



Patras, 16.4.2025 Ref. No.: 175707





Invitation for Expression of Interest:

MSc Fellowship "Use of laser sources for the synthesis of graphene-based nanostructures with applications in flexible energy harvesting and storage devices"

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one MSc fellowship position in the context of the research project «Innovative pilot lines for sustainable graphene-based flexible and structural energy harvesting and storage devices (GRAPHERGIA), GA: 101120832», which is implemented under the HORIZON EUROPE Research and Innovation Actions.

Job Description

To conduct research as a MSc candidate in the framework of the aforementioned project "GRAPHERGIA". The main objective of GRAPHERGIA is to develop a new science-based, holistic approach, implementing new advances to achieve one-step, laser-assisted synthesis, processing, functionalization and simultaneous integration of graphene-based materials and graphene nanohybrids, directly into relevant energy harvesting/storage devices. The selected candidate will conduct research, as a graduate student (MSc), in the framework of the aforementioned project "GRAPHERGIA", in the development of methods based on laser-assisted synthesis of graphene-related materials with applications in flexible energy harvesting and storage devices.

Location: FORTH/ICE-HT, Patras, Greece

Duration: up to 6 months, with the potential of renewal or extension according to the needs of the project.

Fellowship: up to approximately 700 € per month (graduate fellowship) depending on qualifications. **Envisaged starting date:** 01/06/2025

Requirements and Qualifications

The applicant should have a BSc in Physics or Chemistry or Materials Science or relevant field. The candidate should have been registered as a Graduate student (MSc) in a materials science program or in a department of Physics or Chemistry or Materials Science or related discipline. Experience using: (i) laser sources to decompose various carbon precursors for the synthesis of graphene-based electrodes, (ii) fabrication and characterization of in-plane interdigitated supercapacitors on flexible substrates, (iii) electrochemical characterization as in three-electrode set up and coin-cell devices, is required. Candidates must be fluent in Greek and have a good knowledge of English (at least B2 level).





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

Qualifications	Weight	Evaluation criteria
Proven experience in the fabrication of supercapacitor electrodes and their electrochemical characterization	40	Demonstrated through the relevance of BSc thesis: strong relevance: 40 points, medium relevance: 20 points, weak relevance: 5 points
Proven experience in the use of laser sources to decompose various carbon precursors for the synthesis of graphene-based materials or modify the morphology of electrodes	30	Duration of contract: 5 points per month, up to 30 points
Knowledge of English Language	20	10 points (C1), 20 points (C2)
BSc grade	10	BSc grade x 1 point
Overall	100	

Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 30/4/2025, 16:00h., by email to Kleanthi Zacharopoulou: kleanthi@iceht.forth.gr, cc.: Spyros Yannopoulos: sny@iceht.forth.gr.

In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles & English language certificate
- Certificate of registration as a MSc student
- Copy of BSc thesis
- Employer's certificate and any other official documentation of the required experience
- Copy of transcript of courses and grades

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.

Interview Criteria: (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)





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

In case of titles and qualifications awarded by foreign Higher Education Institutions, the provisions of the Law 55/2023 (article 36) and 4957/2022 (article 304) are implemented.

Selection Announcement

The result of the selection will be announced on the website of: FORTH/ICE-HT.

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, 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, 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 Spyros Yannopoulos: tel: 30 2610 965252, email: sny@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.

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,

Theophilos Ioannides Director



