

Pragya Nandan Banjare



Ph. D.
Metallurgical and Materials Engineering

Contacts No: +91- 9770578891
Email Id: impragyanandan@gmail.com

CAREER OBJECTIVE: -

To build a long-term profession in academic field that will offer endless opportunities for career growth and to keep up with cutting-edge educational technologies.

ACADEMIC DETAILS: -

DEGREE / CLASS	UNIVERSITY/ BOARD	INSTITUTE	YEAR OF PASSING	RESULT (C.P.I/%)
Ph. D.	National Institute of Technology, Raipur.	National Institute of Technology, Raipur.	Thesis submitted	6.66/10
M. Tech.	Indian Institute of Technology, Gandhinagar	Indian Institute of Technology, Gandhinagar	2015	6.5/10
B. Tech.	National Institute of Technology, Raipur.	National Institute of technology, Raipur	2012	7.21/10
Class 12th	Chhattisgarh Board of Secondary Education Raipur	B.S.P.H.S. School Sector 2 Bhilai	2007	55.2%
Class 10th	Chhattisgarh Board of Secondary Education Raipur	B.S.P.H.S. School Sector 2 Bhilai	2005	74.5%

ACADEMIC PROJECTS: -

- Studies on Friction Stir Welding of Dissimilar Aluminum and Copper alloys. [2022]
 - Objective of this project to study the effect hybrid FSW techniques and various welding parameters on weld strength.
- To Develop a new of Friction Stir Welding tool for the joining of thermoplastics. [March 2015]
 - Aim of this project to develop and study the effect of assisted heating tool on weld strength and optimize various welding parameters to get maximum weld strength.
- Academic project under B.Tech. curriculum on “Computational Modelling (Molecular Dynamics) of Heat Transfer Characteristics of Nanofluids”. [March 2012]
 - Aim of this project to validate the computational results of thermal characteristics of Nano fluids from experimental results

PUBLICATIONS: -

- Study of Material Flow and Mechanical Properties of Friction Stir Welded AA2024 with AA7075 Dissimilar Alloys using Top-Half-Threaded Pin Tool; Pragya Nandan Banjare, Satya Kumar Dewangan and Manoranjan Kumar Manoj; *Trends in Sciences* 2021; 18(20): 4 ISSN: 1686-3933; (*Scopus Indexed*)

- Effect of Tool RPM and Tool Travers Speed on Mechanical Properties of Friction Stir Welded Joints of Dissimilar Aluminium Alloys; Pragma Nandan Banjare & Manoranjan Kumar Manoj; (*IJMPERD*) Volume 10, Special Issue, Aug 2020, 215–222; (*Scopus Indexed*)
- An assisted heating tool design for FSW of thermoplastics; Pragma Nandan Banjare, Pankaj Sahlot & Amit Arora; *Journal of Materials Processing Technology* Volume 239, 2017 Page 83–91, ISSN: 0924-0136; (*SCI Indexed*)
- Effect of ageing time and temperature on corrosion behaviour of aluminum alloy 2014; Vikas Gadpale, Pragma Nandan Banjare & Manoranjan Kumar Manoj; *IOP Conference Series: Materials Science and Engineering* (*Scopus Indexed*)
- Friction Stir Spot Welding of Commercial Aluminum Strip Using A Drill Press; Pragma Nandan Banjare, Vikas Gadpale & Manoranjan Kumar Manoj; *MATS journal of engineering and applied science*, Volume 3, Issue 1, October -2018 ISSN No: - 2394-0549
- Evolution of tools and process in friction stir spot welds of al-based alloys: a review; Pragma Nandan Banjare, Vikas Gadpale & Manoranjan Kumar Manoj; *ICSTPCT Conference*.
- Effect of welding parameters on mechanical properties of Al 2024 and Al 7075 friction stir welded joint; Pragma Nandan Banjare & Manoranjan Kumar Manoj; *ICPCM 2018 Conference*.
- Effect of Ageing Time on Microstructure and Mechanical Properties of Aluminum Alloy 2014; Vikas Gadpale, Pragma Nandan Banjare & Manoranjan Kumar Manoj; *MATS journal of engineering and applied science*, Volume 3, Issue 1, October -2018 ISSN No: - 2394-0549
- Effect of Double Sided FSW on Mechanical Properties and Corrosion Resistance of 7075 Aluminium Alloy; Satya Kumar Dewangan, Pragma Nandan Banjare, Vikas Gadpale, Manvendra K. Tripathi & Manoranjan Kumar Manoj; *ICPCM 2018 international conference*.

ACADEMIC AND LAB EXPERIENCE: -

- Lectures and lab taken- Metal Joining Processes (Welding, Brazing and Soldering).
- Organized International conferences and workshops.
- GATE qualified with 864 AIR in year 2012.
- Welding Lab setup, procurement of Friction Stir Welding machine via tender process.
- Prepared pit furnace and Stir Casting Setup for aluminum melting.
- Temperature data logging device using Arduino Mega and thermocouples.

COMPUTER SKILLS: -

- CAD Software: Autodesk Inventor.
- Software skills: Microsoft office, Photoshop, Lightroom, Premier Pro

EXTRA CURRICULAR ACTIVITIES: -

- Senior Under Officer in N.C.C. 'C' and 'B' Certificate holder from 5 C.G. CTI. COY. N.C.C. Raipur & 'A' certificate holder from 3 C.G. AIR. SQN. N.C.C. Raipur.
- Mentor of Click club NIT Raipur for 5 years.
- Part of 'Raaga the music club of NIT Raipur' as lead and bass guitarist for 6 years.

HOBBIES AND INTEREST

- Photography, Playing Guitar, Playing Chess, Solving Rubik's cube.