

Tentative Outline
Special Issue for Current Organic Chemistry

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&

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**TITLE: Recent Advances in Solid Phase Organic Synthesis
(SPOS)**

Aims & Scope:

Owing to its automatability, solid phase organic synthesis (SPOS) continues to evolve as a means to create and modify compound libraries *via* combinatorial chemistry. SPOS is a technology adapted from bio-chemistry and peptide synthesis pioneered by R. B. Merrifield, which later earned him a Nobel Prize in Chemistry in 1984. The solid-phase synthesis carries many advantages over classical solution-phase synthetic methods which may include purification of products by simple filtration of the polymer matrix, easy handling, low moisture susceptibility, minimum side reaction, polymerization-free due to site-isolation of polymer beads and recyclability of the polymer matrix for repeated use; thereby adding the ‘green’ credentials of the whole processes. Consequently, polymer-bound reagents have drawn huge attention from industry and academia for their easy handling, separation, and reusability. In addition, as polymeric reagents/catalyst can be recycled and reused they can be used in an excess amount to drive the reaction faster.

Subtopics:

- Advances in solid phase peptide synthesis
- Solid phase strategy to drug discovery and natural products synthesis
- Solid phase synthesis of heterocycles
- C-C and C-heteroatom coupling in SPOS
- Protection/deprotection in SPOS
- Solid phase macrocyclization
- Polymer-immobilized metal catalysts in SPOS
- Asymmetric synthesis using polymer-supported chiral catalyst
- Design, synthesis and applications of soluble polymers in SPOS
- Recent application of “metal-free” polymer-supported triphenylphosphine in SPOS

Approximate Schedule:

- Manuscript Submission Deadline: 12/15/2017
- Peer Review Due: 01/20/2018
- Revision Due: 03/05/2018
- Notification of Acceptance by the Guest Editor: 03/15/2018
- Final Manuscript Due: 03/25/2018