



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

23th - 25th
March 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⁻, OH⁻, Cl⁻ and Br⁻)
 Spectrophotometric and Spectrofluorimetric titration of an intrinsic chemosensor with the transition metal ions Zn²⁺, Cu²⁺ and Hg²⁺
 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 fee: 350€

Groups with 2/3 persons have a **20%** discount.

Groups with 4 or more persons have a **40%** discount.

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

To register please contact:

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