

Name of Teaching Staff: DR. MANOJ SINGHA

Designation: ASSISTANT PROFESSOR

Department: MECHANICAL ENGINEERING

Date of Joining the Institution:3rd March, 2014

Qualification:

B.Tech.:Mechanical Engineering, 2005

M.E. :Production Engineering, 2007

Project title: Study on the effect of tool geometry and cutting speed on tool force and surface finish in machining of AISI 1040 steel

Ph.D. :Production Engineering,2014

Thesis title: Investigation on Multi-Parametric Mixes of Electrochemical Deburring (ECD) Process for Enhanced Deburring Characteristics.

Teaching Interest: Advanced manufacturing processes, Primary manufacturing processes, Machining principles and machine tools, Heat transfer, Engineering thermodynamics and fluid mechanics

Research Interest: Non Traditional Machining (NTM) Processes,Machining principles and machine tools

Projects Guided:

Projects at UG Level: 04

Total Experience:

Teaching: 05 years

Research: 05 years

Paper Published:

National/International Journals:

(a) "Study on the effect of tool geometry and cutting speed on tool force and surface finish in machining of AISI 1040 steel", ***Manufacturing Technology and Research***, Vol. 4, No. 1 & 2, 2010, pp 56-63.

(b) "Reliability Assessment of Rukhia Gas Turbine Power Plant in Tripura", ***International Journal of Current Engineering and Technology***, Vol.2, No.1 (March 2012), pp-184-195.

(c) "Optimization of process parameters in electrochemical deburring of die steel using Taguchi method", ***International Journal of Modern Manufacturing Technologies***, Politehnium Publishing House, 'GHEORGHE ASACHI' Technical University of Iasi, Romania, Vol. IV, No. 1 / 2012, 2012, pp. 121-126.

(d) "Evaluation of the characteristics of electrochemical deburring process of die steel using response surface methodology", ***Journal of Manufacturing Technology Research***, Vol. 4, Issue 3-4, 2012, pp. 199-208.

(e) "Grey-based Taguchi method for optimization of multiple characteristics in electrochemical deburring process", ***International Journal of Manufacturing Technology and Management***, Vol.26, No.1/2/3/4, 2012, pp.137 - 148.

National/International Conferences:

(a) "Electrochemical deburring (ECD) of SS304 stainless steel workpieces for enhanced deburring characteristics", ***National Conference on Recent Trends in Manufacturing Technology***

(RTMT'09), DoME, CEGC, Anna University, Chennai, 06-07 March, 2009.

(b) “Study of electrochemical deburring (ECD) of SS304 stainless steel workpiece for enhanced deburring characteristics”, **The International Conference on Advances in Materials and Processing Technologies (AMPT 2009)**, The Legend Hotel Kuala Lumpur, Malaysia 26-29 October, 2009.

(c) “Multi-Objective optimization of electrochemical deburring (ECD) process based on grey relational analysis method”, **Sixth International conference on “Precession, Meso, Micro and Nano Engineering”**, Coimbatore, India, 11-12 December, 2009.

(d) “Optimization of electrochemical deburring (ECD) process by grey relational analysis method”, **Recent Advances in Manufacturing Technology and Management (RAMTM – 2010)**, Jadavpur University, Kolkata, India, 19 - 20 February, 2010.

(e) “Study of electrochemical deburring (ECD) of die-steel by employing Taguchi method”, **3rd International and 24th All India Manufacturing Technology, Design and Research Conference**, Andhra University College of Engineering (A), Andhra University, Visakhapatnam-530003, December 13-15, 2010.

(f) “Influence of NaNO₃ and NaCl as electrolytes on electrochemical deburring characteristics of die steel”, **An International Conference on PRECISION, MESO, MICRO, AND NANO ENGINEERING**, College of Engineering, Pune, 10-11 December, 2011.

(g) “Multi-Objective Optimization of Electrochemical Deburring Process Using Grey-based Taguchi Method”, **Recent Trends in**

Manufacturing Science and Technology (RTMST-2013), National Institute of Technical Teachers Training and Research, Kolkata, India, 18th and 19th April, 2013.

(h) “Multi-objective optimization of electrochemical deburring (ECD) process using desirability function approach”, **All India Seminar on Advancements and Trends in engineering & Technology Management (ATETM-2015)**, The Institution of Engineers (India), Durgapur Local Centre, August 29th & 30th, 2015.

(i) “Influence of different electrolytes on electrochemical deburring (ECD) process”, **Enabling Sustainable Development in Mechanical Engineering in the Context of Make in India**, Durgapur Institute of advanced technology and management, 3rd - 4th April, 2017.

(j) “Optimization of multi machining characteristics in electrochemical deburring (ECD) using Pareto optimality approach”, **Sustainable Development in Manufacturing Process and Impact on Environment**, Durgapur Institute of advanced technology and management, 3rd - 4th May, 2018.