

# UNIVERSITY OF CALCUTTA FACULTY ACADEMIC PROFILE

Name: DIPAK KUMAR MANDAL **Designation**: Assistant Professor **Specialization**: Power Electronics (EE)

**Date of Joining the University:** 19<sup>TH</sup> NOVEMBER, 2019

#### **Contact information:**

Department of Applied Physics (Electrical Engineering Section)
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# **Academic Qualifications:** B.Tech (EE); M.Tech; Ph.D. (pursuing)

UNIVERSITY	ABBREVIATION OF THE DEGREE	
National Institute of Technology, Silchar	B. Tech. (Electrical Engineering)	
Indian Institute of Engineering Science and	Master of Technology	
Technology, Shibpur (Former BESU)	(Renewable Energy Sc.& Tech.)	

# **Work Experience:**

Organization	Positions	Duration
University of Calcutta	Assistant Professor	Nov, 2019 to till date
"Development of Smart Grid Interactive SPV Systems" DST-GOI Funded project	DST-GOI Fellowship	Feb, 2017 to Feb, 2019
Tata Consultancy Services Limited	Assistant System Engineer	Dec, 2011 to Nov, 2013

#### **Research interests:**

- Power Electronics
- Renewable Energy

## Research Publications:

- [1] **D. K. Mandal**, R. Das, S. Chowdhuri,"ZigBee Based Real Time Energy Monitoring for Preventive Maintenance of Solar Photovoltaic System" 6th International Conference on Nanoelectronics, Circuits & Communication Systems 19<sup>th</sup> -20<sup>th</sup> December, 2020.
- [2] D. K. Mandal, S.Chowdhuri, S.K.Biswas, S. S. Saha" A Soft-Switching DC-DC Boost Converter for Extracting Maximum Power from SPV Array" IEEE 5th International Conference on Computing Communication and Automation (ICCCA), Oct 30-31, 2020, DOI: 10.1109/ICCCA49541.2020.9250818.
- [3] S.Bera, D. K. Mandal, S.Chowdhuri, "Design and Improvement of Droop Control Strategy for Single Phase Micro-Grid Inverters in Stand-Alone Mode" international conference on computing, power and communication technologies (GUCON 2019), September 27<sup>th</sup>-28<sup>th</sup>, 2019 (ISBN:978-93-5351-098-5).



- [4] S. Das, A. Munsi, P. Pal, **D. K. Mandal**, S. Chowdhuri "Solar PV Battery Charger Using MPPT-Based Controller". Advances in Control, Signal Processing and Energy Systems. Lecture Notes in Electrical Engineering, vol 591. Springer, Singapore, https://doi.org/10.1007/978-981-32-9346-5\_14.
- [5] D. K. Mandal, S.Chowdhuri, S.S. Saha, B.Majumdar, D.Maiti, S. K.Biswas "Efficient Power Extraction from SPV system in Partially Shaded Condition: A Comparative Study between Classical and Fuzzy logic Control", ,Fifth IEEE International conference on Emerging Application of IT(EAIT),2018, DOI: 10.1109/EAIT.2018.8470408.
- [6] A.Bhattacharjee, **D. K. Mandal**, H.Saha "Design of an optimized Battery Storage enabled solar PV pump"IEEE Conference 4<sup>th</sup>-5<sup>th</sup> July,2016 (**ISBN:** 978-1-4673-8588-6)
- [7] A.Bhattacharjee, **D. K. Mandal**, H.Saha "Optimized Power Management of a Storage Enabled DC Grid Tied Solar PV Power System", 'International Exhibition and Conference on Smart Grid and Smart Cities' organized by "India Smart Grid Forum (ISGF)" in New Delhi (16<sup>th</sup>-18<sup>th</sup> March, 2016).

### Professional Development Training Programmes:

- ➤ UGC sponsored Faculty Induction Programme (FIP-9) organised by UGC-HRDC Jawaharlal Nehru University, New Delhi from 22<sup>nd</sup> August to 17<sup>th</sup> September, 2022.
- ➤ "A Five Day Online AICTE Training and Learning (ATAL) Academic FDP on "Electric Charging Station for Vehicles" From 21st February, 2022 to 25th February, 2022 at Government Engineering College Thrissur.
- ➤ "A Five Day Online AICTE Training and Learning (ATAL) Academic FDP Programme on "Fuel Cell Technology [FCT-2021]" From 21st June, 2021 to 25th June, 2021 at National Institute of Technology, Rourkela.
- ➤"A Five Day Online AICTE Training and Learning (ATAL) Academic FDP "ELECTRIC TRANSPORTATION INFRASTRUCTURE FOR E-MOBILITY IN INDIA" from 2<sup>nd</sup> August, 2021 to 6<sup>th</sup> August, 2021 at National Institute of Technology, Warangal.
- ➤ Four Days Online Workshop on Examination Reforms Training from 4<sup>th</sup> to 7<sup>th</sup> December, 2020 organized by NPIU MHRD and TEQIP.
- ➤ Short term course on "Control of Power Electronic Converters for on Grid and off Grid Applications" held during 3<sup>rd</sup> to 7<sup>th</sup> August 2020, organized by Department of Electrical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat.
- ➤ International short-term course on "Microgrid Opportunity: Renewable Energy Resources and Buildings" organized by Department of Electrical Engineering, Dayalbagh Educational Institute, Dayalbagh, Agra, India, from 16<sup>th</sup> June to 20<sup>th</sup> June, 2020.
- ➤ Faculty Development Programme (FDP) on "Recent Advances in Power Electronics Applications with MATLAB Simulations" organized by Department of Electrical Engineering, NIT Patna under Electronics and ICT Academy, NIT Patna, held from 25<sup>th</sup> May to 30<sup>th</sup> May, 2020.
- ➤ Two Week's Training Programme on "Interdisciplinary Cyber Physical Systems (ICPS)" organized and conducted by Centre for Development of Advanced Computing (CDAC), Kolkata from 16<sup>th</sup> March to 27<sup>th</sup> March, 2020.
- ➤ Short Term course on "Electric Vehicle Technologies Based on Power Electronics and Drives" organized and conducted by Dept of EE, IIT Delhi from 26<sup>th</sup> November to 30<sup>th</sup> November, 2019.

#### Membership of Prestigious Organization:

- IEEE Industry Applications Society (IEEE-IAS)
- Institution of Engineers (India) Associate Member (AMIE)