



## Editorial

# Special Issue on Environmental Measurement and Instrumentation

This Special Issue contains expanded and enhanced versions of selected papers presented at the 2013 IMEKO TC19 Symposium on Environmental Monitoring.

IMEKO International Measurement Conference TC19 provides an international platform for collaborating in the field of environmental measurements. The main fields of activity are: analytical measurement of the three main environmental media, air, water, soil; instrumental methods for the measurement of environmental noise and vibration pollution; development and improvement of analytical methods for measuring environmental pollutants; development of new analytical methods, sensors and instruments for monitoring of air, water and soil quality in residential, industrial, as well as, agricultural areas; development and improvement of remote sensing methods for measuring environmental pollution; development of new platforms and image processing techniques for detection of potential sources of contamination and monitoring of air, water and earth quality; evaluation and assessment of environmental data; quality assurance and quality control of environmental measurements.

Dedicated instrumentation and measurements for environmental monitoring is a very active research area that impacts our daily lives. The papers in this issue explore new advances in the field of non-invasive instrumentation and measurements. The development of many types of analytical instruments received a new impetus when water-and air-pollution controls came into effect; spectroscopic methods are known to be versatile and are often used in on-line measurements.

The papers in this Special Issue focus on instrumentation for pollutant detection and for revealing quantities dealing with environmental and energy issues including the following technologies: spectroscopic measurements for air, water and material characterisation; measurement techniques for automobiles; photovoltaic issues with a special connection with energy, hence environment; soil uses by means of sensor networking and image processing. This Special Issue is aimed at the researchers working in the field of Environmental Measurement and Instrumentation as well as general public interested in this topic. Finally, we would like to thank Dr Mike Cunningham, the Editor-in-Chief of *IET Science, Measurement and*

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