

## Faculty Profile

1. Name: *Dr. Surya Narayan Panda*

2. Department: *Production & Industrial Engineering*

3. Email id: *snpanda.bit@gmail.com/snpanda.prod@bitsindri.ac.in*

4. Phone Number: *9861192330*

5. Office Address: *Department of Production & Industrial Engineering  
Department, B.I.T Sindri, Dhanbad, Jharkhand-  
828123*



6. Qualification:

S. No	Degree (UG, PG, PhD)	Specialization	Institute
1	B. tech	Manufacturing Science and engineering	Veer Surendra Sai University of Technology, Burla, Odisha
2	M. Tech	Machine Design and Analysis	Veer Surendra Sai University of Technology, Burla, Odisha
3	Ph.D	Production Engineering	Veer Surendra Sai University of Technology, Burla, Odisha

7. Area of Specialization: *Design of Machine Element, Nontraditional Machining, Welding, Softcomputing methods, Machine tool design, composite materials, CAD/CAM*

8. Professional Experience:

I) Teaching Experience:

S. No	Organization	Designation	Period (Date)	
			From	To
01	Bit, Sindri, Dhanbad, Jharkhand	Assistant Professor-NPIU	01/09/2018	Till Date
02	Govt College Of Engineering, Kalahandi, Odisha	Assistant Professor(OC)	25/07/2016	31/08/2/18
03	Centurion University of Technology and Management, Bhubaneswar	Assistant Professor	31/07/2014	23/07/2016

II) Industrial Experience:

Sl. No.	Position held	Name of Organization	from	to
01	Assistant Engineer	Bhushan Power and Steel	04/07/2011	21/07/2014

9. Publications:

I) International Journal:

	<b>Title of Paper</b>	<b>Name of Journal &amp; ISSN Number</b>	<b>Volume, Page Number &amp; Year</b>	<b>Paper published in SCI/SCIE/SSCI/Scopus indexed journal (as cited in paper)</b>	<b>Quartile Index (Q1,Q2,Q3,Q4)</b>
<b>1</b>	Modeling and Optimization of Rolling Process: A Multi-Objective Approach	<i>Journal of Advanced Manufacturing Systems</i> , ISSN (online): 1793-6896	19(02), 343-364,2020	<b>ESCI</b>	<b>Q3</b>
<b>2</b>	A multi objective optimum design approach for rolling element bearing	<i>International Journal on Interactive Design and Manufacturing Electronic</i> ISSN:1955-2505	12, 1095–1108 ,2018	<b>ESCI</b>	<b>Q2</b>
<b>3</b>	Comparative study on optimum design of rolling element bearing	<i>Tribology International</i> , ISSN: 0301-679X	92, 595-604, 2015	<b>SCIE</b>	<b>Q1</b>

II) International Conference :

	<b>Title of Paper</b>	<b>Detail of Conference</b>	<b>Volume, Page Number &amp; Year</b>
<b>1</b>	A Comparative Evaluation of Process Parameter Optimization of Wire Cut Electric Discharge Machining of Ti-6Al-4V Using WASPAS and Metaheuristic Methods.		<i>Psychology and Education Journal</i> , 58(1), 5860-5863,2021

2	A Review on Friction Stir Welding—A Green Manufacturing Technology.	<i>In Recent Trends in Manufacturing and Materials Towards Industry 4.0: Selected Articles from iM3F 2020, Malaysia</i> . Springer Singapore.	(pp. 869-880), 2021
3	Tribological investigation of quality of the industrial speed reducer synthetic lube oil used in material handling industry.	2nd International Conference on Functional Material, Manufacturing and Performances	<i>Materials Today: Proceedings</i> . 2021
4	Parametric appraisal of strength & hardness of resin compacted sand castings using hybrid Taguchi-WASPAS-Material Generation Algorithm.	2nd International Conference on Functional Material, Manufacturing and Performances	<i>Materials Today: Proceedings</i> . 2021
5	Recent advancements in ice jet machining process as an alternative of AWJM.	2nd International Conference on Functional Material, Manufacturing and Performances	<i>Materials Today: Proceedings</i> . 2021
6	Experimental study of a portable plasma arc cutting system using hybrid RSM-nature inspired optimization technique.	2nd International Conference on Functional Material, Manufacturing and Performances	<i>Materials Today: Proceedings</i> . 2021
7	Scope of Using Photovoltaic Cell to Power Electrical Units of Air-Conditioned Linke Hofmann Busch (LHB) Coaches Used in Indian Railways..	<i>In Advances in Air Conditioning and Refrigeration</i> (pp. 405-414). Springer, Singapore.	(pp. 405-414),2021
8	An Efficient Robotic Manipulator Trajectory Planning Using Modified Firefly Algorithm.	<i>In Advances in Materials and Manufacturing Engineering</i> (pp. 59-66). Springer, Singapore.	(pp. 59-66),2020
9	Process Parameter Optimization in EDM: A Multi-objective Approach	<i>In Advances in Materials and Manufacturing Engineering</i> (pp. 193-	(pp. 193-201), 2020

	Using Metaheuristic.	201). Springer, Singapore.	
10	Analysis of Different Types of Micro Grains in Stick Welded Mild Steel Plates.	In <i>Advances in Materials and Manufacturing Engineering</i> (pp. 471-476). Springer, Singapore	(pp. 471-476), 2020
11	Geodesic Approach for Trajectory Planning of Mobile Robot Manipulators.	In <i>Advances in Mechanical Engineering</i> (pp. 1521-1531). Springer, Singapore.	(pp. 1521-1531),2020
12	A Multi-objective Approach to Study the Effects of Ball Race Conformity on Optimum Design of Rolling Element Bearing Using Metaheuristics. In <i>Advanced Computing and Intelligent Engineering</i> (pp. 35-47). Springer, Singapore.	In <i>Advanced Computing and Intelligent Engineering</i> (pp. 35-47). Springer, Singapore.	(pp. 35-47),2020
13	Multi-objective optimization and experimental investigation of CNC oxy-fuel gas cutting parameters using Taguchi coupled data envelopment analysis..	In <i>Recent Advances in Mechanical Infrastructure</i> (pp. 75-83). Springer, Singapore	(pp. 75-83),2020
14	Comparative evaluation for studying the parametric influences on quality of electrode using Taguchi method coupled with MOORA, DFA, and TOPSIS method for electrochemical machining.	In <i>Recent Advances in Mechanical Infrastructure</i> (pp. 115-129). Springer, Singapore.	(pp. 115-129),2020
15	Reevaluation of Ball-Race Conformity Effect on Rolling Element Bearing Life Using PSO	. In <i>Computational Intelligence in Data Mining</i> (pp. 155-164). Springer, Singapore.	(pp. 155-164),2019
16	A Comparative	<i>Materials Today: Proceedings</i> , 5(5),	11408-11414,2018

	Investigation to Process Parameter Optimization for Spot Welding Using Taguchi Based Grey Relational Analysis and Metaheuristics.	11408-11414	
17	Effect of process parameters on friction stir spot welding using grey based taguchi methodology.	<i>Materials Today: Proceedings</i> , 5(5), 12098-12102	12098-12102,2018
18	A Multiobjective Ideal Design of Rolling Element Bearing Using Metaheuristics. In <i>Smart Computing and Informatics</i> (pp. 21-31). Springer, Singapore.	In <i>Smart Computing and Informatics</i> (pp. 21-31). Springer, Singapore.	(pp. 21-31),2018

### III) National Journal :

Sl. No.	Title of the paper	Name of the journal in which publication has been made	Vol/No	Publication Year	Pages
01	Parametric Data Modeling and Experimental Approach for Spot Weldment in SS202	Int. Journal of Engineering Research and Application	3	2013	130-135
02	Optimization of process parameters in spot weldment in OEM grade steel using Genetic Algorithm	International Journal on Mechanical Engineering and Robotics	3	2015	25-29
03	Optimization of Spur Gears Using Profile Modification	International Journal of Advanced Mechanical Engineering	8	2018	71-80
04	Re-examination for Effect of Ball Race Conformity on Life of Rolling Element Bearing using metaheuristic	International Journal of Advanced Mechanical Engineering	8	2018	285- 294
05	Reinforcing bar deterioration and anchorage zone cracking on the load capacity of RC half-joints in girder of major bridge on the river of Sutlej in the State of Punjab	International Journal of Advanced Mechanical Engineering	8	2018	97-110
6	Productivity Improvement of Continuous Casting Through Utilization	International Journal of Advanced Scientific Research and	3	2018	1-4

	of Caster Speed Using Goal Programming Technique	Management			
7	Mechanical Characterization of GPL/Polymer Nanocomposite Structure using Finite Element Analysis and SCILAB	International Journal of Applied Engineering Research	14	2019	69-78
8	Multi-Parametric Optimization During Drilling of Aerospace Alloy (UNS A97068) Using Hybrid RSM-GRA, GA and SA	International Journal of Management, Technology And Engineering	09	2019	2501-2509
9	Thermal Model for Analysis of Hard Turning of Titanium alloy by Coated carbide Tool	International Journal for Research in Engineering Application & Management	05	2019	70-82

IV) National Conference :

Sl. No.	Title of the paper	Name of the Conference in which publication has been made	Vol/No.	Publication Year	Pages
01	Re-examination for Effect of Ball Race Conformity on Life of Rolling Element Bearing using metaheuristic	NCMAME-2017	Souvenir	2017	15-16
02	Parametric Optimization of EDM Process By Using Taguchi Based Grey Relational Analysis For Mild Steel IS 1018	International Interdisciplinary Conference on Engineering Science And Management	2	2016	295-300

V) Book Chapter :

S. No.	Title of the Book	Name of Publisher with ISSN/ISBN No.	Year of Publication
1	Advances in Robotics and Optimization Approach in Engineering	Central west publishing ISBN (print): 978-1 922617 18-7 <b>(2 chapters)</b>	<b>2021</b>

## 10. SPONSORED R & D PROJECTS

Sl. No.	Title of Project	Sponsoring Agency	Period		Project Sanctioned Amount in INR	Status (Completed / Ongoing)
			From	To		
1	Investigation to fatigue and vibration characteristics of Rolling Element Bearing	AICTE	18/06/2019	31/03/2021	8.30 Lakh	Completed

## 11. Conference/ Workshop/Seminar/ Organized

Sl. No.	Title of Seminar / Conferences / Short – term Courses	Name of Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses	No. of Participants
01	2nd National Conference on Multidimensional Advancement in Mechanical Engineering	Prof. A.K.Pattanaik	TEQIP-III	27-28 Dec 2017	110
02	MARFF-2018	Prof.P.Kumar	TEQIP-III	3-7 Oct 2018	60
03	Emerging Manufacturing Technologies and Strategies (EMTS-2021)	Dr.S.N.Panda	TEQIP-III	05th July to 09th July, 2021	200

## 12. Symposium/ Workshop/Seminar/ Attended

Sl. No.	Title of Symposium/ Workshop/Seminar/ Short – term Courses	Date	Organizing Institute
01	Functional Engineering Material Technology, Modeling and Analysis (FEMTMA)	25.06.2018 to 07.07.2018	VSSUT,Burla,Odisha
02	Recent Developments in Plant Maintenance And Condition Monitoring of Machinery (RDPMCMM)	10-04-2017 to 15-04-2017	VSSUT,Burla,Odisha
03	Flow and Process simulation in process industries(FAPSIPI)	29-10-2018 to 02-11-2018	BIT, Sindri, Jharkhand

04	Recent Advances in Manufacturing (RAIM)	27-11-2018 to 01-12-2018	BIT, Sindri, Jharkhand
05	One week Online Faculty Development Program on "Research Methodology Tools and Techniques (RMTT)	29-05-2020 to 02-06-2020	Priyadarshini College of Engineering, Nagpur
06	5 days National Workshop on Research Methodology	26-05-2020 to 30-05-2020	Indira Gandhi National Tribal University, Amarkantak, Madhya Pradesh
07	FDP On Latex	13-07-2020 to 19-07-2020	Spoken Tutorial, IIT Bombay and Jamshedpur Women's College
08	Faculty Development Program on "Research Orientations in Engineering with Effective Outcomes"	26-07-2020 to 30-07-2020	KIET, Ghaziabad
09	Five Day Online Faculty Development Programme on "Mechatronics, Automation and Robotics"	03-08-20 to 07-08-20	OPJU, RAIGARH
10	FDP "Recent Trends in Mechanical Engineering"	17-08-20 to 21-08-20	AISSMS College of Engineering, Pune
11	FDP on "Advancement In Manufacturing Technologies For Industrial Applications"	24-08-20 to 28-08-20	AICTE (ATAL)
12	FDP on Advances in Materials & Machining Processes for Recent Industrial Applications	07-09-20 to 11-09-20	AICTE (ATAL)
13	FDP on Additive Manufacturing	21-09-2020 to 25-09-2020	AICTE (ATAL)
14	FDP on 3D Printing & Design	14-12-20 to 18-12-20	AICTE (ATAL)
15	Workshop on Research Advances in Science & Engineering	14-06-2021 to 18-06-21	BIT, Sindri

### 13. Academic and Nonacademic Activity

\* NBA Coordinator of department

\* Coding officer Exam cell

\*NAAC team member

\* Student co-ordinator

\*Startup cell member \* coordinator of workshops conducted by department

\*Purchase committee member

\*Lab Incharge of different labs

\*M.Tech co-ordinator