Faculty Profile

Name: Dr. Vivekananda Kukkala

Designation: Assistant Professor

Teaching Areas: Digital Fabrication, Manufacturing Processes, Production Techniques, Advanced Machining Processes, Advances in Materials Science, Engineering Metallurgy, Structure and Properties of Materials, Machine Tool Design, Micro-Machining and Precision Engineering, Engineering Economics and Management, Introduction to Entrepreneurship, Design Thinking.

Research Interests: Ultrasonic Vibration-assisted Manufacturing Processes, Biomedical applications of Ultrasonic Vibration-assisted Techniques, Wire Cut EDM Process, Extrusion Processes, LASER Cutting/Welding Processes, Additive Manufacturing, Finite Element Analysis (FEA), Optimization Techniques.

Education:

- Ph.D. in Mechanical Engineering, National Institute of Technology Rourkela, 2019.
- MBA (Operations and IT), The ICFAI Business School, Hyderabad 2024.
- M.Tech (Production Technology) in Mechanical Engineering, National Institute of Technology Rourkela, 2012.
- B.Tech in Mechanical Engineering, Jawaharlal Nehru Technological University, Hyderabad, 2010.
- AICTE-QIP-PG Certificate Programme in "Internet of Things" from IIT Jammu, 2024.

Research Publication:

1. **K. Vivekananda**, G.N. Arka, S.K. Sahoo, "Finite element analysis and process parameters optimization of ultrasonic vibration assisted turning (UVT)", vol. 6, pp. 1906-1914, Procedia Materials science, 2014.
2. **K. Vivekananda**, G.N. Arka, S.K. Sahoo, "Design and Analysis of Ultrasonic Vibratory Tool (UVT) using FEM, and Experimental study on Ultrasonic Vibration-assisted Turning (UAT)", vol. 97, pp. 1178-1186, Procedia Engineering, 2014.
3. Anshuman Kumar, **K. Vivekananda** and Kumar Abhishek, Experimental Investigation and Optimization of Process Parameter for Inconel 718 Using Wire Electrical Discharge Machining (WEDM), Vol. 18, No. 03, pp. 339-362, Journal of Advanced Manufacturing Systems, 2019.
4. Kumar, A., Upadhyay, C., **Kukkala, V**. et al. Effect of Electrode Material and Hybrid Metaheuristic Optimization on Die Corner Accuracy during Wire Electrical Discharge Machining on Inconel (625): A Comparative Study. J. of Materi Eng and Perform 2024).