

## Tentative Outline

### Special Issue for Current Analytical Chemistry

#### *Environmental Contamination, Toxicology, and Safety by nanocatalysts*

**Guest Editors:** Dr. Inamuddin and Dr. Mohammed Muzibur Rahman

#### **Aims & Scopes:**

In the thematic issue, it will contain a number of recent researches or reviews on the preparation, characterization and potential applications of various active nano-catalysts. This topic will cover the promising researches from top-to-bottom of various scientific reviews/reports focusing on detoxification of wastewater contaminants in last few decades. It will also cover the advanced topics in analytical, electrochemical, sensor, optical, environmental, structural, and various photo-catalysts as well as electro-catalysts. For the development of new and noble efficient technology, it is attracted the huge interest of researchers towards safe, facile, non-toxic, ecofriendly route of synthesis-to-applications, which can be used for the manufacturing efficient catalyst at a large scale. This potentially unique research work on environmental pollutants offer various approach on R&D with semiconductor photo-catalyst nanomaterials or nanocomposites in aqueous or non-aqueous phases thorough fully modified or unmodified electrodes or sensor probes. Recently, nanotechnology has offered regulating of semiconductor substances at the nano-scale and nano-dimensional substances in few nanometer, which enables to control the novel photo-catalytic or electro-catalytic applications with various active catalysts. It is rapidly becoming one of the most dynamic areas of photocatalytic research with potential applications in areas such as sustainable environmental, detoxification of toxic chemicals, healthcare safety, total mineralization of colored toxicants, and removal of heavy metallic cations or anions.

This thematic issue in **Current Analytical Chemistry (CAC)** under **Bentham Scientific publishers (BSP)** aims to present an overview of current works on catalyst (Photo- or Electro-) fundamentals and substantial applications as well as worldwide researchers. It would be an important issue in Bentham scientific publisher for research organizations, governmental research-centers, academic libraries and R&D departments. Additionally, in this thematic issue, we offer an overview of the cutting-edge processes for pollution control and waste management based on the use of semiconductor nanomaterials or nanocomposites, such as but not limited to, electrochemical devices, absorption, adsorption, photocatalysis, electro-catalysis, environmental safety, environmental remediation, detoxification, mineralization, degradation, and landscape process.

#### **Subtopics:**

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

- **New strategies in synthesis and environmental application of nanocatalysts**
- **Environmental pollutants removal and remediation**
- **Understanding and removal of unsafe toxicants**
- **Healthcare and Environmental safety**
- **Future perspective on nanocatalysts**

#### **Schedule:**

- Manuscript Submission July 15, 2019
- Peer Review Due: August 31, 2019
- Revision Due: September 30, 2019
- Final Manuscript Due: December 30, 2019
- Notification of Acceptance by the Guest Editor: February 10, 2020

#### **Contacts:**

**Guest Editors:** Dr. Inamuddin & Dr. Mohammed Muzibur Rahman

**Affiliation:** King Abdulaziz University

**Email:** [inamuddin@zhcet.ac.in](mailto:inamuddin@zhcet.ac.in)