



Patras, 19<sup>th</sup> of September, 2016

Ref. No.: 2233

**Invitation for Expression of Interest:**

**Fellowship “Simulation of AC impedance spectra and electrochemical processes of the electrodes in Solid Oxide electrolysis cells”**

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one position of a research assistant in the context of the research project “SElySOs, GA: 671481: Development of new electrode materials and understanding of degradation mechanisms on Solid Oxide High Temperature Electrolysis Cells”.

The project is implemented under the **EU-Horizon 2020 Research Framework Programme and is financially supported by the Fuel Cells and Hydrogen 2 Joint Undertaking.**

**Job Description**

To conduct research in the framework of the aforementioned project “SElySOs, GA: 671481”. The aim of this research is to simulate experimental data based on potentiostatic and especially potentiodynamic experimental data, aiming at the extraction and determination of the various parameters that are related to the efficient operation of the Solid Oxide Cell. Under this approach special attention will be given on the simulation of AC impedance spectra and the detailed simulation of the electrochemical processes in the electrodes, operating under high (700 – 900°C) temperature H<sub>2</sub>O electrolysis conditions.

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

**Duration:** 4 months

**Salary:** 840 Euros per month

**Envisaged starting date:** 1/12/2016

**Requirements and Qualifications**

The candidates are required to hold an Engineering Diploma, with preference in Electrical and Computer Engineering. Moreover, the candidates must be fluent in Greek and English, in order to meet working conditions.

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

Qualifications	Weight	Evaluation criteria
Diploma in Engineering	30	Diploma Grade, courses in computer programming, computational analysis and applied mathematics
Proven knowledge in Electrochemistry.	20	Relevant courses in electrochemistry and thermodynamics.



Proven research experience in computer programming and COMSOL, with focus on experience in simulating electrochemical processes	35	Duration of proven research experience in research groups and projects.
Research interests	15	Relevance, plans and potential

### Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than October 3<sup>rd</sup>, 2016, 14:00h, by email to Kleanthi 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
- Statement of research interests

**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.

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

The selected candidate will be notified and asked to accept the position within three (3) working days and to present all relevant documents that should match the submitted ones.

### 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 Dr. Dimitris Niakolas, tel: +30 2610 965240, e-mail: [niakolas@iceht.forth.gr](mailto:niakolas@iceht.forth.gr).

For FORTH/ICE-HT,

Vasilis Burganos  
Director