

Academic Profile

Full name of the faculty member: Dr. Rimi Paul

Designation: Assistant Professor

Contact Information:

Office: Electrical Engineering Department, Aliah University, Newtown, Kolkata-700160.

email: rimipaul.ee@aliah.ac.in

Academic qualifications:

Degrees (graduation onward):

- B.Tech. in Electrical Engineering from West Bengal University of Technology.
- M.E. in Electrical Engineering (specialization in Control System) from Bengal Engineering and Science University, Shibpur. [Gate: **2008**]
- Ph.D. (Engineering) from Indian Institute of Engineering, Science and Technology, Shibpur, Howrah.

Positions held/ holding:

- Assistant Professor at University Institute of Technology, The University of Burdwan (2010-2016).
- Assistant Professor in Aliah University (2016 –Till date).

Research Area:

Areas of research interests

1. Discrete Wavelet Theory for controller and filter design
2. Renewable energy and Dc-Dc Converter
3. Fractional order and Fuzzy logic control system based Applications
4. Fault identification and classification
5. Sensor based application

Research guidance:

Name of registered scholar pursuing in Ph.D.: Mr. Rajib Sadhu (Area: Fault Identification and classification in Power System)

List of Publications:

Journals:

- ❖ R. Paul, A. Sengupta, and R. R. Pathak, "Design and application of discrete wavelet packet transform based multiresolution controller for liquid level system," Tran. of ISA, Elsevier, vol. 71, pp. 585-598, 2017.
- ❖ R. Paul, A. Sengupta, and R. R. Pathak, "Discrete wavelet packet transform based controller for liquid level system and its performance analysis," J. of Measurement, Elsevier, vol. 97, pp. 226-233, 2017.
- ❖ R. Paul, A. Sengupta, and R. R. Pathak, "Wavelet based denoising technique for liquid level system," J. of Measurement, Elsevier, vol. 46, pp. 1979-1994, 2013.

Conferences:

- ❖ R. Paul, “Fractional Order Modified AWPI based DC-DC Converter Controlled SEDC Motor”, International Conf. on Computational Technique and Application (ICCTA), Springer, 2021.
- ❖ R. Paul and A. Sengupta, “Fractional Order Intelligent Controller for Single Tank Liquid Level System”, in Proc. of the IEEE conf. on Control, Measurement and Instrumentation (CMI), 2021, pp. 24-29.
- ❖ R. Sadhu and R. Paul “Wavelet Based Fault Identification for Transmission Lines Including Unified Power Flow Controller”, Proceedings of International Conference on Advancements in Mechanical Engineering (ICAME 2020), Kolkata, India, January, 2020.
- ❖ R. Paul and N. Afroz, “Anti-windup FOPI Controller for Step Motor”, in Proc. of the IEEE conf. on Electronics, materials and Nano-Technology (IEMENTECH), Kolkata, India, 2018.
- ❖ R. Paul and A. Sengupta, “Performance study of multiresolution PI controller for third order system”, in Proc. of the IEEE conf. on Control, Measurement and Instrumentation (CMI), Kolkata, India, 2016, pp.215-218.
- ❖ R. Paul, and A. Sengupta, “Selection of best wavelet for Discrete Wavelet Transform based PID controller connected with liquid level System and its performances analysis”, in Proc. of the IEEE conf. on Ind. Instrumentation and Control (ICIC), Pune, India, 2015, pp. 55-59.
- ❖ A. Sengupta, A. Mukherjee, R. Paul and A. Roy, “Application of MRPID Controller on Liquid Level System: A Performance study”, in Proc. of the IEEE Conf. Control, Instrumentation, Energy & Comm. (CIEC) , Kolkata, 2014, pp.156-161.
- ❖ R. Paul and A. Sengupta, “Wavelet based noise reduction of liquid level system using minimum description length criterion”, Communications, Devices and Intelligent Systems (CODIS), International Conference on IEEE, 2012, pp.592-595.
- ❖ A. Sengupta, A. Deb and R. Paul, “Wavelet transform for determination of state and trajectory sensitivity of a singular control system”, India Conference (INDICON), Annual IEEE,2010, pp.1-4.

Book Chapter:

- ❖ R. Paul, A. Sengupta, S. Purkait, and S. Khan, “Application of Discrete Domain Wavelet Filter for Signal Denoising”, accepted chapter to be included in the upcoming book ‘Noise Filtering for Big Data Analytics’ to be published by De Gruyter in 2022.

Award:

1. Women Researcher/ Scientist Award, Springer Conf., ICCTA, 2021.
2. Best Paper presentation award, IEEE Conf., CODIS, 2012.