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Fluorescence-Based Sensors

Guest Editor:

Prof. Dr. Hisashi Satoh

Aquatic Environmental Protection Engineering, Division of Environmental Engineering, Graduate school of Engineering, Hokkaido University, North-13, West-8, Kita-ku, Sapporo 060-8628, Japan

Deadline for manuscript submissions:

closed (30 April 2020)

Message from the Guest Editor

Dear Colleagues,

The aim of this Special Issue is to collect recent research and developments in the fluorescence-based chemical and biological sensors. Fluorescence-based detection of organic and inorganic matter and microorganisms is an important task for environmental monitoring, medical diagnostics, food safety, industrial quality control, agriculture, and security.

At present, we are using traditional analytical techniques such as gas or liquid chromatography, atomic absorption or emission spectroscopy (AAS/AES), inductively coupled plasma (ICP), mass spectroscopy, and polymerase chain reaction (PCR) for their detection. These techniques are highly accurate and sensitive to a specific analyte of interest, but they are costly, available only in large centralized laboratories, and require extensive sample pretreatment, making on-site, real-time, or in situ detection difficult. However, fluorescence detection is simplicity, low cost, high sensitivity, and fast response.

Topics to be covered include, but are not limited to:

- Fluorescent Sensor
- On-Site Analysis
- Simple Detection
- Sensitivity, Selectivity, Response Time, and Cost For Bioimaging
- Recognition Element













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Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

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(Instrumentation)

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