

CALL FOR PAPERS SPECIAL SESSION ON

"Simulation and Optimization in Renewable Energy Production Systems"

for CODIT'18
April 10-13, 2018 –Thessaloniki, Greece

Session Co-Chairs:

M'hammed Sahnoun, CESI Rouen, France Mohammed Dahane, Université de Lorraine, France Navonil Mustafee, University of Exeter, UK Belgacem Bettayeb, IMT Atlantique, Nantes, France

Session description

The growing need for Renewable Energy Sources has led to the development of large and complex Renewable Energy Production Systems (REPS). The management of these production systems is not obvious especially in the current competitive energy market that includes several sources of energy with challenging cost reduction and process efficiency goals. In order to ensure a competitive renewable energy regarding their costs, their efficiency and their carbon footprint, it is important to assess the behaviour of their production systems and improve their yield. Optimisation and simulation methods have proved their usefulness to build decision-making systems regarding the design, the management and the control of this kind of complex systems.

In fact, several activities in the production systems of renewable energies need to be improved such as maintenance, installation or operation. The effects of the mal function of these systems can be dramatic with the increasing rate of renewable energy injected on the energy supply network.

Recent Perspectives cover all major areas where optimization techniques have been applied to reduce uncertainty and/or improve results in REPS. Production of power with REPS is highly variable and unpredictable, leading to the need for simulation or optimization-based planning and operation in order to maximize economies while sustaining performance.

This special issue will gather up-to-date and reliable information from leading research in this field and would bring increased confidence and visibility to these applications. We welcome papers on the following, but not limited to, topics:

- Biomass Conversion
- Photovoltaic Technology Conversion
- Solar Thermal Applications
- Wind Energy Technology
- Desalination
- Solar and Low Energy Architecture
- Climatology and Meteorology
- Geothermal Technology
- Wave, Tide and Ocean Thermal Energies
- Hydro Power
- Hydrogen Production Technology and Fuel Cells
- Socio-economic and Policy Issues
- Modelling simulation and optimisation of REPS

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **December 10, 2017**: http://controls.papercept.net/conferences/scripts/start.pl. In PaperCept, click on the CoDIT 2018 link "Submit a Contribution to CoDIT'18" and follow the steps.

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

December 10, 2017: deadline for paper submission February 4, 2018: notification of acceptance/reject

February 28, 2018: deadline for final paper and registration.