

Guest Editor(s):

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Hot Topic Title:

New Supramolecular Frontiers: Innovation from Design to Applications.

Aims & Scope: (250-300 words)

In the last decades important challenges have been overcome due to the comprehension of the supramolecular organic chemistry. Non-covalent interactions and aggregation properties often play a central role in the development of new bioactive compounds, carriers systems and delivery devices as well as in the improvement of natural products as starting materials for innovative uses, including tissue engineering and medicine. In many cases different techniques are required to characterize newly formed supramolecular systems in term of dimension, morphology, microviscosity and stability, or to point out the aggregation tendency of the investigated molecules.

Promising strategies are also based on the formation of aggregates or the inclusion of molecules into carrier systems for new targets; the characterization of nanoparticles; the use of the therapeutic polymers; the synthesis of molecules mimicking natural compounds; the applications of traditional or modern techniques to highlight aggregation properties.

The aim of this special issue is to report the recent advances in topic aspects of the supramolecular organic chemistry in a large variety of applications involving self-assembly process and including all cases in which the supramolecular behavior represents the relevant key for future perspectives in the scientific research.

Subtopics: (minimum 6 topics or paper titles)

Synthesis of molecules showing supramolecular behavior;

Aggregation properties of bioactive compounds;

Characterization of nanocarriers;

Recent progress in the applications of host-guest complexes;

Modern and traditional techniques applied to the supramolecular organic chemistry;

Therapeutic Polymers.

Approximate Schedule:

Manuscript Submission Deadline: 03/01/2018

Peer Review Due: 05/01/2018

Revision Due: 06/01/2018

Notification of Acceptance by the Guest Editor: 06/25/2018

Final Manuscript Due: 07/15/2018