

Tentative Outline

Special Issue for "Current Analytical Chemistry"

(Novel Strategy Based Analytical Systems for the Detection of Chemicals and Biomolecules)

Guest Editor: Dr. Ashok K. Sundramoorthy

Aims & Scope:

In the past few years, the rate of chemicals contamination (pollutants) level is increased in the water, air, soil, pharmaceutical, and food stuffs due to various reasons. It may be due to accidental, unintentional or intentional addition of contaminants into the consumer product which may affect or threaten the environmental and human health. In order to find out various ranges of chemicals/biomolecules present in the samples, various analytical methods have been developed such as chromatography, spectroscopy, fluorescence, colorimetry, electrochemistry etc. However, there is still a demand for simple (by a novel approach) methods which can quickly identify and quantify the contaminants by means of paper based sensors, nanosensors, temperature indicators, green materials and methods, fluorescence techniques with quantum dots, electrochemical sensors etc. These methods can provide the same level of detection with high accuracy compared to conventional methods at low cost. At the same time, if they are tested with real-world samples to prove their commercial applications, then they are more promising in the field of emerging advanced analytical science. We are welcoming your contribution to this thematic special issue by addressing any one of the following subtopics:

Keywords: disposable sensors, paper sensors, temperature indicator, green methods, quantum dots, nanomaterials, electrochemical sensors, catalysis.

Subtopics:

The subtopics to be covered within this issue are listed below:

- Synthesis of nanomaterials for analytical applications.
- Paper based sensors for qualitative and quantitative analysis
- Fluorescent sensors, chromatographic and spectroscopic analysis

- Enzymatic and non-enzymatic analytical methods
- Nanocomposite based chemical and biosensors
- Electro-catalysis of nanomaterials

Schedule:

- ✧ Manuscript submission deadline: 30 June 2020
- ✧ Peer Review Due: 31st Aug 2020
- ✧ Revision Due: 1st October 2020
- ✧ Announcement of acceptance by the Guest Editors: 20 October 2020
- ✧ Final manuscripts due: 1 November 2020

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