

Synthetic Chemistry PhD Studentship

We are looking for a highly motivated and talented PhD Candidate to complement our team in the **Development of Novel Organic and Coordination Compounds with Applications in Dye-Sensitized Solar Cells**. This project is related to the Research Program "Advanced Materials for Highly Efficient Dye-Sensitized Solar Cells – AdMatDSC" financed by the Greek Ministry of Education and the European Commission under the action "ΑΡΙΣΤΕΙΑ".

AdMatDSC draws on nanotechnology-driven molecular science, involving advanced functional materials incorporated in low-cost photovoltaic devices, in order to provide efficient conversion of solar energy to electricity. The strong ties and close collaboration of the AdMatDSC research team with leading research and industrial partners in the field will permit technology transfer and direct incorporation of the most innovative results of the project in the next generation of dye-sensitized solar cells devices.

Description of the PhD project

This three-year project will focus on the design, synthesis, and characterization of a series of novel organic and coordination photosensitizers as well as new types of carbon-based materials with tunable physicochemical properties. These materials will be ideally suited for incorporation in high-performance dye-sensitized solar cells.

The successful candidate will be enrolled at the National Centre of Scientific Research Demokritos and will be supervised by Dr. Polycarpos Falaras and Dr. Georgios C. Vougioukalakis. Successful completion of this project will produce a number of high impact publications and will lead to commercially interesting products.

Successful candidates will be employed from October 2012 (PhD students). Remuneration under employment contract for 36 months will be provided.

Possible starting date: October 1st 2012

Qualifications

Candidates applying for a PhD position must hold a Bachelors/Diploma degree in Chemistry and a Masters degree in Synthetic Organic or Inorganic Chemistry. Research experience in organic and/or inorganic synthesis, spectroscopic characterization by various NMR techniques, IR, MS, Cyclic Voltammetry, Raman, and UV-vis spectroscopy is also highly desirable.

Researchers can be nationals of any country within or outside of the EU. Excellent knowledge of the English language (fluently speaking and writing) is essential.

How to apply

For application send:

- 1) Your CV
- 2) Copies of your university degree(s) or academic transcript (list of module marks)
- 3) A cover letter (1 page) outlining your qualification for the project
- 4) A list of publications (if available)

- 5) Two letters of reference to give as broad as possible overview of your academic and/or professional achievements.
- 6) Other documents to demonstrate specific experiences (if available).

Applications deadline: 31/07/2012

Applications have to be addressed to Dr. Polycarpos Falaras

Dr. Polycarpos Falaras
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