

## **Profile Page**



Name : Dr Aviral Mishra  
Designation : Assistant Professor Grade-i  
Department : Industrial & Production Engg.  
Qualification : PhD Mechanical Engineering (IIT Delhi)  
M.Tech Production Engineering (IIT-BHU, Varanasi)  
Address : Department of Industrial and Production Engg.  
NIT Jalandhar  
Jalandhar, Punjab - 144011  
Email : mishraa@nitj.ac.in  
Phone : +91-9711209450

### **Research Interests :**

Modelling of manufacturing processes, Micro-machining, Nano-finishing, Metal forming

### **Other Profile Links :**

#### **Google Scholar Link :**

Google Scholar Profile [Click Here](#)

#### **Personal Web Link :**

ResearchGate [Click Here](#)

ORCHiD [Click Here](#)

### **Journal Publications :**

<b>Year</b>	<b>Journal</b>	<b>Publication</b>
2023	Engineering Research Express	Multi-response optimization of magnetic abrasive finishing for AZ-31 alloy using RSM-GRA approach
2019	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture	Modeling of finishing force and torque in ultrasonic-assisted magnetic abrasive finishing process
2018	International Journal of Advanced Manufacturing Technology	Multi-objective optimization of ultrasonic-assisted magnetic abrasive finishing process
2017	International Journal of Mechanical Sciences	Modeling and simulation of surface roughness in ultrasonic assisted magnetic abrasive finishing process
2017	International Journal of Mechanical Sciences	Modeling of material removal in ultrasonic assisted magnetic abrasive finishing process

## Conference Publications :

Year	Conference	Publication
2022	2nd International Conference on Materials Science and Engineering (ICMSE-2022)	Finite element analysis of viscoelastic media used in abrasive flow machining process
2017	39th International MATADOR Conference on Advanced Manufacturing	Simulation of magnetic field in ultrasonic assisted magnetic abrasive finishing process

## Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Book Chapter	Modeling and Analysis of Wire EDM Process Parameters for AZ-31 Alloy Using Response Surface Methodology	Springer Nature Singapore	Durgesh Pandey, Rajesh Babbar, Aviral Misra, and R. K. Bansal	2195-4356	2022
Book Chapter	Mechanically Based Non-Conventional Machining Processes	CRC Press	Rajesh Babbar, Aviral Misra, Girish C Verma, Pulak Mohan Pandey	9781003327394	2022
Book Chapter	Advancement in Magnetic Field Assisted Finishing Processes	CRC Press	Girish C Verma, Dayanidhi K Pathak, Pawan Sharma, Aviral Misra, Pulak M Pandey	9781003220237	2022
	Magnetic abrasive finishing process	Walter de Gruyter GmbH & Co KG	Aviral Misra, Uday S Dixit	<a href="https://doi.org/10.1515/9783110584479-004">https://doi.org/10.1515/9783110584479-004</a>	2022

## Events Organized :

Category	Type	Title	Venue	From	To	Designation
Short Term Course	National	Industry 4.0 and Smart Manufacturing: Opportunities & Challenges	NIT Jalandhar	20-07-2020	24-07-2022	Coordinator
FDP	National	Hybrid Machining Solutions for Complex/Typical Engineering Applications	NIT Jalandhar	01-02-2021	05-02-2021	Coordinator
Short Term Course	National	Recent Advances in Industrial and Production Engineering	NIT Jalandhar	17-12-2021	21-12-2021	Coordinator
Short Term Course	National	Practices of Statistical & Optimization Techniques for Research	NIT Jalandhar	06-06-2022	10-06-2022	Coordinator

## Professional Affiliations :

Designation	Organization
Life member	Additive Manufacturing Society of India (AMSI)
Life member	Institution of Engineers (India) [IEI]
Member	SME

## PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Jashanpreet Singh Sidhu	Additive manufacturing	Ongoing	2022	Dr Arvind Bhardwaj
Madhav Kumar Jha	To be decided	Ongoing	2022	Dr Vishal Sharma
Arvind Dixit	Fabrication of Bio-medical Implants	Ongoing	2021	Dr Arvind Bhardwaj
Rajesh Babbar	Magnetic abrasive finishing	Ongoing	2020	

## PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Gharat Saurabh Mangesh	Flow analysis of viscoelastic abrasive media in two-way abrasive flow machining process	Completed	2022	
Durgesh Pandey	A COMPARATIVE INVESTIGATION OF MACHINING CHARACTERISTICS FOR Ti-6AL-4V AND AZ-31 ALLOYS USING WIRE-EDM	Completed	2021	R K Bansal