



2nd International Symposium on Sustainable Energy and Technological Advancements

Date: 24th-25th Feb. 2023

A Special Session

on

Intelligent Controller and Computing in Microgrid

The electricity industry is transforming itself from a hierarchical, passive, and sparsely-sensed engineering system into a flat, active, and ubiquitously-sensed cyber-physical system, Microgrid is one of the key agents of this transformation, This special session is proposed with a basic theme of “Intelligent controller and computing in microgrid” This session will provide an effective forum to disseminate new technology and share the expertise among researchers, scientists and engineers in the recent development of microgrid, This special session deals with different topologies of microgrids and will cover a wide range of topics related to microgrid.

.Topics of interest for this Special Session include, but are not limited to:

- Modeling, operation and control of microgrid
- Control and stability analysis of renewable integrated Microgrid
- Energy management system and optimization
- Power quality issues and solutions in microgrid
- Microgrid system design and control
- Networked Control
- Microgrid protection
- MV microgrids and hybrid ESS
- Cyber-security of microgrid
- Standard –based ICT
- Applications of IoT in Microgrid
- AMI for AC/DC microgrids
- Microgrid market analysis and forecast
- Design of Electric Vehicle Charging System for a Renewable sources integrated micro-grid
- Power management and control in a PV, EV, battery and super capacitor integrated Microgrid

Special Session Organizers (names, designation, affiliation and contact emails)

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Special Session Organizers (short bios with photo)



Pratap Sekhar Puhan (SM'22) received his BE in Electrical Engineering from Utkal University, Odisha in 2001. He received his ME in Power System from Bengal Engineering and Science University (IEST), Shibpur, West Bengal, India, in 2010 and completed his PhD in Electrical Engineering from Utkal University, Odisha, India in 2015. He is working as a Professor with the Department of Electrical and Electronics Engineering at Sreenidhi Institute of Science and Technology, Hyderabad, India. He has 17 years of experience in teaching and research. He has published more than 30 papers in reputed journal His main research interests include power quality, distributed generation, estimation of signal and systems etc



Sarat Chandra Nayak holds a Ph.D. degree in computer engineering from VSSUT, Burla, India in 2016 and M. Tech. in computer science from Utkal University, Bhubaneswar, India in 2011. His research interests are machine learning, data mining, soft computing, predictive systems, financial time series forecasting, computational intelligence, and evolutionary computations. He has more than 80 research articles in reputed international journals and conferences, 1 book, and 14 book chapters in his credit. He has 15 years of experience in teaching and research. He is awarded with Brain Korea 21 (BK21) fellowship from Government of South Korea and currently associated with Soft Computing Laboratory, Department of Computer Science, Yonsei University, South Korea as Research Professor



Satyabrata Sahoo received his AMIE in Electrical Engineering from Institution of Engineers (I), Kolkata, India in 1993. He received his M Tech in Hydro-Power from NIT, Bhopal, India, in 2001 and completed his PhD in Electrical Engineering from Utkal University, Odisha, India in 2019. He is working as a Associate Professor with the Department of Electrical and Electronics Engineering at Nalla Malla Reddy Engineering College, Hyderabad, India. Apart from 04 years of industry experience, he is in the teaching and research profession since 2001. He has published more than 15 papers in reputed conference & journal. His main research interests include Power system, Artificial intelligence, Predictive control, Adaptive control, Micro-grid wind energy conversion system and its control etc