



# Sinhgad Technical Education Society's

Smt. Kashibai Navale College of Engineering

Department of Mechanical Engineering

Vadgaon (Budruk) Off. Sinhgad Road, S.No. 44/1



Dr. Prabhat Ranjan

Ph.d – Fluid Power and Control

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## Academic Qualification:

Degree	Institute Name	University Name	Year of Passing	Qualification Status
Ph.d	IIT(ISM) Dhanbad	IIT(ISM) Dhanbad, Jharkhand, India	2021	Awarded
M.Tech (Integrated with Ph.d)	IIT(ISM) Dhanbad	IIT(ISM) Dhanbad, Jharkhand, India	2021	Completed
BE Mech	BNCOE, Pusad	Amravati University, Maharashtra, India	2013	Completed

## Research Paper:

ISSN/ ISBN NO	Title of paper	Published Date	Name of the Journal	Level	Paper Status	Authors
1	A novel approach for the energy recovery and position control of a hybrid hydraulic excavator	Jan 2020	ISA transactions	99 (2020): 387-402	Published	Ranjan, P., Wrata, G., Bhola, M., Mishra, S. K., & Das
2	Performance enhancement of hybrid hydraulic excavator using multiple hydro-pneumatic accumulators	July, 2020	Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering	234(10), 2020, 1133-1149	Published	Ranjan, P., Wrata, G., Bhola, M., Mishra, S. K., & Das, J
3	'Energy saving and Fuzzy-PID position control of electro-hydraulic system by leakage compensation through proportional flow control valve	July 2020	ISA transactions	101(2020) 269-280	Published	Wrata, Gyan., M. Bhola., Ranjan, P., Mishra S. K & Das, J.
4	Position control and	Oct, 2019	Proceedings of the	233(9), 201	Published	Wrata, Gyan,

	performance analysis of hydraulic system using two pump-controlling strategies		Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering	9,1093-1105		Ranjan, P., M. Bhola., Mishra S. K & Das, J
5	PID controller with feed forward estimation used for fault tolerant control of hydraulic system	April 2018	Journal of Mechanical Science and Technology	32.8 (2018): 3849-3855	Published	Mishra, S. K., Wrata, G., Ranjan, P., & Das, J
6	Performance, Emission, and Spectroscopic Analysis of Diesel Engine Fueled with Ternary Biofuel Blends	April 2023	Sustainability	15(9) (2023), p.7415	Published	Hasnain, S.M.M., Chatterjee, R., <b>Prabhat Ranjan</b> , Kumar, G., Sharma, S., Kumar, A., Salah, B. and Ullah, S.S.
7	Study on hydraulic regenerative braking system used in hybrid	Oct 2016	International Journal of Control Theory and Applications	10 (9), 2016; 4361-4364	Published	Ranjan, P., Wrata, G. & Das, J.
8	Leakage and its effects in Various hydraulics driven system	Oct 2016	International Journal of Control Theory and Applications	10 (9), 2016; 4355-4359	Published	Wrata, G., Ranjan, P. & Das
9	Numerical Investigation on Aerodynamic Performance of a Helical Savonius Rotor Inspired by Natural Shapes”	2023	Journal of Mines, Metal and Fuels		Accepted	Pramod Kumar M. Bagade, Preeti Bagade, Ashish Chaudhari, <b>Prabhat Ranjan</b> , Samartha Shirke and Chetan Kumar Sedani
10	Numerical analysis of vertical axis wind turbine with different profiles	2023	Journal of Mines, Metal and Fuels		Accepted	Pramod Kumar M. Bagade, Preeti Bagade, <b>Prabhat Ranjan</b> , Amit Chakravorty, Eeshaan Kamath, and Omkar Mogare

### Conference Details:

SI NO	Title of paper	Authors	Name of the Conference	Date & year
1	Hydraulic Transmission System: An Overview	Ranjan, P., Wrata, G., & Das, J	2nd National conference on mining equipment: new technologies, challenges, and applications (MENTCA-2015)	9-10 October, 2015, IIT(ISM)Dhanbad, Dhanbad.

2	Literature Review of energy saving of Hydraulic Excavator	Ranjan, P., Wrat, G., Bhola, & Das, J	3rd National conference on mining equipment: new technologies, challenges, and applications (MENTCA-2018)	9-10 Feb, 2018, IIT(ISM) Dhanbad, Dhanbad.
3	Study on hydraulic regenerative braking system used in hybrid	<b>Prabhat Ranjan</b> , Gyan Wrat and Jayanta Das	2 <sup>nd</sup> International Conference on computing Paradigms (ICCP-2016) held from	22-24 <sup>th</sup> July, 2016, Don Bosco College and Integrated Intelligent Research, Chennai (Tamil Nadu)
4	Leakage and its effects in Various hydraulics driven system	Gyan Wrat, <b>Prabhat Ranjan</b> and Jayanta Das	2 <sup>nd</sup> International Conference on computing Paradigms (ICCP-2016)	22-24 <sup>th</sup> July, 2016 at Don Bosco College and Integrated Intelligent Research, Chennai (Tamil Nadu).
5	An overview of energy saving technique of a hybrid hydraulic excavator	Kaushal Kishore, Gyan Wrat, <b>Prabhat Ranjan</b> , and J. Das,	3 <sup>rd</sup> National conference on mining equipment: new technologies, challenges, and applications (MENTCA-2015)	9-10 Feb, 2018, IIT(ISM) Dhanbad, Dhanbad
6	“Review of various energy saving methods in construction and heavy machinery	Raushan Kumar, Dev Narayan Kumar Mahto, <b>Prabhat Ranjan</b> , Gyan Wrat & Jayanta Das,	3 <sup>rd</sup> National conference on mining equipment: new technologies, challenges, and applications (MENTCA-2015)	9-10 Feb, 2018, IIT(ISM) Dhanbad, Dhanbad
7	Effect of Cutting Operation of Picks on the Reliability of Surface Miner	Roshan Kumar Patel, Sandeep Kumar Sahoo, Gyan Wrat, Nawal Kishore, and <b>Prabhat Ranjan</b>	3 <sup>rd</sup> National conference on mining equipment: new technologies, challenges, and applications (MENTCA-2015)	9-10 Feb, 2018, IIT(ISM) Dhanbad, Dhanbad.
8	Planning and Preparation of Thematic map using Application of GIS: A Case Study of ISM Campus, Dhanbad, India.	Ajay Kumar, Amit Kumar Gorai, <b>Prabhat Ranjan</b> , and Gyan Wrat,	3 <sup>rd</sup> National conference on mining equipment: new technologies, challenges, and applications (MENTCA-2015)	9-10 Feb, 2018, IIT(ISM) Dhanbad, Dhanbad.

**Workshop Attended/ Organised:**

<b>Workshop</b>	<b>Topic</b>	<b>Conducted By</b>	<b>Date</b>	<b>Level</b>	<b>Category</b>
Five- Days International Faculty Development Program on Recent Trends in Manufacturing Technologies	Days International Faculty Development Program on Recent Trends in Manufacturing Technologies	Mechanical Engineering Department of Padmabhooshan Vasanturadada Patil Institute of Technology, Pune	13 <sup>th</sup> to 17 <sup>th</sup> March 2023.	International	
Faculty Development Program on Hydrogen, Ethanol, and Natural gas as an Alternative and Sustainable Fuels for Transportation	Faculty Development Program on Hydrogen, Ethanol, and Natural gas as an Alternative and Sustainable Fuels for Transportation	Mechanical Engineering Department of BRACT'S Vishwakarma Institute of Information and Technology, Pune with the Indian Society for Technical Education (ISTE)	7 <sup>th</sup> to 11 <sup>th</sup> December 2021	National	
Training and Practice on MATLAB for Engineering Solutions	Training and Practice on MATLAB for Engineering Solutions	Department of Mechanical engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab, India	26 <sup>th</sup> to 30 <sup>th</sup> Nov 2020.	National	
Mechatronics and Electrohydraulic System	Mechatronics and Electrohydraulic System	TEQIP-111 Program OF Government of India Organized by the Department of Mechanical engineering, Jadavpur university, Kolkata	21 <sup>th</sup> to 25 <sup>th</sup> May 2018	National	
Fluid drive and Alternative Drives, and Control in Aerospace Actuation Systems	Fluid drive and Alternative Drives, and Control in Aerospace Actuation Systems	Department of Mechanical Engineering at Indian Institute of Technology Kharagpur, India,	05 <sup>th</sup> Dec to 13 <sup>th</sup> Dec 2016	National	
Workshop on Fluid Power System, their Components, Design and Research Scopes	Workshop on Fluid Power System, their Components, Design and Research Scopes	Department of Mining Machinery Engineering at	03 <sup>rd</sup> to 04 <sup>th</sup> October, 2018.	National	

		Indian Institute of Technology (Indian School of Mines) Dhanbad			
Workshop on Tribology for Industry	Workshop on Tribology for Industry	TEQIP-111 Program OF Government of India Organized by the Department of Mechanical Engineering at Indian Institute of Technology (Indian School of Mines) Dhanbad	01 <sup>th</sup> to 02 <sup>nd</sup> November, 2018	National	
Workshop on IC Engine Assemble and Deassemble	Workshop on IC Engine Assemble and Deassemble	BITS Pilani Goa Campus	5 <sup>th</sup> Feb to 7 Feb 2012	National	
Bharat Wagon Engineering Company Ltd	Bharat Wagon Engineering Company Ltd	Bharat Wagon Engineering Company Ltd” Muzaffarpur unit	25 <sup>th</sup> may to 18 <sup>th</sup> June 2018	National	

### **Honors and Awards**

1. Editorial board member of American journal of Mechanical and industrial Engineering (AJMIE)
2. International Association of Engineers (membership number is: 290592)
3. Avails MHRD Scholarship during Ph.D. program.
4. Graduate Aptitude Test in Engineering (GATE-2015) Qualified

### **Declaration**

I hereby declare that all the above information furnished by me are true to the best of my knowledge.

Date: 21<sup>st</sup> Sep 2023

Name: Dr. Prabhat Ranjan