



HELLENIC REPUBLIC  
MINISTRY OF DEVELOPMENT  
GENERAL SECRETARIAT FOR RESEARCH & INNOVATION



FOUNDATION FOR RESEARCH & TECHNOLOGY - HELLAS  
INSTITUTE OF CHEMICAL ENGINEERING SCIENCES



Patras, 22.02.2024

Ref. No.: 133623

### Invitation for Expression of Interest:

**PhD fellowship** “Development and characterization of electrocatalysts/electrodes for the investigation of the H<sub>2</sub>O electrolysis & fuel cell processes on Solid Oxide high temperature cells”

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE- HT) is seeking applicants for one PhD candidate position in the context of the research project “Novel SOE architectures for hydrogen production (NOAH2)” - Grant Agreement number: 101137600, which is implemented under the HORIZON EUROPE, HORIZON-JTI-CLEANH2-2023-1.

### Job Description

To conduct research as a Ph.D. candidate in the framework of the “Novel SOE architectures for hydrogen production \_ Project acronym: NOAH2 \_ P. No 101137600”. The aim of this research is to understand the degradation and lifetime operation fundamentals of new Solid Oxide Cell (SOC) fuel electrodes, developed with novel chemical synthesis methods, at high (750 – 900 °C) and intermediate (600 – 750 °C) temperature H<sub>2</sub>O electrolysis and fuel cell operation conditions.

**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 850 € per month (graduate fellowship) depending on qualifications

**Envisaged starting date:** 1/4/2024

### Requirements and Qualifications

The applicant should hold a BSc in Chemistry and a MSc in Chemistry, preferably in the topic of “Chemistry of materials for energy applications”. The applicant should be registered in a Ph.D. program.

Furthermore, the candidates must have successfully attended courses in their MSc, related to:

chemistry of materials, focusing on synthesis of inorganic materials, characterization techniques of materials, focusing on surface analysis, as well as technological and energy applications of materials, focusing on heterogeneous catalysis. Candidates must have knowledge of the Greek and English language (at least B1).

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

| Qualifications  | Weight     | Evaluation criteria & Points   |
|---|------------|--|
| MSc grade   | 35         | <ol style="list-style-type: none"> <li>MSc grade X 1 point</li> <li>Grade in the following courses: <ul style="list-style-type: none"> <li>chemistry of inorganic materials, focusing on the synthesis of inorganic materials</li> <li>surface characterization techniques of materials</li> <li>technological applications of materials</li> <li>materials for energy applications, focusing on heterogenous catalysis.</li> </ul> </li> </ol> Grade X 0.625 points/per course, up to 25 points |
| Relevance of the MSc thesis to Chemistry of materials for Energy applications | 25         | strong relevance = 25 points, medium relevance = 10 points, weak relevance = 7 points  |
| BSc grade   | 20         | BSc grade X 2 points   |
| Interview   | 10         | (a) Background in the objective of the assignment (4.0 points). (b) Organizational and communication skills (2.0 points). (c) Team-spirit and self-motivation (2.0 points). (d) Commitment to achieving the goals (2.0 points).  |
| Knowledge of the English language   | 10         | B2= 5 points, C1=8 points, C2=10 points  |
| <b>TOTAL</b>  | <b>100</b> |  |

### Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 4/3/2024, 16.00h., by email to Kleanthi Zacharopoulou: [kleanthi@iceht.forth.gr](mailto:kleanthi@iceht.forth.gr), cc: [niakolas@iceht.forth.gr](mailto:niakolas@iceht.forth.gr).

In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles and language knowledge certificates
- Copy of transcript of courses and grades
- Copy of BSc Thesis and MSc thesis
- Certificate of registration as a PhD candidate

**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.

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](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)

For information and questions about the advertised position and the research activity of the group or the Institute, candidates are asked to contact Dr. Dimitris Niakolas, tel: +30 2610 965240, e-mail: [niakolas@iceht.forth.gr](mailto:niakolas@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

Theophilos Ioannides  
Director

