



**Advances in Resilient DER,  
Microgrid, and Electric  
Vehicle Technologies for  
Smart Grids**

**19<sup>th</sup> to 21<sup>st</sup>  
February 2026**

**Organized by**



**School of Electrical and  
Computer Sciences  
IIT Bhubaneswar**

**Insights**

- Interactive session and Talks by experts from IITs, Industry & abroad

**Contact**

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## About the Workshop

School of Electrical and Computer Sciences, Indian Institute of Technology (IIT), Bhubaneswar organising a workshop on “**Advances in Resilient DER, Microgrid, and Electric Vehicle Technologies for Smart Grids**” from 19<sup>th</sup> to 21<sup>st</sup> Feb 2026. This workshop is supported by Scheme for Promotion of Academic and Research Collaboration (SPARC) project, Ministry of Higher Education, Govt. of India. Research scholars and young working professionals with Power Electronics and its application are encouraged to participate in this workshop. The objective of this workshop is to address the broad challenges of resilient technologies for sustainable smart grid systems and encourage brilliant young minds to build careers in areas of Power Electronics and its application. There will be talks and demonstrations by delegates from abroad, IITs faculty and industry professionals to introduce the attendees to the area of interest and let them know the applications, current challenges and emerging trends.



## About IIT Bhubaneswar

Bhubaneswar, the capital of Orissa, is also popularly known as the "Temple City of India". Temple construction operations of the Odia style flourished in BBS for more than a millennium, from their earliest beginning to its fullest fulfilment. With facilities to cater to every type of visitor, BBS makes an ideal tourist destination. For more info about the city and its surroundings, please visit the following links:

<http://www.orissatourism.org/travel-to-orissa/bhubaneshwar/places-to-see.html>.

## About Bhubaneswar



## Registration Link : *Click to Apply*

All the interested candidates are required to fill up the application form available link.

## Registration fee details:

- Students/Research Scholars:
  - ₹ 500 +GST (18%)
- Research Staff/Industry Professional:
  - ₹ 1000+GST(18%)

*Click here to make Payment*

## Important dates

- Deadline for submission of applications form and Registration Fee:  
**12th February 2026, 5 PM**
- Announcement of the list of selected candidates: **13th February 2026, 6:00 pm**

## NOTE :

- **The registration fee includes attendance to all technical sessions as well as hand on training, including coffee breaks, and lunches (during 19<sup>th</sup> -21<sup>st</sup> February 2026). Accommodation for the participants will be arranged in the hostels of IIT BBS on payment basis.**

## International Speaker



**Sanjib Kumar Panda (S'86-M'91-SM'01-F'21)** received B. Eng. Degree from the South Gujarat University, India, in 1983, M.Tech. degree from the Indian Institute of Technology, BHU, Varanasi,

India, in 1987, and the Ph.D. degree from the University of Cambridge, U.K., in 1991, all in electrical engineering. He was the recipient of the Cambridge-Nehru Scholarship and M. T. Mayer Graduate Scholarship during his PhD study (1987-1991). Since 1992, he has been holding a faculty position in the Department of Electrical & Computer Engineering, National University of Singapore. Dr. Panda has published more than 525 peer-reviewed research papers, co-authored one book and contributed to several book chapters, holds six patents and co-founder of three start-up companies. His research interests include high-performance control of motor drives and power electronic converters, condition monitoring & predictive maintenance, building energy efficiency enhancement etc. He had served as Associate Editor of several IEEE Transactions e.g. Power Electronics, Industry Applications, Energy Conversion, Access and IEEE Journal of Emerging and Selected Topics in Power Electronics. He had also served as the Chair of the IEEE PELS Technical Committee, TC-12: Energy Access and Off-grid Systems from 2021-23. He is a member of the Global Energy Access Forum. Dr. Panda serves as IEEE PELS R-10 Membership Chair and a Member of the IEEE PELS Conference Committee. Dr. Panda was awarded the ACE Alumnus Award from SVNIT in Dec 2025.

**Prof. Abhisek Ukil** is currently an Professor with the Dept. of Electrical, Computer and Software Engineering, University of Auckland, NZ.



From 2013 to 2017, he was Assistant Professor with the School of Electrical and Electronic Engineering, Nanyang Technological University (NTU), Singapore, where he led a group of 20 researchers with several industrial collaborations. From 2006 to 2013, he was Principal Scientist with the ABB (Asea Brown Boveri) Corporate Research Center, Baden-Daettwil, Switzerland, where he led several projects on smart grid, protection, control, and condition monitoring.

### National Speakers



**Dr. VENKATA RAGHAVENDRA I Faculty, NIT Tiruchirappalli**  
**Title:** Design of GaN-based Motor Controller for Electric Two/Three Wheelers. -  
**Hardware Demo** – Two-level VSI design, GaN integration, and Microcontroller interfacing.

**Design Tutorial:** – Hands-on walkthrough of motor controller PCB design using KiCad.

A Power Electronics expert with a Ph.D. from IIT Dharwad, Dr. Venkata Raghavendra has served as a Research Scientist at IIT Bombay (EV Powertrain Lab) and the University of Tennessee, USA. His work focuses on high-efficiency GaN/SiC power converters for next-gen EV drivetrains.

**Dr. Ande Bala Naga Lingaiah Senior Engineer, AVL India**



**Title:** Smart Electric vehicle charging in microgrids

Dr. Lingaiah holds a Ph.D. from IIT Mandi (2024), where he specialized in multifunctional multiport converters for smart EV charging and V2G/G2V systems. Currently a Senior Engineer at AVL India, his expertise spans renewable energy integration, wireless power transfer, and optimization techniques for next-generation electric mobility.



**Dr. Deepak Reddy Pullaguram Faculty, IIT Kharagpur**

**Title:** Cyber Resilient Distributed Control Design for DER dominant Microgrid system

Dr. Deepak Reddy Pullaguram is a leading expert in cyber-resilient control and microgrid systems. A Ph.D. alumnus of IIT Delhi, he has held research positions at the University of Texas at Arlington and faculty roles at NIT Warangal. He is a recipient of the INAE Young Associate Award and the 2025 NIT Warangal Distinguished Alumnus Award, specializing in the dynamics and optimization of converter-dominated power systems.



**Dr. Kaushik Basu Faculty, IISc Bangalore**



**Title:** Bi-directional GaN FETs: Ushering the Next Revolution in Power Electronics

Dr. Kaushik Basu is a renowned expert in power electronic converter design. An IEEE Senior Member and PELS Distinguished Lecturer, he has co-authored over 120 papers and serves as General Chair for IEEE ECCE Asia 2025. His research focuses on high-power applications for grid integration, renewable energy, and electric vehicle fast-charging.



**Dr. Chandan Kumar Faculty, IIT Guwahati**

**Title:** Operation and Control of Smart Transformer in Meshed Hybrid Distribution Grid

Dr. Chandan specializes in power electronics and power systems. A former Alexander von Humboldt Fellow at the University of Kiel, he currently serves as the Chair of the IEEE Guwahati Subsection. He is a voting AdCom member of the IEEE Industrial Electronics Society and an Associate Editor for several prestigious IEEE journals, including IEEE Transactions on Industrial Electronics.



**Dr. Deepak Ronaki Faculty, IIT Madras**