

Tentative Outline
Special Issue for Current Organic Chemistry
Guest Editor(s): Prof. Li-Wen Xu and Dr. Ke-Fang Yang

**TITLE: Novel Chiral Ligands/Organocatalysts for
Asymmetric Synthesis**

Aims & Scope:

In asymmetric organometallic catalysis, chiral ligands generally play critical role in numerous stereoselective transformations. Thus the design and synthesis of novel chiral ligands is an area of permanent interest of developing efficient enantioselective metal-catalyzed reactions that provide facile access to optically pure enantiomers. In this regard, phosphine and other heteroatom-containing ligands/organocatalysts are extremely attractive for asymmetric catalysis because they are easily to be prepared from readily available amino acids, chiral amines or alcohols/phenols. In the past decades, the design and synthesis of chiral ligands/organocatalysts have been received much attention for organic chemists. However, there are no special issues on COC focused on the progress of chiral ligands/organocatalysts for asymmetric catalysis. Thus this is the main purpose of the proposed the special issue (thematic issue) of COC, which is planned to provide its reader with a description of the state-of-art status of chiral ligands/organocatalysts in chiral chemistry, including its synthesis and application in asymmetric catalysis.

Key words: Asymmetric synthesis, Organic synthesis, Asymmetric catalysis, Chiral ligands, Organocatalysis, Metal Catalysis

Subtopics:

- BINOL-derived Multistereogenic Ligands/Organocatalysts
- Multistereogenic Ferrocenyl Ligands/Organocatalysts
- TADDOL-derived multistereogenic Ligands/Organocatalysts
- Chiral Amine or Diamine-derived Multistereogenic Ligands/Organocatalysts
- Amino Acid-derived Multistereogenic Ligands/Organocatalysts
- Sugar-based Multistereogenic Ligands/Organocatalysts

Approximate Schedule:

- Manuscript Submission Deadline: 08/30/2015
- Peer Review Due: 09/30/2015
- Revision Due: 10/30/2015
- Notification of Acceptance by the Guest Editor: 11/15/2015
- Final Manuscript Due: 11/30/2015