# **CURRICULUM VITAE**

### DR RITUPARNA MITRA

+91-8638221323/+91-9531038444 rituparnamitra1990@gmail.com

## **CAREER OBJECTIVE**

My belief is that knowledge has no boundary. My confidence is that virtual hunger backed by diligence and perseverance can make me fulfilled and grab anything.

The mission of my life is to be perfect and genuine. I like to contribute my knowledge for the sake of students and society for their enrichment. I have covered an extensive area of my department of Electrical Engineering though my scope of work is power distribution system and power quality. I am a regular reviewer of IET Renewable Power Generation, International Journal of Fuzzy Systems, IET intelligent transport system, IET smart grid and IET Electrical Systems in Transportation and also of numerous national and international conferences. Presently I am working in Swami Vivekananda University as an assistant professor and HOD in electrical engineering department.

# PREVIOUS WORK EXPERIENCE:

At Adamas University as an Assistant Professor in Electrical Engineering Department from 5th August, 2019 to 12th January 2022 (2years 5 Months)

# **KEY SKILLS**

- > Specialization: Power and Energy System, Power Quality, Power Distribution System
- ➤ Mathematical Simulation
- Software dealt: MATLAB 9, 10, 13, Mi-Power, LaTex

# **STRENGTHS**

- Dynamic
- Positive Attitude
- Confident
- > Sincere
- ➤ Adjustable
- Responsible
- Quick learner
- Excellent communication skill

#### PAPER PUBLISHED

#### Journals

- 1. "Experimental investigations of resilient hybrid fiber reinforced SCC beam-column subassemblies under cyclic loadings", Structures, Elsevier, Volume 41, Pages 389-403, July 2022, https://doi.org/10.1016/j.istruc.2022.05.026
- 2. "The Efficacy of Solar EV Duo: Way to Voltage Sag Mitigation", Rituparna Mitra, Arup Kumar Goswami, Prashant Kumar Tiwari, IET Generation, Transmission & Distribution, Volume 14, Issue: 1, pp. 131-139. DOI: 10.1049/iet-gtd.2018.6273
- 3. "Optimal Selection of Voltage Sag Mitigating Devices for Micro Level Customer in Distribution System", Rituparna Mitra, Arup Kumar Goswami, Prashant Kumar Tiwari, IET Renewable Power Generation, Special Issue: Oscillations in Power Systems with High Penetration of Renewable Power Generations, Volume: 13, Issue: 1, pp: 191 200. DOI: 10.1049/iet-rpg.2018.5289
- **4.** "Voltage Sag Assessment using Type-2 Fuzzy system considering uncertainties in Distribution system", Rituparna Mitra, Arup Kumar Goswami, Prashant Kumar Tiwari, IET Generation, Transmission & Distribution, Volume: 11, Issue: 6, pp: 1409 1419. DOI: 10.1049/iet-gtd.2016.0816

## Conferences

- 1. "Minimization of Power Loss in Helical Coil of a Half Bridge Inverter with Improved Whale Optimization", Titas Kumar Nag, Rituparna Mitra, Pradip Kumar Sadhu, 3<sup>rd</sup> International Conference on 'Energy Systems, Drives and Automations', ESDA2020. (Presented)
- 2. "Loss Minimization in Planner Coil for Induction Heating System Using Salp Swarm Algorithm", Avik Datta, Rituparna Mitra, Pradip Kumar Sadhu, 3<sup>rd</sup> International Conference on 'Energy Systems, Drives and Automations', ESDA2020. (Presented)
- 3. "Economic Benefit Analysis by Integration of Different Comparative Methods for FACTS Devices", Rituparna Mitra, Sadhan Gope, Arup Kumar Goswami and Prashant Kumar Tiwari, International Conference on Applied Mathematics & Computational Intelligence (ICAMCI-2020), held in Agartala, December 23-24, 2020, Presented and received best paper award. Published in Springers Proceedings in Mathematics and Statistics, Title: Applied Mathematics and Computational Intelligence, Volume 413, pp. 171, ISBN 978-981-19-8193-7.

- **4.** "Optimal Selection of Voltage Sag Mitigating Devices using Whale Optimization Algorithm for Small and Medium Sized Customers in Distribution System", Rituparna Mitra, Sadhan Gope, Arup Kumar Goswami, Prashant Kumar Tiwari, 2018 2<sup>nd</sup> International Conference on Energy, Power and Environment (Towards Smart Technology) (ICEPE), DOI: 10.1109/EPETSG.2018.8658703
- 5. "Wind Power Generation, an Ingredient for Charging Battery Electric Vehicle (BEV) and a useful Menace of Voltage Sag in Distribution System", Rituparna Mitra, Arup Kumar Goswami, Prashant Kumar Tiwari, 2018 3rd International Conference for Convergence in Technology (I2CT)

DOI: 10.1109/I2CT.2018.8529330

**6.** "Congestion mitigation considering solar electric vehicle: A possible solution for today's electricity market", Sadhan Gope, Rituparna Mitra, Arup Kumar Goswami, Prashant Tiwari, 2017 International Conference on Technological Advancements in Power and Energy (TAP Energy)

DOI: 10.1109/TAPENERGY.2017.8397297

7. "Power transformer failure analysis using interval type-2 fuzzy set theory based fault tree analysis", Rituparna Mitra, Galiveeti Hemakumar Reddy, Arup Kumar Goswami, Nalin B Dev Choudhury, 2016 IEEE 7th Power India International Conference (PIICON), pp 1-4. DOI: 10.1109/POWERI.2016.8077349

# **Book Chapter**

- **1.** "Transmission Congestion Relief with Integration of Photovoltaic Power Using Lion Optimization Algorithm", Sadhan Gope, Subhojit Dawn, Rituparna Mitra, Arup Kumar Goswami, Prashant Kumar Tiwari, Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 816), 25<sup>th</sup> Chapter, pp. 327-338, ISBN: 978-981-13-1592-3, Springer, Singapore. DOI: 10.1007/978-981-13-1592-3\_25
- 2. "Fuzzy Possibility Theory-An Integration of Voltage Sag Type Detection and Its Impact on Equipment Behavior", Rituparna Mitra, Arup Kumar Goswami, Prashant Kumar Tiwari, 6th Chapter, pp. 179-202, ISBN: 978-1-53616-128-1, An Essential Guide to Fuzzy Systems, © 2019 Nova Scientific Publisher.

# **ACADEMIC QUALIFICATION**

- 1. Defended PhD thesis on 11<sup>th</sup> November, 2019 from National Institute of Technology Silchar, Assam, India on "Some studies on Voltage Sag Mitigation Strategies Based on Installation of FACTS Devices and Renewable Energy Sources". (Obtained 92.30% marks in course work)
- 2. M. Tech in Power and Energy System from National Institute of Technology Silchar, Assam, India with 86.20% in the year 2014. The title of M. Tech project is "An Approach for Congestion Management Based on Transmission Line Reconfiguration using Heuristic Algorithms in Electrical Power System". I had secured 10 (in the scale of 10) in this project.
- **3.** GATE Qualifier in the year 2012 with 97.25 percentile in Electrical Engineering Department.
- 4. B. Tech in Electrical Engineering from Hooghly Engineering and Technology College under West Bengal University of Technology with 8.36 (in the scale of 10) in the year 2011. Done project on the topic of "Harmonic Analysis of Cycloconverter Output". The objective of the project was reducing the short circuit occurrences and at the same time helps to reduce the harmonics in the load voltage waveform in B. Tech.
- **5.** Passed Higher Secondary Examination with Pure Science (Phy-Chem-Math-Bio) from Konnagar Hindu Girls' High School under West Bengal Council of Higher Secondary Education with 65.40% in 2007.
- **6.** Passed Secondary examination from Deviswari Vidyaytan, Makhla under West Bengal Board of Secondary Education with 74.50% in 2005.

## **ACHIEVEMENTS**

- Received **Best Teacher award** from Adamas University in 2020.
- Received **best paper presenter award** in ICAMCI 2020, organised by NIT Agartala.
- Guided M. Tech students for completion of their projects and taught LaTex and personality development skills in profession life.
- Central library core committee member as PG/PhD student representative.
- Holding the position of departmental library member of EE department in NIT Silchar.
- Served as Hostel Prefect and MMC member.
- Volunteered thrice in Convocation of NIT Silchar.

- Volunteered for 4<sup>th</sup> International Conference on "Soft Computing for Problem Solving 2014" held during 27-29 December 2014 at National Institute of Technology Silchar, Assam, India.
- Volunteered in DST sponsored "Inspire Science Camp 2016" held during 5-9 July, 2016 at National Institute of Technology Silchar, Assam, India.
- Volunteered as an Anchor in one week workshop on "Hands on Training using Mi-Power Software for Power System Analysis" under TEQIP-III organised by Electrical Engineering Department of National Institute of Technology Silchar during 2<sup>nd</sup> – 6<sup>th</sup> October 2018.
- Completed summer training from West Bengal State Electricity Distribution Company Limited in the period of 16<sup>th</sup> July 2010 to 30<sup>th</sup> July 2010 in Generation Substation (under Chandannagar division).
- Successfully undergone Diploma on Software Development conducted by CMC Ltd (TATA Enterprise) in the year 2012.
- Participated in the three day short term course on "Applications of Soft Computing Techniques in Engineering" held during 9<sup>th</sup> 11<sup>th</sup> November, 2013 at NIT Silchar.
- Participated in 4<sup>th</sup> International Conference on "Soft Computing for Problem Solving 2014" held during 27-29 December 2014 at National Institute of Technology Silchar, Assam, India.
- Participated in three day workshop on "Reliability Theory and its Applications to Real Life Problems" organized by the Central SQC Office of Indian Statistical Institute (ISI) Kolkata during 16-18 January 2015 at National Institute of Technology Silchar, Assam, India.
- Participated in "IEEE Authorship Workshop 2015" on 15<sup>th</sup> February 2015 at National Institute of Technology Silchar, Assam, India.
- Attended workshop on "Advanced Fuzzy Logic" organized by Soft Computing Club, NIT Silchar during 1-8 February, 2016.
- Participated in one week workshop on "Frontiers in Solar Technologies (FST 2018)" under TEQIP-III organised by Mechanical Engineering Department of National Institute of Technology Silchar during September 24<sup>th</sup> – 28<sup>th</sup>, 2018.
- Participated in one week FDP on "Recent Advances in Electrical Engineering (RAEE 2020)" from 03.06.2020 to 07.06.2020 organized by the Department of Electrical & Electronics Engineering of VEMU Institute of Technology, P. Kothakota, Chittor, A.P.

- Participated in the webinar organized by Adamas University on "Need of Mathematical Cryptology and Digital Forensic in Current Society" on 30<sup>th</sup> May, 2020.
- Participated in the webinar organized by Adamas University on "Hydro Generators" on 5<sup>th</sup>
  June, 2020.
- Participated in the webinar organized by Adamas University on "Soft-Computing and its Engineering Applications" on 13<sup>th</sup> June, 2020.
- Participated in the online course organized by Adamas University on "Being and Becoming Innovative: Uncovering your inner problem solving power" from 27<sup>th</sup> April to 1<sup>st</sup> May, 2020.
- Completed a course in Coursera on "COVID-19: What You Need to Know (CME Eligible)".
- Completed a course in Coursera on "Grammar and Punctuation".
- Completed a course in Coursera on "AI for Everyone".
- Completed a course in Coursera on "Electric Power Systems".

## **EXTRA-CURRICULAR ACTIVITY**

- Passed fifth year of Rabindra Sangeet and Nazrul Geeti from Bangio Sangeet Parishad
- Passed third year of Kaththak dance from Chandigarh Nritya Parishad.

# PERSONAL DETAILS

Date of Birth: 1st April, 1990

Languages Known: English, Hindi, and Bengali (Expert in all three)

Permanent Address: 44, Bireswar Banerjee Street, P.O. Bhadrakali, Dist. Hooghly, West

Bengal, India, PIN 712232

LinkedIn: https://www.linkedin.com/in/dr-rituparna-mitra-3613a282/

ResearchGate: https://www.researchgate.net/profile/Rituparna\_Mitra2

Publons: https://publons.com/researcher/1726921/rituparna-mitra/

# **BACKGROUND**

Father: Premasis Mitra (Retired Bank officer)

Mother: Tapati Mitra (Working in Bank)

04 June 2023,

Hindmotor, Hooghly, West Bengal, India