

Name of Faculty Dr. MANOWAR HUSSAIN  
 Designation Assistant Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 19-07-2019  
 E-mail manowar\_mech@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Mechanical Engineering)	Awarded
PG	M. Tech. (Manufacturing)	First
UG	B. Tech. (Production Engineering)	Distinction

Work Experience

Teaching	02 Years
Research	04 years
Industry	01 year
Others	--

Area of Specialization Manufacturing, Laser material processing, Non-Conventional Processes

Professional Memberships  
 Life Member: ISTE; Number: LM- 125691  
 Life Member: Indian Laser Association; Number: LM- 1292

Responsibilities held at Institution Level  
 1. R&E Coordinator (Mechanical Engineering), from 06-12-2019 to till date.

Responsibilities held at Department Level  
 Member, Informatics Team

Research Guidance --

Awards Received --

Courses Handled at Under Graduate / Post Graduate Level.  
 Machine Tool Engineering, Metrology and Instrumentation, Production Technology, Engineering Graphics, Workshop Practices

No. of Papers Published  
 National Journals – 00 International Journals – 26

National Conference – 00 International Conference – 04

Projects Carried out --

Patents  
 1. "Improved Biomedical Implants Using Titanium Alloy Based Metal Matrix Composite", Patent Application No.201941012759A, Publication Date: 02-08-2019.  
 2. "Method for Manufacturing of Magnetic Nano-Fluids using Micro-EDM Process" Application No.202041016827A, Publication Date: 03-07-2020.

Technology Transfer --

Invited Speaker --

No. of Books/Chapter Published with details --

Details of Short-Term Training Programs /Faculty Development Programs / Seminars / Workshops / Other Trainings (Attended and/or Organized).

1. One Week Faculty Development Program on "Engineering Optimization" organized by NITTTR, Chandigarh from 13-07-2020 to 17-07-2020.
2. One Week Faculty Development Program on "Materials Processing and Optimization" organized by NITTTR, Chandigarh from 06-07-2020 to 10-07-2020.
3. A One Week Faculty Development Program on "Advanced Materials and Manufacturing" organized by KITS Warangal from 29-06-2020 to 03-07-2020.
4. A one Week online Faculty Development Program on "Optimization Techniques & Tools for Mechanical Engineers" Organized by Mechanical Engineering Department of Sreenidhi Institute of Science & Technology, Hyderabad from 22-06-2020 to 27-06-2020.
5. One Week Faculty Development Program on "Mechanical Manufacturing and Process optimization" organized by NITTTR, Chandigarh from 25-06-2020 to 29-06-2020.
6. A One Week Faculty Development Program on "Industry 4.0- A Vision of Design & Manufacturing", organized by CBIT(A),

- Hyderabad from 16-06-2020 to 20-06-2020.
7. A One Week Faculty Development Program on "Outcome based education and NBA accreditation process-UG" organized by CBIT from 28-05-2020 to 01-06-2020
  8. A One Week Faculty Development Program on "Computer Integrated Manufacturing & CNC (CIM/CNC)" organized by NITTTR, Chandigarh from 25-05-2020 to 29-05-2020.
  9. A One day of video lectures and hands-on workshop on "Effective and Efficient Online Teaching in the Age of Corona, A hands on Workshop" on 24 May 2020 by IIT Bombay.
  10. A One Week Faculty Development Program on "Modeling and simulation using MATLAB" organized by NITTTR, Chandigarh from 18-05-2020 to 22-05-2020.
  11. Successfully Completed "Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading" an online non-credit course authorized by Georgia Institute of Technology offered through Coursera on 12-05-2020
  12. Successfully Completed 12 Week NPTEL Online Certification Course on "NBA Accreditation and Teaching - Learning in Engineering (NATE)" offered through SWAYAM on Jan-Apr 2020.
  13. Successfully Completed four Week NPTEL Online Certification Course on "Metal Cutting and Machine Tools", offered through SWAYAM on Jan-Apr 2020.
  14. Two days online workshop on "Intellectual Property Rights" organized by Pandit Deendayal Petroleum University, Gandhinagar from 10-04-2020 to 11-04-2020.

#### International/ National Journal from the Year 2017

1. Manowar Hussain, Pranshul Gupta, P. Kumar, A. K. Das (2020). Selective Laser Melting of Single Track on Ti-6Al-4V Powder: Experimentation and Finite Element Analysis. *Arabian Journal for Science and Engineering*, 45(2), 1173-1180. (SCI; IF 1.711)
2. Manowar Hussain, G. N. Ahmad & P. Kumar. (2020). A Study on Welding of Thin Sheet of Ti6-Al-4V Alloy Using Fiber Laser and Its Characterization. *Lecture Notes in Mechanical Engineering*, In Recent Trends in Mechanical Engineering Springer, Singapore. 271-280. ISSN: 2195-4356 (Scopus)
3. P. Kumar & Manowar Hussain (2020). Effects of Micro-EDM Parameters on the Surface Integrity of the Micro-Holes Fabricated on Nickel Sheet. In *Recent Trends in Mechanical Engineering Springer*, Singapore., 259-270. (Scopus)
4. P. Kumar & M. Hussain (2020). Optimization of Micro-electro Discharge Drilling Parameters of Ti6Al4V Using Response Surface Methodology and Genetic Algorithm. In *Numerical Optimization in Engineering and Sciences*, 449-456. Springer, Singapore. (Scopus)
5. Md. Aleem Pasha, T. N. Aditya, A. Chandrakanth, Manowar Hussain (2020). Evaluation of Optimum Input Process Parameters and Theoretical Optimum Response Parameters of FDM. *Alochana Chakra Journal*, Vol. IX, Issue V, 7324-7332.
6. T. N. Aditya, Md. Aleem Pasha, A. Chandrakanth, Manowar Hussain (2020). Evaluation of Tensile Strength of Friction Stir Processed Al6063 with SiC Reinforcement. *Alochana Chakra Journal*, Vol. IX, Issue V, 6234-6240.
7. Saurav Misra, Manowar Hussain, Ankit Gupta, Alok Kumar Das (2019). Fabrication and characteristic evaluation of direct metal laser sintered SiC particulate reinforced Ti6Al4V MMC's. *Journal of Laser Applications*, 31(1), 012005. (SCI; IF 1.937).
8. V. Prakash, P. Kumar, P. K. Singh, M. Hussain, A. K. Das & S. Chattopadhyaya (2019). Micro-electrical discharge machining of difficult-to-machine materials: A review. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 233(2), 339-370. (SCI; IF 1.982)
9. Pankaj Kumar, Manowar Hussain, Alok Kumar Das: Effect of process parameters on the Surface Integrity of micro-holes of Ti6Al4V obtained by micro-edm, *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)* 8(6), Dec,2019, 721-728. (Scopus)
10. Himanshu Shekhar Gupta, M. Hussain, P. K. Singh, V. Kumar, S. Kumar, and A. K. Das. (2019) "Laser Surface Modification of SAE8620 HVD Material for Transmission Gear." *Materials Today: Proceedings* 11 (2019): 813-817. (Scopus)
11. Ankit Gupta, Manowar Hussain, Saurav Misra, Alok Kumar Das, Amitava Mandal (2018). Processing and characterization of laser sintered Hybrid B<sub>4</sub>C/cBN reinforced Ti-based metal matrix composite. *Optics and Lasers in Engineering*, 105, 159-172. (SCI; IF 4.273).
12. Sudip Kundu, Manowar Hussain, Vikas Kumar, Shakti Kumar, and Alok Kumar Das (2018). "Direct metal laser sintering of TiN reinforced Ti6Al4V alloy based metal matrix composite: Fabrication and characterization." *The International Journal of Advanced Manufacturing Technology*, 97(5-8), 2635-2646. ISSN: 1433-3015. (SCI; IF 2.633)
13. P. K. Singh, N. K. Singh, H. Bishwakarma, M. Hussain, A. K. Das, & B. H. Prasad. (2018). Effect of annealing on silver oxide nano-particle generated by electrochemical discharge machining. *Materials Today: Proceedings*, 5(13), 26804-26809. (Scopus)
14. Manowar Hussain, V. Mandal, V. Kumar, A. K. Das, & S. K Ghosh. (2017). Development of TiN particulates reinforced SS316 based metal matrix composite by direct metal laser sintering technique and its characterization. *Optics & Laser Technology*, 97, 46-59. ISSN: 0030-3992. (SCI; IF 3.233)
15. Manowar Hussain, V. Mandal, P. K. Singh, P. Kumar, V. Kumar & A. K. Das (2017). Experimental study of microstructure, mechanical and tribological properties of cBN particulates SS316 alloy based MMCs fabricated by DMLS technique. *Journal of Mechanical Science and Technology*, 31(6), 2729-2737. ISSN: 1976-3824. (SCI; IF 1.345)

16. Manowar Hussain, V. Kumar, V. Mandal, P. K. Singh, P. Kumar & A. K. Das (2017). Development of cBN reinforced Ti6Al4V MMCs through laser sintering and process optimization. *Materials and Manufacturing Processes*, 32(14), 1667-1677. ISSN: 1532-2475.(SCI; IF 3.690)
17. Vijay Mandal, Manowar Hussain, Vikas Kumar, Alok Kumar Das, N.K Singh (2017). Development of reinforced TiN-SS316 metal matrix composite (MMC) using direct Metal laser sintering (DMLS) and its characterization. *Materials Today: Proceedings* 4, 9982–9986 (Scopus).