



Patras, 20.2.2025 Ref. No.: 169185





Invitation for Expression of Interest:

PhD fellowship "Laser-assisted synthesis of graphene-related materials for electrochemical energy storage"

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one PhD fellowship position in the context of the research project "Integrating novel materials with scalable processes for safer and recyclable Li-ion batteries", INERRANT, GA: 101147457, which is implemented under the Horizon Europe.

Job Description

To conduct research as a PhD candidate in the framework of the aforementioned project "INERRANT". The main objective of INERRANT is to develop safe-and-sustainable-by-design materials, e.g. through the use of laser processing of raw materials, to ensure the economical and widespread utilization of safer LIBs in modern society. To realize this, INERRANT formulates a holistic approach to enhance safety, boost performance and improve fast charging, of Gen 3 LIBs tailored for mobility applications. The selected candidate will conduct research, in the framework of the aforementioned project "INERRANT", in the preparation of electrochemical storage devices (batteries) based on graphene and its hybrid nanostructures produced using laser sources.

Location: FORTH/ICE-HT, Patras, Greece

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

Fellowship: up to approximately 950 € per month (graduate fellowship) depending on qualifications.

Envisaged starting date: 01/04/2025

Requirements and Qualifications

The applicant should hold both BSc and MSc degrees in Physics or Chemistry or Materials Science, or a related field. Additionally, candidates should have been enrolled in a PhD program in Physics, Chemistry, Materials Science, or a relevant field. Preference will be given to candidates with experience in: (i) the use of lasers to prepare graphene-based nanomaterials by transforming various carbon sources, (ii) the preparation and physicochemical / electrochemical evaluation of materials with battery-type behavior prepared using laser sources, and (iii) the fabrication and performance evaluation of electrochemical energy storage devices. Candidates must be fluent in Greek language and have a good knowledge of English (at least B2 level) language.





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

Qualifications	Weight	Evaluation criteria
Proven experience in the laser-assisted synthesis and physicochemical characterization of graphene-based nanomaterials	40	Demonstrated through the relevance of the master degree thesis. (i) High relevance: 40 points. (ii) Medium relevance 20 points. (iii) Low relevance: 5 points.
Proven experience in the fabrication and electrochemical characterization of energy storage devices	30	Demonstrated through the duration of experience acquired from participation in relevant funded research projects (i.e. Horizon Europe or similar): 2 points per month of active participation; up to 30 points
MSc grade	20	2 points X MSc grade
Relevant articles and conferences	10	10 points per peer-reviewed relevant article or international conference participation, up to 10 points
Overall	100	

Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 4/3/2025, 16:00 h, 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 with clear description of the methodologies possessed by the applicant and the level of experience
- Scanned copies of academic titles & English language certificate
- Copy of MSc thesis
- Certificate of registration as a PhD candidate
- Employer's certificate and any other official documentation of the required experience
- Copies of peer-reviewed articles or books of abstracts demonstrating participation in international conferences.

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



