

Special Issue on
**Physicochemical Properties of Structured Fluids for
Novel Applications: From the Nanoscale Upwards**

CALL FOR PAPERS

Structured fluids are advanced materials having recently gained increasing attention due to their chemical and technological importance. From a scientific point of view, the composition, intermolecular self-assembly, and chemical stability of structured fluids are pivotal factors in determining their physicochemical properties. From a technological point of view, their applications include magnetofluidics, electrorheology, liquid membranes in fuel cells, and several other state-of-the-art applications.

The main focus of this special issue will be to point out the progress on multicomponent fluids exhibiting nano- and meso-structure from both the theoretical and experimental point of view to form a common language and knowledge ground for the scientific community. This special issue will be a platform for research studies on materials chemistry of hard and soft matter, from the nanoscale upwards focusing on aspects of both fundamental and applied chemistry. Both theoretical and experimental contributions will be welcome to synergically present the progress in self-assembled systems with a special emphasis on their physicochemical properties.

Research articles must include novel results. Review articles should be focused on examining the state of the art achieved mainly during the last five years.

Potential topics include but are not limited to the following:

- ▶ Reactive and compartmentalizing media for physicochemical properties of fluids and nanoparticle synthesis
- ▶ Physical chemistry of hard and soft matter, from the nanoscale upwards
- ▶ Physicochemical properties of structured fluids
- ▶ Magnetorheology, electrorheology, and ferrofluidics of physicochemical properties of fluids
- ▶ Physical chemistry of liquid crystals
- ▶ Physicochemical properties of ionic liquids
- ▶ Novel applications in physical chemistry: smart fluids
- ▶ Modeling and simulation of physicochemical properties of fluids
- ▶ Self-assembly and supramolecular ordering in fluids
- ▶ Physical chemistry of liquid amphiphiles
- ▶ Surfactant-based liquid mixtures
- ▶ Self-segregation in liquid amphiphiles

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jchem/physical.chemistry/nsfma/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Pietro Calandra, Institute for the Study of Nanostructured Materials, Rome, Italy
pietro.calandra@ismn.cnr.it

Guest Editors

Mikolaj Pochylski, Adam Mickiewicz University, Poznan, Poland
pochyl@amu.edu.pl

Elisabeta Ildyko Szerb, Institute of Chemistry Timisoara of Romanian Academy, Timisoara, Romania
szella73@gmail.com

Submission Deadline

Friday, 16 November 2018

Publication Date

April 2019