

Symposium: Multifunctional materials derived from clay minerals

Scope of the Symposium:

New materials derived from clay minerals have attracted great attention because clay minerals are abundant, low-cost material, environmentally compatible, ease of handling and shown unlimited potential. The clay minerals structures have important properties as high surface area, porosity, thermal and mechanical stabilities, low toxicity, and facility of chemical modification. Therefore the particular structural, morphological and textural features of clay minerals are useful for the preparation of a wide variety of advanced nanostructured materials, essentially regarding their ability to render nanocomposite materials. Due the special properties, clay minerals have been used in numerous applications as potential sorbents for removal of specific pollutants for effluent and waste water treatment, fertilizer carrier, catalysts and catalytic support, sensors, chromatographic phases, bio-plastics and membranes, uses in biomedicine as drug delivery systems and adjuvants of vaccines, tissue engineering, antimicrobial agents and other uses. The aim of this symposium will be focused to discuss new trends and developments in clay minerals science research.

Abstracts will be solicited in (but not limited to) the following areas:

- Organoclay-polymer nanocomposites or bionanocomposites derived from clay minerals
- Clay minerals as catalysts or catalytic supports
- Clay minerals as adsorbents and remediation system
- Clay minerals as sensor devices
- Clay minerals and biomedical applications
- Synthetic clay minerals and their applications

Invited speakers:

- 1. PR César Viseras Iborra Facultad de Farmacia, Universitat de Granada, Granada, Spain
- 2. PR Faiza Bergaya CRMD-CNRS-University of Orleans, France
- 3. Fernando Wypych Departamento de Química, Universidade Federal do Paraná
- 4. Luis Carlos Bertolino CETEM
- 5. PR Maguy Jaber Université Pierre et Marie Curie/Paris/France
- 6. Sibele B. C. Pergher Instituto de Química/Universidade Federal do Rio Grande do Norte
- 7. Vera Constantino Leopoldo Instituto de Química/Universidade de São Paulo



Symposium Organizers:

1. Maria Gardênnia da Fonseca

Universidade Federal da Paraíba

2. Maguy Jaber

Pierre et Marie Curie University

3. Edson Cavalcanti da Silva Filho

Universidade Federal do Piauí

4. Ana Paula de Melo Alves

Universidade Federal do Rio Grande do Norte