



## II Hands-on Course in Nanoparticles Studies: from fluorescence and biochemical tools to MALDI-MS techniques applied to coated metal nanoparticles

15th - 17th  
January 2014

### Module I - Theory

An Introduction of the photophysical principles applied to chemosensors  
 Photophysical characterization: absorption, emission and excitation spectra, fluorescence quantum yield. Solid state studies  
 Design and applications of Fluorescent and Colorimetric chemosensors.  
 Application of MALDI-TOF-MS techniques in Supramolecular chemistry  
 Synthesis of Metallic Nanoparticles. Methods and Characterization

### Module II - Hand-on

Photophysical characterization of a highly luminescence compound  
 An approach to a Colorimetric System: Spectrophotometric titration with anions using a macrocycle molecular device (F<sup>-</sup>, OH<sup>-</sup>, Cl<sup>-</sup> and Br<sup>-</sup>)  
 Spectrophotometric and Spectrofluorimetric titration of an intrinsic chemosensor with the transition metal ions Zn<sup>2+</sup>, Cu<sup>2+</sup> and Hg<sup>2+</sup>  
 Effects on the temperature with luminescence molecular materials in the solid state  
 Application of the NANODrop technology in Bio-inspired systems  
 Spectrometric titration with alkaline and alkaline-earth metals by MALDI-TOF-MS technique using a crown ether molecular device  
 Spectrophotometric Study of gold and silver nanoparticles used as chemosensors for charged molecules

**Registration fees:** 350€

**Location:** Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516 Caparica

**To register please contact:**

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