



Patras, 19.11.2021

Ref. No.: 65965

### Invitation for Expression of Interest:

**Postdoctoral/Research Assignment on “Characterization and study of multifunctional composites for automotive and aerospace applications, including additive manufacturing techniques”**

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one position of a postdoctoral/research assignment in the context of the research project “Graphene Flagship Core Project 3 – SGA 881603: Work Package 14 - Composites”, which is implemented under the Horizon 2020 Research Framework Program.

### Job Description

To conduct research under a work or an employment contract in the development, characterization and testing of composite polymer/graphene coatings in the aforementioned project “Graphene Flagship Core Project 3 – SGA 881603: Work Package 14 - Composites”. The aim of this research is the fabrication of GRMs and 2D layered structures and characterization by means of microscopy and spectroscopy.

In particular, the job consists in the following main tasks:

- a) Preparation and characterization of graphene-based composite coatings and laminates using spectroscopic techniques
- b) Prepare the corresponding reports (technical and economical) for project’s evaluation.
- c) Research activities related to graphene and to other 2D related materials, such development of conductive coatings and study of mechanical properties with nano-indentation.

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

- a) Organization of activities and national and international meetings.
- b) Identification of requirements for the research and develop tactics for future challenges.
- c) Scientific supervision of potential master and/or PhD thesis.
- d) Production and characterization of graphene and other 2D related materials, using techniques such as Raman spectroscopy, Atomic Force Microscopy etc in conjunction with mechanical testing.

**Location:** FORTH/ICE-HT, Patras, Greece

**Duration:** 12 months with the potential of renewal or extension according to the needs of the project

**Salary:** up to 3.560 € per month depending on the qualifications (total cost of the employer, including social security and taxes)

**Envisaged starting date:** 01/01/2022

### Requirements and Qualifications

The candidates are required to hold a Mechanical Engineering Diploma and a PhD in Materials Science, preferably on 2D materials, with experience in reporting, in tandem with a strong expertise in mechanical deformation of composite materials and characterization techniques such as Raman spectroscopy. Moreover, candidates must have good knowledge of the Greek and English (level B2) language. The appropriate candidate should have:



- a) Strong expertise in the preparation and characterization of composite materials
- b) A great scientific background in materials, especially in polymers and composites
- c) Strong know-how in the preparation and characterization of graphene (or related carbon-based materials) and/or 2D materials and additive manufacturing techniques.

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

Qualifications	Weight	Evaluation criteria
PhD in Materials Science	25	PhD Dissertation relevant to composite and multifunctional materials (weak relevance: 15 points, strong relevance: 25 points)
Proven research and lab experience (minimum 4 years): (i) Mechanical characterization of materials (ii) Fabrication and study of smart/multifunctional materials (iii) Study of graphene or other 2D related materials or nanomaterials (iv) Investigation of interfacial properties	20	Duration of proven research experience in research labs and projects (5 points/year, max 20 points)
Interview	20	(a) Background in the objective of the assignment (5 points). (b) Organizational and communication skills (5 points). (c) Team-spirit and self-motivation (5 points). (d) Commitment to achieving the goals (5 points).
Experience in relevant projects (as postgraduate student or post-doctoral researcher)	15	Duration of proven experience in relevant projects (3 points/year, max. 15 points)
Publications in refereed journals and conference proceedings	10	Number of relevant publications (2 points/publication, max 10 points)
Diploma in Mechanical Engineering	10	Degree of Diploma grade X1 point
<b>Overall</b>	<b>100</b>	

### Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 6/12/2021 16:00h, by email to Kleantchi Zacharopoulou: [kleanthi@iceht.forth.gr](mailto:kleanthi@iceht.forth.gr).

In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles & foreign language certificate
- Any document to support the aforementioned required qualifications

**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.

### **Selection Announcement**

The result of the selection will be announced on the website of: FORTH/ICE-HT as well as on the website of “DIAVGEIA”.

Candidates have the right to appeal the selection decision, by addressing their written objection to the FORTH/ICE-HT Research Secretariat, e-mail: [kleanthi@iceht.forth.gr](mailto:kleanthi@iceht.forth.gr), within five (5) days after the results announcement on the web.

### **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](mailto: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](mailto:c.galiotis@iceht.forth.gr).

### **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](mailto: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.

For FORTH/ICE-HT,  
Vasilis Burganos  
Director

