

Tentative Outline
Special Issue for Current Organic Chemistry
Guest Editor(s): Leandro Aguiar

**TITLE: Controlled Free-Radical Polymerizations: Review
on Experimental and Modeling Studies**

Aims & Scope:

I propose you a revision of the state of the art in the field nanotechnology-organic chemistry. This a very actual, wide and open area of research that is the joint of many different research fields. Due to this fact, there is not a book or a thematic issue that gives its state of the art. Base on this I believe that this area needs thematic issue like this. I propose to include the study of the organic molecules that are used in the last years for the modification of surfaces (metallic or not: mainly silicon, organic substrates as cellulose, and carbon) and the main carriers that are used in the delivery of actives compounds, from lipid nanoparticles to nanofibres. Moreover I propose to include a chapter focused on the delivery of antitumoral actives.

Subtopics:

- Application of Nitroxide-Mediated Free-Radical Polymerization in Different Monomer Systems
- Kinetic Features Concerning Atom-Transfer Radical Polymerizations
- Comparison of Mathematical Descriptions on Reversible Addition-Fragmentation Chain-Transfer Polymerization
- Phase separation Phenomena on Controlled Polymerizations
- Deterministic Approaches for Simulation of Nitroxide-Mediated Radical Polymerization
- Comparison among ATRP, NMRP and RAFT processes: Theoretical and Experimental aspects
- Controlled Molecular Weight Distributions obtained through ATRP, RAFT and NMRP Techniques
- Improved Homogeneity of Polymer Chains Synthesized through Controlled Polymerizations
- Initiation Types on Controlled Free-Radical Polymerizations
- Application of Controlled Polymerization Techniques in the Production of Polymer Networks

Approximate Schedule:

- Manuscript Submission Deadline: 09/15/2016
- Peer Review Due: 11/01/2016
- Revision Due: 11/15/2016
- Notification of Acceptance by the Guest Editor: 12/05/2016
- Final Manuscript Due: 12/30/2016