Faculty Profile

1. Name: Dr. Purushottam Kumar Singh

2. Department: Mechanical Engineering

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4. Phone Number: 9798003510

5. Office Address: Assistant Professor,
Department of Mechanical Engineering,
BIT Sindri, Dhanbad, Jharkhand

6. Qualification:

S. No	Degree(UG, PG, PhD)	Specialization	Institute
1	PhD	Manufacturing Science and Engineering	IIT(ISM) Dhanbad
2	M.Tech	Heat Power	BIT Sindri
3	B.Tech	Mechanical Engineering	Ranchi University

7. Area of Specialization: Manufacturing Science and Engineering

8. Current areas of research: Nano Materials, Micro-manufacturing, Solar Energy

9. Subjects Taught:

I) UG:- Fluid Mechanics, Thermodynamics, Kinematics of Machine

II) PG:- Advance Thermodynamics

10. Professional Experience:

I) Teaching Experience:

Sl. No.	Position held	Name of Organization	from	to
1	Assistant Professor	BIT Sindri	26-02-2018	Till date

11. Publications:

I) International Journal:

Sl. No.	Title of the paper	Name of the journal in which publication has been made	Vol/No.	Publication Year	Pages
1	Performance investigation of CuO-paraffin wax nanocomposite in solar water heater during nigh	Thermochimica Acta	671	2019	36-42
2	Performance analysis of Thermoelectric Generation System under Different Flow Configurations	Journal of Electronic Materials		2019	
3	Laser Surface Modification of SAE8620 HVD Material for Transmission Gear	Materials Today: Proceedings	11	2019	813-817
4	Micro-Electrical Discharge Machining of Difficult-to-Machine Materials: A Review.	Journal of Engineering Manufacture	33	2019	339-370
5	Singh P.K., Das AK. Un-conventional Methods for Synthesis of Metal and Non-Metal Nano-particles: A Review	Proceedings of the National Academy of Sciences, India Section A: Physical Sciences	33	2019	1-23
6	Effect of annealing on silver oxide nano particle generated by electrochemical discharge machining	Materials Today: Proceedings	5	2019	26804-26809.
7	A facile green synthesis of tungsten nanoparticles through Micro-EDM	Materials Today: Proceedings	11	2019	761-766
8	*Synthesis of Doped Zinc Oxide Nanoparticles: A Review*	Materials Today: Proceedings	11	2019	767-775
9	Surface alloying of Miniature components by Micro Electrical Discharge Process	Materials and Manufacturing Processes	33	2018	1051-61
10	Effect of annealing on silver oxide nano particle generated by	Materials Today: Proceedings	5	2018	26804-26809.

	electrochemical discharge machining				
11	Pulse Current Co-deposition of Ni-WS2 Nano-composite Film for Solid Lubrication.	Materials and Manufacturing Processes	32	2017	365-72
12	Shape controlled green synthesis of CuO nanoparticles through ultrasonic assisted electrochemical discharge process and its application for supercapacitor.	Materials Chemistry and Physics.	198	2017	16-34
13	Study of Annealing Effects on Ag2O Nanoparticles Generated by Electrochemical Spark Process.	Journal of Electronic Materials.	46	2017	5715-27
14	A novel application of micro-EDM process for the generation of nickel nanoparticles with different shapes.	Materials and Manufacturing Processes	32	2017	564-572
15	Experimental study of microstructure, mechanical and tribological properties of cBN particulates SS316 alloy based MMCs fabricated by DMLS technique.	Journal of Mechanical Science and Technology	31	2017	2729-2737
16	Development of cBN Reinforced Ti6Al4V MMCs through Laser Sintering and Process Optimization.Materials and Manufacturing Processes.	Materials and Manufacturing Processes.2017	32	2017	1667-1677
17	Influence of process parameters on the surface integrity of micro-holes of SS304 obtained by micro-EDM.	Journal of the Brazilian Society of Mechanical Sciences and Engineering.	38	2016	2029-2037

18	Synthesis and characterization of CuO nanoparticles using strong base electrolyte through electrochemical discharge process	Bulletin of Materials Science	39	2016	469-78
19	Synthesis of Silver Metal Nanoparticles Through Electric Arc Discharge Method: A Review	Advanced Science Letters	22	2016	3-7

II) International Conference:

Sl. No.	**Title of the paper**	**Name of the Conference in which publication has been made**	**Vol/No.**	**Publication Year**	**Pages**
1	Performanceinvestigation highlighting the Energy storage behaviour of Cupric Oxide nanoparticles synthesise through Electrochemical Discharge Process	St. Cross College, University of Oxford, United Kingdom, March	(E-Proceeding ISBN: 978-1-912532-05-6)	2019	
2	Optical characterization of tungsten carbide nanoparticles synthesized through micro-EDM	ABSMSNW, IIT BHU		2017	
3	A facile green synthesis of tungsten nanoparticles through Micro-EDM-	EMCA, NIT Durgapur		2017	
4	Laser Surface Modification of SAE8620 HVD Material For Transmission Gear	EMCA, NIT Durgapur		2017	
5	Development of cBN Reinforced Ti6Al4V MMCsusing Direct Metal Laser Sintering Process andits Characterization-	ICAMM, Hyderabad		2017	
6	Synthesis and	COPEN9, IIT Bombay		2015	

	characterization of Copper nanoparticle by electrochemical discharge process				
7	Investigation of Surface Integrity and Material Transfer of Nickel Sheet Using micro-EDM Process	COPEN9, IIT Bombay		2015	
8	Electrochemical discharge synthesis and optical characterization of tungsten nanoparticles	NANOS, Hyderabad		2015	
9	Drilling of Micro Holes on Soda-line Glass through Electrochemical Discharge Machining Process	ICAD& M , NIT Trichy		2014	
10	A New Method for Modeling of Cathode and Anode Erosion in Micro-EDM Process	ICAD& M , NIT Trichy		2014	
11	Synthesis of Silver Metal Nanoparticles through Electric Arc Discharge Method: A Review	EMCA, CSIR-CGCRI Kolkata.		2014	

12. Symposium/ Workshop/Seminar/ Attended

Sl. No.	**Title of Symposium/ Workshop/Seminar/ Short – term Courses**	**Date**	**Organizing Institute**
1	Recent Advances in Manufacturing	**Nov 27 to Dec 01**	BIT sindri

13. Administrative Position Held:

S. No.	**Position Held**	**From (date/month/year)**
1	Hostel Superintendent, Hostel no-08 BIT Sindri	11-08-2018
2	TEQIP Co-coordinator Mechanical Engineering	