

## **Marie Skłodowska-Curie Fellowships at the NanoProSECEP group of the Institute of Nanoscience and Nanotechnology (INN) at NCSR “Demokritos” in Athens, Greece**

### **1. About the research organization**

The group of Nanotechnology Processes for Solar Energy Conversion and Environmental Protection (NanoProSECEP) group at the Institute of Nanoscience and Nanotechnology (INN) of NCSR “Demokritos” invites researchers from abroad to apply for a Marie Skłodowska-Curie Fellowship (MSCA - IF - EF). The MSCA - IF - EF allows the best and promising researchers from Europe to conduct a research project in a European host institution.

The Institute was established from the merger of the Institutes of Materials Science, Microelectronics and Physical Chemistry, as a result of a national reorganization of research institutions in Greece. INN efficiently organizes and integrates most of the best research and human resources available in Greece to address the innovation challenge and to increase the European competitiveness of the Country in Key Enabling Technologies (KETs) such as nanotechnology, micro- and nanoelectronics, advanced materials, biotechnology and photonics. INN provides a unique environment to promote and support world-class multidisciplinary basic and applied research, while forging ties with industry and SMEs it promotes the transfer of innovation to the market.

### **2. Supervisor, group and research topics**

Dr. Polycarpus Falaras (PhD thesis from Paris VI University-France 1986, PSIPW Alternative Water Resources Prize 2014, 7 patents, more than 200 papers, *h* index 42) is a Research Director leading the NanoProSECEP group (of 16 people, among them one Senior Researcher, one Assistant Professor and two University Lecturers). The Current research activities of the group are focusing on nanotechnology driven light induced processes (photo-induced electron transfer) for solar energy applications, mainly in third generation photovoltaics and photocatalysis

The Group of Dr Falaras is fully equipped and disposes high experience in the implementation of EU projects, being the coordinator and/or scientific leader of the Demokritos team in several European (FP6: Ti-nanotubes and FP7: Clean Water and SANS, IOLICAP, DESTINY, COST: Chemistry actions D14 and D35, Nanospectroscopy MP1302; and Greek projects (EXCELLENCE-ARISTEIA, Thales,...). In the frame of the implementation of these projects, fruitful collaborations have been established close and with companies and

well-known research teams around the world (including in USA, UK, Germany, Italy, France, Czech Republic, Spain, Portugal, Switzerland,...).

The group encourages candidates for the MSC Fellowship to apply in the fields of:

Perovskite Solar Cells

Dye-sensitized Solar Cells

Visible-light Activated Photocatalysts incorporated in Photocatalytic Membrane Reactors for Emerging Water Pollutants

Photocatalytic Conversion (Reduction) of CO<sub>2</sub> to Hydrocarbons.

### **3. About the application procedure**

Who can apply?

Researchers who completed a doctorate or have gained at least 4 years of full-time research experience after graduation.

Important: applications are not possible with an institution in a country where the researcher has already been resident or worked for more than 12 months in the 3 years before the final submission date.

Which topic can be funded?

All areas of scientific and technological research that are of interest to the EU may be eligible for IEF. The applications to the NanoProCECEP group at the Institute of Nanoscience and Nanotechnology (INN) of NCSR “Demokritos” in Athens should be in line with its research programme.

What does the grant support?

The researcher is provided with a basic monthly salary and a mobility grant. Host institutions receive a grant for indirect costs and an additional contribution for research materials.

Which is the duration of the project?

1 to 2 years

#### Useful websites:

More info on Marie Curie actions:

[http://ec.europa.eu/research/mariecurieactions/about-mca/actions/ief/index\\_en.htm](http://ec.europa.eu/research/mariecurieactions/about-mca/actions/ief/index_en.htm)

The NanoProSECEP group at the Institute of Nanoscience and Nanotechnology (INN) of NCSR “Demokritos”

<http://inn.demokritos.gr/en/prosopiko/p.falaras/>

If you are interested in applying for a Marie Curie Fellowship (IF - EF) with the NanoProSECEP group of the Institute of Nanoscience and Nanotechnology (INN) at NCSR “Demokritos” in Athens, please send us your CV with publications and a short description of your research idea (max. 2,000 characters, with spaces) to: [p.falaras@inn.demokritos.gr](mailto:p.falaras@inn.demokritos.gr)

Deadline for expression of interest: June 1st 2016

Deadline call: September 14th 2016