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International Conference on Power Electronics & IoT Applications in Renewable **Energy and its Control (PARC 2020)**

February 28th – 29th, 2020 http://www.gla.ac.in/parc2020/

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Introduction:

The International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC 2020) will be organized by Department of Electrical Engineering, GLA University, Mathura, India during 28th-29th February 2020 at GLA University, Mathura, India. Looking at the importance of power electronics, IoT and their applications in the modern smart grid and the increasing integration of renewable energy due to increasing environmental concerns, this conference theme is set on "Power Electronics, IoT and Renewable Energy applications", and it is planned to further explore these research areas. This conference aims to explore the challenges in Future Grid-Interactive Power Converters regarding control strategies, optimal operation, and corrective actions. PARC 2020 also targets to present latest research on new strategies for overcoming the technical challenges of grid integration of renewable energy systems, such as synchronization of interfaced converters with power grid, operation and control of different power converters in power systems under large shares of renewable energies. The other thrust area of this conference is applications of IoT analytics in renewable energy sector. This conference will be a launch pad for many researchers to present emerging topics on power electronic technologies and renewable energy integration and control for future energy applications.

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About GLA University:

GLA University (NAAC Accredited 'A'), started in 1998 as GLA Institute of Technology and Management. It went on to take the shape of GLA group of Institutions and finally became GLA University in the year 2010. The University is recognized by UGC as well under section 2(f). The Campus of the University has over 110 acres of lush green and expansive grounds. The University is home to more than 10,000 students. The establishment feels proud of its alumni base of more than 12000 students. The University provides education at the diploma, undergraduate, post graduate and doctoral levels in various disciplines of Science, Technology and Management. More than 500 well-qualified and experienced faculty members and 700 staff members work for the University.

Conference Tracks:

The topics of the conference includes, but are not limited to, the following areas:

- Emerging Technologies in Power Electronics
- Power Converter Topologies and Design
- Multilevel and High-Power converters
- Grid-Interactive Power Converters • Power electronics in HVDC, HVAC and FACTS
- Emerging power electronic based power systems
- Ancillary services through grid-interfacing power converters
- Metering, Monitoring and Protection • Power electronics in transmission and distribution systems • Standard & advanced control techniques for power
- converters
- Control of multi-machines/multi-converters

• Energy Storage technologies

- Management of distributed systems • Computational intelligence in control systems
- Measurements techniques
- Sensors, Wireless control
- Renewable Energy Systems, Renewables Penetration
- Distributed Generation and its Protection
- Grid integration of renewable energy systems • Standalone and grid connected systems
- Sustainable Energy Technologies and Systems • IoT Technology in the Energy Sector, Next Generation IoT
- IoT Devices/Applications, IoT Security
- Big data analytics in Energy Sector
- Smart Metering, Smart Cities Buildings, Home Automation • Electric Vehicles Charging stations
- Electric Vehicle Propulsion Systems & Their Energy Storage
- Data Analysis Challenges in the Future energy market • Cloud analytics for Internet of Things (IoT)
- Energy Internet
- IoT applications in renewable sector • Control of power electronics converters
- Harmonics & harmonic stability in renewable based power
- Control Techniques for Renewable Energy Systems
- Future Challenges and Directions for Renewable Energy Systems.
- Electrical Machines and Drive Systems • Data analysis applied to Power Electronics & drives systems
- Application of AI to Power Electronics and drives systems
- Application of control methods to electrical systems

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Proceedings Publication:

All Accepted and presented papers of the conference by duly registered author(s), will be submitted to IEEE Xplore digital library for publication. (IEEE Conference Record: #49193)

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