

**Tentative Outline**  
**Special Issue for Current Organic Chemistry**  
*Guest Editor(s): Mallikarjuna Nadagouda, Nasir Baig*  
**TITLE: Nano-catalysis and Sustainable Synthesis**

**Aims & Scope:**

In last century chemist have played a vital role in the development of fine chemicals used in the wide spectrum of daily life ranging from drugs to materials used in technological advancements. The process of development resulted in the accumulation of large number of waste and release of toxic chemical in the environment, there for directly impacting our surrounding. Hitherto scientific community have realize the environmental protection should also be consider in ongoing chemical research and developments. Therefore in today's chemical advancements the development of green and sustainable method is of prime importance across the chemical research to lead the healthy life on this beautiful planet.

In the era of environmental consciousness the use minimum resources, energy, cost and toxicity of chemicals are very important. In many reactions it is impossible to avoid the use of expensive and toxic metals. The loss of precious metal in the process of work-up by conventional methods is often tedious and energy demanding, especially in case of pharmaceutical products where the levels of metal contamination is highly regulated. Therefore the demand of active catalyst system accompanied with recyclability and rapid purification process for a reaction mixtures that are both economically and environmentally benign is growing. The intriguing approach for efficient recycling of the catalyst and ease of reactivity is to immobilize catalytic active scaffolds required to perform organic reactions over heterogeneous supports. Nano-materials are making inroad in multidisciplinary area of basic research ranging from electronics, energy, biochemical sensors and catalysis. They have been emerging as a sustainable alternatives to trivial materials, as a benign, high surface area catalysts or catalyst supports for their heterogenization. The nano-sized of the catalyst particles helps in providing higher number of active site of the catalyst for the reaction, thereby enhancing the contact between reactants and catalyst. The heterogenization of the catalyst result in the elimination or diminishing waste generation and improve the cost effectiveness and sustainability which could meet the requirement of present industrial demands without compromising the environmental future. This special issue focuses on the use of nano-catalyst in sustainable synthesis.

**Key words:** Nano-catalysis, Sustainable Synthesis, Heterogeneous Catalysis, Catalytic Organic Transformations, Organic Synthesis and Environmental Remediation

**Subtopics:**

Flow Chemistry, Heterogeneous catalysis, Environmental Remediation, Microwave Chemistry, Sustainable Synthesis, Nano-Catalysis, magnetic catalysts

**Approximate Schedule:**

- Manuscript Submission Deadline: 06/30/2015
- Peer Review Due: 07/01/2015

- Revision Due: Nov. 08/01/2015
- Notification of Acceptance by the Guest Editor: 08/15/2015
- Final Manuscript Due: 9/01/2015