



6<sup>th</sup> Global Power, Energy and Communication Conference

Budapest/HUNGARY

June 4-7, 2024

## Special Session on Microgrids for EV Charging Infrastructure

The technical session on microgrids for electric vehicle (EV) Charging Infrastructure will delve into the critical intersection of renewable energy, energy storage, and electric transportation. The outline begins with an overview of microgrid concepts, emphasizing their role in enhancing the resilience and sustainability of EV charging networks. The session will explore advanced technologies, such as smart grid integration, to optimize energy flow and demand management within microgrids. A focus on renewable energy sources, including solar and wind, will be essential to address the environmental impact of EV charging. Additionally, the integration of energy storage solutions, such as batteries, will be discussed to ensure grid stability and efficient energy utilization. The session will conclude with a discussion on real-world case studies and future prospects, providing a holistic understanding of the technical intricacies involved in deploying microgrids for EV charging infrastructure.

I am writing to invite you to submit your original work to this Special Issue and I look forward to receiving your outstanding research.

### Topics of interest include, but are not limited to:

- Renewable Energy Integration for Sustainable EV Charging
- Electric vehicle charging/discharging technology
- Design and modeling of EV Charging infrastructures
- Vehicle-to-grid technology
- Control and energy management strategies
- Cybersecurity and Grid Security
- Energy storage systems and transient issues for EV Charging
- Microgrids and integration of EV
- Hybrid coupled micro-grid for EV Charging (AC+DC)
- Energy efficiency in micro-grids for EV Charging
- Power public grid connection and demand-response
- Multiple microgrid clusters
- Internet of Things and energy internet for multiple microgrids

### Organizer(s):

Veerpratap Meena, Malaviya National Institute of Technology, Jaipur, (E-mail: [vmeena1@ee.iitr.ac.in](mailto:vmeena1@ee.iitr.ac.in))

Anand R, Amrita Vishwa Vidyapeetham, Bangalore, India, (E-mail: [r\\_anand@blr.amrita.edu](mailto:r_anand@blr.amrita.edu))

Sanjeevikumar Padmanaban, University of South-Eastern Norway, (E-mail: [sanjeev.padma@usn.no](mailto:sanjeev.padma@usn.no))

Kumari Namrata, National Institute of Technology, Jamshedpur, (E-mail: [namrata.ee@nitjsr.ac.in](mailto:namrata.ee@nitjsr.ac.in))

### Deadlines of the special session:

Full paper submission (maximum 6 pages):	<b>March 24, 2024</b>
Notification of acceptance:	<b>April 21, 2024</b>
Final submissions due:	<b>May 12, 2024</b>

All the instructions for paper submission are included at the conference website.  
<https://gpecom.org/2024/guidelines/>