



Theoretical and Physical Chemistry Institute  
National Hellenic Research Foundation  
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Applications are invited for a **Research Fellow position** in the project entitled “*Carbon nanohorn-based hybrid materials for energy conversion. Reinforcing and expanding the research potential of carbon-nanostructures laboratory to a regional and European kernel of excellence*” (NANOHOST), funded by the European Commission, in the context of **Activity 4.1: “Unlocking and developing the research potential in the EU’s convergence regions and outermost regions – REGPOT-2007-1 of the FP7 Capacities Work Programme: Research Potential**. The project will be implemented at the carbon-nanostructures laboratory, in the Theoretical and Physical Chemistry Institute (TPCI) of the National Hellenic Research Foundation (NHRF), Athens, Hellas ([www.eie.gr](http://www.eie.gr)).

The NANOHOST project aims at unlocking and developing of the research potential of the carbon-nanostructures laboratory, not only in the area of CNHs-based hybrid materials but also of carbon-based nanostructured materials in general. Implementation of NANOHOST will lead to:

- the preparation of diverse nanosized hybrid materials consisting of CNHs and electron donors ranging from (metallo)porphyrins and transition metal polypyridyl systems to tetrathiafulvalenes and extended tetrathiafulvalene analogues,
- the detailed characterization of the new CNHs-based hybrids materials in terms of structure and morphology analysis,
- the calculation of the electronic structure of different hybrid systems, the determination of the excited states of relevance to the photoinduced transfer of charge and/or energy and of the mechanism of such processes. The prediction based on theoretical data, of suitable hybrid systems possessing the desired structure-property optimization,
- the properties evaluation and exploitation of the new CNHs-based hybrid materials in energy conversion schemes,
- detailed and integrated knowledge of structure-design properties-optimization.

**The present advertisement involves a position of Research Fellow to work in the theoretical aspects of NANOHOST.**

The applicants should have research experience greater than 4 years (after obtaining their bachelor’s degree) in one (or a combination) of chemistry, physics, mathematics, materials science. Experience in theoretical chemistry, methods of electronic structure calculations, and in general experience with methods of calculation on extended systems is highly desirable.

The appointment will be initially for 12 months, with the possibility for a maximum of two 12-month renewals, for a maximum total period of 36 months, subject to performance. The salary will depend on the age, experience and qualifications of the Research Fellow according to the usual practices of NHRF.

The Theoretical and Physical Chemistry Institute of NHRF is an equal opportunity employer.

Applications including a full CV with list of publications, summary of current research interests and a letter of recommendation, should be e-mailed to the coordinator of the project

Dr. Nikos Tagmatarchis (Email: [tagmatar@eie.gr](mailto:tagmatar@eie.gr); Tel.: + 30 210 7273835; Fax: + 30 210 7273794)

Contact persons for information regarding the position

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