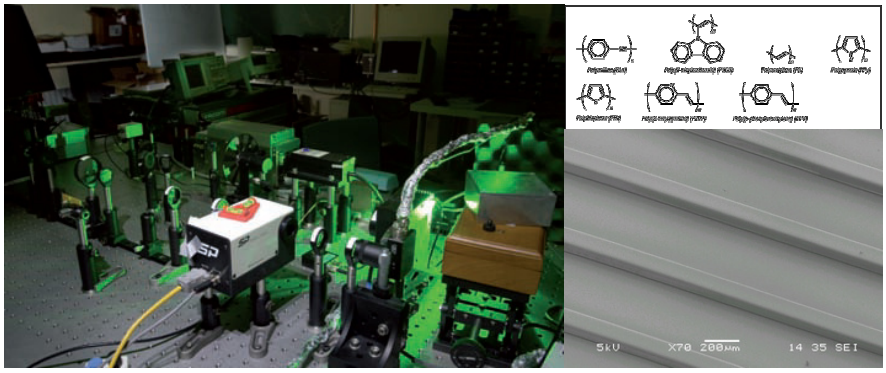
Madrid, December 2011

Research Technician Position in "Conjugated polymer waveguides for chemical sensing applications

The proposed project aims the development of polymer-based optical sensors for detection of volatile organic compounds (VOCs) with very high sensitivity. These sensors will be composed of planar waveguides and microcavities of highly luminescent conjugated polymers. Conjugated polymers are highly interesting materials from the technological point of view since they offer a combination of high emission quantum yields, large optical gain coefficients, flexibility as well as easy processability. All these properties have strong implications in health and security technologies for the design of light-weight portable devices for point-of- care applications. Research will be carried out in three stages involving the study of polymer photophysics in the presence of VOCs, development and characterization of polymer waveguides and characterization of sensitivity to the specific analyte. The project will involve the use of optical spectroscopy tools available at IMDEA Nanociencia such as absorption and fluorescence spectroscopy, time-resolved fluorescence and state-of-the-art femtosecond pump-probe spectroscopy.

We offer a research technician position focus on the proposed project and We seek for ambitious students who possess a MSc degree in Physics, Chemistry or Engineering. Knowledge on programming will be appreciated. We offer a 1 year contract, starting immediately, with conditions according to standard regulations in Spain at the Madrid Institute for Advanced Studies-IMDEA Nanoscience (http://www.nanoscience.imdea.org/)



Candidates should send their CVs to the contact address:

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Deadline: 31st December 2011