

Tentative Outline
Special Issue for Current Organic Chemistry
Guest Editor(s): Han Wu

TITLE: Recent development in the synthesis methods and characterization techniques of complex organic materials

Aims & Scope:

It has become the scientific focus to advance the synthesis methods and the analysis techniques for organic materials because of these materials' importance in food, pharmaceutical and medical industries. A good understanding of the properties of a material (e.g., composition, chirality, structure, thermal stability and phase transformation) is crucial for food processing and safety, drug design and manufacturing and medical applications. Thus there's an increasing demand for a wide range of modern characterisation techniques.

This proposed thematic issue will try to present the latest advances, trends and challenges in modern synthesis methods and analysis techniques by collecting the review articles on some emerging techniques (e.g., 3D printing, small angle X-ray scattering) as well as some more traditional techniques (e.g., nuclear magnetic resonance, differential scanning calorimetry and X-ray diffraction). It will also highlight some in-situ monitoring techniques (e.g., the simultaneous X-ray diffraction- differential scanning calorimetry technique for the characterization of solid pharmaceuticals).

Subtopics:

- Thermal analysis and X-ray diffraction
- Modern NMR techniques for organic chemistry
- Small-angle and wide-angle scattering
- 3D printing of organic materials
- Ion/molecule recognition of nanochannel devices in solution conditions
- Process Analytical Technology based crystallization of pharmaceuticals
- Preferential enrichment-an effective way for chiral resolution
- Synthesis and functionalization of polymers for regenerative medicines

Approximate Schedule:

- Manuscript Submission Deadline: 31/09/16
- Peer Review Due: 30/10/16
- Revision Due: 31/11/16
- Notification of Acceptance by the Guest Editor: 15/12/16
- Final Manuscript Due: 31/12/16