

## ***Symposium: Nanomaterials for Nanomedicine***

### **Scope of the Symposium:**

The importance of nanomaterials, especially for life sciences, is continuously growing as it does the number of research groups devoted to them. The nanomaterials (nanoparticles = NPs) have recently emerged as essential building blocks in biomedicine capable, for example, of diagnosis, early detection, and treatment of various diseases. They have been also proved to be multi-functional probes with great potential in the study of single cell dynamics.

The goal of this symposium is to bring together the most important scientific leaders of research groups from around the world and create an ambient of discussion in which both junior and senior researchers would participate in understanding the recent applications of NPs in nanomedicine. Several topics will be considered and treated including synthesis of NPs; optical, structural, and magnetic properties of NPs; biocompatibility of NPs; NPs based high resolution imaging techniques; NPs for diagnosis and therapies, etc. Therefore, the multidisciplinary character of the “Nanomaterials for Nanomedicine” symposium requires the creation of discussion forums in which ideas from senior researchers with diverse expertise and from different fields would be exchanged. Of course, the young researchers beginning their academic and scientific formation, such as PhD and post-doctoral students, working on the fabrication, characterization, and applications of NPs will have a good opportunity to improve their knowledge and will be welcome.

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

- Nanoparticles for drug delivery
- Nanoparticles for thermal treatments
- Nanoparticles for early diagnosis
- Nanoparticles for single cell studies
- Nanoparticle synthesis
- Optical manipulation of nanoparticles and cells
- Upconversion nanoparticles
- Nanoparticles for infrared imaging



**Invited speakers:**

- **Prof. Luis D. Carlos** (Univesidade de Aveiro, Portugal)
- **Prof. Dr. Kohei Soga** (Department o Materials Science and Technology/Center for Technologies against Cancer, Tokyo University of Science)
- **Prof. Fiorenzo Vetrone** (INRs, Montreal Canada)
- **Prof. José García Solé** (University of Madrid, Spain)
- **Prof. Luiz Ricardo Goulart Filho** (Univ. Federal de Uberlândia, Brazil)
- **Prof. Andris Figueiroa Bakuzis** (Univ. Federal de Goiás, Brazil)
- **Prof. Valtencir Zucolotto** (IFSC, Univ. de São Paulo, Brazil) - **to be confirmed**

**Symposium Organizers:**

- 1. Prof. Dr. Carlos Jacinto da Silva**  
Universidade Federal de Alagoas, Brazil
- 2. Prof. Dr. Daniel Jaque García**  
Universidad Autónoma de Madrid, Spain
- 3. Prof. Dr. Andrea Simoni Stucchi de Camargo**  
Universidade de São Paulo, Brazil
- 4. Dr. Kagola Upendra Kumar (Post-doct at IF-UFAL)**  
Universidade Federal de Alagoas, Brazil
- 5. Uéslen Rocha Silva (PhD at IF-UFAL)**  
Universidade Federal de Alagoas, Brazil