

Tentative Outline

Special Issue for *CURRENT PROTEOMICS*

NANOFLUIDICS AND MICROFLUIDICS: NOVEL APPROACHES IN BIOMEDICAL SCIENCE

Guest Editor: Alexandru Mihai GRUMEZESCU

Aims & Scope:

Nano and microfluids displaying microbicidal and anti-biofilm properties open new perspectives for the development of new alternatives to traditional antimicrobial therapies, to destroy microbes or modulate their activity. Till now, very few reports highlight the potential of polar and non-polar fluids in antimicrobial tactics, for handling microbial resistance and for the prevention and eradication of microbial biofilms. This motivates the purpose of this special issue of *Current Proteomics* to summarize current research involving proteins in the fabrication of nanofluids and microfluids as novel tools to tackle the current challenges in preventing, treating and controlling infectious diseases.

Keywords: nanofluids, microfluids, nano and micromaterials, antimicrobial, drug delivery, biopolymers, proteins, nano and microspheres, functionalized surfaces, lab-on-a-chip devices.

Subtopics:

1. Nanofluidics and Microfluidics for Antimicrobial Therapy
2. Nanofluidics and Microfluidics for handling Microbial Biofilms
3. Nanofluidics and Microfluidics for Tissue Engineering
4. Nanofluidics and Microfluidics Fabrication Technologies
5. Lab-on-a-Chip Devices

Approximate Schedule:

- Manuscript Submission Deadline: 20/12/2013
- Peer Review Due: 1/02/2014
- Revision Due: 1/03/2014
- Notification of Acceptance by the Guest Editor: 15/04/2014
- Final Manuscript Due: 01/05/2014