

HELLENIC REPUBLIC MINISTRY OF DEVELOPMENT & INVESTMENTS GENERAL SECRETARIAT FOR RESEARCH & INNOVATION



Patras, 20.6.2023 Ref. No.: 112568

Invitation for Expression of Interest:

PhD Fellowship "Development of modified Ni-based electrocatalysts/electrodes for the investigation of the reversible electrolysis/fuel cell process on Solid Oxide high temperature cells (reversible-SOCs)"

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 "Reversible SOEC/SOFC System For A Zero Emissions Network Energy System _ Project acronym: 24_7 ZEN _ P. No 101101418", which is implemented under the Horizon Europe Research Framework Programme and is financially supported by the Clean Hydrogen Partnership and its members Hydrogen Europe and Hydrogen Europe Research under grant agreement No 101101418. Funded by the European Union and the Swiss State Secretariat for Education Research and Innovation (SERI).

Job Description

To conduct, as a PhD candidate, research in the framework of the "Reversible SOEC/SOFC System For A Zero Emissions Network Energy System _ Project acronym: 24_7 ZEN _ P.No No 101101418". The aim of this research is to understand the degradation and lifetime operation fundamentals of new-developed fuel Solid Oxide Cell (SOC) electrodes under the high (750 – 900 °C) temperature reversible H_2O electrolysis/fuel cell operation.

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 840 € per month (graduate fellowship) **Envisaged starting date**: 1/08/2023

Requirements and Qualifications

The candidate is required to hold a diploma in Chemical Engineering, with a Master in Engineering (MEng), as well as to be registered in a PhD program. In addition, the candidates are required to have experience in investigation of electrochemical processes for the production of H_2 and/or electricty. Furthermore, the candidates must have succesfully attended courses, related to electrochemistry, heterogeneous catalysis, chemical processes and mass transport phenomena. Candidates must have good knowledge of the Greek and English (at least B2 level) language.

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







Qualifications	Weight	Evaluation criteria
Diploma in Chemical Engineering	55	Demonstrated through: 1. Diploma grade X 3 points, up to 30 points, and 2. Grade in the following courses: heterogeneous catalysis, electrochemistry, chemical processes and mass transport phenomena. Grade X 0.625 points/per course, up to 25 points
Proven research experience in the: investigation of electrochemical processes for the production of H_2 and/or electricty.	15	Demonstrated through: Relevance of Undergraduate Thesis: strong relevance: 15 points, medium relevance: 10 points, weak relevance: 7 points
Publications in peer-reviewed international journals and/or in conference proceedings	10	5 points for each, up to 10 points
Interview	10	 (a) Background in the objective of the assignment (2.5 points). (b) Organizational and communication skills (2.5 points). (c) Team-spirit and self-motivation (2.5 points). (d) Commitment to achieving the goals (2.5 points).
Knowledge of English Language	10	5 points (C1), 10 points (C2)
TOTAL	100	

Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 30/6/2023, 23:59, 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 & English language certificate
- Copy of Undergraduate Thesis
- Certification of registration in a PhD program
- Transcript
- Copies of the publications in peer-reviewed journals and conference proceedings

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.

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: <u>kleanthi@iceht.forth.gr</u>, 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 Dr. Dimitris Niakolas, tel: +30 2610 969540, e-mail: <u>niakolas@iceht.forth.gr</u>.

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





