# EXPERIENCED RESEARCHER FOR MARIE CURIE FELLOW IAPP

## NATIONAL CENTER FOR SCIENTIFIC RESEARCH "DEMOKRITOS" (NCSR Demokritos), IAMPPNM, Department of Physical Chemistry

Location:	Athens, Greece
Tenure:	Full time, fixed term for 18 months (possible start in March/April 2014), working 40 hours per week
Closing Date:	31 <sup>st</sup> January 2014
Interview Date:	week 8, 2014
Reference:	SANAD
Salary:	€ 58,500 per annum plus mobility allowance (Marie Curie) (both corrected by the coefficients indicated in the Work Programme for Greece: 94.8)

We are seeking a Marie Curie Fellow (Experienced Researcher 4 -10 years) to work in the **SANAD** project (<u>http://www.sanadproject.eu/</u>). **SANAD** is a FP7 Marie Curie-Industry-Academic Pathways and Partnerships project (IAPP) focusing on novel Nanocoatings with improved Aerodynamic and De-icing behavior for aircraft. The project consortium consists of 5 partners including 2 academic institutions, 2 SMEs partners specialised in the field of nanocomposite coatings and 1 airline partner as end user.

The activities of the current proposal are expected to provide insight on the fundamental mechanisms that determine the phenomena observed in nanoscale and to facilitate their applicability to other industrial sectors. The proposed research plan represents a key enabling technology for manufacturers to maximize profit and gain competitive advantages. Optimization of the processing input parameters will be carried out in order to achieve desired processability (e.g. rheological properties), increased performance (mechanical, electrical or thermal properties), improved anti-icing properties and reduced drag force.

The main tasks of NCSR Demokritos within the **SANAD** project include: a) the preparation of functionalised metal oxides and carbon based nanofillers (CNTs and graphenes), b) the preparation of nanocomposite coatings and c) their structural characterization.

The Marie Curie Fellow should have an internationally recognised PhD degree (or equivalent) in a relevant discipline (Chemistry, Materials Science and Chemical Engineering). The ideal candidate would have a strong track record of projects involving industrial collaboration, together with in-depth knowledge of material sciences and mechanical engineering, especially in the modification of inorganic and carbon nanoparticles and the preparation of polymer nanocomposites.

We offer a working contract with benefits adjusted to living conditions according to EU FP7 guidelines and international mobility. In accordance with Marie Curie funding conditions, candidates must have less than ten years of full-time equivalent research experience, including the years spent on PhD studies, and must not have resided or carried out their main employment activity in Greece for more than 12 months in the 3 years immediately prior to the date of appointment. In addition, candidates must have a minimum of 4 years' research experience in an Institute of Higher Education/Research Organisation (but not more than 10 years' experience).

The salary for this post will be paid in Euro  $\notin$  58,500 per annum. In addition, the successful applicant will receive a monthly mobility allowance depending on applicant status -  $\notin$  700 (single) or  $\notin$  1000 (married). The salary and the mobility allowance will be corrected by the country coefficient of Greece 94.8 as stated in the Work Programme.

### **Main Activities**

- ✓ To carry out high quality research within the framework of SANAD, in the area of the preparation and characterisation of PDMS or polyurethane nanocomposites with functionalized inorganic fillers using chemical or physical routes. The candidate will assist essentially the NCSR Demokritos staff on the preparation and modifications of metal oxides and the preparation of metal oxide composite paints. In addition it is expected to contribute to the characterization of the prepared nanocomposites. His/her role will be critical for the success of the project as he/she will also provide expertise on market related issues including legislative, regulations and standards aspects.
- ✓ To develop collaboration and partnership with key stakeholders and researchers in the corresponding field, nationally and internationally
- ✓ To disseminate research through peer reviewed journals, presentation at conferences, seminars, workshops
- ✓ To assist NCSR Demokritos staff in project management.

### Specific responsibilities will include:

- Preparation of materials according to the modifications protocols that are described or will be determined within the project
- ✓ Contribution to the structural characterization of the developed materials
- ✓ Communication with the other participants and on-time submission of the work package documents according to the workplan
- ✓ Keep up-to-date with developments and changes in the area of nanocomposites and especially for marine applications

For more details regarding this vacancy before making an application please contact:

Dr. Zili Sideratou, email: zili@chem.demokritos.gr

Dr. Fotis Katsaros, email: <a href="mailto:fkats@chem.demokritos.gr">fkats@chem.demokritos.gr</a>

#### **Application Procedure**

Please send your application either by post to:

NATIONAL CENTER FOR SCIENTIFIC RESEARCH "DEMOKRITOS" IAMPPNM, Department of Physical Chemistry Dr. Zili Sideratou, Terma Partiarchou Gregoriou & Neapoleos str. Aghia paraskevi Attikis, 15310, Athens, Greece

or by email to zili@chem.demokritos.gr or fkats@chem.demokritos.gr

Please attach a Curriculum Vitae (including photo). The closing date is midnight on Friday, 31<sup>st</sup> January, 2014. For information, interviews will be held week commencing 17<sup>th</sup> February, 2013.