

Call for Papers

Technical Session on

“Environmental monitoring and prediction”

4th International Forum on Research and Technologies for Society and Industry:

Innovation to shape the future

Palermo, Italy, September 10-13, 2018

<http://rtsi2018.ieeesezioneitalia.it/>

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Environmental monitoring techniques focus on the study of physical phenomena as well as the design and implementation of policies, mechanisms, and technologies applied to the geographical areas of interest, with the purpose of predicting and reacting to environmental issues to ensure sustainability and the well-being of individuals. Examples of environmental monitoring applications include natural disaster detection (e.g., wildfires, earthquakes, volcanic eruptions, oils spills), environment observation (e.g., crop monitoring, solar activity detection, monitoring of water quality and pollution levels), and prediction (e.g., weather forecasts, production of renewable energy). Recently, advances in technology have fostered the introduction of innovative environmental monitoring systems. Faster, smaller, and more energy-efficient computing and networking infrastructures with lower cost enabled the deployment of monitoring solutions also in harsh environments to increase the robustness and effectiveness of environmental applications.

This special session presents an opportunity to the scientific and professional communities working in the field for discussing advances in environmental monitoring and prediction. Topics of interest include, but are not limited to:

- Sensors, instrumentation, measurements, sensor networks, wireless sensor networks, remote sensing, and UAV for environmental applications
- Digital architectures, analog/digital circuits, electronic devices and systems, embedded systems, reconfigurable and resilient architectures for environmental applications
- Communications, networking, internet of things, cloud and fog computing, and systems and network security for environmental applications
- Environmental monitoring, management, modelling and prediction
- Big data analytics, machine learning, computational intelligence, knowledge extraction, data fusion for environmental applications
- Environmental data management, privacy, and protection
- Monitoring of water and air resources and pollution
- Robotics, rescue systems, and human interfaces for environmental applications
- Environment-friendly industrial manufacturing, logistics, and intelligent transportation
- Environment-friendly energy and resource production, consumption and efficiency
- Disaster prevention monitoring and management
- Reliability and safety in environments
- Ethics, social, economic, and technology impacts on environments
- Environmental signal and image processing

Important Dates

Manuscript Submission Deadline: April 9, 2018, 23:59 CET

Manuscript and Submission

Preparation of manuscripts and submission should refer to the guidelines described at:

http://rtsi2018.ieeesezioneitalia.it/auth_guid.html