Faculty Profile

1. Name: Dr. Dinesh Kumar (Assistant Professor)
2. Department: Mechanical Engineering
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   B.I.T. Sindri

   Dhanbad – 828123

   Jharkhand; India

6. Qualification:

Sl. No.	Degree(UG, PG, PhD)	Specialization	Institute/University	Year
1.	Ph.D.	Mechanical engineering	IIT (ISM) DHANBAD	2017
2.	M.Tech	Alternate hydro energy system	IIT ROORKEE	2013
3.	B.E	Mechanical engineering	R.G.P.V, BHOPAL	2011

7. Area of Specialization: Fluid Mechanics, fluid machinery, thermodynamics, Renewable energy (hydro energy, solar energy and wind energy), modeling and simulation.

8. Ph.D. Guided: 1 ongoing

9. RESEARCH PROJECTS:

   One research project entitled "**Performance analysis of whirlybird hydrokinetic turbine**" (CRS ID: 1-5694005989, an amount Rs 1643000) completed under collaborative research scheme (CRS), TEQIP III, NPIU, MHRD' GOI.

10. Subjects Taught:

(I)UG:

S. NO.	DETAILS
1	Fluid mechanics (Theory+Lab)
2	Fluid machine (Theory+Lab)
3	Heat and Mass Transfer (Theory+Lab)
4	Thermodynamics (Theory)
5	Applied thermodynamics (Theory+Lab)

(II)PG: Nil

11. Professional Experience:

I) Teaching Experience:

Sl. No.	Position held	Name of Organization	from	to
1	Assistant Professor	BIT, Sindri	29.12.2022	Till date
2	Associate Professor	UCET, VBU Hazaribagh	26.07.2019	28.12.2022
3	Assistant Professor (Under TEQIP-III)	UCET, VBU Hazaribagh	03.01.2018	25.07.2019
4	Assistant Professor	UCET, VBU Hazaribagh	09.09.2013	02.01.2018

II) Research Experience: Nil

III) Industrial Experience: Nil

12. 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.	Employability of vertical axis crossflow whirlybird rotor as	Ocean Engineering	238	2021	109744

	hydrokinetic turbine and its performance prediction corresponding to different design parameters				
2.	Modeling of flow-induced stress on helical Savonius hydrokinetic turbine with the effect of augmentation technique at different operating conditions	Renewable Energy	111	2017	740-748
3.	Numerical investigation of Hydraulic load and Stress Induced in Savonius Hydrokinetic Turbine with the effects of Augmentation Techniques through Fluid-structure interaction analysis	Energy	116	2016	609-618
4.	A review on the technology, performance, design optimization, reliability, techno-economics and	Renewable and Sustainable Energy Reviews	58	2016	796-813

	environmental impacts of hydrokinetic energy conversion systems				
5.	CFD based analysis of combined effect of cavitation and silt erosion on Kaplan turbine	material today: proceedings	2(4)	2015	2314-2322
6.	Flow Analysis of Kaplan Hydraulic Turbine by Computational Fluid Dynamics	International Journal of Applied Engineering Research	8	2013	61-65
7.	Dynamic Analysis Of Bajaj Pulsar 150cc Connecting Rod Using Ansys-14.0	Asian Journal of Engineering and Applied Technology	3(2)	2014	19-24
8.	Performance analysis of single slope solar still	International Journal of Emerging Technology and Advance Engineering	3(3)	2013	66-72
9.	Review of Optimal Selection of Turbines for Hydroelectric Projects	International Journal of Emerging Technology and Advance Engineering	3 (3)	2013	424-430

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.	A Review on the Design Efficient Blade of Hydrokinetic Turbines	Hydro 2014 International Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering jointly organized by MANIT Bhopal and ISH during December 18-20,2014. Published by Excellent Publishing House, New Delhi	Chapter 29	2014	305-315
2.	Region recognition of stress induced in modified Savonius hydrokinetic turbine based on fluid-structure interaction analysis	INCOM18: Proceedings of the 1st International Conference on Mechanical Engineering, Jadavpur University, Kolkata, January 4 – 6, 2018	Chapter 08	2018	786-789

III) National Journal:Nil

IV) National Conference:Nil

V) Book Chapter: Nil

13. Patents (Filed/Granted)

Sl. No.	Name of the Inventor	Title of the Invention	Application/Patent No. (As applicable)	Year	Status (Filed / Granted)
1.	Ravindra Bhagat, Dinesh Kumar, Shibayan Sarkar	An ellipsoid cross flow hydrokinetic turbine	Indian Patent application no. 202231069692	2022	Publication Date: 30.12.2022

14. Conference/ Workshop/Seminar/ Organized: Nil

15. Symposium/ Workshop/Seminar/ Attended

Sl. No.	Title ofSeminar / Conferences / Short – term Courses	Date	Organizing Institute
1.	One week professional development training under TEQIP III	23rd to 27th September 2019	IIM Tiruchirappalli
2.	One week faculty development programme on the era of digital transformation	8th -12th July 2019	BIT Sindri
3.	One week faculty development programme on Advance Pedagogy	24th to 28th June 2019	IIT Madras
4.	One week Short term course on Introduction to programming: A pedagogical approach, organized by electronics and ICT academics	17th -21st June 2019	IIT Kanpur
5.	Three days workshop on Nurturing start-up/entrepreneurial skills in budding engineers	28th to 30th September 2018	UCET VBU Hazaribagh
6.	Start up conclave 2018 (educate to innovate 1.0)	July 27 –July 29, 2018	ESCI campus, Hyderabad
7.	Professional development programme on Condition Monitoring and failure Analysis of Machines	March 21-24, 2018	IIT(ISM) Dhanbad
8.	Workshop on outcome based education	March 09- March 10, 2018	UCET, VBU Hazaribagh
9.	Faculty induction workshop	February 06- February 10,2018	IIT Kharagpur

16. Administrative Position Held: AICTE In-charge at UCET, VBU Hazaribagh (4.5 years)

17. Award / Recognition Bestowed on Faculty (State / National / International)

- Qualified Graduate Aptitude Test in Engineering (GATE)-2010, 2011, 2012, 2013 and 2014 with good score in Mechanical engineering.
- Got awarded B.E degree With Distinction

18. REVIEWER:

- Solar energy
- Renewable energy,
- Sustainable energy technology and assessment

19. Members of Professional Bodies:

- International Solar Energy Society