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Assistant Professor



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OBJECTIVES

Teaching, Research and consultancy

EDUCATION

Ph. D. - IIT Bhubaneswar
M. Tech. in Manufacturing Science and Engineering, IIT Kharagpur,
B. E. Mechanical BPUT, Odisha
Diploma in Mechanical Engineering, Govt. of Odisha

EMPLOYMENT EXPERIENCE

TEACHING (5.5 Years)

- Working as Asst. Prof. in Manufacturing Engineering Department, NIFFT, Hatia, Ranchi (From 15th Nov 2016)
- Worked as Asst. Prof. in School of Mechanical Engineering, KIIT University. (From June, 2014 till 9th Nov 2016)
- Worked as Asst. Prof. in Mechanical Engineering Department, ITER, Bhubaneswar, Odisha. (2010- January, 2011)

INDUSTRIAL (3 years)

- Worked in SRIRAM PISTONS, An auto component Manufacturer, New Delhi from Aug., 1996- Till Aug. 1999

RESEARCH PROJECTS (3 years)

- Part of the project “Development of Autonomous Under Water Vehicle at IIT Kharagpur” for about 3 years (99 lacs approx. , a project sponsored by Govt. of India)
- Worked as team leader in the project “Re-engineering of Maize Sheller” at IIT Bhubaneswar (10 lacs. Approx., a project sponsored by Govt. of Odisha)



- Worked as team leader in the project “Development of a walking type Reaper cum Binder at IIT Bhubaneswar “(29 lakhs , approximately , a project sponsored by Govt. of Odisha.



- Developed a delta 3-d printer at NIFFT

Other consultancy projects (both funded and non-funded consultancy)

- Development of process sheet, tools, fixture, Codes for manufacturing of blade adopter of a wind mill at L&T Kansbahal, 2003.
- Development of process sheet, tools, fixture for manufacturing and proving of coiler mandrel of a steel plant SMS at L&T Kansbahal, 2002.
- Conversion of microcontroller based CNC lathe to RT linux PC based real time CNC lathe at IIT Kharagpur.
- Development of software for web based monitoring and control of six axes PUMA Robot in JAVA J2EE.

Subject Taught

U. G. Subject

Kinetics and kinematics of machines

Machine dynamics

Machine design

Mechatronics

P. G. Subject

Soft computing

Theory of elasticity

Finite element methods

Fracture mechanics

Manufacturing systems engineering

Research Guidance

P. G. Seven

Ph. D. Two continuing

Laboratory Developed in collaboration of Industry at KIIT University: (National Instruments Lab.)

Laboratory developed at NIFFT.

PUBLICATIONS

(International Journals)

1. A.K. Pradhan, S.K. Parida, 3D FE delamination induced damage analyses of lap shear joints made with curved laminated FRP composite panels, *Journal of Adhes. Sci. and Technol.* 27 (2013) 1104-1121.
2. S.K. Parida, A.K. Pradhan, 3D finite element analysis of stress distributions and strain energy release rates for adhesive bonded flat composite lap shear joints having pre-existing delaminations, *Journal Mechanical Science and Technology*, 29 Feb. (2014)
3. S.K. Parida, A.K. Pradhan, Influence of curvature geometry of laminated FRP composite panels on delamination damage in adhesive bonded lap shear joints, *International Journal of Adhes. and Adhes.* Doi 10.1016/j.jadhaadha.2014.05.003
4. S.K. Parida, A.K. Pradhan, Effect of degree of anisotropy on fracture behavior of delamination damage in adhesive bonded lap shear joints, *I. jou. Sci. Technol. Trans. Of Mech. Engg.* Doi DOI: 10.1007/s40997-016-0018-4. (2017)
5. S. K. Parida, A. K. Pradhan, Effect of Pre-embedded delamination on mixed mode fracture behavior in LSJ made with flat FRP composites (submitted)(2018)
6. Pruthwiraj Sahu, Sambit Kumar Parida and Sisir Mantry, Effect of agglomerated zirconia-toughened mullite on the mechanical properties of giant cane fiber mat epoxy laminated composites, *Structural Engineering and Mechanics*, Vol. 70, No. 2 (2019) DOI: <https://doi.org/10.12989/sem.2019.70.2.000>
7. Ranjan K. Behera, S. K. Parida & R. R. Das Effect of the aspect ratio of the pre-existing rectangular adhesion failure on the structural integrity of the adhesively bonded single lap joint, *Journal of Adhesion Science and Technology*, DOI: [10.1080/01694243.2019.1629731](https://doi.org/10.1080/01694243.2019.1629731)
8. Ranjan K. Behera, S. K. Parida & R. R. Das (2019) Three Dimensional Adhesion Failure Analysis of the Single Lap Joint having Pre-Embedded Circular Defects, *Journal of Strain Analysis for Engineering Design*, sagepub.com/journals-permissions DOI: 10.1177/0309324719867002 journals.sagepub.com/home/sdj
9. Md Saquib Bin Reyaz, S. K. Parida Design, development of automated SMAW setup and weldment analysis in wet and dry working environment, accepted

Book Chapter

10. Optimization of Semi-solid forging parameters of A356-5TiB 2 in-situ composites using ANSYS and DEFORM Simulation, S. Deepak Kumar, D Karthik, S. K. Parida, S. K. Jha, *Innovations in soft-computing and Information Technology*, Springer nature, Singapore Pte Ltd, 2019. DOI: https://doi.org/10.1007/978-981-13-3185-5_25

International Conferences

1. S. K. Parida, A. K. Pradhan, Mixed mode fracture behavior of circular delamination embedded in lap shear joint made with flat FRP composite laminates, In Proceedings of Indian Society Of Theoretical and Applied Mechanics (ISTAM) ... 58th Congress of ISTAM 18th - 21st December, 2013 , BESU, Kolkata, India.
2. S K. Parida, A. K. Pradhan , V. Hari , Adhesion failure analyses of single lap joint made with FGM adherends, In Proceedings of Indian Society Of Theoretical and Applied Mechanics (ISTAM) ... 57th Congress of ISTAM ,16th – 19th December, 2012 , DIAT, PUNE, India.
3. S K. Parida, A. K. Pradhan, Stress analyses of lap shear joints made with FRP composite adherends, In Proceedings of Indian Society Of Theoretical and Applied Mechanics (ISTAM) ... 56th Congress of ISTAM, 17th - 21st December, 2011 , SVNIT, Surat, India.
4. Alok Kumar Das, Sambit Kumar Parida, Amit Rai Dixit, Partha SAHA, C. S. Kumar, A Vision System for Online Measurement of Diameter of Micro-Tool in Micro-Electrochemical Machine, 24th International Congress on condition Monitoring and Diagnostic Engineering Management (COMADEM 2011) Page-1197.
5. S K. Parida, A. K. Pradhan, Delamination Damage Analyses of Adhesive Bonded LSJ in Curved Laminated FRP Composite Panels adherends, In Proceedings of 4th ICCMS, Novtel, 11th December,2012, IIT Hyderabad, India
6. Alok Kumar Das, Sambit Kumar Parida, Amit Rai Dixit, Partha Saha, C. S. Kumar, A vision system for online measurement of diameter of micro-tool in microelectrochemical machine, Proceedings of 24th International congress on Condition Monitoring and Diagnostic Engineering Management (COMADEM2011), University of Stavanger, Norway,2011, PP. 1197-1204.
7. S K. Parida, U. Babu, G. Madhab., Monitoring and control of mobile robots using Java, In the Proceedings of 17th International symposium, 2007, Austria, Vienna.
8. S K. Parida, A. K. Pradhan, P Mishra, High Oil consumptions in Tata 697 Engine: A Case Study, Proceedings of 3rd International symposium, KIITSAAT, 2014, Bhubaneswar, India.
9. S. K. Parida, A. K. Pradhan, Adhesion failure analyses of LSJ made with curved FRP Composite panels, Proceedings of 3rd International symposium, KIITSAAT, 2014, Bhubaneswar, India.
10. T Sahoo , S Parida , S Mantry , R Sahoo , S Deepak, Thermo-Mechanical characterization of plasma Sprayed YSZ-CeO₂ Nano-Composite Coatings on Inconel substrates Asia Steel International Conference, Bhubaneswar, India, February 6-9, 2018.
11. Saquib Bin Reyaz , Sambit Parida, About the design, development of an automated SMAW setup and the weldment analysis in air and wet working environment, in the proceeding of ICAMME,2019, KIIT Bhubaneswar, India March 15-17 ,2019.
12. Pruthwiraj Sahu, Sambit Kumar Parida, Effect of cenosphere filler on the hardness and impact strength of wild cane fibre mat reinforced laminated composites, in the proceeding of ICAMME,2019, KIIT Bhubaneswar, India March 15-17 ,2019.
13. Ranjan K. Behera, Nitin Sharma, S. K.Parida, Finite element analysis of buckling, free vibration and flexure of clamped laminated composite plates in variable thermal environment, International Conference on Recent Innovations and Developments in Mechanical Engineering *NIT Meghalaya, Shillong, India, November 8 – 10, 2018*