



6th IEEE International Conference on Sustainable Energy and Future Electric Transportation (IEEE SeFet 2026)

08th July – 11th July, 2026, Nagpur, Maharashtra, INDIA



Call for papers: Special Session 13

AI-Driven Optimization of Green Microgrids and E-Mobility for Real-Time Energy Management and Sustainability (AI-GMEMS)

SS13: *The session will focus on real-time energy management, stability enhancement, predictive control, and sustainable operation of decentralized energy networks. The session aims to bring together researchers, engineers, and industry practitioners to discuss innovative algorithms, data-driven strategies, simulation studies, and practical implementations. Topics of interest include, but are not limited to:*

- ❖ Real-time scheduling of renewable generation and loads
- ❖ Predictive forecasting of energy demand and renewable output
- ❖ Optimal coordination of distributed energy resources
- ❖ Smart EV charging/discharging strategies
- ❖ Vehicle-to-Grid and Grid-to-Vehicle optimization
- ❖ Impact of e-mobility on microgrid stability and energy flow
- ❖ Reinforcement learning and deep learning for control
- ❖ Multi-objective optimization for energy, cost, and emissions
- ❖ Adaptive and decentralized control strategies
- ❖ AI-enabled stability assessment and contingency management
- ❖ Resilient microgrid operation under uncertainties
- ❖ Energy efficiency and carbon footprint reduction
- ❖ Role of AI/ML in achieving sustainable energy targets
- ❖ Case studies and implementations of AI-driven solutions

Special Session Organizers:



Dr. Amar Kumar Barik,
(amarkumar.barik@nirmauni.ac.in)
EED, Institute of Technology, Nirma University, Ahmedabad, Gujarat



Dr. Soumesh Chatterjee,
(soumesh.chatterjee@nirmauni.ac.in)
EED, Institute of Technology, Nirma University, Ahmedabad, Gujarat



Prof. Chintan D. Patel,
(chintan.patel@nirmauni.ac.in)
EED, Institute of Technology, Nirma University, Ahmedabad, Gujarat

Organized by:

Department of Electrical Engineering,
Visvesvaraya National Institute of
Technology, Nagpur

Submission link:

<https://cmt3.research.microsoft.com/SEFET2026/Submission/Index>

For more details please visit:

<https://vnit.ac.in/sefet26/>

Paper Submission Closes: 31st Jan 2026
Notification of Acceptance: 15th March 2026
Final Camera-ready paper: 5th June 2026
Conference Date: July 8th -11th 2026
All presented papers will be considered for further review in IEEE Transactions on Industry Applications and IEEE Industry Applications Magazine.