

**Invitation for Expression of Interest:****Postdoctoral Research Associate “Development and characterization of multifunctional composites for fan blades and structural components”**

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for the position of a postdoctoral research associate in the context of the research project “Smart by Design and Intelligent by Architecture for turbine blade fan and structural components Systems”, with the acronym “SMART-FAN”, proposal ID: 760779-2. The project is implemented under the EU-Horizon 2020 Research & Innovation Actions (RIA) and is financially supported by EC.

Job Description

To conduct research in the framework of the aforementioned project. SMARTFAN proposes the development of “smart” material and product architectures that will interact with their environment and react to stimuli by employing biomimetic, self-sensing, actuating and damage-repairing technologies. Their smartness is based on the use of, (i) modified carbon fibres (CF), (ii) CF reinforced polymers (CFRPs) and (iii) nano-/micro- composites with special physicochemical properties, in order to develop smart (bulk) materials, applied on intelligent structures, as denoted by the DoA. The aim of this research is the production of polymer composites with graphitic based inclusions to be used as core materials for “smart” materials and product architectures.

The potential candidate should also be responsible for the following main tasks:

- Conduct research activities related to graphene and graphene-enhanced composite materials, including experimental characterization (i.e. Raman spectroscopy, atomic force microscopy etc in conjunction with mechanical testing)
- Work in collaboration with the other research and industrial partners of the project for accomplishing the corresponding tasks and subtasks
- Identify requirements for the research and develop tactics for future challenges
- Prepare the corresponding reports (technical and economical) for project’s evaluation

Location: FORTH/ICE-HT, Patras, Greece

Duration: 1 year with potential renewal

Salary: up to 3.200,00 € per month (total cost of the employer, including social security and taxes)

Envisaged starting date: 01/04/2019

Requirements and Qualifications

The candidates are required to hold a Chemical Engineering Diploma and a PhD in Chemical Engineering, specialized in mechanical deformation of composite materials in tandem with non-destructive characterization techniques such as Raman spectroscopy. Moreover, the candidates must be fluent in Greek and English, in order to meet working conditions. The appropriate candidate should have:

- Experience in the preparation and characterization of graphene
- Previous research experience in an industrial environment is strongly required
- Be able to lead teams
- A great scientific background in materials, especially in 2D related materials
- Analytical thinking, strong personality and good communication skills
- Be a flexible and reliable person

The evaluation of the candidacies will be based on the following criteria and qualifications:

Qualifications	Weight	Evaluation criteria
Diploma in Chemical Engineering	20	Diploma Grade, courses in polymer materials
PhD in Chemical Engineering	20	PhD in Chemical Engineering, Dissertation relevant to Raman spectroscopy and its application on polymer based composite materials
Proven industrial experience (minimum 4 years) in tandem with research and lab experience in : (i) Study of graphene and other 2D related materials, (ii) Characterization techniques such as Raman spectroscopy and (iii) Mechanical testing of materials	25	Duration of proven research experience in industry and in research groups and projects. Quality and number of related publications in refereed journals and conference proceedings
Research interests	20	Relevance, plans and potential

Awards of excellence	15	Number and type of awards
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Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 4/3/2019, 23:59h., by email to Kleanthi Zacharopoulou: kleanthi@iceht.forth.gr

In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles
- Statement of research interests

Any application received after the deadline will not be considered for the selection.

Selection Procedure

Applications that are received on time will be evaluated by a scientific committee using the criteria mentioned above. If necessary, certain candidates will be invited to a personal interview with the committee.

The outcome of the selection will be announced on the website of FORTH/ICE-HT as well as on the website of "DIAVGEIA".

The selected candidate will be notified and asked to accept the position within three (3) working days and to present all relevant documents that should match the submitted ones.

General Protection Data Regulation

FORTH is compliant with all legal procedures for the processing of personal data as defined by the Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data.

FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law.

FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one's legitimate legal rights' as defined in the Regulation EU/2016/679 and/or in national law.

We inform you that under the Regulation EU/2016/679 you have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws.

We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

You have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.

Contact

For information and questions regarding the application and selection procedure, candidates are asked to contact the FORTH/ICE-HT Research Secretariat, e-mail: kleanthi@iceht.forth.gr, tel.: +30 2610 965278.

For information and questions about the advertised position and the research activity of the group or the Institute, candidates are asked to contact Professor Costas Galiotis, tel: +30 2610 965255, e-mail: c.galiotis@iceht.forth.gr.

For FORTH/ICE-HT,
Vasilis Burganos, Director