

Tentative Outline
Special Issue for Current Organic Chemistry
Guest Editor(s): Mihai V. PUTZ

**TITLE: Sustainable Organic And Hybrid Nanomaterials:
From Structure To Functions**

Aims & Scope:

Viewed few decades ago merely like a politically correct approach of sciences respecting the society and environment, the sustainable research acquired nowadays new and compulsory valences: the safeness in terms of toxicity and durability for the chemicals and physicochemical processes, paralleling the energetic contents, its renewability, the cost-effectiveness of the production, its time-life (volatility), availability, and integrability in both meso- and nano-scales alike. In this context, the organic chemistry alone cannot face such challenge if not combined with inorganic structures to produce hybrid materials and junctions with special properties, i.e. intelligent behavior (e.g. magnetic, semiconductor, logic gates in complex higher systems, etc.), memory effects, storage properties, nano/meso pores, etc., while assuring the low toxicity and bio-degradability once dispersed in the environment or recycled. The present mini hot-topic special issue is intended to overview from essential parts of the virtues to the limits and perspectives organic nanochemistry has in terms of sustainability for its derived nanomaterials, at both fundamental and experimental sides of analysis, while gathering multi-disciplinary approaches by using the physical, mathematical and even eco-logical arguments in chemical designing meta/hybrid-materials with pre-established functions by controlled (quantum and topological) structures.

Keywords: chemical sustainability , chemical bonding, hybrid materials, nanomaterials, metamaterials, fullerenes and nanotubes, conjugated systems, carbon systems, molecular machines, molecular magnetism, structure-property relationships (SAR), spectroscopy, light and neutron scattering, crystallography, aromaticity, graph theory.

Subtopics:

- Nanochemistry
- Quantum Organic Chemistry
- Organic-Inorganic Compounds/Complexes
- Carbon Nanostructures
- Quantitative Structure-Property Relationships (QSPR)
- Chemical Topology
- Structural Chemistry
- Hybrid Materials for Energy
- Hydrogen Storage
- Molecular Organic Frameworks (MOFs)

Approximate Schedule:

- Manuscript submission deadline: 31 April 2016
- Peer review due: May 2016
- Review due: June 2016
- Notification of Acceptance by the Guest Editor: July 2016
- Final manuscript due: August 2016