IEEE Access
The journal for rapid open access publishing

IEEE
Advancing Technology for Humanity

Special Section: Call for Papers

Announcing a Special Section in **IEEE *Access***:

Smart Grids: A Hub of Interdisciplinary Research

Submission Deadline: September 30, 2015

IEEE *Access* invites manuscript submissions in the area of **Smart Grids: A Hub of Interdisciplinary Research.**

The smart grid is an important hub of interdisciplinary research where researchers from different areas of science and technology combine their efforts to enhance the conventional electrical power grid. Due to these efforts, the conventional electrical grid is now evolving. The envisioned smart grid will bring social, environmental, and economic benefits. The smart grid is the combination of different technologies including control system theory, communication networks, pervasive computing, embedded sensing devices, electric vehicles, smart cities, renewable energy sources, Internet of Things, wireless sensor networks, cyber physical systems, and green communication. Due to these diverse activities and significant attention from researchers, education activities in the smart grid area are also growing.

The objective of this Special Section in IEEE *Access* is to showcase the most recent advances in the interdisciplinary research areas encompassing the smart grid. This Special Section will bring together researchers from diverse fields and specializations, such as communications engineering, computer science, electrical and electronics engineering, educators, mathematicians and specialists in areas related to smart grids. We invite researchers from academia, industry, and government to discuss challenging ideas, novel research contributions, demonstration results, and standardization efforts on the smart grid and related areas.

Topics of interest include, but not limited to:

Education and Smart Grid
Smart grid and engineering education
Curricula development progress for smart grid
Smart grid for novice learners
Continuing education for smart grids
Educational needs for smart grid
Learning outcomes and perceptions of students about smart grid

Renewable Energy and Green Smart Grids
Optimization methods for distributed energy management systems
Electric vehicles as grid energy storage
Integration of solar energy into smart grids
Spatial load forecasting for micro-grids and virtual power plants
Energy load and prize forecasting
Energy harvesting
Renewable energy sources
Energy forwarding networks in smart grid
Energy storage and off-grid energy storage techniques
Green computing models and green software engineering
Case studies on integration of green computing with smart grid
Distributed energy sources and smart grid

IEEE Access
The journal for rapid open access publishing

IEEE
Advancing Technology for Humanity

Social networking and Smart Grid
Mobile services for smart grid applications
Social media data integration for smart utility applications
Case studies about social networking applications in smart grid
Modeling residential, commercial and industrial consumer behavior
Online social networks and smart grid
Cloud computing, social networks, and smart grid
Social metering
Model based customer analytics and demand side management

Communications Technologies and Networks for Smart Grid
Communication technologies in AMI, HAN, NAN, and WAN
Communication architectures for smart grid
Cognitive radio based smart grid
Wireless sensor networks and rechargeable sensor networks for smart grid
Physical and MAC layer protocols for smart grid
Capacity and network planning for smart grid
Multi-hop communication to support smart grid
Integration of smart meters in smart grid
Wireless energy harvesting to support smart grid
Wireless multimedia sensor and actuator network for smart grid
Internet of Things, and sensor web services for smart grid
QoS in smart grid
Signal processing for smart grid
Convergence of smart grid with cyber physical systems
Sensors and intelligent electronic devices (IEDs) for smart grids

Smart Cities and Smart Grid
Security and Privacy for Smart Grid
Control and Management of Smart Grid

We also highly recommend the submission of multimedia with each article as it significantly increases the visibility downloads and citations of articles.

Associate Editor: Mubashir Husain Rehmani, COMSATS Institute of Information Technology, Pakistan

Guest Editors:
1) Martin Reisslein, Arizona State University, Tempe, USA
2) Abderrezak Rachedi, University Paris Est, France
3) Melike Erol Kantarci, Clarkson University, New York, USA
4) Milena Radenkovic, University of Nottingham, UK

IEEE Access Editor in Chief: Michael Pecht, Professor and Director, CALCE, University of Maryland

Paper submission: Contact Associate Editor and submit manuscript to:
http://mc.manuscriptcentral.com/ieee-access

For information regarding IEEE *Access* including its publication policy and fees, please visit the website
http://www.ieee.org/ieee-access

For inquiries regarding this Special Section, please contact: Bora M. Onat, Managing Editor, IEEE *Access*
(Phone: (732) 562-6036, ieeeaccess@ieee.org)