Faculty Profile

1. Name: Dr. Manoj Kumar

2. Department: Mechanical Engineering

3. Email id: bitmanoj@gmail.com

4. Phone Number: 9430374658

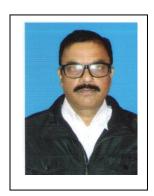
5. Office Address: Mechanical Engineering Department

B.I.T., Sindri, Sindri Institute, Dhanbad, Jharkhand

PIN - 828123

6. Qualification:

S. No	Degree(UG, PG, PhD)	Specialization	Institute
1	B.E.	Mechanical	Visvesvaraya Regional
		Engineering	College of Engineering,
			Nagpur; Presently called
			VNIT, Nagpur
2	M.E.	Automated	Birla Institute of
		Manufacturing System	Technology, Mesra,
			Ranchi
3	Ph.D.	Machine Condition	Indian School of Mines,
		Monitoring,	Dhanbad; Presently
		Lubricating Oil	known as I.I.T. (I.S.M.),
		Analysis	Dhanbad



- 7. Area of Specialization: Lubricating Oil Analysis, Machine Condition Monitoring
- 8. PhD (Guided): One
- 9. Projects: P.I. in D.S.T. FIST project
- 9. Subjects Taught:
- I) UG:- Engineering Mechanics, Engineering Thermodynamics, Engineering Graphics, Kinematics of Machines, Dynamics of Machines, Computer Added Design, Automation (CAM), Theory of Machines
- II) PG:-Advance Mechanical Vibration

10. Professional Experience:

I) Teaching Experience:

Sl. No.	Position held	Name of Organization	from	to
1	Lecturer	C.I.T., Tatisilwai,	13/04/2002	15/02/2006
		Ranchi		
2	Lecturer	Sikkim Manipal	22/02/2006	16/09/2006
		Institute of		
		Technology, Majitar,		
		Sikkim		
3	Assistant Professor	B.I.T. Sindri, Dhanbad	19/09/2006	3/10/2017
4	Professor	B.I.T. Sindri, Dhanbad	3/10/2017	Till date

III) Industrial Experience:

Sl. No.	Position held	Name of Organization	from	to
1	G.E.T.	Brooke Bond India	September	June 1993
		Limited	1992	
2	Asst. Engg. Trainee	Tata Yodogawa Ltd.	December	April 1999
		(TAYO), Jamshedpur	1997	
3	Mechanical Engg. Trainee	SPHL, Ranchi	July 2000	April 2002

11. Publications:

I)InternationalJournal:

SI. No.	Title of the paper	Name of the journal in which publication has been made	Vol/No.	Publication Year	Pages
1.	Advancement and current status of wear debris analysis for machine condition monitoring — A review	Industrial Lubrication and Tribology	Vol. 65, Iss: 1	2013	3 – 11
2	Statistical hypothesis testing of the increase in wear debris size parameters and the deterioration of oil	International Journal of Engineering Inventions	Vol. 2, Iss:8	2013	1-8.
3	Assessing remaining useful life of lubricant using Fourier transform infrared spectroscopy	Journal of Quality in Maintenance Engineering	Vol.22 Iss 2	2016	202-214
4	Wear debris analysis using ferrography	International Journal of Recent Trends in Engineering and Research	Vol. 2 Iss, 8	2016	398-404
5	Investigation of Quantum Dot Controlled Not Gate	International Journal of Innovative research in Science, Engineering and Technology	Vol. 5 Iss 9	2016	15939- 15946.
6	Process selection for automation of photolithography in microchip fabrication	International Journal of Engineering Innovations	Vol.5 Iss 8	2016	55-60.

7	Geometrical and Operational Parameters Effect on Inline Hole Jet Plate Solar Air Heater with Longitudinal Fins for Cross and Non-Cross Conditions	International Journal of Emerging Trends in Science and Technology	Vol. 4 Iss:8	2017	5541- 5548
8	Modelling of Wear Debris in Planetary Gear Drive	Industrial Lubrication and Tribology	Vol. 71 Issue 2	2019	199-204
9	To Study the Performance of Thermoelectric Generator using Plate Fin, Round Fin & Square Fin Heat Sinks	International Journal for Research in Engineering Application and Management	Vol-04, Issue- 07	2018	397-400
10	Experimental Analysis of Space Cooling Using Refrigeration System Creating Vacuum	International Journal for Research in Engineering Application and Management	Vol-04, Issue- 07	2018	136-139
11	_	Proceedings of the iMeche, PartE: Journal of Process Mechanical Engineering		2020	235-242
12	Experimental and Statistical analysis of wear on gear material	Lubrication Science	Accepted for publication (Early view available online)	2023	1-11

II) International Conference:

Sl. No.	Title of the paper	Name of the Conference in which publication has been made	Vol/No.	Publicat ion Year	Pages
1	Investigating the Engine Condition of a Mining Equipment by Wear Debris Analysis Using SEM	International Congress on Condition Monitoring and Diagnostics Engineering Management (COMADEM 2011) at Stavanger, Norway	Proc. (ISBN: 0- 9541307-2-3).	2011	519-524
2	A Comparative Study of Instruments used in Wear Debris Analysis for Machine Condition Monitoring	International Congress on Condition Monitoring and Diagnostics Engineering Management (COMADEM 2011) at Stavanger, Norway	Proc. (ISBN: 0-9541307-2-3).	2011	507-511
3	An investigation to detect leakage of oil using wear debris analysis in journal bearing of 1 MW hydel power plant	International Conference on Mechanical, Materials and Renewable Energy, Sikkim, India	IOP Conf. Ser.: Mater. Sci. Eng. 377	2018	012216 (1-4)

III)National Conference :

SI. No.	Title of the paper	Name of the Conference in which publication has been made	Vol/No.	Publicat ion Year	Pages
1	Status and prospect of energy management programme for conservation of energy	National Conference on Population Growth, Pollution and Biodiversity loss: A Bio-social Approach	Abstract in Proc.	2005	
2	A Study of Size Distribution of Wear Particles in Deteriorating Gear Oil of HEMM	National Seminar on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2012), Indian School of Mines, Dhanbad,	Proc.	2012	101-106
3	Materials for High Temperature Nuclear Applications	National Seminar on Indian Nuclear Power Programme: Challenges and Opportunities, B.I.T. Sindri, Dhanbad	Proc.	2012	
4	Laser Based Direct Metal Deposition: A Review of Effect of Process Parameters on Geometrical Characteristics of the Part	All India Seminar on Recent Advancement in Manufacturing and its Management, B.I.T. Sindri, Dhanbad.	Proc.	2014	
5	Investigating the Condition of a Differential Assembly Using Wear Debris Analysis	National Seminar on Environmental Issues Protection, Conservation and Management, B.I.T. Sindri, Dhanbad	Proc.	2016	

13. Symposium/ Workshop/Seminar/ Attended

SI. No.	Title of Symposium/ Workshop/Seminar/ Short – term Courses	Date	Organizing Institute
1	National Workshop on Technological Excellence Through Value Engineering	April 07, 2007	B.I.T. Sindri, Dhanbad
2.	National Workshop on Industry Institute Interaction	July 13- 14, 2007	B.I.T. Sindri, Dhanbad
3	National Workshop on Intellectual Property Rights	October 26, 2013	B.I.T. Sindri, Dhanbad
4	U.G.C. refresher course on "Automation in Manufacturing Engineering"	November 28 – December 17, 2005	B.I.T., Mesra, Ranchi.
5	TEQIP sponsored training programme on "Developing Personal and Professional Effectiveness"	December 16-24, 2006	XLRI, Jamshedpur
6	TEQIP sponsored training programme "Certified PLC Programmer"	April 07- 12, 2008	B.I.T. Sindri, Dhanbad.
7	Short term course on "Introduction to Material Handling"	June 09- 13, 2008	NITTTR, Kolkata
8	TEQIP sponsored training programme on "Finite Element Analysis with ANSYS"	July 16- 20, 2008	B.I.T., Mesra, Ranchi
9	Training Programme on Intellectual Property Rights	September 13-14, 2008	B.I.T. Sindri, Dhanbad
10	TEQIP sponsored training programme "Training on Pedagogy II"	October 14-19, 2008	B.I.T. Sindri, Dhanbad.
11	Short term course under QIP "Teaching Computer Graphics"	June 14- 25, 2010	I.I.T. Delhi
12	Short term course on "Improving Teaching Competency for 21 st Century Learners"	December 19-30, 2011	NITTTR, Kolkata

13	ISTE sponsored short term training programme on "Performance Enhancement Skills"	July 23 – August 03, 2012	B.I.T. Sindri
14	National Workshop on "Intellectual Property Rights"	October 26, 2013	B.I.T., Sindri
15	ISTE STTP 2 weeks training programme on, "Personality Development"	October 26 – November 6, 2015	B.I.T. Sindri
16	One week Faculty Development Programme on "ICT Skills for Teachers" organized by Electronics and ICT Academy, N.I.T., Patna	June 19- 24, 2017	B.I.T. Sindri
17	TEQIP- III sponsored two days workshop on "Outcome Based Education and Accreditation"	March 16- 17, 2018	B.I.T. Sindri
18	Summer Training Programme on "Active Learning"	June 18- 22, 2018	I.I.T., Gandhinagar
19	Two day workshop on "New PMSS Software"	March 12- 13, 2019	Jadavpur University, Kolkata
20	Two week course on "Digital Transformation In Teaching Learning Process"	March 16- 30,2020	MOOC course on SWAYAM offered by IIT Bombay.
21	Faculty Development Programme for Engineering Colleges on Virtual Labs	June 29, 2020	Jharkhand Education Grid
22	Webinar on Government e- Marketplace	July 7, 2020	NPIU, MHRD, Govt. of India
23	Faculty Development Programme on Engineering Next Generation Technology for Humanity	August 5- 9, 2020	TEQIP-III sponsored FDP at Motihari College of Engineering.
24	Advances in Manufacturing (AIM-2021)	June15- 19, 2021	TEQIP-III sponsored FDP by Mechanical Engineering Department, B.I.T. Sindri, Dhanbad
25	Introduction to Upstream & Downstream Hydrocarbon Industry	June 25, 2021	Industry Institute Interaction Cell, B.I.T., Sindri, Dhanbad

14. Administrative Position Held:

S. No.	Position Held	From (date/month/year)
1.	Assistant Hostel Superintendent	2006
	Counseling and admission related woks – 2007- Till	
	date	
	-12	
	– Till date	
2	Assistant Professor In-charge, Workshop	2006
3	Member, Services to Community and Economy under	2006
	TEQIP	
4	Hostel Superintendent	2007 and 2015
5	Professor In-charge, Workshop	2007
6	Assistant Professor In-charge, Academics	2008
7	Assistant Legal Advisor	2008
8	Purchase Officer	2012
9	Nodal Officer, Procurement (TEQIP- III)	2017
10	Member, Post-Graduate Research Council (Faculty of	2016
	Engineering) Vinoba Bhave University, Hazaribagh	

15. Members of Professional Bodies:

- 1. Associate Member of The Institution of Engineers (India) (M. No.: AM096694-3) (National)
- 2. Life Member of The Indian Society for Technical Education (M. No.: LM62781) (National)
- 3. Life Member of the Indian Institution of Production Engineers (M. No.: ELM166) (National)