CURRICULUM VITAE

Dr. RAHUL KUMAR

Assistant Professor Department of Electrical Engineering B.I.T Sindri Dhanbad, Jharkhand, India E-mail : rahuljrfee209@gmail.com, rahuleee1352@ymail.com Mob.: 8936011950, 8789174259



OBJECTIVE:

To utilize my teaching skills towards a challenging career in growth oriented and leading edge that will provide mutual benefits and where from I can utilize my capabilities to the fullest benefits of the organization and society. I will try my best to make judgment to my work by putting my best effort into it.

ACADEMIC PROFILE

Course	Institution	Board/University	Year of Passing	Percentage /CGPA
Ph.D. (Power Electronics & Machine Drives)	IIT (ISM), Dhanbad Jharkhand	IIT(ISM), Dhanbad Jharkhand	November, 2020	NA
M. Tech. (Power System)	B.I.T, Sindri Jharkhand	Vinoba Bhave University, Hazaribag, Jharkhand	2014	8.55
B. Tech . (Electrical & Electronics Engg.)	R.V.S.C.E.T, Jamshedpur, Jharkhand	Ranchi University, Ranchi, Jharkhand	2010	8.1
12 TH	Saraswati Vidya Mandir, Sindri	C.B.S.E	2004	71%
10 th	Saraswati Vidya Mandir, Sindri	C.B.S.E	2001	81%

EXPERIENCE

- Assistant Professor in B.I.T Sindri, from December, 30th 2022 to till date.
- Assistant Professor in Dumka Engineering College, Dumka, Jharkhand, from October, 4th 2021 to December, 29th 2022.
- Assistant Professor in Bharat Institute of Engineering and Technology, Hyderabad, from June, 13th 2019 to July, 21st 2020.

PH.D. THESIS TOPIC

• Model Reference Adaptive System Based Sensorless Speed Control of Doubly-Fed Induction Machine Drive under Different Control Regimes.

M. TECH THESIS TOPIC

• Transient Stability of a Two Machine Transmission System with Static Var Compensator (SVC) And Power System Stabilizer(PSS) using MATLAB /Simulink.

RESEARCH AREA

- Power Electronics and Machine Drives.
- Renewable Energy.

PUBLICATIONS

International Journals Published

- MD Adil, Upendra Prasad, Rahul Kumar "Modified Bidirectional Grid Connected Single Power Conversion Converter with Hybrid Input Battery Voltage" *Design Engineering*, vol. 9, pp-17519- 17529, 2022.
- R. Kumar and S. Das "Model Reference Adaptive System Based Sensorless Speed Control of Grid-Connected Doubly-Fed Induction Generator in Wind Energy Conversion System," *Iranian Journal of Science and Technology, Transactions of Electrical Engineering*, vol.44, pp-129– 140, 2020.
- Upendra Prasad, Ravindra Kumar Yadav, Rahul Kumar "Speed Control of Three-Phase Induction Motor Using Switching Table-Based Direct Torque Control Technique" *IJARET*, *IAEME Publication*, vol. 11, pp-296-304, 2020.

- R. Kumar, S. Das and A. Bhaumik, "Speed sensorless model predictive current control of doubly-fed induction machine drive using model reference adaptive system," *ISA Transactions*, vol. 86, pp. 215-226, 2019.
- **R. Kumar** and S. Das, "MRAS-based speed estimation of grid connected doubly-fed induction machine drive," *IET Power Electronics*, vol. 10, no. 7, pp. 726–737, Jan. 2017.
- Rahul Kumar, Shashi Minz "Transient Stability of a Two Machine Transmission System With Static Var Compensator (Svc) And Power System Stabilizer (Pss) Using Matlab Simulink" *VSRD International Journals*, vol.-3, pp- 379-382, 2013.

International Journal under Consideration

 R. Kumar and S. Das "Space-Vector Modulation based Sensorless Direct Torque Control Scheme for Doubly- Fed Induction Machine Drive," *EPE Journal: European Power Electronics and Drives*, <u>Under review</u>.

International Conferences

- R. Kumar, S. Das, and M. Manohar "Sensorless Control of Grid-Connected Doubly-Fed Induction Machine Drive using Model Reference Adaptive Controller," 2016 IEEE Uttar Pradesh Section International Conference on Electrical, Computer and Electronics Engineering (UPCON), IIT(BHU), Varanasi, India, 09 -11, December, 2016.
- R. Kumar, and S. Das, "Sensorless DTC-SVM Strategy for Doubly-Fed Induction Machine Drive using Model Reference Adaptive System," *14th IEEE India Council International Conference (INDICON)*, IIT Roorkee, India, 15- 17 December, 2017.
- M. Manohar, S. Das and R. Kumar, "A robust current sensor fault detection scheme for sensorless induction motor drive," *IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC)*, Bangalore, India 08-10 November 2017.

SUBJECT TAUGHT

- Power Semiconductor Drive
- Power Electronics
- Electrical Machine
- Circuit Theory
- Utilization of Electrical Power

TRAININGS

- To study the generation & distribution of power at **Patratu Thermal Power Station**, Patratu, Jharkhand, India, from 16th Sep. 2009 to 15th Oct. 2009 (B. Tech level).
- To study the different equipment's used in Grid operation division at Chandil, Jharkhand, India, from 28th Dec. 2009 to 28th Jan. 2010 (B. Tech level).

WORKSHOP, FACULTY DEVELOPMENT PROGRAM AND SEMINAR ATTENDED

- Workshop on "Advanced Power Electronics and Drives", Department of Electrical Engineering, IIT (ISM), Dhanbad, India, 2010.
- Workshop on "Professional Skill Development Program on MATLAB & Simulink for Engineering Application", Department of Electrical Engineering, IIT(ISM) Dhanbad, India, 2014.
- Workshop on **"Industrial Automation with Emphasis on PLC & SCADA"**, Department of Electrical and Electronics Engineering, BIET, Hyderabad, India, November, 2019.
- Participated in the AICTE Recognized Faculty Development Programme On Climate Change and Disaster Management Conducted by Rural Development Department from 10-02-20 to 14-02-20 (One Week) organized by NITTTR, Chandigarh.
- Participated in one week online FDP on "SCILAB- An Open Source Substitute for MATLAB" jointly organized by JNTUH College of Engineering, Sultanpur, and Spoken Tutorial Project, IIT, Bombay from 25th May, 2020 to 30th May, 2020.
- Participated in 5-day online FDP on "NBA and NAAC Accreditation" organized by Internal Quality Assurance Cell (IQAC), M S Ramaiah Institute of Technology under Margdarshan Scheme from 4th-8th June 2020.
- Participated in 5-day online FDP on "Recent Innovations and Technologies in Electric Vehicles" from 8th-12th June 2020, organized by GATES Institutes of Technology, Andhra Pradesh.
- Participated in one week online FDP on "Course Structuring, Teaching and Evaluation in HEI as per OBE" organized by Malla Reddy College of Engineering, Hyderabad in association with ISTE and MHRD from 11th -17th June 2020.
- Participated in One Day Webinar on "Issues and Challenges in Wind Power Grid Integration" on 30th June 2020 Organized by Siddhartha Institute of Engineering and Technology, Hyderabad.

• Participated in International webinar on "How to get Research Grant for UGC, AICTE" jointly hosted by MBITS and SMBS, Kerala, India.

EXTRA CURRICULAR ACTIVITIES:

- Worked as a **HOD** in Dumka Engineering College (ESTD. By Govt. of Jharkhand & Run By Techno India Under PPP) for **NBA** & **NAAC**.
- Worked as a Lab In-charge for the Network Theory Lab in Dumka Engineering College (ESTD. By Govt. Of Jharkhand & Run by Techno India Under PPP).
- Coordinator for conducting One day International Seminar (Online) in "Performance and Economic Analysis of Hydrogen based Fuel Cell with Photovoltaic Tracking System" on 14th February 2022, Organized by Department of Electrical Engineering, Dumka Engineering College (ESTD. By Govt. Of Jharkhand & Run by Techno India Under PPP).
- Coordinator for conducting Three-Day National Level Workshop on "Cutting Edge Technologies for Electrical Engineering" from 10th to 12th March, 2022. Organized by Department of Electrical Engineering, Dumka Engineering College (ESTD. By Govt. Of Jharkhand & Run by Techno India Under PPP).
- Worked as a **Lab In-charge** for the Network Theory Lab in Dumka Engineering College (ESTD. By Govt. Of Jharkhand & Run By Techno India Under PPP).
- Worked as an **Academic In-charge** for the department of EEE in Bharat Institute of Engineering and Technology, Hyderabad.
- Worked as a **Renewable Energy College Level In-charge** in Bharat Institute of Engineering and Technology, Hyderabad.
- Worked as a **Lab In-charge** for the Simulation Lab in Bharat Institute of Engineering and Technology, Hyderabad.
- Department level In-charge for Criterion-2 for NAAC assessment.
- Convener for conducting a One Week Online Faculty Development Program on Challenges & Opportunities in Electrical Engineering - A Research Perspective from 15th to 20th June -2020 Organized by the Department of Electrical and Electronics Engineering, Bharat Institute of Engineering and Technology (BIET).
- Convener for conducting a One Week Online Faculty Development Program on Recent Advances in Electrical Engineering from 22nd to 27th June-2020, Organized by the Department of Electrical and Electronics Engineering, Bharat Institute of Engineering and Technology (BIET), Hyderabad.

 Organized a series of webinar on "Coal-Based Power Generation-The Future Scenario, Talk on EHV Circuit breakers & Electrical Engineering in Industry" in Bharat Institute of Engineering and Technology, Hyderabad on 25th, 27th and 29th June, 2020.

SKILLS

- Programming: C, C++, MATLAB, LATEX.
- Simulation Tools MATLAB, PSPICE, Proteus (PCB circuit design).
- Application of dSPACE for real-time code generation.

PERSONAL DETAILS

Date of Birth	: 05-09-1985	
Mother's Name	: Binota Devi	
Father's Name	: Gora Chand Mahto	
Marital Status	: Married	
Languages Known	: Hindi, English & Bangla	
Address	: Vill- Chitahi, Post- Motinagar, Sindri, DistDhanbad,	
	Jharkhand, Pin-828120.	
Mob. No.	: 8936011950, 8789174259	

REFERENCES

Prof (Dr.) Upendra Prasad Professor Department of Electrical Engineering, B.I.T, Sindri, Dhanbad Email: uprasad@bitsindri.ac.in

Dr. Murli Manohar

Assistant Professor Department of Electrical Engineering, B.I.T, Sindri, Dhanbad Email: murlimanohar2012@gmail.com

DECLARATION

I hereby declare that the above-mentioned particulars are true to the best of my knowledge and belief.

Date: January, 2023

Rahul Kumar

Place: B.I.T Sindri, Dhanbad, Jharkhand

Rahul Kumar