Resume of Dr Rajesh Kumar Bhushan

Associate Professor

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Career Profile

- 1. Very good academic record
- 2. 16 years of experience in teaching, research and administration
- 3. Has wide administrative experience as Director School of Mechanical Engineering, Coordinator for competitive exams like GATE, IES, PSU, Head student's faculty committee, Coordinator P G programme, MCA coordinator, Assistant Center Superintendent, Acting head department of information technology
- 4. Participated in organisation of 2 national conferences and 2 workshops
- 5. Guided 1 PhD thesis(under progress), 4 M Tech Dissertations
- 6. Published 16 research papers in reputed International journals and 13 research papers are under review in reputed International journals
- 7. Published 10 research papers in International conference and 6 in national conference
- 8. 1 UGC sponsored project under process
- 9. Received summer research fellowship from IIT Gandhinagar
- 10. Reviewer of 6 reputed International journals
- 11. Attended 15 courses
- 12. Cleared GATE with high percentile
- 13. Certified Energy Manager and Energy Auditor by Government of India

Academic Qualifications

- PhD in Mechanical Engineering
- ME in Mechanical Engineering

Reviewer of International journals

1. Energy conversion and management, Science Direct



- 2. Material Science and Engineering B, Science Direct
- 3. Energy, Science Direct
- 4. Machining Science and Technology, Taylor and Francis
- 5. Journal Scientific Research and Essays
- 6. Tribology in Industry

Areas of Research Interest

Fabrication, Characterization and Machining of Metal Matrix Composites, Micromanufacturing, Nano-materials, Application of Optimization techniques, Artificial Intelligence Application in Manufacturing, High Performance Computational Modeling of Engineered Systems and Multi-disciplinary Design Optimization

Contributions to Professional committee

- 1. Member of academic council
- 2. Member of board of studies
- 3. Member of purchase committee

Administrative Responsibilities

- 1. Director School of Mechanical Engineering, Shri Mata Vaishno Devi University from 19 Oct 2012 to 01 July 2013
- Coordinator for competitive exams like GATE, IES, PSU etc, Shri Mata Vaishno Devi University from 27 Oct 2011 to 12 July 2013
- 3. Head student's faculty committee, Shri Mata Vaishno Devi University from 25 Jan 2010 to 12 July 2013
- 4. Coordinator P G programme from 04 Aug 2008 to 12 July 2013
- 5. Member of purchase committee from 14 July 2007 to 12 July 2013
- 6. MCA coordinator from Nov 2000 to Apr 2002
- 7. Assistant Center Superintendent for B.E. (I.T.) exam for 02 semesters (Dec 99 to June 2000)
- 8. Acting head dept. of information technology from Nov 99 to June 2000
- 9. Member of the confidential board to conduct entrance test for admission to B.E. & M.C.A. course

Courses Taught

Courses at UG level Courses at PG level

Strength of Materials Simulation and Modelling

Mechanics of Solids Mechatronics

Kinematics of Machines Advanced Composite Materials

Dynamics of Machines Metrology and Industrial Inspection

Materials Science and Engineering Computer aided process planning

Courses Attended

- 1. CAD/CAM on IDEAS-8 at, Netaji Subhas Institute of Technology, New Delhi
- 2. CNC Programming at, Netaji subhas Institute of Technology, New Delhi
- 3. Modelling, Simulation & FEM on IDEAS-10 at Rustamji Insitute of Technology
- 4. Production Management at, National Institute of Technical Teachers Training & Research Chandigarh
- 5. Advanced AUTO CAD at National Institute of Technical Teachers Training & Research Chandigarh
- 6. Computer Aided Advanced Computational methods end modeling, at Thapar Institute of Engineering & Technology Patiala
- 7. Production and Storage of Hydrogen Energy at. S.R. State College of Engineering Murthal, Haryana
- 8. Mechatronics Visvesuaraya National Institute of Technology Nagpur
- 9. Advanced optimization techniques, SVNIT, Surat
- 10. Micromachining, IIT Kanpur
- 11. Soft computing applications in decision technology, Jadavpur University
- 12. Control Engineering and Information Technology in Mechatronics: Roles Played Jadavpur University
- 13. Introduction to MATLAB and Matrox Imaging Library(MIL) with emphasis on hands on Practice(WMMIL,11),Shri Mata Vaishno Devi University
- 14. Future composite technology for wind turbine blades IIT Delhi
- 15. Nanofabrication, IISc Bangalore

Participation in Conferences

Presented 4 research papers in international conferences. Participated 1 in national conference.

Sponsored Projects

Period	Sponsoring Organisation	Title of Project	Amount of Grant
3 years	UGC	Experimental and Computational Analysis of Fabrication of Metal Matrix Composites (MMCs)	5.22 lakhs

Supervision of Ph.D Thesis

S.No.	Name	Year of Completion	Title of Thesis
1.	Deepak Sharma	undergoing	Friction Stir Welding

Supervision of M. Tech Dissertations

S.No.	Name	Year of Completion	Title of Thesis	Co-guides (if any)
1.	Jyoti Sharma	2010	Automation of Cement Plant	Balbir Singh
2.	Deepak Byotra	2011	Effect of Process Parameters on Surface roughness in Milling	no
3.	Sahib Singh	2012	Investigation of Machining Response of LM 13-SiC composite	no
4.	Kapil Singh	2013	Analysis of machining responses of 1100 Al/ZrO ₂ and 1100 Al/Al ₂ O ₃ composites on CNC vertical milling centre	no