive Manufacturing and its Applications in Automotive Technology” at Automobile Engineering Department & Institute Innovation Council, MCKV Institute of Engineering, Howrah sponsored Expert Lecture Series, September 24, 2022
- Expert Talk on “Hybrid Manufacturing” at E&ICT Academy Faculty Development Program (FDP) on Advances in Material Processing and Advanced Manufacturing (September 1-10, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, September 6, 2022
- Expert Talk on “Product Design and Related Aspects” at Agripreneurship Orientation Program (PRERNA 4.0) and Agri Incubation Program (SAAKAR 4.0), Jawahar R-ABI RKVY RAFTAAR Agribusiness Incubator, IABM, JNKVV, Jabalpur, August 24, 2022
- Expert Talk on “Design Thinking Methods” at E&ICT Academy Faculty Development Program (FDP) on Research Methodologies & Design Thinking for Professional Career (August 18-24, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, August 19, 2022
- Expert Talk on “Elements and Perspectives of Design Thinking” at E&ICT Academy Faculty Development Program (FDP) on Research Methodologies & Design Thinking for Professional Career (August 18-24, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, August 18, 2022
- Expert Talk on “Institutional Restructuring and Consolidation” at E&ICT Academy Faculty Development Program (FDP) on Curriculum Development in the Light of NEP 2020 (August 8-19, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, August 14, 2022
- Expert Talk on “Use of Technology in Education in the light of NEP 2020” at E&ICT Academy Faculty Development Program (FDP) on Curriculum Development in the Light of NEP 2020 (August 8-19, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, August 12, 2022
- Expert Talk on “Product Design and Development” at E&ICT Academy Faculty Development Program (FDP) on Additive Manufacturing and 3D Printing (AM & 3DP) (July 18-29, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, July 28, 2022
- Expert Talk on “Product Development through Additive Manufacturing and 3D Printing” at E&ICT Academy Faculty Development Program (FDP) on Additive Manufacturing and 3D Printing (AM & 3DP) (July 18-29, 2022), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, July 28, 2022
- Expert Talk on “Research and Innovation - Challenges” at the FDP on Research and Innovations in Engineering (February 7-12, 2022), J.C. Bose University of Science and Technology, Faridabad, February 9, 2022
- Expert Talk on “National Education Policy 2020: Institutional Restructuring and Consolidation – Role of Technology in Education” at E&ICT sponsored FDP on Directions

and Dimensions of Accreditation Criteria in the light of NEP for HEIs (February 3-12, 2022), PDPM IIITDM Jabalpur, February 4, 2022

- Expert Talk on “Design and Materials” at AICTE Sponsored FDP on Engineering Materials (January 24-30, 2022), J.C. Bose University of Science and Technology, Faridabad, January 29, 2022
- Expert Talk on “Enhancing Competitiveness in Design and Manufacturing Organizations” under the AICTE-ATAL Sponsored Online Faculty Development Programme, Department of Industrial & Production Engineering, Dr. B R Ambedkar National Institute of Technology, Jalandhar, December 6, 2021
- Expert Talk on “Biomedical Applications of Additive Manufacturing” under the Impact Lecture Series – I of Institute’s Innovation Council at Hyderabad Institute of Technology and Management, Hyderabad, October 23, 2021
- Expert Talk on “Additive Manufacturing: Recent Research and Future Scope” at the AICTE sponsored Online Short Term Training Program on “Advances in Manufacturing Systems” (September 20-25, 2021), Madhav Institute of Technology Gwalior, September 24, 2021
- Expert Talk on “Developments of some variants of Incremental Sheet Forming and Challenges ahead” at the High End Workshop on DOE, Material Characterization and Advanced Manufacturing Techniques (Under the KARYASHALA Scheme of SERB) (September 20-26, 2021), PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, September 22, 2021
- Expert Talk on “Research and Professional Ethics” at FDP on Research Writing and Professional Ethics, JC Bose University of Science and Technology, YMCA Faridabad, September 10, 2021
- Expert Talk on “Use of Technology in Education” at Theme based Webinar on NEP 2020 (August 9-10, 2021), Department of Mechanical Engineering, Maulana Azad National Institute of Technology, Bhopal, August 10, 2021
- Expert Talk on “Design Thinking” at the Five Days’ ON-LINE AICTE Training and Learning (ATAL) Academy Sponsored Faculty Development Programme (FDP) on System Engineering (June 21-25, 2021), Department of Mechanical Engineering, Maulana Azad National Institute of Technology, Bhopal, June 21, 2021
- Invited Expert Lecture on “Research Scope in 3D Printing and AM” at the three-day National Workshop on Additive Manufacturing (NWAM-2021) (April 15-17, 2021), Department of Mechanical Engineering, Jaypee University of Engineering and Technology, Guna, MP, April 17, 2021
- Expert Talk on “Design Thinking” at the TEQIP III sponsored Five Days’ Faculty Development Programme on Industrial Engineering Techniques (March 15-19, 2021), Department of Mechanical Engineering, Maulana Azad National Institute of Technology, Bhopal, March 16, 2021
- Expert Talk on “Dieless Manufacturing” at the Recent Trends in Manufacturing Technique for New Product Development, Central Institute of Petrochemicals Engineering & Technology (CIPET), Korba, March 5, 2021
- Expert Talk on “Design Thinking in Product Design” at the ATAL Faculty Development Program (FDP) on Product Design and Additive Manufacturing (February 15-19, 2021), Pillai College of Engineering, New Panel, Navi Mumbai, February 15, 2021
- Expert Talk on “Product Development” at the ATAL Faculty Development Program (FDP) on Emerging Trends in Mechatronics, Automation and Robotics to Save Planet (December

14-18, 2020), Gyan Ganga Institute of Technology and Sciences (GGITS), Jabalpur, December 15, 2020

- Expert Talk on “Hybrid Manufacturing” at the AICTE-ATAL Academy Sponsored FDP on Mechanical Manufacturing and Monitoring using MATLAB (MMM-2020), Visvesvaraya National Institute of Technology, Nagpur, December 14, 2020
- Expert Talk on “Hybrid Manufacturing” at the Short-Term Program on Technology, Innovations and Challenges in Rapid Product Development and Manufacturing, National Institute of Technology Hamirpur, November 25, 2020
- Expert Talk (Webinar) on “Product Design and Design Thinking” at the PRERNA 2.0 (Agripreneurship Orientation) and SAAKAR 2.0 (Incubation Program), JAWAHAR R-ABI RVKY RAFTAAR Agribusiness Incubator, IABM, JNKVV, JABALPUR, November 20, 2020
- Expert Talk on “Role of Teachers in the present era of Digital Technologies” at the TEQIP III Sponsored Webinar on ICT for Students and Teachers, Faculty of Engineering and Technology, JC Bose University of Science and Technology, YMCA Faridabad, November 2, 2020
- Expert Talk on “The Role of Teachers as Facilitators in the present era of Digital Technologies” at the Webinar Series on ICT for Pre-Service, In-Service Teachers and Teacher Educators, jointly organized by North-Eastern Hill University, Shillong and Dr. B.R. Ambedkar National Institute of Technology Jalandhar, October 21, 2020
- Expert Talk on “Research and Projects Related to 3D Printing” at the one week AICTE Training and Learning (ATAL) Academy Sponsored online Faculty Development Programme (FDP) on 3D Printing and Design (October 6-10, 2020), IPS Academy, Institute of Engineering & Science, Indore, October 7, 2020
- Expert Talk on “Design Thinking” at the one week AICTE Training and Learning (ATAL) Academy Sponsored Faculty Development Programme (FDP) on System Engineering (August 28-October 2, 2020), Maulana Azad National Institute of Technology, Bhopal, September 28, 2020
- Expert Talk (Webinar) on “Hybrid Manufacturing” at the one week TEQIP-III RTU (ATU) sponsored Faculty Development Program on Recent Trends in Advanced Machining and Additive Manufacturing (September 7-11, 2020), Jointly Organized by Swami Keshvanand Institute of Technology, Management & Gramothan (SKITM&G), Jaipur and Rajasthan Technical University (RTU), Kota, September 9, 2020
- Expert Talk on “Design Thinking” at the one week AICTE Training and Learning (ATAL) Academy Sponsored Faculty Development Programme (FDP) on Design Thinking (September 7-11, 2020), Oriental Institute of Science and Technology, Bhopal, September 7, 2020
- Expert Talk on “Hybrid and Smart Manufacturing” at the one week Atal Academy, AICTE Sponsored Faculty Development Programme (FDP) on Advancement in Manufacturing Technologies for Industrial Applications (August 24-28, 2020), Gyan Ganga Institute of Technology and Sciences (GGITS), Jabalpur, August 28, 2020
- Expert Talk on “Metal Additive Manufacturing” at the one week Atal Academy, AICTE Sponsored Faculty Development Programme (FDP) on Advancement in Manufacturing Technologies for Industrial Applications (August 24-28, 2020), Gyan Ganga Institute of Technology and Sciences (GGITS), Jabalpur, August 24, 2020

- Expert Talk on “Design Thinking” at the National Level Webinar Series on Recent Advances in Engineering & Technology (Web Seminar I: Mechanical), Rasoni Group of Institutions, Nagpur, June 9, 2020
- Expert Talk on “Smart Manufacturing” at the one week Online FDP on Innovation, Entrepreneurship and its Relevance in Industry 4.0 Practices in the Post Covid-19 Situation, Terna Engineering College, Navi Mumbai, May 28, 2020
- Resource Person in One Week National Level Workshop on Internet of Things, MET Institute of Engineering, Nashik, January 12, 2018
- Resource Person of Two Days Workshop on CAD/CAM/CAE and FEA, MET Institute of Engineering, Nashik, January 12, 2018
- Delivered Expert Lectures on “Challenges in Engineering Education” at Entrepreneurship Development Camp, Rewa Engineering College, Rewa (M.P.), August 29, 2017
- Delivered an Expert Lecture on “Electric Discharge Machining of Insulating Ceramics” at IMTEX, Bangalore, January 29, 2017
- Delivered Expert Lectures on “Product Design” at ELICT sponsored Faculty Development Programme on Advances in Product Design and Manufacturing, MANIT Bhopal, January 3, 2017
- Delivered an expert lecture on “Fundamentals of CAD” at the short-term course on “CAD/CAM and Advanced Machining” at Motilal Nehru National Institute of Technology Allahabad, July 01, 2014
- Delivered a lecture on "Education as a Service Sector" at National Workshop on “Emerging Trends in Information Technology in University Management”, PDPM IIITDM Jabalpur, September 10, 2013
- Delivered an invited lecture on “Additive Manufacturing” at Short Term Training Programme on Product Development at MANIT, Bhopal, India, February 18, 2013
- Delivered a Keynote address “Y Design?” at International Design Workshop (DeW 2012) at PDPM IIITDM Jabalpur, India, December 7, 2012
- Delivered a Keynote address “Why Design? Formal Design Methodology – Role and Challenges Ahead” at International Conference on Mechanics and Control, Shanghai, China, August 26, 2012
- Invited to deliver a lecture on “Engineering Literacy” at I.T.S Engineering College, Greater Noida, August 23, 2012
- Invited to deliver a lecture on “Manufacturing in India – With special focus on Automotive Industry in India” as part of a course on Intelligent Manufacturing Systems, Graduate Programme, University of Tokyo, Tokyo, July 27, 2011
- Delivered an expert lecture on “Rapid Product Manufacturing: An Introduction to Rapid Tooling” at National Workshop on “Manufacturing Automation”, Jaypee University of Engineering & Technology, Guna, December 16-17, 2011
- “Research Issues in Mechanical Engineering - Special Focus on Production, Industrial and Design Engineering”, Maulana Azad National Institute of Technology Bhopal, January 29, 2011.
- “Rapid Tooling and Manufacturing Technologies”, AICTE sponsored Staff Development Course on CAD & FEM, M. N. National Institute of Technology Allahabad, August 01, 2008

- “Rapid Prototyping”, AICTE / MHRD sponsored Short Term Course on Recent Trends in Industrial and Production Engineering, Maulana Azad National Institute of Technology Bhopal, July 02, 2008.
- “Rapid Tooling and Manufacturing Technologies”, AICTE / MHRD sponsored Short Term Course on Recent Trends in Industrial and Production Engineering, Maulana Azad National Institute of Technology Bhopal, July 02, 2008.
- “Manufacturing Three-Dimensional Components at the Meso and Micro Scales: The role of μ -Metrology”, MHRD / AICTE sponsored Summer School on CAD/CAM and Optimization Techniques, NIT Hamirpur, India, June 10-11, 2008.
- “Rapid Tooling and Manufacturing Technologies”, MHRD / AICTE sponsored Summer School on CAD/CAM and Optimization Techniques, NIT Hamirpur, India, June 10-11, 2008.
- “Rapid Tooling: An Introduction”, AICTE Short Term Course on Rapid Product Development, IIT Guwahati, India, December 11-15, 2006.
- “Advanced Networking in Manufacturing” in the Summer School on Advanced Manufacturing Technologies at NIT Kurukshetra, 2004
- “Rapid Prototyping and Tooling Technologies” in the Summer School on Advanced Manufacturing Technologies at NIT Kurukshetra, 2004
- “Computer Integrated Manufacturing Systems” in the Summer School on Advanced Manufacturing Technologies at NIT Kurukshetra, 2004

✳ Membership of Professional Bodies

- Fellow, International Association of Computer Science and Information Technology (IACSIT)
- Member, American Society of Mechanical Engineers (ASME) (*Membership #: 100486074*)
- Member, ACM SIGGRAPH (Pioneer) (*Membership #: 9309522 – SIGGRAPH Member*)
- Member, Society of Manufacturing Engineers (SME) (*Member ID: 000016374369*)
- Member, International Association of Engineers (IAENG) (# 128455)
- Member, Institution of Engineers
- Member, Indian Society for Technical Education (ISTE)

✳ Indo-Japan Forum

- Coordinator, **Design Workshop** on “**Internet of Process Centric Design and Manufacture**”, PDPM IIITDM Jabalpur, December 12-14, 2016
- Co-Convener, **Design Workshop** on “**User Centric Design**”, December 8-10, 2014
- Member of the Indian Delegation to Indo-Japan Seminar to promote the exchange of knowledge and information necessary for advancement of research and development work in Micro/Nano Manufacturing Science, March 21-25, 2011, IIT Delhi, India.
- Convener, Joint India-Japan **Design Workshop** on “**Leading-edge Theories and Practices in Design**”, October 11-15, 2010.
- Member of the Indian Delegation to First Indo-Japan Workshop on Micro and Nano Manufacturing, February 2006, Tokyo, Japan.
- Delivered a 21st Century Center of Excellence (CoE) Technical Seminar at Tohoku University, Japan, on “Geometric Modeling of Cutting Tools for Integrated Design and Manufacturing” on December 13, 2007.

- Exposure visit to various Universities and Industries of Japan under India-Japan Joint Project IIITDM Jabalpur in December 2007. Sponsored by MOFA, Japan and MHRD, India.

✳ Indo US Science and Technology Forum

- Member of the Indian delegation at First Indo-US workshop on Rapid Manufacturing, March 2006, Bangalore.
- Invited to attend and present at 'International Workshop on Futuristic Shaping Technology at Meso, Micro and Nano Scales', October 9 – 12, 2007 at Indo US Center for Advanced and Futuristic, IIT Kanpur.

✳ Administrative Assignments

- Member Selection Committee for Faculty Selections at various reputed Institutes
- Member, Board of Studies, Mechanical Engineering Department, G H Rasoni College of Engineering, Nagpur (Tenure 2022-25; wef 30 November 2021)
- Design, Delhi Technological University, Delhi (wef February 19, 2019)
- Member, Board of Studies for Design, Delhi Technological University, Delhi (wef February 19, 2019)
- Member, Academic Council, Avantika University, Ujjain, Madhya Pradesh, India (wef October 1, 2018)
- Member, Research Advisory Committee, Electronics and ICT Academy, PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur
- Member, Research Degree Committee (RDC) of Mechanical Engineering, Dr. APJ Abdul Kalam Technical University (AKTU), (Formerly UP Technical University), Lucknow, India (wef February 16, 2016)
- Expert Member, Curriculum Development Committee, UG and PG programme in Industrial Design at NIT Rourkela (2017 and 2019)
- Member, Advisory Board of Mechanical Engineering, Marwadi Education Foundation's Group of Institutions (MEFGI) Technical Campus, Rajkot, Gujrat (wef October 14, 2015)
- Member, Board of Governors, PDPM-IIITDM Jabalpur (February 2010 –12, November 2012-14)
- Member, Evaluation Committee of Principal Research Scientist, Centre for Product Design and Manufacturing at Indian Institute of Science (IISc) Bangalore for promotion to Chief Research Scientist.
- Member, AICTE Committee, Sant Longowal Institute of Technology, Longowal

Administrative Experience

- Head, Smart Manufacturing Discipline, PDPM IIITDM Jabalpur (August 13, 2021 to March 9, 2022)
- Director, Technology Business Incubation Center, IIITDM Jabalpur [TBIC-IIITDM Jabalpur], a Section 8 Company (September 30, 2021 to till date)
- Professor in-Charge, Alumni Cell (August 19, 2021 to till date)
- Chairman, Institute Ranking Committee, IIITDM Jabalpur (September 21, 2021 to till date)

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- Head, Mechanical Engineering Discipline, PDPM IIITDM Jabalpur (August 6, 2019 to August 13, 2021)
- Nodal Faculty, International Affairs (May 2, 2018 to August 13, 2021)
- Member, Institute Counselling Service
- Member, Committee for No Deduction of HRA of Institute's employee (February 15, 2021)
- Member, Committee to conduct the Convocation 2021 (online) (January 6, 2021)
- Chairman, Member, Procurement of Virtual Classroom Software (December 14, 2020)
- Member, Director's Gold Medal (for PhD students), Convocation 2021 (November 27, 2020)
- Member, Committee for finalization of Institute's Degree and Provisional Degree Certificate (October 15, 2020)
- Convener, Institute's Website Development Committee (September 30, 2020/October 5, 2020)
- Convener/Member, Committee for Procurement of Zoom's Virtual Classroom Platform (Convener: September 7, 2020) (Member: December 14, 2020)
- Member, Academic Program Committee of Senate (APCS) (August 14, 2020)
- Member, House Allotment Policy Committee (August 10, 2020)
- Chairman, Committee for Allotment of Quarters to Institute employees (July 23, 2020 to August 10, 2020)
- Member, Committee for implementation of Personality Development Course (February 6, 2020)
- Member, Coordination Committee, Visit of Hon'ble Vice-President of India (February 5, 2020)
- Member, Committee for Review of Academic performance of underperforming students (November 13, 2019)
- Chairman, Medical Health Checkup Committee (October 23, 2019)
- Member, Committee for report submission to Peer Review Committee set up by MHRD to assess the performance of IIITs-CFTIs (September 9, 2019)
- Nodal Faculty / Single Point of Contact (SPOC), Smart India Hackathon 2019, AICTE (December 20, 2018 to August 6, 2019)
- President, MHRD Innovation Cell (MIC) (October 30, 2018 to August 6, 2019)
- Faculty Mentor, Students Startup and Incubation Center (July 2018 to till date)
- Institutional Coordinator, Scheme for Promotion and Research Collaboration (SPARC) (October 29, 2018 to till date)
- Coordinator, National Resource Center (NRC) for Design under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) (ARPIT) of Ministry of Human Resource Development (MHRD), Government of India (July 12, 2018 to September 30, 2020)
- Member, Board of Governors, PDPM-IIITDM Jabalpur (February 2010 –12, November 2012-14)
- Member, Board of Governors, MANIT Bhopal (February 2012 – January 2015)
- Dean, Research, Sponsored Projects & Consultancy, PDPM IIITDM Jabalpur (June 1, 2016 to August 6, 2019)
- Dean of Planning and Development, PDPM-IIITDM Jabalpur (March 13, 2010 to March 12, 2013 & September 24, 2013 to May 31, 2016)
- Head, Design Discipline (June 2012–August 2014). Prior Coordinator, Design Discipline

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- Chief Vigilance Officer, PDPM-IIITDM Jabalpur (October 2011–2014)
- Member, Building and Works Committee, PDPM-IIITDM Jabalpur (March 2010 – 2013 & September 2013 – May 2016)
- Coordinator, Atal Ranking of Institutions for Innovative Achievements (ARIIA), (November 02, 2018 to July 11, 2019)
- Prepared Detailed Project Report 2012, 2014 and 2015
- Convener of various Fact-Finding Committees
- Member, Senate, PDPM-IIITDM Jabalpur (August 2005 onwards)
- Chairman, Campus Advisory Committee, PDPM-IIITDM Jabalpur (March 2010 – 2013 & September 2013 – May 2016)
- Faculty-in-Charge, Alumni Association, (February 4, 2015 to May 31, 2016)
 - Organized First Alumni Meet of the Institute on December 25-26, 2015
- Faculty-in-Charge, Consultancy Cell (February 3, 2015 onwards)
- Coordinator, Visit of UGC to the Institute for Deemed-to-be-University status (2008-09)
- Member, Institute Administrative Group – General Administration (since August 2006) (latest notification wef November 20, 2012)
- Member, Space Allocation Committee, PDPM-IIITDM Jabalpur (March 2014 onwards)
- Member, Rajyabhasa Karyanvan Committee (March 22, 2013 onwards)
- Member, Committee to procure furniture of Visitors Hostel (January 20, 2015 till February 2016)
- Member, Committee to finalize vendor and implement automation in the Institute (March 3, 2015 onwards)
- Convener, Committee related to the hiring of bus services to look into various aspects to the services and suggest mechanisms to ensure the quality of hiring of the services. (wef March 25, 2015)
- Organized First Alumni Meet of the Institute on December 25-26, 2015.
- Member of the committee to procure Auditorium Chair and Dual Desks (wef June 15, 2015).
- Convener of the committee to look into the matters related to labour welfare and security norms at different construction sites in the Institute campus (wef July 06, 2015)
- Member of the committee to vet the claims of the Consultants (wef July 08, 2015)
- Member of the committee for allotment of space to the service provider for installation of the mobile tower and recommend safety measures at the installation site (wef July 10, 2015)
- Member of the committee for the purchase of furniture of PG Hostel (wef August 03, 2015)
- Member of the committee to visit all the Buildings/ Works undertaken by CPWD and report the pending Works/ Defective Works/ Incomplete Works (wef December 17, 2015)
- Chairman, Campus Advisory Committee (wef March 2010) (Revised Committee wef February 18, 2016)
- Member of the committee to analyze and assess the consumption and demand of electricity from MPPKVCL by PDPM IIITDM Jabalpur (wef September 12, 2013)
- Head Design till August 31, 2014
- Member Space Allocation Committee (wef March 3, 2014)

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- Member, Committee for installation of Closed-Circuit Cameras at the Institute premises (wef March 20, 2015)
- Coordinator, Research Activities on Industry 4.0 Technologies (wef September 7, 2015)
- Member, Committee for hiring the Security Services (wef September 22, 2015)
- TBI Coordinator, Startup Centre (wef December 28, 2015)
- Member In-Charge, National Innovation Club (wef January 31, 2016)
- Nodal Officer for Collaboration with Bharat Forge Ltd. (wef February 3, 2016)
- Convener, Committee on Ticket Booking Procedure
- In-charge, Institute Presentations (wef February 3, 2016)
- Member, Committee for Research Park India Program (wef February 25, 2016)
- Convener, Manpower Assessment Committee (wef February 25, 2016)
- Member, Planning and Evaluation Committee, Jabalpur Engineering College Jabalpur (An autonomous college) (August 2010 – till date)
- Coordinator, International Relations, PDPM-IIITDM Jabalpur (January 2009 – May 2010)
- Coordinator, Research, Development & Planning, IIITDM Jabalpur (January 2009–March 2010)
- Chairman, Students' Placement Cell, PDPM-IIITDM Jabalpur (January 2009 – April 2011)
- Coordinator, Central Facilities, PDPM-IIITDM Jabalpur (January 2009 – May 2010)
- Convener, Undergraduate Committee of Senate (UGCS), PDPM-IIITDM Jabalpur
- Convener, Institute Communication Policy Committee, PDPM-IIITDM Jabalpur
- Member, Campus Advisory Committee, PDPM-IIITDM Jabalpur (2005 onwards)
- Faculty In-charge, Visitors Hostel (June 01, 2010 – June 06, 2012)
- Coordinator, Students' Placement, Internship and Industrial Tour Committee, IIITDM Jabalpur
- Member, Placement Cell, IIITDM Jabalpur (July 2008-December 2008; May 2011–till date)
- Member, Institute Advisory Committee – General Administration, PDPM-IIITDM Jabalpur
- Member, Institute Advisory Committee – Academic Vision, PDPM-IIITDM Jabalpur
- Member, Institute Advisory Committee – Student Affairs, PDPM-IIITDM Jabalpur
- Prof-In Charge, CAD Labs, NIT Kurukshetra.
- Prof-In Charge, Examinations (Results), NIT Kurukshetra.
- Member, TEQIP Committee, NIT Kurukshetra.
- Member, Non-Teaching Grievance and Welfare Committee, NIT Kurukshetra.
- Member, Workshop Modernization/CAM Lab Committee, NIT Kurukshetra.
- Member, Labour Contract Committee, NIT Kurukshetra.
- Member, Library Committee, NIT Kurukshetra.
- Member, Institute Furniture Committee, NIT Kurukshetra.
- General Secretary, Alumni Association, NIT Kurukshetra.
- Member, Curriculum Development Committee, UG & PG (both), NIT Kurukshetra.
- Warden, NIT Kurukshetra & PDPM-IIITDM Jabalpur.

Publications

Books

1. **Cutting Tool Geometry: 3D Perspective**, Published by LAP Lambert Academic Publishing GmbH & Co., KG, Germany, 2011 [ISBN 978-3-8465-2878-5]
2. Pesin A.M., Chukin M.V., Drigun E.M., Tandon, P., Pustovoitov D.O., Chikishev, D.N., Lokotunina, N.M. and Pesin I.A., 2018. *On the possibility of the production of machine-building products on a plate mill*. Magnitogorsk: Magnitogorsk Publishing House. NMSTU, 2018. 128 p. (In Russian) *The Studies were carried out as part of DST-RFBR grant (INT/RUS/RFBR/P-349 dated 02-01-2019)*

Some Recent Book Chapters

1. Kausadikar, S., Tiwari, M.K, Ponappa, K. and Tandon, P., 2023. Design and analysis of Single Screw Extruder for Hybrid Manufacturing Process. In: *Advances in Manufacturing, Automation, Design and Energy Technologies (Chapter 41)*. Eds: N. M. Sivaram et al., Lecture notes of Mechanical Engineering, Springer Nature. ISBN 978-981-99-1287-2
2. Shrivastava, P. and Tandon, P., 2022, A Review on Process Limitations and Recent Advancements in Single Point Incremental Sheet Forming, In: *Metal Forming Processes*. Eds: Kakandikar, G. M., Agrawal, A., Kumar, D. R., CRC Press, Boca Raton. eBook ISBN9781003226703. DOI: [10.1201/9781003226703](https://doi.org/10.1201/9781003226703)
3. Gohil, Y. and Tandon, P., 2022, Quantitative and Qualitative Study on Lifestyle of Polycystic Ovarian Syndrome or Disease (PCOS/PCOD) Patients, In: *Ergonomics for Design and Innovation. HWWE 2017*. Chakrabarti, D., Karmakar, S., Salve, U.R. (eds). Lecture Notes in Networks and Systems, vol 391, pp175-184. Springer, Cham. DOI: [10.1007/978-3-030-94277-9_16](https://doi.org/10.1007/978-3-030-94277-9_16)
4. Sahu, A., Jain, P.K., and Tandon, P., 2022, Toolpath Generation of a Human Anatomical Shape for Double-Sided Incremental Forming, In: *Recent Advances in Operations Management Applications. Lecture Notes in Mechanical Engineering*, Eds: Sachdeva, A., Kumar, P., Yadav, O.P., Tyagi, M., Springer, Singapore. DOI: [10.1007/978-981-16-7059-6_23](https://doi.org/10.1007/978-981-16-7059-6_23)
5. Telang, V.S., Pemmada, R., Ramakrishna, S., Tandon, P. and Nanda, H.S., 2022. Overview of Current Additive Manufacturing Technologies for Titanium Bioimplants. In: *Nanoscale Engineering of Biomaterials: Properties and Applications*, Eds: Lalit M. Pandey and Abshar Hasan, Springer, Chapter 5, pp.117-130 ISBN 978-981-16-3666-0 ISBN 978-981-16-3667-7 (eBook) DOI: [10.1007/978-981-16-3667-7](https://doi.org/10.1007/978-981-16-3667-7)
6. Pemmada, R., Telang, V.S., Dash, M., Richard, J.L.C., Tandon, P., Ramakrishna, S. and Nanda, H.S., 2022. 3D Printing for Functional Tissue Engineering. In: *Tissue Engineering: Current Status and Challenges*, Eds: Chandra P Sharma, Thomas Chandy, Vinoy Thomas and Finosh G Thankam, Academic Press, Elsevier, Chapter 17, pp. 415-430. ISBN 978-0-12-824064-9, eBook ISBN: 9780128240656 [Available online 28 January 2022] DOI: [10.1016/C2020-0-01183-7](https://doi.org/10.1016/C2020-0-01183-7)
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9. Dayam, S., Priyadarshi, S. and Tandon, P., 2020. Simulation of Extrusion of Thermoplastic Binder in Additive Manufacturing Process. In: Shunmugam M., Kanthababu M. (Eds) *Advances in Additive Manufacturing and Joining* (Chapter 28, pp.319-328). Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore. [doi:10.1007/978-981-32-9433-2_28](https://doi.org/10.1007/978-981-32-9433-2_28)
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 11. Tiwari, V., Jain, P.K. and Tandon, P., 2019. Bio-inspired Knowledge Representation Framework for Decision Making in Product Design. In: Shunmugam M., Kanthababu M. (eds) *Advances in Forming, Machining and Automation. Lecture Notes on Multidisciplinary Industrial Engineering*. Springer, Singapore. [doi: 10.1007/978-981-32-9417-2_48](https://doi.org/10.1007/978-981-32-9417-2_48). Print ISBN: 978-981-32-9416-5, Online ISBN: 978-981-32-9417-2
 12. Kumar, N., Jain, P.K., Tandon, P. and Pandey, P.M., 2019. Toolpath Generation for Additive Manufacturing Using CNC Milling Machine. In *3D Printing and Additive Manufacturing Technologies* (pp. 73-82). Springer, Singapore.
 13. Vispute, M., Kumar, N., Jain, P.K., Tandon, P. and Pandey, P.M., 2019. On the Surface Finish Improvement through Hybrid Additive Subtractive Manufacturing Process. In: *Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018)*, (pp.443-449). Springer, Singapore.
 14. Dwivedi, D., Kumar, A., Priyadarshi, S., Jain, P.K. and Tandon, P., 2018. Numerical prediction of fracture in parts formed with incremental sheet forming process. In *Simulations for Design and Manufacturing* (Vol. 2, pp. 173-194). Springer, Singapore. [doi: https://doi.org/10.1007/978-981-10-8518-5_6](https://doi.org/10.1007/978-981-10-8518-5_6)

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Year – 2023

- Patil, I.G., Shahare, H.Y., Bhandarkar, V.V. and Tandon, P., 2023. Numerical Study of Non-Newtonian Ceramic Slurry Flow in Extrusion-based Additive Manufacturing. *Computer-Aided Design and Applications*. [Accepted]
- Pawar, K., Telang, V., Shahare, H.Y. and Tandon, P., 2023. Numerical Analysis of Progressive Cavity Pump Extruder for 3D Printing of High Viscosity Ceramic Paste. In: *CAD Conference and Exhibition (CAD'23), Mexico City, Mexico, 10 - 12 July 2023*. [Accepted]
- Tiwari, V., Khanna, P. and Tandon, P., 2023. Capturing Design Intent during concept evaluation using rough numbers and TODIM Method. In: *CAD Conference and Exhibition (CAD'23), Mexico City, Mexico, 10 - 12 July 2023*. [Accepted]
- Rajak, S.K., Kumar D., Seetharam R. and Tandon P., 2023. Mechanical and sliding wear analysis of Porcelain reinforced SAE660 Bronze bearing alloy composite fabricated by stir casting method. *Materials Today: Proceedings*. DOI: [10.1016/j.matpr.2023.04.550](https://doi.org/10.1016/j.matpr.2023.04.550)
- Nagargoje, A., Kankar, P.K., Jain, P.K. and Tandon, P., 2023. Application of Artificial Intelligence Techniques in Incremental Forming: A State of Art Review. *Journal of Intelligent Manufacturing*, 34, pp. 985-1002. DOI: [10.1007/s10845-021-01868-y](https://doi.org/10.1007/s10845-021-01868-y)

- Natarajan, Y., Naresh Raj, K.L. and Tandon, P., 2023. Measurement and Analysis of Pocket Milling Features in Abrasive Water Jet Machining of Ti-6Al-4V alloy. *Archives of Civil and Mechanical Engineering*, 23(1), pp.1-16. [DOI: 10.1007/s43452-022-00578-3](https://doi.org/10.1007/s43452-022-00578-3)
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Year – 2022

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- Sahu, A., Nagargoje, A. and Tandon, P., 2022. Feature Segmentation of Multi-Featured Freeform Geometries for Incremental Sheet Forming. *Digital Manufacturing Technology*, [Accepted on 18-10-2022]
- Mandaloi, G., Nagargoje, A., Banerjee, G., Gupta, A. and Tandon, P., 2022, Assessment of Response Parameters of the Bending Mode of Deformation Machining for Manufacturing of Impeller Blades, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 44, pp.523. [DOI: 10.1007/s40430-022-03811-5](https://doi.org/10.1007/s40430-022-03811-5)
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- Gupta, A.K., Shahare, H.Y., Kumar, P., Dubey, A.K., Pustovoytov, D., Yu, H., Pesin, A. and Tandon, P., 2022. Effect of Tool Path Strategy and Tooltip Profile on Geometrical Feature and Surface Quality of Al-6061 alloy during Deformation Machining in Bending Mode. *Advances in Materials and Processing Technologies*, pp.1-18. [DOI: 10.1115/1.4054683](https://doi.org/10.1115/1.4054683)
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- Dayam, S., Tandon, P. and Priyadarshi, S., 2022. Development of Paste Extrusion Based Metal Additive Manufacturing Process. *Rapid Prototyping Journal*, 28(10). pp.1920-1932. [DOI: 10.1108/RPJ-05-2021-0118](https://doi.org/10.1108/RPJ-05-2021-0118)
- Soni, R., Ponappa, K. and Tandon, P., 2022. A Review on customized food fabrication process using Food Layered Manufacturing. *LWT – Food Science and Technology*, 161, pp.1-8. [DOI: 10.1016/j.lwt.2022.113411](https://doi.org/10.1016/j.lwt.2022.113411)
- Rajak, S.K., Kumar D., Seetharam R. and Tandon P., 2022. Mechanical and sliding wear analysis of Porcelain reinforced SAE660 Bronze bearing alloy composite fabricated by stir casting method. In: *13th Symposium on Plasticity and Impact Mechanics (IMPLAST-2022), IIT Madras, Chennai, India, 21-26 August 2022.*
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- Sahu, A., Jain, P.K., and Tandon, P., 2020, Toolpath Generation of a Human Anatomical Shape for Double-Sided Incremental Forming, In: *International Conference on Industrial and Manufacturing Systems (CIMS-2020), Dr B R Ambedkar National Institute of Technology Jalandhar, INDIA, 26-28 June 2020 9-11 October 2020* [Ref. No. 322] [Presented by Akshay Sahu on Saturday, 10 October 2020]
- Sharma, G.K., Pant, P., Jain, P.K., Kankar, P.K. and Tandon, P., 2020. Thermal and fluid flow modelling of a heating bed for application in metal AM process. In: *RAME-2020: 2nd International Conference on Recent Advances in Mechanical Engineering, Delhi Technological University, Delhi, India, 18-19 September 2020*. Paper No.: 151 [Presented by Gourav K. Sharma on Friday, 18 September 2020]
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- Lakhera, S., Priyadarshi, S. and Tandon, P., 2020. Post-Processing of Metal Additive Manufactured Parts through Ring Rolling. In: Horváth I., Keenaghan G. (Eds) *Proceedings of Thirteenth International Tools and Methods of Competitive Engineering Symposium (TMCE 2020), Dublin, Ireland, 11-15 May 2020*. *TMCE 2020 Repository*, pp.613-623. tmce.io.tudelft.nl/proceedings ISBN/EAN: 978-94-6384-131-3

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- Nagargoje, A., Kankar, P.K., Jain, P.K and Tandon, P., 2019. Prediction of Thickness Profile of Axisymmetric Conical Part in Single Point Incremental Forming, In: *International Conference on Precision, Meso, Micro and Nano Engineering (COPEN 2019)*, IIT Indore, 12-14 December 2019. [Presented by A. Nagargoje]
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- Dayam, S., Priyadarshi, S. and Tandon, P., 2018. Simulation of Extrusion of Thermoplastic Binder in Additive Manufacturing Process. In *7th International & 28th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2018), Anna University, Chennai, INDIA, 13-15 December 2018*. [Presented by Sunidhi Dayam]
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- Gupta, A., Raju, P.P., Priyadarshi, S., and Tandon, P., 2018. Deformation Machining. In: *Conference on Sheet Metal Forming (SMF 2018), Chennai, India, 6-7 December 2018*, pp.37 [Presented by P. Kumar and P.P. Raju]
- Hasan, A., Sahu, A., Manish, N. Singh, S.A., Modi, S., Nagargoje, A., Raju, P.P., Kumar, P., Priyadarshi, S., Kankar, P., Jain, P.K., and Tandon, P., 2018. Adaptive Double Sided Incremental Forming. In: *Conference on Sheet Metal Forming (SMF 2018), Chennai, India, 6-7 December 2018*, pp.38 [Presented by P. Kumar and P.P. Raju]
- Singh, S.A., Priyadarshi, S., and Tandon, P., 2018. Review of Incremental Sheet Forming Process at Elevated Temperature. In: *Conference on Sheet Metal Forming (SMF 2018), Chennai, India, 6-7 December 2018*, pp.39 [Presented by P. Kumar and P.P. Raju]
- Shrivastava, P. and Tandon, P., 2018. Efficiency Enhancement of Single Point Incremental Forming Simulation by Mitigating Hourglass Phenomenon. In: *The 8th International Conference on Research in Engineering, Science and Technology, Paris, France, 2-4 November 2018*, pp.81-89. [Presented by Parnika Shrivastava]
- Pesin A., Chukin M., Tandon P., Pustovoitov D., Drigun E., Pesin I. and Kozhemyakina A. 2018. Development of Theory and Technologies for Hybrid Metal Forming of Steel Complex Parts. In: *27th International Conference on Metallurgy and Materials - METAL 2018, Brno, Czech Republic, 23-25 May 2018*. [Presented by Alexander Pesin]
- Priyadarshi, S., Verma, S., and Tandon, P., 2018. Development of Double Sided Incremental Forming Strategies for Improvement in Part Accuracy. *Twelfth International Tools and Methods*

of Competitive Engineering (TMCE) Symposium, Las Palmas de Gran Canaria, Spain, 7 -11 May 2018.
[Presented by Puneet Tandon]

- Vispute, M., Kumar, N., Jain, P.K., Tandon, P., and Pandey, P.M., 2018. Shrinkage Compensation Study for Performing Machining on Additive Manufactured Parts. *8th International Conference of Materials Processing and Characterization (ICMPC), Hyderabad, India, 16-18 March 2018*, pp. 79. [Presented by Mayur Vispute]
- Shrivastava, P., and Tandon, P., 2018. Deformation induced Surface Roughness and Global Spring Back resulted with different plastic strain levels in Incremental Forming of original and preheated sheet samples. *1st International and 4th National Conference on Reliability and Safety Engineering (INCRS), IIITDM Jabalpur, India, 26-28 February 2018*. [Presented by Parnika Shrivastava]
- Vispute, M., Kumar, N., Jain, P. K., Tandon, P., Pandey, P. M., 2018. On the Surface Finish Improvement Through Hybrid Additive Subtractive Manufacturing Process. *3rd International Conference on Innovative Design, Analysis & Development Practices in Aerospace and Automotive Engineering (IDAD), Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Avadi, Chennai, India, 22-24 February 2018*. [Presented by Mayur Vispute]

Some Recent Conferences / Symposia / Seminars Attended

1. 4th International Conference on Smart and Sustainable Developments in Materials, Manufacturing and Energy Engineering (SME-2022), NITTE University and NMAM Institute of Technology, Udupi, Karnataka, India, 22-23 December 2022
2. ASME 2022 International Mechanical Engineering Congress and Exposition IMECE2022, Columbus, OH, USA, 30 October – 3 November 2022.
3. ASME International Mechanical Engineering Congress & Exposition IMECE2021, Virtual Conference, Online, 1-5 November 2021 [Attended Virtually]
4. ASME International Mechanical Engineering Congress & Exposition IMECE2020, Portland, Oregon, USA, November 16 – 19, 2020 [Attended Virtually]
5. Thirteenth International Tools and Methods of Competitive Engineering Symposium (TMCE 2020), Dublin, Ireland, 11-15 May 2020 [Attended Virtually]
6. International Conference on Lightweight Materials and Manufacture (LMM 2019), Central South University, Changsha, China, 9-12 October 2019
7. NUMIFORM 2019: The 13th International Conference on Numerical Methods in Industrial Forming Processes, Portsmouth, New Hampshire, 23-27 June 2019
8. 4th International Youth Workshop on Magnitogorsk Rolling Practice 2019, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, 04-07 June 2019
9. 2nd Magnitogorsk Materials Week, Spring 2019, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, 25-28 March 2019
10. ICMME 2018, International Conference on Mechatronics and Mechanical Engineering, Wuhan, China, 10-12 November 2018
11. 3rd International Youth Workshop on Magnitogorsk Rolling Practice 2018, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia, 05-08 June 2018
12. Twelfth International Tools and Methods of Competitive Engineering (TMCE) Symposium, Las Palmas de Gran Canaria, Spain, 7 -11 May 2018

Doctoral Thesis Supervision

1. Parveen Kumar Saini (Reg. No. 2K-04-NITK-Ph.D.-1027), Analysis of Rough Non-Conformal EHL Contacts Using Couple Stress Fluids, NIT Kurukshetra. [Awarded: May 2008]
2. Vishal Gulati (Regd. No. 2K04-NITK-Ph.D.-1026), CAD Paradigms for Ornamental Products Development, NIT Kurukshetra. [Awarded: May 2009]
3. M. Rajik Khan (Roll No. 0710361), Geometric Modeling, Design and Analysis of Custom-Engineered Milling Cutters, IIITDM Jabalpur [Awarded: September 2011]
4. Sandeep Singhal (Regd. No. 2K04-NITK-Ph.D.-1029), The Contribution of ERP to Quality Assurance: An exploration of its Problems and Prospects in Indian Technical Education, NIT Kurukshetra [Awarded: August 2012]
5. Kumar Sambhav (Roll No. Y71050680), Geometric and Force Modeling of Single Point Cutting Tool and Drill with Generic Profiles, IIT Kanpur [Awarded: July 2013]
6. T.V.K. Gupta (Roll No. Y8105090), In-Process Monitoring of Abrasive Water Jet Milling, IIT Kanpur [Awarded June 2014]
7. Sitaram Soni (Roll No. 0810363), Computational Support to Aesthetic Concept Generation in Industrial Design, PDPM IIITDM Jabalpur [Awarded: June 2014]
8. Arun Gupta (Regd. No. 2K06-NITK-Ph.D.-1120), Optimization of Machining Parameters and Non-Productive Time for 2.5D Milling, NIT Kurukshetra [Awarded: August 2014]
9. Vineet Kumar Goel (Regd. No. 2K06-NITK-Ph.D.-1102), A Geometric Modeling Schema to develop traditional Indian Ornamental Designs, NIT Kurukshetra [Awarded: March 2015]
10. Vikas Gupta (Regd. No. 2K06-NITK-Ph.D.-1101), Computer Aided Modeling for Rapid Prototyping of Heterogeneous Objects, NIT Kurukshetra [Awarded: March 2015]
11. Varun Tiwari (Roll No. 1110365), Capturing Design Intent: Effective Handling of Design Information in Early Design Stages, IIITDM Jabalpur [Awarded: May 2017]
12. Ravindra Singh (Roll No. 1110461), Formalization for Improvement of Universal Design Practice, Design Discipline, IIITDM Jabalpur [Awarded: November 4, 2017]
13. Prabhat Kumar (Roll No. 1110362), Identification, Classification and Mitigation of Uncertainty during Early Design Stages, IIITDM Jabalpur [Awarded: January 5, 2018]
14. Amaltas Khan (Roll No. 1220461), Design Interventions to Utilize Food Packaging Discards, Design Discipline, IIITDM Jabalpur [Awarded: September 26, 2018]
15. Parnika Shrivastava (Roll No. 1210305), Microstructure and Crystallographic Texture based Investigation of Single Point Incrementally Formed AA1050 Sheet, IIITDM Jabalpur [Awarded: March 16, 2019]
16. Pavan Kumar (Roll No. 1520365) (2016-22), Investigating the Incremental Forming Capabilities of Al1050 H14, Copper, EDD Steel, and CP Ti Grade 2 using Ductile Damage Criterion, IIITDM Jabalpur [Open: December 30, 2020] [Awarded: January 6, 2022]
17. Aniket Ramnath Nagargoje (Roll No. 1813603) (2018-22), Development of geometrical feature extraction technology for freeform surfaces using DBSCAN clustering for feature-based toolpath development in dieless manufacturing, IIITDM Jabalpur [Submitted on January 31, 2022] [Awarded: June 2, 2022]
18. Gangaram Mandaloi (Roll No. 1913802) (2019-23), Development of Hybrid Deformation Machining Process and Technology, IIITDM Jabalpur [Submitted on January 31, 2022]
19. Harshal Yadaorao Shahare (Roll No. 1823604) (2019-...), Development of new methods for hybrid metal forming of complex parts, IIITDM Jabalpur

20. Anand Kumar Mall (Roll No. 1913601) (2019-...), Design and Development of Heterogeneous Porous Scaffold, IIITDM Jabalpur
21. Vivek Bhandarkar (Roll No. 1913604) (2019-...), Smart Additive Manufacturing, IIITDM Jabalpur
22. Mithilesh Kumar Tiwari (Roll No. 1913605) (2019-...), Hybrid Additive Manufacturing and Incremental Forming, IIITDM Jabalpur
23. Vicky Telang (Roll No. 1913608) (2019-...), Hybrid Manufacturing, IIITDM Jabalpur
24. Ankit Kumar Gupta (Roll No. 1913614) (2019-...), Elevated Temperature Incremental Sheet Forming, IIITDM Jabalpur
25. Rahul Soni (Roll No. 1923603) (2020-...), 3D Printing of Food items, IIITDM Jabalpur
26. Abhay Kumar Dubey (Roll No. 20PMEO02) (2020-...), Hybrid Metal Forming, IIITDM Jabalpur
27. Ankit Tiwari (Roll No. 20PMEO06) (2020-...), Functionally Graded Materials, IIITDM Jabalpur
28. Santosh Rajak (Roll No. 21PMEO07) (2021-...), Hybrid Metal Forming, IIITDM Jabalpur
29. Sakshi Patel (Roll No. 21IDSo03) (2021-...), Infant Health Care, IIITDM Jabalpur

Master of Technology (M.Tech.) Thesis Supervision

1. Addepalli Srinivas, 1998, Development of Computer Aided Inspection Planning System for Mechanical Components, NIT Kurukshetra.
2. Anuj Kant, 2003, A CAD System for the Heterogeneous Solid Modeling, NIT Kurukshetra.
3. Vishal Gulati, 2003, Unified Shape Modeler for Two and a half Dimensional Components, NIT Kurukshetra.
4. Satya Pal Singh, 2004, Three-Dimensional Finite Element Modelling of Face Milling Cutters, NIT Kurukshetra.
5. Awanish Kumar, 2005, Feature Based Modeler for Modeling Non-Manifold Sheet Metal Objects, NIT Kurukshetra.
6. Mohit Kumar, 2005, Generic Solid Modelling for integration of CAD and CAE databases, NIT Kurukshetra.
7. M. Rajik Khan, 2006, Computer Aided Engineering Analysis of End Milling Cutters, NIT Kurukshetra.
8. Siddhartha, 2006, Curve Fitting for Styling Applications, NIT Kurukshetra.
9. Nisheet Soni, 2010, Path planning of an Automated Guided Vehicle in an unknown environment, IIITDM Jabalpur
10. Umesh, 2010, Development of a Material Dispensing and Positioning System of a Rapid Prototyping Workbench, IIITDM Jabalpur
11. Vijay Pal, 2009-11, Effect of Process Parameters and Material Characteristics on Milling Time in Controlled Depth Milling using Abrasive Water Jet Machining, IIITDM Jabalpur
12. Divyansh Patel, 2011-13, Improvements in Abrasive Water Jet Machining Process through Suspension Jet and Thermally Enhanced Machining, IIITDM Jabalpur
13. Om Namah Sharma, 2011-13, Experimental Investigations to Improve Incremental Sheet Forming Process, IIITDM Jabalpur
14. Vandana Jain, 2012-14, Mathematical Modeling and Experimental Investigation of the Effect of Slurry, and 3D Shape Generation in Abrasive Water Jet Machining, IIITDM Jabalpur

15. Pavan Kumar, May 2015, Surface Finish Analysis in Incremental Sheet Forming Process, IIITDM Jabalpur
16. Govind Narayan Sahu, August 2015, Development of Finite Element Analysis Methodology for Incremental Sheet Forming Process, IIITDM Jabalpur
17. Jodave Sanket Haridas, 2013-15, Experimental Investigations on the effect of Clamping Parameters and Blank Shape in Incremental Sheet Forming, IIITDM Jabalpur
18. Abhishek Kumar, 2014-16, Estimation of Material Model Parameters and Finite Element Analysis of ISF Process, IIITDM Jabalpur
19. Divyansh Dwivedi, 2014-16, Numerical Investigations of Coupled and Uncoupled Material Models in Incremental Sheet Forming Process, IIITDM Jabalpur
20. Aayushi, 2015-17, Electric Discharge Machining of Insulating Ceramics, IIITDM Jabalpur
21. Animesh Kumar Amar, 2015-17, Investigation of Gelatin Enabled Abrasive Water Slurry Jet Machining and 3D Profiling, IIITDM Jabalpur
22. Ankush Gaurav, 2015-17, Concept Generation and Analysis of Saddle System of Large Calibre Gun, IIITDM Jabalpur
23. Ashish Wadatkar, 2015-17, Design for Retrofitting and Analysis of Components of Artillery Gun, IIITDM Jabalpur
24. Sudhir Kumar, 2015-17, Heterogeneous Modeling Based Development of Bio-CAD System, IIITDM Jabalpur
25. Harshal Shahare Yadarao, 2016-18, Investigation of Contact Conditions through Elastic Wave Propagation during Stamping of a Thin Plate, IIITDM Jabalpur
26. Sanjog Patidar, 2016-18, Numerical Investigation of Blank Shape and Tool Geometry in Incremental Sheet Forming, IIITDM Jabalpur
27. Sunidhi Dayam, 2016-18, Development of Powder Extrusion Based Metal Additive Manufacturing Process, IIITDM Jabalpur
28. Varun Dubey, 2016-18, High Quality Mesh Generation from Low Grade Point Cloud Data, IIITDM Jabalpur
29. Amita Sahu, 2017-19, Feature based Toolpath Generation for Parts Formed through Incremental Forming Process, IIITDM Jabalpur
30. Ankit Kumar Gupta, 2017-19, Investigation on Improvement in Formability and Surface Quality of Al 6061 Components produced by Deformation Machining, IIITDM Jabalpur
31. Nishant Manish, 2017-19, Development of Design Rules for Incremental Forming Process, IIITDM Jabalpur
32. Sitaram Modi, 2017-19, Finite Element based Investigation of Ultrasonic Vibration Assisted Incremental Forming Process, IIITDM Jabalpur
33. Swarit Anand Singh, 2017-19, Comparative Analysis of Incremental Forming and Elevated Temperature Incremental Forming of AA1050 Sheet, IIITDM Jabalpur
34. Vicky Telang, 2017-19, Additive Manufacturing of Hybrid Soft Bone Scaffolds, IIITDM Jabalpur
35. Deshmankar Atharv Pramod (Roll No. 1813104), 2018-20, Toolpath generation strategy for hybrid Additive Manufacturing and Incremental Sheet Forming, IIITDM Jabalpur
36. Priya P.J. (Roll No. 1813105), 2018-20, Numerical Modeling of Progressive Cavity based Extruders for 3D Printing, IIITDM Jabalpur

37. Mohit Sharma (Roll No. 1813209), 2018-20, Influence of Ultrasonic Vibrations and Elevated Temperature in Incremental Sheet Forming of AA1050 and Titanium Grade 2 Alloys, IIITDM Jabalpur
38. Ashrut Sharma (Roll No. 1813301), 2018-20, Parameter Identification of Lemaitre Damage Model for Finite Element Simulation of Incremental Sheet Forming, IIITDM Jabalpur
39. Shubhneet Lakhera (Roll No. 1813307), 2018-20, Development of a Novel Extrusion System and Post-Processing Technique for Metal Additive Manufacturing, IIITDM Jabalpur
40. Ayushi Gupta (Roll No. 1913101), 2019-21, Development of Five Axis Toolpath for Single Point Incremental Forming, IIITDM Jabalpur
41. Gaurabh Banerjee (Roll No. 1913102), 2019-21, Experimental and Statistical Analysis of AA6061 components produced by Deformation Machining, IIITDM Jabalpur
42. Kartikey Pawar (Roll No. 1913105), 2019-21, Numerical Analysis of Progressive Cavity Pump Extruder in 3D Printing for High Viscosity Ceramic Paste, IIITDM Jabalpur
43. Ratnesh Awasthy (Roll No. 1913107), 2019-21, Prediction of Surface Roughness in Single Point Incremental Sheet Forming using Artificial Intelligence techniques, IIITDM Jabalpur
44. Ishant Ganesh Patil (Roll No. 20MMEC04), 2020-22, Numerical and Experimental Investigation of Material Extrusion Additive Manufacturing Process for Boron Carbide, IIITDM Jabalpur
45. Kushagra Sharan (Roll No. 20MMEC05), 2020-22, Development of Position Control Algorithm for Double Sided Incremental Forming using Real-Time Force Data, IIITDM Jabalpur

Master of Design (M.Des.) Thesis Supervision

1. Ravindra Singh, 2010, Designing and Capturing the Design Intent of a Lifting Mechanism, IIITDM Jabalpur
2. Amaltas Khan, 2011, Design of a Transportation Device in Indian context, IIITDM Jabalpur
3. Dhananjay Bisht, 2011, Redesign of Shopping Cart in Indian Context, IIITDM Jabalpur
4. Deepanshu Azad, 2013, Consumer Product Attachment from Sustainability point of View, IIITDM Jabalpur
5. Ashish Jain, 2013, Design of Sustainable Commercial Solar Iron, IIITDM Jabalpur
6. Devendra Deshmukh, 2013, Nature Inspired Design of Water Storage Devices, IIITDM Jabalpur
7. Prasad Ravindra Padase, November 2014, Perimeter Security Learning Tool - A Serious Game Approach, IIITDM Jabalpur
8. Prashant Singh, November 2014, Purpose Centric Design Process: A Paradigm for Concept Improvements, IIITDM Jabalpur
9. Hemant Harishchandra Kanade, May 2015, Airport Luggage Trolley Redesign, IIITDM Jabalpur
10. Abhijeet Chirde, 2014-16, Nirmaan - Design of a Multi-Modal and Multi-Sensory Learning Methodology for Primary Education in India, IIITDM Jabalpur
11. Ganesh S., 2014-16, Process Centric Design Solutions for Unorganized Sectors in India, IIITDM Jabalpur
12. Madhura Shridhar Phadke, 2014-16, Design Intervention for Effective Drug Inhalation during Trauma, IIITDM Jabalpur

13. Azif Ismail, 2014-16, Visual Documentation of Non-Governmental Organization, Jeevika: Through Documentary Film, IIITDM Jabalpur
14. Neha Karmakar, 2014-16, Visual Identity Design for the City of Jabalpur, IIITDM Jabalpur
15. Sarvani Shankar Jha, 2014-16, Eco-Friendly Mobile Toilet System, IIITDM Jabalpur
16. Balasubramaniyan N., 2017, Design Intervention to reduce Post-Harvest Storage Losses in Cover and Plinth Method, IIITDM Jabalpur
17. Vijay Singh Thakur, 2017, Micro Till Seeder: Study of "Zero Till Seeder" and Design Intervention to Maximize the Crop Production, IIITDM Jabalpur
18. Jay Umeshkumar Modi, 2015-17, Design Intervention for Unorganised Parcel Trolley Service at Jabalpur Railway Station, IIITDM Jabalpur
19. Pankaj Rawat, MSME, 2015-17, Design of a Frugal Laundry Solution, IIITDM Jabalpur
20. Sharat Jyoti Kuli, 2015-17, Design Issues related to Traditional Winding in Pre-Weaving Process in India, IIITDM Jabalpur
21. Dawn Varghese, 2016-18, Design Intervention in Physiotherapy to Improve the Rehabilitation System, IIITDM Jabalpur
22. Nirmal Kumar, 2016-18, Development of a Laparoscopic Entry Device to minimize the Unwanted Injuries and Blood Loss, IIITDM Jabalpur
23. Nishant Kumar, 2016-18, Ligation Device for Laparoscopic Surgeries, IIITDM Jabalpur
24. Parul Singh, 2017-19, Design and Development of Hydrogen Water Generator to enrich drinking water for better health, IIITDM Jabalpur
25. Abhishek Sudarshan (Roll No. 1814001), 2018-20, Design Solution for Relieving Psychological Trauma in Hospitals, IIITDM Jabalpur
26. Shaurya Verma (Roll No. 1814019), 2018-20, Design and Styling of Electric Tractor for Indian Market, IIITDM Jabalpur
27. Yogesh Bhanu (Roll No. 1814025), 2018-20, Design and Development of New Generation Automated External Defibrillator to Reduce the Mortality Rate Due to Sudden Cardiac Arrest, IIITDM Jabalpur
28. Vartika Verma (Roll No. 1914023), 2019-21, Design intervention for the proper management of Insulin levels and Glucose levels in the Human Body, IIITDM Jabalpur
29. Yagnesh Ashvinbhai Gohil (Roll No. 1914024), 2019-21, Design intervention to manage Polycystic Ovary Syndrome or Disease (PCOS/PCOD), IIITDM Jabalpur
30. Kaustubh Sanjay Ambedkar (Roll No. 1914006), 2019-22, Design Intervention for Safe Intubation/Artificial Ventilation Process, IIITDM Jabalpur
31. Shubham Chomal (Roll No. 20 MDS019), 2020-22, Identifying and designing user-friendly mechanisms in gloves for assessment of Parkinson's Disease, IIITDM Jabalpur
32. Aseem Pratyush Bhowmick (Roll No. 20MDS003), 2020-22, Design Intervention for Indian medical school students to ease the rigorous nature of the study, IIITDM Jabalpur
33. Trushna Gopalrao Khalode (Roll No. 21MDS021), 2021-23, Walking Assistance, IIITDM Jabalpur

Awards and Recognitions

- Honorary Rosalind Membership, London Journal Press, UK [*Membership ID #RZ81700*] [*wef July 5, 2021*]
- Certificate of Appreciation for Mentoring Ms. Rishika Kedia, IIITDM Jabalpur, India in the 2021 Taiwan International Student Design Competition held by the Ministry of Education, Taiwan
- Research Paper titled: “Comparison of Heterogeneous Modeling Based Different Patterns of Hip Prosthesis Design” (Paper No.: ICCB_9) has been awarded “*Certificate of Merit*” for The International Conference on Computational Biology 2017, World Congress on Engineering and Computer Science (WCECS 2017), San Francisco, USA
- Awarded Second Prize in IMTEX - Indian Metal Forming Exhibition 2018 on “Double Sided Incremental Forming” held during January 25-30, 2018 at Bengaluru, India (Organized by Indian Machine Tool Manufacturers’ Association)
- Awarded Second Consolation Prize in IMTEX 2017 on “Electric Discharge Machining of Non-Conductive Ceramics” held during January 26-February 1, 2017 at Bengaluru, India (Organized by Indian Machine Tool Manufacturers’ Association)
- Represented college/ I.I.T./ School in Swimming, Water polo, Badminton, Basketball, Chess and other sports activities.

Personal Details

Date of Birth: July 26, 1966

Nationality: Indian

Passport Details: Z3345756 Valid July 17, 2028

Marital Status: Married, with two sons, aged 27 years and 23 years respectively.

Wife: Dr. Pritee Khanna, Professor, Department of Computer Science & Engineering at IIITDM Jabalpur, India.

Father: Late Prof. R.K. Tandon, Retired as a Professor and Dean, Faculty of Management, Kurukshetra University, Kurukshetra. 136 119

(PUNEET TANDON)