

# ISDA 2011

11th International Conference on Intelligent Systems Design and Applications
November 22-24, 2011 - Córdoba, Spain

### SPECIAL SESSION

# Computational intelligence for environmental monitoring and renewable energies

Environmental monitoring refers to the observation, recording and analysis of the state of the environment and its changes. The goals are to check the state of the environment, to assess how well the environmental quality objectives are met and to help detect new environmental issues. In terms of relevance to global change, special attention must be directed to the renewable energy sources, which include sun, wind, biomass and hydro energy. Renewable energy sources can contribute to climate change mitigation through the reduction of GHGs. They are also much more sustainable than conventional power sources, and can help provide a more secure supply of energy.

The needs to exploit enormous quantities of information from different sources so as to understand trends, effects, and processes in the environment, to anticipate environmental changes, to mitigate natural and technological risks, to efficiently use renewable energy resources make Computational Intelligence techniques a valuable means to help operators deal with all issues related to environmental monitoring and renewable energies.

This session aims to provide a forum for researchers and practitioners to discuss intelligent approaches to environmental monitoring and renewable energies and to identify new research challenges.

# **Topics**

Topics of interest include, but are not limited to:

- Modeling and simulation;
- Control and optimisation;
- Intelligent sensing;
- Energy management;
- Fault detection and diagnosis;
- Change/anomaly detection;
- Prediction and forecast;
- Data mining;
- Data fusion:
- Other related topics.

## **Instructions for Authors**

All instructions for submission can be found in the Conference Website <a href="http://www.uco.es/isda2011/">http://www.uco.es/isda2011/</a>

# **Important Dates**

- Submission of papers: May 31, 2011
- Notification of acceptance: July 22, 2011
- Camera-ready manuscript submission: September 16, 2011

## **Session Chairs and Contacts**

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