

CURRICULUM VITAE PIYUSH SINGH



NAME

Piyush Singh

DESIGNATION

Assistant Professor

AFFILIATION

Dept of Mechanical Engg
Assam Engineering College
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Kamrup (M), Assam
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RESEARCH INTERESTS

Wire-EDM, Friction Stir
Welding, CFD and
Optimization

LANGUAGES

Hindi: Excellent
English: Excellent
Assamese: Fair
Bengali: Fair

COMPUTER SKILLS

MS Office, AutoCAD, c,
MATLAB, COMSOL,
MINITAB etc.

OTHER INTERESTS

Cooking, sketching,
photography and playing
Chess.

EDUCATION

- 2012-2014 **Indian Institute of Technology (Indian School of Mines) Dhanbad**
M. Tech. in Mechanical Engineering (Manufacturing Technology)
First class with distinction. Secured first position.
- 2005-2009 **Assam Engineering College, Guwahati (Gauhati University)**
B.E. in Mechanical Engineering. Secured first class with honours.

PROFESSIONAL EXPERIENCE

- 2018 - Present **Assistant Professor, Department of Mechanical Engineering, AEC Guwahati**
UG Courses taught: Engg Mechanics (1st & 2nd Semester), Workshop Theory II (6th Semester), Refrigeration (7th Semester) and Air-Conditioning (8th Semester)
BE Projects Guided: 3 nos (11 students); M.Tech Project Guided: 1 no.
- 2009-2012 **Engineer-Plant, Gammon India Limited**
Posted at Regional Workshop Ranchi for 2 years and 8 months.
Key responsibilities: Repairs and maintenance, testing & quality assurance, R&D and manufacturing/ fabrication.

INTERNSHIP/ TRAINING/ EXCURSION

- 3 weeks Department of Mechanical Engineering, IIT Guwahati
Development of a regression model to find the main cutting force in turning.
- 3 weeks HMT Limited, Tractor Division, Pinjore, Haryana
Summer industrial training (Manufacturing & Assembly of Agricultural tractors)
- 9 days Visit to IMTEX (International Machine Tool Exhibition) 2013 & industries (HMT Limited & Bharat Fritz Werner (BFW) Ltd) in Bengaluru.
- 1 month Sandvik Asia Pvt Limited, Udaipur
Internship project "Designing of the Maintenance System at S K Mines, Rajasthan, such that the MTTR for drills does not exceed two hours."
- 1+1 weeks IIT Guwahati: STC on "Modern Scenario in Welding Technology" & "Mechanics of Composites for Engineering Applications"
- 8 weeks NPTEL course on "Manufacturing of Composites"
- 1+1 weeks IIT Kharagpur: "Faculty Induction Workshop" & "Advanced Pedagogy and Digital Tools for TEQIP Faculty Members"
- 2 weeks IIT Bombay: Course on "Digital Transformation in Teaching Learning Process"

ACADEMIC PROJECTS

- B.E. Numerical investigation of a 2-D incompressible viscous flow over a flat plate in the presence of a rectangular obstruction using vorticity-stream function approach.
- M. Tech Investigation and parametric optimization of WEDM of Stainless Steel SS304 and Al-10% SiC MMC.

RECENT PUBLICATIONS/ CONFERENCES (FOR FULL LIST VISIT [GOOGLE SCHOLAR PROFILE](#))

- Tiwari, A., Singh, P., Pankaj, P. et al. FSW of low carbon steel using tungsten carbide (WC-10wt.%Co) based tool material. J Mech Sci Technol 33, 4931–4938 (2019).
- Tiwari, A., Singh, P., Pankaj, P. et al. Effect of Tool Offset and Rotational Speed in Dissimilar Friction Stir Welding of AISI 304 Stainless Steel and Mild Steel. J. of Materi Eng and Perform 28, 6365–6379 (2019).
- Singh et al. Finite Element and Experimental Study of Self-Reacting Friction Stir Welding of Aluminium Alloy AA6061-T6, 6th International & 27th All India Manufacturing Technology, Design and Research Conference, 2016, Excel India, Vol. ISBN: 978-93-86256-27-0, pp. 967-971.
- Singh et al. A three-dimensional fully coupled thermo-mechanical model for Self-reacting Friction Stir Welding of Aluminium AA6061 sheets, 2016, J. Phys.: Conf. Ser., 759, pp. 012047.

RECENT EVENTS ORGANIZED

- TEQIP-III sponsored One Week FDP on "Quality and Quality Engineering", 3-7 December 2019
- TEQIP-III sponsored Workshop on "Introduction to Bio-mechanics", 26th & 27th September 2019

HONOURS AND AWARDS

- Gold medalist for securing first position in M. Tech at IIT(ISM) Dhanbad.
- Secured 1st runners up during Research Conclave' 16 at IIT Guwahati.
- Represented IIT Guwahati at the Make in India Week (13-18 February, 2017) held in Mumbai.
- Jury member for selection of the winners in India Skills Assam 2018 for Welding skills on the invitation of Assam Skill Development Mission (ASDM).