



# IEEE PEDES 2022

## Power Electronics, Drives and Energy Systems

Malaviya National Institute of Technology Jaipur  
14-17 December 2022 Jaipur, Rajasthan, India



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### Important Dates

Opening Date of Submission of Digest:  
28-02-2022

Extended Last Date of Submission of  
Digest: ~~10-06-2022~~

30-06-2022

15-07-2022 (Hard Deadline)

Acceptance Notification of Digest:  
20-09-2022

Submission of Final Manuscript and Copy-  
right Form: 15-10-2022

**IEEE PEDES 2022** will be held at Malaviya National Institute of Technology (MNIT) Jaipur, Rajasthan from 14-17 December 2022. The goal of PEDES is to provide a platform for conference, exhibition and tutorial on selected topics of contemporary interest. The conference provides a unique forum for the exchange of knowledge and information among the professionals across the globe in the area of power electronics, drives and energy system subjects which have greater significance owing to the emphasis on energy affected by the climate change. The conference aims at bringing together the users and researchers of electrical energy conversion systems and sub-systems with the emphasis on technical content of the papers.

## Technical Tracks

### Power Converters, Components and Devices

- AC/AC, AC/DC, DC/AC and DC/DC Converter Topologies, Modeling and Control
- Power Device Modeling and Device Drivers, Packaging of Devices, Systems and Thermal Issues, Magnetic Materials and Component Design, Passive Filter Design

### Industrial Drives and EMI

- Converters, Operation and Control
- EMI and EMC issues in Power Electronic System Design and Packaging, Methods of Analysis and Filters

### Transportation

- Power Electronics and Motor Control for EV Applications, Charging Methods and Standards
- Wireless Charging, G2V and V2G Applications
- Aircraft and Space Applications
- Railway Traction Applications
- Intelligent Transportation System

### Control and Automation

- Linear and Nonlinear Control, Intelligent Control, Predictive Control, Networked Control System and Instrumentation
- Industrial Automation, Internet of Things and Embedded Systems

### About MNIT

Malaviya National Institute of Technology is one of the premier NITs of India, fully funded by Ministry of Education (MoE), Government of India. The Institute was established in 1963 as a joint venture of the Government of India and the Government of Rajasthan, with the name as Malaviya Regional Engineering College, Jaipur. Its campus spreads over 325 acres of area in the central location of Jaipur city. The institute was given the status of a National Institute of Technology and Deemed University on June 26, 2002, and proclaimed the Institute of National Importance through Act of Parliament on August 15, 2007. The institute offers undergraduate and post graduate (B.Tech., B.Arch., M.Tech., M.Plan., M.Sc., MBA and PhD) programmes to about 4500 students in Engineering, Technology, Architecture, Management and Sciences.

### Renewable Energy and Energy Storage

- Distributed Power Generation, Control and Grid Interaction
- Role and Operation in Grids and Microgrids, Charging and Discharging, Battery Management Systems, Battery Engineering, Battery uses and Recycling

### Electrical Machines

- Modeling, Analysis and Design of Rotating and Linear Machines and Electromagnetic Devices

### Smart Grids & Power Quality

- Modeling, Control and Integration of Multiple Energy Sources, Economics of Smart Grids and Microgrids
- Quantification and Estimation of Disturbances in Transmission and Distribution Networks, Converters and Control for Improving Power Quality
- Reactive and Active Power Controls, FACTS Devices

### Power Engineering Education & Policy Issues

- Teaching Concepts in Power Engineering and Laboratory Innovations
- Policies for Distributed Generation
- Smart Grids and Operation with Increased Renewable Penetration

### About Department

The Electrical Engineering Department is one of the oldest department of the institute which was established in the year 1963. At present the department offers both undergraduate and postgraduate courses in Electrical Engineering. The Department has well equipped laboratories such as Electrical Machines laboratory, Power Systems laboratory, Control Systems laboratory, Electrical Measurements laboratory, Power Electronics & Drives laboratory, Electrical Workshop & Computer laboratory. The department has undertaken a number of research projects/schemes with the financial assistance from AICTE, DST and MoE. The department is also actively engaged in research, consultancy and testing in the areas of Power Systems, Power Electronics and Drives, and Control Systems.

### Authors Guidelines

Prospective authors are requested to initially submit their digest (4 pages max) according to guidelines available on the conference website. All papers presented will go to IEEE Xplore and will be eligible for further review for publication in IAS Transactions and magazine.

### Contact Us

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