

# RESUME



## **Dr. AMIT JOSHI**

Assistant Professor,  
Mechanical Engineering Department,  
G. B. Pant Engineering College, Ghurdauri,  
Pauri-Garhwal (UK)-246194

**Mobile:** 09634025683  
**E-mail:** amitj4765@gmail.com

### **Career Objective**

Seeking a Research/Engineering position in the areas of Design & Manufacturing.

### **Professional/Educational Qualification**

- **“Ph.D in Fatigue and Fracture Studies on Ultrafine grained Al 2014 Alloy” from Indian Institute of Technology Roorkee**
- **M. Tech. in CAD/CAM from National Institute of Technology, Kurukshetra (Haryana) with 9.35 C.G.P.I. in 2009 (Thesis Approved With Distinction).**
- **B. Tech. (Mechanical Engineering) from College of Engineering Roorkee (Uttarakhand) with 73 % in 2005.**
- **Intermediate from G. I. C. Pauri, Uttarakhand (UP Board) with 64.60% in 1998.**
- **High school from G. I. C. Pauri, Uttarakhand (UP Board) with 75.60% in 1996.**

### **Ph.D Dissertation**

**“Fatigue & Fracture Studies on Ultrafine Grained Al 2014 Alloy” in Supervision of Dr. R. Jayaganthan Professor Metallurgical & Materials Engineering Department IIT Roorkee and Visiting Professor Engineering Design Department IIT Madras**

### **M. Tech. Dissertation**

**“Investigating Effect of Process Variables on Surface Finish in WEDM using RSM” (approved with Distinction) in Supervision of Dr. Hari Singh Professor Mechanical Engineering Department.**

### **B. Tech. Project**

Design & Fabrication of Robotic Arm.

### **Technical Skills**

Operating Systems : Microsoft Windows 95/98/2000/XP/2007.  
Programming language : MATLAB.  
Engineering Packages : ANSYS, AutoCAD.  
Characterization Techniques: SEM, TEM, XRD, EBSD

## Teaching Experience

S. No.	Organisation	Designation	Duration	
			From	To
1.	G B Pant Engineering College, Pauri-Garhwal	Assistant Professor	04/01/2010	Till Date
2.	UPES, Dehradun	Assistant Professor	11/08/2010	31/12/2010
3.	Graphic Era Institute of Technology, Dehradun	Lecturer	03/10/2005	21/07/2007

## M. Tech. Thesis Guided

S. No.	Thesis Title	Student Name	Year
1.	Optimization of machining parameter of WEDM using RSM Box Benken design on D <sub>4</sub> die tool steel (co-guide-Dr.k.k.s.mer)	Mr. Aditya Kumar (roll no- 10090706001)	2012
2.	Optimization of machining parameter of WEDM using RSM central composite design on D <sub>4</sub> die tool steel (co-guide-Dr.k.k.s.mer)	Mr. Himanshu Kumar	2012
3.	Optimization of abrasive wear characteristic of Al <sub>2</sub> O <sub>3</sub> & chromium carbide + nickel chromium coating on die steel deposited by D-GUN process using TOPSIS method (co-guide-Dr. K.k.s. mer)	Mr. Mukesh chauhan (roll no. 1100907060070)	2013
4.	Optimization of abrasive wear characteristic of Al <sub>2</sub> O <sub>3</sub> & chromium carbide + nickel chromium coating on die steel deposited by D-GUN process using TAGUCHI method (co-guide-Dr.k.k.s. mer)	Mr. Vivek Bahuguna (110090706016)	2013
5.	Investigating effect of geometrical parameters on stiffness of small end of connecting rod & comparing the results by FEM method (co-guide- Dr k.k.s. mer)	Km. Rakhi (110090706012)	2013
6.	Optimization of abrasive wear characteristics of tungsten carbide cobalt and nickel chromium based coating on HSS using detonation gun process by TAGUCHI and TOPSIS method ( co-guide-Dr.k.k.s.mer)	Mr.Vijaypal (110090706015)	2013
7.	Optimization of machining parameters for WEDM of Ti-6Al-4V using multiple quality charecteristis	Mr. Pradeep kothiyal	2014
8.	Optimization of machining parameters for WEDM of ASSAB TOOL STEEL using multiple quality charecteristis and desirability function	Mr.Pradeep Barthwal	2014

## Co-curricular Activities

1. Acted as coordinator of TEQIP sponsored workshop on “**Material Charecterization by SEM, TEM & EBSD**” organised by G. B. Pant Institute of Engineering & Technology from 27/10/2017/ to 28/10/2017
2. Acted as **Co-Convenor** of National Conference on “**Recent Advances in Mechanical Engineering**” organised by Department of Mechanical Engineering Govind Ballabh Pant Engineering College Pauri (Garhwal) held during 8-9 July 2013
3. Acted as **Oranising Secretary** of 2<sup>nd</sup> National Conference on “**Recent Advances in Mechanical Engineering (NCRAME-2014)**” organised by Department of Mechanical Engineering Govind Ballabh Pant Engineering College Pauri (Garhwal) held during 26-27 September 2014
4. **Nodal officer Finance of TEQIP III Phase (World Bank Project)** Since 1 Aug 2017 to till date
5. **OIC Solid Waste Management and Horticulture** of G. B. Pant Institute of Engineering & Technology Since 1 Dec 2017 TO till date

6. **Deputy Coordinator Industry Institute Interaction Cell (IIC)** of G. B. Pant Institute of Engineering & Technology
7. Worked as a **Warden** of various hostels in Govind Ballabh Pant Engineering College Pauri (Garhwal)

### Short Term Courses

8. 5 days program on “**Advance Tribology**” organised by IIT Delhi from 13/02/2012 to 17/02/2012.
9. 5 days program on “**Numerical Simulation Using FEM, XFEM and Mesh free Methos**” organised by IIT Roorkee from 24/12/2012 to 28/12/2012.
10. 4 days program on “**Fatigue and Fracture of Advanced Materials**” organised by IIT Roorkee from 20/06/2013 to 23/06/2013.
11. 5 days TEQIP sponsored program on “**Information Technology and Its Impact on Society**” organised by GBPEC PAURI from 26/08/2013 to 30/08/2013
12. 4 days TEQIP sponsored Workshop on “**Applied Mechanics**” organised by IIT KANPUR from 04/10/2013 to 07/10/2013
13. 5 days program on “**Modelling and Simulations using FEM**” organised by IIT ROORKEE from 07/01/2014 to 11/01/2014
14. 5 days program on “**Harnessing the researcher to promote Sustainable Innovation**” organised and sponsored by MHRD-IPR Chair, IIT ROORKEE from 02/09/2014 to 06/09/2014
15. 5 days program on “**Electron Microscopy- Why, How and What**” organised by IIT ROORKEE from 19/10/2015 to 23/01/2015
  
16. **Two Week** Program on “**Make in India: Dreams to Reality**” organised by IIT ROORKEE from 03/01/2017 to 14/01/2017”
17. **Two Week** Program on “**Recent Advances on Numerical Methods for solving Engineering Problems**” organised by IIT ROORKEE from 13/02/2017 to 24/02/2017”
18. 5 days program on “**Sustainable Environmental Management**” organised and sponsored by TEQIP, IIT ROORKEE from 27/03/2017 to 31/03/2017
19. TEQIP III Sponsored 2 days workshop on “**Material Charecterization by SEM, TEM & EBSD**” organised by G. B. Pant Institute of Engineering & Technology from 27/10/2017/ to 28/10/2017

### Publications

#### International conference papers

1. **Amit Joshi, Pradeep Kothiyal, Ruby Pant**, “Experimental Investigation of machining parameters of CNC milling on MRR by Taguchi method” Proceeding of 3<sup>rd</sup> International Conference on Emerging Trends in Engineering & Technology (IETET-2012), 09-11 November, 2012 at GIMT Kurukshetra, pp. 1796-1800.
2. **Amit Joshi, Pradeep Kothiyal**, “ Investigating effect of of machining parameters of CNC milling on surface finish by Taguchi method” Presented on International Conference on Mechanical and industrial engineering (ICMIE-2012), 06 JAN, 2013 at Hyderabad organised by ird , published in international journal on theoretical & applied research in mechanical engineering,ISSN: 2319-3182 pp. 60-65
3. **Amit Joshi, Pradeep Kothiyal**, “ Investigating effect of process variables on MRR in EDM by Taguchi parameter design approach s” Presented on International Conference on Mechanical and industrial engineering (ICMIE-2012), 06 JAN, 2013 at Hyderabad

- organised by ird , published in international journal on theoretical & applied research in mechanical engineering, 2319-3182 pp. 54-59
4. **Amit Joshi, K.K.S Mer**, "Optimization of abrasive wear characteristic of Tungsten Carbide and Chromium Carbide based coating on mild steel deposited by detonation gun process using Taguchi method" proceeding of International conference on Advanced materials manufacturing and characterization (IJAMMC-2013), 13-15 march,2013 at GRIET Hyderabad, pp. 231-35.
  5. **Amit joshi,S.S.Samant, K.K.S Mer**, "Modelling Surface Finish in WEDM using RSM" proceeding of International conference on Metallurgical, Manufacturing and Mechanical Engineering -2013(ICMMME-2013), 31 March,2013 at Goa,pp.
  6. **S.S.Samant,A.Joshi, K.K.S Mer**, "Ultrasonic imaging of ballistic-ally impacted composite armour" proceeding of International conference on Metallurgical, "
  7. **Deepti Rawat, Pradeep Bartwal, Amit Joshi**, " Carbide coatings on Hot Working Steel (CR HIGH ALLOY H-13) By Detonation Gun Process : A REVIEW" proceeding of international conference on recent development in mechanical and industrial engineering (ICRDMIE), 26 May 2013 pp. 57-62
  8. **Manpreet Singh Bajwa, Sinthiya Pundir, Amit Joshi**, " Static Load Analysis of Tata Super Ace Chassis And Stress optimization using standard techniques" proceeding of international conference on recent development in mechanical and industrial engineering (ICRDMIE), 26 May 2013 pp. 63-67
  9. **Manpreet Singh Bajwa, Yatin Raturi, Amit Joshi**, " Static Load Analysis of Tata Super Ace Chassis And its verification using solid mechanics" proceeding of international conference on recent development in mechanical and industrial engineering (ICRDMIE), 26 May 2013 pp. 68-71
  10. **Abhishek Mittal, Pradeep Rana, Amit Joshi and Pradeep Kothiyal**, "Methanol Powered Small Wireless Remote Controlled I.C. Engine Driven Car" presented on International Conference on Advances in Mechanical, Automobile and Aerospace Engineering (AMAAE-2013), 21-22 september, 2013 at J.N.U. New Delhi organised by krishi Sanskriti.
  11. **Amit Joshi, Pradeep Kothiyal, Hitesh**, "Optimization Of Abrasive Wear Characteristics Of Satellite-6 And Chromium Carbide Based Coating On High Speed Steel Deposited By Detonation Gun Process Using Taguchi Method " Proceeding of 4<sup>th</sup> International Conference on Emerging Trends in Engineering & Technology (IETET-2013), 25-27 October, 2013 at GIMT Kurukshetra, pp. 231-237.
  12. **Pradeep Kothiyal, K.K.S Mer, Amit Joshi, Sanjay Singh Samant**, "Machining of Titanium grade 5 (Ti-6Al-4V) with WEDM: A review" proceeding of International Conference on Advances in Sustainability of Materials and Environment, 10th,11th April 2014 ISBN 978-81-910747-8-9 pp. 579-584
  13. **Pradeep Barthwal, Pradeep Kothiyal, Amit Joshi, Deepti Rawat** "Optimization of process parameters and their effect on MRR and surface roughness in WEDM of cryogenically treated ASSAB tool steel, in WEDM using Response Surface Methodology (RSM)" under the processing in proceedings of international conference on optimisation and parametric modelling-2014 october 6-7-2014 NIT Hamirpur Himachal Pradesh India.
  14. **Amit Joshi, Pradeep Kothiyal, Praveen Singh** "Modelling MRR in WEDM using RSM " proceeding of national Conference on Recent Advances in Mechanical Engineering, 8-9 july 2013 [ NATIONAL CONFERENCE]

## Publications in journals

### Referred journals (SCOPUS INDEXED)

Sl. No.	Title of the Paper	Name of the Journal	Volume No.	Issue No.	Page Nos.	Year
1	<b>A Comparative Study on Tensile and Fracture Behaviour of Al-Mg alloy Processed through Cryorolling and Cryo Groove rolling</b>	Metallography, Microstructure, and Analysis, ASM international, SPRINGER publication.	5	3	251–263	2016
2	<b>Mechanical Properties and Microstructural Evolution in Al 2014 Alloy Processed Through Multidirectional Cryoforging</b>	Journal of Materials Engineering and Performance, SPRINGER publication.	25	7	3031–3045	2016
3	<b>Effect of Cryo groove Rolling followed by Warm rolling (CGW) on Mechanical Properties of 5052 Al alloy</b>	Materials and Manufacturing Processes, TAYLOR & FRANCIS, Publication.	32	12	1336-1344	2016
4	<b>Influence of Annealing on Microstructural Evolution, Precipitation Sequence, and Fracture Toughness of Cryorolled Al-Cu-Si alloy”</b>	Metallography, Microstructure, and Analysis, ASM International SPRINGER publication.	5	6	540-556	2016
5	<b>Influence of cryorolling and followed by annealing on high cycle fatigue behavior of ultrafine grained Al 2014 alloy</b>	Materials Characterization, ELSEVIER Publication,	127	-	253-271	2017
6	<b>Fatigue Behavior of Ultrafine-Grained 5052 Al Alloy Processed Through Different Rolling Methods.</b>	Journal of Materials Engineering and Performance, SPRINGER Publication.	26	6	2826–2836	2017
7	<b>Effect of Combined Severe Plastic Deformation (SPD) on Fatigue and Fracture Behaviour of Al-Mg Alloy.</b>	Materials Science and Engineering: A ELSEVIER publication	Communicated (2017)			

8	<b>Investigation of strain hardening and fracture behaviour of multidirectional cryoforged (MDCFed) Al 2014 alloy",</b>	Materials Science and Engineering: A ELSEVIER publication	Communicated (2017)
9	<b>Effect of Grain Refinement on Fatigue Crack Propagation of 5052 Al Alloy Processed Through Different Cryogenic Rolling Methods.</b>	Journal of Materials Research, CAMBRIDGE CORE.	Communicated (2017)
10	<b>Fatigue crack growth behavior of bulk UFG Al 2014 alloy after annealing treatment</b>	Fatigue & Fracture of Engineering Materials & Structures, Wiley publications	Communicated (2017)

#### International Conference Participated :

Sl. No.	Details of Conferences/Seminars/ Workshops	Presented Papers (Title of the Paper Presented)	Dates (From-To)	Sponsoring Agency
1.	<b>IIM-NMD-ATM 2015</b>	Mechanical Behavior of 5052 Al-Mg Alloy Processed Through Cryorolling	13th to 16th Nov, 2015	PSG Tech. Coimbatore
2.	<b>IIM-NMD-ATM 2015</b>	Tensile and Fracture properties of Al 2014 alloy processed through multidirectional Forging	13th to 16th Nov, 2015	PSG Tech. Coimbatore
3.	<b>ICMR 2016</b>	Effect of deformation temperature on mechanical properties and microstructural evolution in Al 2014 alloy processed through multidirectional Cryoforging	21- 23 Jun 2016	IISc Bangalore
4.	<b>ICDFM 2016</b>	High Cycle Fatigue Strength of 5052 Al-Mg Alloy Processed by Cryorolling	28th to 30th Sep, 2016	IISc Bangalore
5.	<b>ISAMEA-2017</b>	Improvement of fatigue strength in ultrafine grained (UFG) 5052 Al alloy processed by cryo-groove rolling	24th to 25th Mar, 2017	NIE, Mysore
6.	<b>ISAMEA-2017</b>	Influence of Phosphorus Addition on Strength and Ductile Behavior of Fe based Alloy Processed through Powder Metallurgy (P/M) Route	24th to 25th Mar, 2017	NIE, Mysore
7.	<b>ISAMEA-2017</b>	Improvement of Fracture Toughness of Al 2014 Alloy Processed Through Cryorolling	24th to 25th Mar, 2017	NIE, Mysore
8.	<b>ISAMEA-2017</b>	Investigation of Mechanical and Fracture Behavior of Fine-Grained Ze41 Alloy	24 <sup>th</sup> to 25 <sup>th</sup> Mar, 2017	NIE, Mysore
9.	<b>ICMAT 2017</b>	Mechanical properties of 5052 Al alloy processed through cryogenic groove rolling	18 <sup>th</sup> to 23 <sup>rd</sup> June, 2017	MRS, Singapore

10	<b>ICMAT 2017</b>	High cycle fatigue behavior of bulk UFG Al 2014 alloy processed through cryorolling	18th to 23 <sup>rd</sup> June, 2017	MRS, Singapore
11	<b>ICMAT 2017</b>	Effect of Secondary Phase Distribution on Mechanical Behavior of Bulk Nanostructured Mg-4Zn-4Gd Alloy.	18 <sup>th</sup> to 23 <sup>rd</sup> June, 2017	MRS, Singapore
12	<b>AMPCO 2017</b>	Structure Property correlations in Multi-directional Cryoforged (MDCFed) Al 2014 Alloy.	30 <sup>th</sup> Nov to 2 <sup>nd</sup> Dec 2017	I I T Roorkee
13	<b>ISAM 2017</b>	Mechanical Behaviour of Ultrafine Grained (Bulk Nano Structured) 5052 Al Alloy Processed through Multi Directional Forging	27 <sup>th</sup> December 2017	SJCE Mysore
14	<b>ISAM 2017</b>	EBSA analysis of crack tip plasticity	27 <sup>th</sup> December 2017	SJCE Mysore

### Strengths

- Responsible & Hardworking
- Fast Learner
- Flexible

### Personal Details

Name : Dr. Amit Joshi.  
 Father's Name : Mr. H. P. Joshi.  
 Date of Birth : 17 Feb., 1981.  
 Sex : Male.  
 Marital Status : Married.  
 Nationality : Indian.  
 Religion : Hindu.  
 Languages Known : English, Hindi.  
 Hobbies : Browsing Net, Travelling.  
 Permanent/ Correspondence Address : Opposite Jugran Wedding Point,  
 Srikot, Srinagar,  
 Srinagar-Garhwal (Uttarakhand), INDIA

### Declaration

I hereby declare that the above mentioned information is correct to the best of my knowledge and I bear the responsibility for the correctness of the above mentioned particulars.

**Place** : Pauri (U.K.)

**Date** :

**Dr. Amit Joshi**