

## DIPC PhD STUDENT GRANTS

The Donostia International Physics Center DIPC is currently accepting applications for PhD students. This is a unique opportunity for highly motivated students, recently graduated from the University in physics or related fields, to develop a research career joining high-profile research teams.

DIPC PhD grants last for just 12 months. An extension of the grant may be accepted just in some exceptional cases. DIPC PhD grants are intended to support the student during the first steps of his/her research career. Further financial aid to continue the PhD research project after this period should be obtained from other institutions.

Interested candidates please send an updated CV including an academic transcript with the obtained marks, a brief statement of interest, and contact information to [phd@dipc.org](mailto:phd@dipc.org). Reference letters are welcome but not indispensable. The particular PhD position(s) to which the candidate is applying should be stated as well.

Next review of applications is scheduled for July 1<sup>st</sup>. Applications will be evaluated by a Committee designed by the DIPC board on the basis of the following criteria (with point weights indicated in parentheses):

- CV of the candidate (60%)
- Adequacy of the candidate's scientific background to the project (20%)
- Statement of interest and reference letters (10%)
- Others: Diversity in gender, race, nationality, etc. (10%)

Evaluation results will be communicated to the candidates soon after. Positions will only be filled if qualified candidates are found.

## PHD OPENINGS

- ***Study of the interaction of surfaces and organic molecules in the frame of photovoltaic applications***

*PhD position, contact person: Celia Rogero ([celia\\_rogero@ehu.es](mailto:celia_rogero@ehu.es)).  
Reference: 2011/1.*

The aim is to perform a systematic experimental investigation to characterize the structural and the electronic properties of organic molecules, particularly porphyrins, interacting with metal and oxide surfaces in order to understand the limitations of the current organic cell designs. The combination of different experimental techniques (photoelectron spectroscopy, XPS, adsorption spectroscopy, NEXAFS, and scanning tunneling microscopy, STM) will enable a full feedback cycle to optimize molecules and substrates for solar cell applications.

- ***Theoretical study of the interaction of light with magnetic nanostructures and nanoantennas.***

*PhD position, contact person: Javier Aizpurua ([aizpurua@ehu.es](mailto:aizpurua@ehu.es)).  
Reference: 2011/2.*

The interaction of light with nanoscale metallic nanostructures provides a mechanism to localize and enhance light in the nanoscale, thus acting as effective optical nanoantennas. The properties of closely-interacting nanoantennas in complex environments can provide new options to obtain polarization-resolved fluorescence spectroscopy as well as activation of dark modes by the molecular emission. The project will study all these options in hybrid systems. A special emphasis will be devoted to the study of decay rates of electric dipoles in the proximity to magnetic nanostructures that provide magnetooptical activity. Strongly interacting attitude with experimental groups is necessary. Computing skill will be also greatly valued. In the framework of the project ETORTEK.