

Call for Participation in TEQIP III sponsored six days Workshop on
"Recent Techniques for Energy Management in Smart Grid"

Dates: – Jan29 –Feb03 2018

Organized jointly by

Department of Electrical Engineering and Department of Computer Science & Engineering
Visvesvaraya National Institute of Technology, Nagpur– 440010



<p>About the Workshop:</p> <p>The Workshop is oriented to explore the new frontiers and challenges within the Computational Intelligence research area for the optimal usage and management of energy resources in Smart Grid applicative scenarios. The scientists and technicians worldwide have intensified their studies on renewable energy resources, especially in the Electrical Energy sector. A remarkable increment in complexity of the electrical grid has been also registered, due to the need of integrating distributed generation and storage units, resulting in strong engineering challenges in terms of energy distribution, management and system maintenance. Many sophisticated algorithms and systems aimed at introducing intelligence within the electrical energy grid have already appeared in the recent scientific literature. A multi-disciplinary coordinated action is therefore required to the Electrical and Electronic Engineering, Computational Intelligence, Digital Signal Processing and Telecommunications scientific communities, taking the stringent environmental sustainability constraints into account.</p> <p>The organizers of this Workshop wants to explore the new frontiers and challenges within the Computational Intelligence research area, including Game Theory, Multi-Agent Systems, Neural Networks and Evolutionary Computation based solutions, for the optimal usage and management of energy resources in Smart Grid scenarios. Indeed, the adoption of distributed sensor networks in many grid contexts enabled the availability of data to be used to develop suitable expert systems with the aim of supporting the humans in dealing with the complex problems in grid management, as mentioned above. Research in this field is undoubtedly already florid, but many open issues need to be addressed and innovative intelligent systems needs to be investigated.</p> <p>The entire program is a blend of theory, hands-on sessions on the software for data analytics usage and case studies which will ensure rapid and effective assimilation of concepts.</p> <p>Workshop Objectives:</p> <ul style="list-style-type: none">• Introduce participants to the fundamentals of Smart Grid and challenges ahead• Cover various multi-disciplinary aspects of energy management and the associated functions.• Discuss the emerging trends in energy management and associated challenges.• Focus on new technologies and solutions for modern energynetwork to enable larger penetration of distributed renewable resources and to make systems more resilient <p>Program Contents:</p> <ul style="list-style-type: none">• Computational Intelligence for Smart Grids Applications• Game Theory for Complex Energy Systems• Integration and Control of Renewable Energy Systems• Energy Management in Hybrid AC/DC Microgrid Systems• Design and Development of Smart Controllers for Microgrid/Smart Grid Systems• Demand-side management, demand response and flexible loads• Soft Computing based Algorithms for Transactive Energy• LP Problem formulation for Smart Grid Optimization• Information Security and Smart Grid• Smart Grids and Big Data <p>Who Should Attend?</p> <p>Research scholars, graduate students, undergraduate students, engineers, trainees, Faculty members, academicians and researchers from different organizations/institutions across the country working in the field of Energy Engineering and Computational Intelligence.</p>	<p>Workshop Coordinators</p> <p>Dr. Nita R. Patne Dr. Meera. M. Dhabu Dept. of Electrical Engg. Dept. of Computer Science & Engg.</p> <p>Speakers:</p> <p>Faculties from various IITs, NITs, Industry personnel and in-house faculties and research scholars of VNIT, Nagpur</p> <p>Important Dates</p> <p>Workshop Dates:- Jan 29-Feb03, 2018 Registration deadline: Jan15, 2018</p> <p>Fee Structure</p> <ul style="list-style-type: none">• No fee. <p>Workshop Registration</p> <ul style="list-style-type: none">• Participants are requested to fill and send the registration form to the coordinators. Once the registration is confirmed, the details will be mailed to the participants.• No TA/DA will be provided.• Suitably furnished accommodation will be made available, if requested in advance, in the hostels/guest houses of the VNIT on payment basis as per institute norms for out stationed candidates on twin sharing basis.• Registration will be done on first come first served basis to a maximum of 30 seats.• Tea/Snacks and lunch will be provided free of cost on all days.• For Registration Form Click here <p>Contact Information:</p> <p>Email: rtemsg.vnit@gmail.com Phone No. 0712-2801140, 1842, 1030. Ashok: +919284911695</p> <p>About VNIT:</p> <p>Visvesvaraya National Institute of Technology, Nagpur is one of the thirty National Institutes of Technology in the country. The Govt. of India conferred on the Institute, the Deemed to be University status (under University Grants Commission Act, 1956 (3 of 1956)) with effect from 26th June 2002. Subsequently, the Central Govt. by Act of Parliament (National Institutes of Technology Act, 2007 (29 of 2007)) declared VNIT Nagpur as an Institute of National Importance along with all other NITs. Apart from imparting professional education, the institute has been extending available expertise to various industries located in and around Nagpur.</p> <p>The department of Electrical Engineering was established in 1960 with a UG programme in Electrical Engineering. The postgraduate programme in 'Integrated Power System' was started in 1968. Later, another postgraduate program in 'Power Electronics and Drives' was introduced. The Department is recognised as QIP Centre for M.Tech and Ph.D. programmes.</p> <p>The Department of Computer Science and Engineering, established in 1987, offers B.Tech, M. Tech. and Ph.D. degrees. The laboratories are adequately equipped with state-of-the-art facilities. The department is actively involved in R&D as well as consultancy projects and has collaborations with several industries, academic institutes and R&D organizations in the country.</p>
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