Dr. Rakesh Bhandari

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Abstract of profile:

- \triangleright More than 23 years of Industrial and Teaching experience.
- Working as Dean(Research) and Professor of Mechanical Engineering \triangleright
- \triangleright Conducted Special six months Post Graduate diploma course in Power plant engineering in collaboration with Sangam Group of Industries
- Exposure to MATLAB and SPSS software. \triangleright
- AAAAAA Taught vide range of subjects
- Organised Events of Scale
- Hard Working an Integrity
- H- index- 10 / i10 index -10
- More than 30 Research Articles and 6 Patent (Published), 2 Books Published
- **Two Consultancy Project**
- \triangleright Taught subjetcs like Robotics/ Engineering Economy and other vide range of **Subjetcs**

Oualification:

- \geq Ph.D Mechanical Engineering from Sangam University-2018 (Thesis Title-" Modeling of WEDM Process Parameters and their Optimization")
- \triangleright M. E, Manufacturing Tech. from NITTTR, Chandigarh (73.6%) -2012 (Dissertation - Development of ANN Based Multi Criteria Classification and **Coding System**)
- B.E., Mechanical Engineering from M.B.M Engineering College, Jodhpur (65%) - \geq 1998
- Diploma in Advanced Computing from CDAC Bangalore (68%)-2002 \geq
- \geq X-76% (1992), XII-87% (From Birla School, Pilani)- (1994)
- \triangleright **GATE Score-2010-324**

Professional Experience

Sangam University, Bhilwara / Institute of Technology & Management, Bhilwara 1. Dean (Research) and Professor, Mechanical Engineering Department (From Sept 2008 to Nov 2014)

Responsibilities:

- Handling the Research affairs of the University across all the Schools for Ph.D.
- > Managing all the activities of School of Engineering and Technology including establishment of new labs, procurement of lab equipments.
- Chairman- Board of Studies (School of Engineering)
- Preparation of Documentation for NAAC.
- > Allocation & delegation of works in department (with 37 faculty members) in previous assignment as Dean (Engineering)
- 2. Sobhasaria Engineering College, Sikar (Sr. Lecturer and Head, Mechanical Engineering Department) (From August 2007 to August 2008)
- 3. Institute of Technology & Management, Bhilwara(Rajasthan) Lecturer, Mechanical Engineering Department (From July 2003 to August 2007)
- 4. MLVTI Govt. Engineering College, Bhilwara (Visiting Faculty, Mechanical Engineering Dept.) (August 2002 to June 2003)

5. Nirma Ltd, Bhavnagar : Engineer (Project and Maintenance) (Sept, 1998 to Feb 2001)

Responsibilities:

- > Erection and commissioning of the various Rotary and Static equipments.
- > Evaluation of the layout and equipment drawings.
- > Preparation of preventive maintenance Chart.
- Performance Monitoring of the equipments.

Consultancy Project:

- 1. Principle Investigator in Consultancy project for Material Testing of Components with MINOVA RUNOYA (2.4 lacs)
- 2. Principal Investigator for the assignment on Manpower assessment for A **Infrastructure Ltd, Hamirgarh- Bhilwara (80k)**

- Patent Published: 1. Lean Concepts in Software Industry (Published on 12/02/2021)
 - 2. Three sided roughened fin type Solar Air Heater.

Number of Ph.D Supervised: Five Completed / Four(Ongoing)

NPTEL Courses: Robotics with 85% Score

Conferences/Seminars/Workshops Organised/Attended

- Worked as organizing secretary in a National level conference organized at ITM, Bhilwara-2010
- Coordinated ICT based workshop (ISTE recognized) on Engineering Thermodynamics at ITM Campus with IIT Bombay- 2013
- Coordinated ICT based workshop (ISTE recognized) on Fluid Mechanics at ITM Campus with IIT Kharagpur- 2015
- Attended ICT based workshop (ISTE recognized) on Research Methodology at ITM Campus with IIT Bombay 2012.
- Attended ICT based workshop (ISTE recognized) on Aakash Tablet at ITM Campus with IIT Bombay 2013.
- > Attended STC at IIT Roorkee on Modelling and Simulations of Dynamic System (2014).
- > Delivered talk in Industry Conclave on Lean Concepts in Textile Industry
- > Attended 2 Week STC on Problem Based Learning Organised by NITTTR Kolkota
- Delivered Expert Lectures (more than 15)
- Convener of Two International Conferences organized by Sangam University, Bhilwara.

Paper Published:

- 1. Rakesh Bhandari, Harish Nagar," Parametric optimization of WEDM parameters on AISID2 steel for surface roughness and material removal rate using Taguchi method", *International Journal for Scientific Research & Development*, Vol. 5, Issue 05, 2017
- 2. Rakesh Bhandari, Harish Nagar, "Mathematical modelling and optimisation of WEDM parameters using Response Surface Methodology in machining of AISI D2 steel", *International Journal of Advanced Research in Engineering and Applied Sciences*, Vol. 6 | No. 7 | July 2017
- 3. Rakesh Bhandari, Harish Nagar "Experimental Investigations and development of empirical model for gap current and cutting rate in Wire Electric Discharge Machining of AISI D2 steel", *International Journal of Engineering Development and Research*, Vol 5, Issue 3, 2017.
- 4. Vikram Singh, Rakesh Bhandari & Vinod Kumar Yadav," An experimental investigation on machining parameters of AISI D2 steel using WEDM", *International Journal for Advanced Manufacturing and Technology*, Vol 93:1-4, pp:203-214, October 2017.
- AjitanshuVedrtnam, Dr.S.J.Pawar, Rakesh Bhandari,, "Ultrasonic Testing Of Glass Fiber Reinforced Polypropylene Composites" *International Journal of Mechanical Engineering and Technology (IJMET)*, ISSN 0976–6340(Print), ISSN 0976–6359(Online) Volume 4, Issue 4, July – August 2013
- 6. Rakesh Bhandari, Vikram Singh," Development of ANN Based Multi Criteria classification and Coding System", International Conference-COPING CHANGE", 2017

- A.Renuka Prasad, Dr.Rakesh Bhandari, Donepudi.Jagadish, "Experimental Investigations on Homogeneous Charged Compression Ignition (HCCI) Engine ", International Journal of Engineering and Advanced Technology (IJEAT), 2249 – 8958, Volume-8, Issue-2S,410-412, 2018.
- Yogesh Tamboli, Dr. Rakesh Bhandari,, "Air-fuel ratio control of an IC engine using advanced machine intelligence : A Review". IJRAR (International Journal of Research and Analytical Reviews), ISSN 2348-1269, ISSN 0976 – 6359(Online), Volume 6, Issue 1;84-88, 2019.
- A.Renuka Prasad, Rakesh Bhandari, Donepudi Jagadish, "Performance and Emissions Characteristics of HCCI Engine with Eucalyptus Biodiesel", International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN 2278-3075, Volume-8 Issue-5;1180-1182, March 2019
- 10. Arun Kumar Sharma, Rakesh Bhandari, Amit Aherwar," Mechanical Aspects Of Metallic Biomaterials In Human Hip Replacement", "International Journal of Research and Analytical Reviews (IJRAR)", ISSN: 2348-1269, Volume 5, Issue 4; 363-368, Feb-2019.
- 11. Chetan Jaiswal, Rakesh Bhandari, "Simulation analysis of solar air heater using various artificial roughness", IJRAR (International Journal of Research and Analytical Reviews), ISSN: 2348-1269, Volume 6, Issue 1;61-73, Feb, 2019.
- 12. Arun Kumar Sharma, Rakesh Bhandari, Amit Aherwar, "Lean concepts for productivity improvement", International Journal of Research and Analytical Reviews (IJRAR), ISSN: 2348-1269, Volume 6, Issue 1;11-14, Feb, 2019.
- A.Renuka Prasad, Rakesh Bhandari," Performance of HCCI engine with Various Modes of Charging Operations", International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8, Issue 4; 12399-12402, 2019.
- Arun Kumar Sharma, Rakesh Bhandari, Amit Aherwar, Ruta Rimašauskiene," Matrix materials used in composites: A comprehensive study", Materials Today: Proceedings, ISSN 2214-7853, 2019
- 15. Yogesh Tamboli, Dr. Rakesh Bhandari," CFD Analysis of Diesel Engine Cylinder to find the Effect of Fuel Consumption On Thermal and Exhaust Characteristics of Engine", Journal Of Critical Reviews, Vol 7, issue 13, ISSN- 2394-5125, 2020
- Chetan Jaiswal, Rakesh Bhandari, "Simulation and Performance Analysis of Roughened Solar Air Heater A Review", Bhugol Swadesh Charcha (Multidisciplinary International Journal), Vol.16, Special Issue 5, June 2020.
- 17. A.Renuka Prasad, Donepudi.Jagadish, Dr.Rakesh Bandari, "STUDIES ON PERFORMANCE AND EMISSIONS OF CI ENGINE CONVERTED AS MODEL HCCI ENGINE", International Journal of Pure and Applied Mathematics, Volume 120 No. 6; 4211-4221, ISSN: 0976 – 6359.
- 18. Arun Kumar Sharma, Rakesh Bhandari, Amit Aherwar, Camelia Pinca-Bretotean, "A study of fabrication methods of aluminum based composites focused on stir casting process", Materials Today Proceeding, Science Direct, 2020, Volume 24, part 2,, Pages 1608-1612.
- 19. ArunKumar Sharma, Rakesh Bhandari, Amit Aherwar, Ruta Rimašauskiene, Camelia Pinca-Bretotean," A study of advancement in application opportunities of aluminum metal matrix

composites", Materials Today Proceeding, Science Direct, Volume 26, Part 2, 2020, Pages 2419-2424.

- 20. Rakesh Bhandari, Premashish Roy, Astham Sau," Disastrous Conventional Energy Situation in India and Role of Non Conventional Energy in that perspective", Wesleyan Journal of Research, Volume 13(73), 2021, Pages 101-106
- 21. Rakesh Bhandari, Yogesh Tamboli,"Thermal and Exhaust Gas Emission of Diesel Fuel at different Air –Fuel Ratio Combination using CFD Analysis in CI Engines", Wesleyan Journal of Research, Volume 13(67), 2021, Pages
- 22. Arun Kumar Sharma, Rakesh Bhandari, Amit Aherwar, Camelia Pinca-Bretotean, "A study of fabrication methods of aluminum based composites focused on stir casting process", Materials Today Proceeding, Science Direct, https://doi.org/10.1016/j.matpr.2020.03.316, 2020, Volume 24, part 2,, Pages 1608-1612.
- 23. Arun Kumar Sharma, R Bhandari, C Pinca-Bretotean," Impact of silicon carbide reinforcement on characteristics of aluminium metal matrix composite", Journal of Physics : Conference Series, Volume 1781(1), 2021 page:12031
- 24. Mathur, Sharma, Bhandari, Bretotean, Sharma, Dhakad, A study of trends and industrial prospects of Industry 4.0, Materials Today Proceeding (Science Direct), 2021
- 25. C Pinca-Bretotean, R Bhandari, C Sharma, SK Dhakad, "An investigation of thermal behaviour of brake disk pad assembly with Ansys", Materials Today Proceeding, 2021
- 26. Arun Kumar Sharma, Rakesh Bhandari, Camelia Pinca-Bretotean, "A systematic overview on fabrication aspects and methods of aluminum metal matrix composites", Materials Today: Proceedings (Elsevier), 2021.
- 27. R. Jaswal, R Bhandari, V. Bansal, "A COMPREHENSIVE REVIEW ON THE EFFECT OF VARIOUS PARAMETERS ON THE PERFORMANCE OF SOLAR AIR HEATER", THE JOURNAL OF ORIENTAL RESEARCH MADRAS, 2021(August), 128-131
- Rahul Mishra, Dr. Rakesh Bhandari , Dr. S. P Pandey," Review On Hybrid Energy System", Design Engineering, 2021, Vol(6), page: 4559-4567, International Journal of Mechanical Engineering, 2022, Vol(7), Page: 1550-1559
- 29. Rahul Mishra, Dr. Rakesh Bhandari , Dr. S. P Pandey,"AN ARTIFICIAL INTELLIGENT USED IN HYBRID PV OR DFIG BASED GRID CONNECTED SYSTEM"

Books Published:

- 1. Engineering Mechanics; ISBN (9789391322007), 2021, Ashwin Books Collection and Distributors.
- 2. HCCI Engines; ISBN(978-93-90847-30-3), Kria Dhrishti Publications

References:

- 1. Dr. B. R. Natarajan (Professor), Bansthali Vidyapeeth, Nivai (9799476406)
- 2. Dr. Karunesh Saxena (Vice Chancellor), Sangam University, Bhilwara (9588801174)

Personal Profile:

Father's Name: Date of Birth: Languages known: Permanent Address: Hobbies: Shri Niwas Bhandari 21st November, 1976 English, Hindi 187, Vakil Colony, Bhilwara(Rajasthan)-311001 Interacting with Students, Reading.

Contact Details:

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