

JOB OPENING

INSTITUTION:	Institute of Power Engineering – Research Institute
CITY:	Warsaw
JOB POSITION:	Co-investigator
LOCATION:	Department of High Temperature Electrochemical Processes Augustówka 36, 02-981 Warsaw, POLAND
SCIENTIFIC DISCIPLINE:	Environmental engineering, mining and energy
SPECIALITY:	High temperature electrochemical processes
CALL:	SONATA BIS
FUNDING AGENCY:	National Science Centre (Narodowe Centrum Nauki)
ANNOUNCEMENT DATE:	15.03.2022
DEADLINE FOR APPLICANTS:	29.03.2022
WAY OF SUBMITTING:	electronic (via email)
LINK:	www.ien.com.pl
KEYWORDS:	electrolysis, co-electrolysis, electrochemical cells, hydrogen production, solid oxide cells

DESCRIPTION

Institute of Power Engineering in opening a position for a researcher who will be involved in the project as a Contractor - a member of the research team. The winning candidate will receive a stipend, and will be responsible for research activities within the project *Investigation of high temperature co-electrolysis of carbon dioxide and steam in solid oxide electrochemical cells operated at elevated pressure* which received financing from the National Science Centre through SONATA BIS programme.

Job description and competency expectations:

Main activities of Contractor will be focused on numerical activities related with development and implementation of the solid oxide cell model operating both in electrolysis and co-electrolysis modes. In order to calibrate model and determine proper operating conditions, Contractor will realize detailed literature analysis focusing on experimental activities related to high temperature electrolysis of H₂O and CO₂. After preparation of the model, Contractor will help in selecting suitable experimental data from the current literature in order to preliminary validate the prepared numerical tool. When the model prediction error will not exceed 5%, numerical activities will be focused on helping in creation of numerical platform simulating operation of power-to-X system based on SOE/co-SOE stacks integrated with Sabatier and Fischer-Tropsch reactors. Acquired skills and knowledge during realisation of the project, will be used by the Contractor to prepare a Master's thesis.

Requirements:

- Education - engineering degree (power engineering, materials engineering, chemical engineering or process engineering)
- Postgraduate student (MSc student)
- Knowledge and skills in the field of numerical calculations or computer simulation
- Good command of English, publications in English are welcome

Conditions of employment

Duration: 24 months

Salary: 2 500 PLN (stipend)

Required documents:

1. Curriculum vitae (CV)
2. List of scientific achievements including publications, conference presentations, participation in research projects, internships and research stays, trainings/courses, awards and distinctions received, other
3. Motivational letter
4. BSc diploma or proof of being enrolled in postgraduate studies
5. A declaration of consent to the processing of personal data for recruitment purposes
6. The candidate's own declaration that he / she meets the formal requirements of the National Science Centre in terms of employment in the position

Selection criteria along and the scoring system used by the selection committee:

The scholarship committee assesses candidates taking into account the scientific achievements to date, the achievements in scientific research and competences to carry out specific tasks in the research project, with the following selection criteria and scores:

- Scientific achievements, including publications in journal and elsewhere and research career (50% of the final grade):
 - 4 - outstanding;
 - 3 – very good
 - 2 – good;
 - 1 – weak;
 - 0 – no achievements
- Achievements, including activities in research, scholarships, awards and scientific experience gained in Poland or abroad, scientific workshops, participation in research projects (20% of the final grade) :
 - 4 - outstanding;
 - 3 – very good
 - 2 – good;
 - 1 – weak;
 - 0 – no achievements

- Competences to carry out specific tasks in the research project (30% of the final grade):
 - 3 – very good
 - 2 – good;
 - 1 – weak;
 - 0 – no achievements

In the event none of candidates scores at least 2.2 points, researcher will not be recruited.

The Candidate will be selected in an open competition to be conducted by the committee in accordance with the Regulations for awarding research scholarships in research projects financed by the National Science Centre:

https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2019/uchwala25_2019-zal1.pdf

Application documents with a statement: "I consent to the processing of my personal data for the purpose of recruitment in accordance with art. 6 sec. 1 lit. a of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (general regulation on data protection) "Please send it by e-mail to the following e-mail address: agnieszka.wardak@ien.com.pl, in the subject of the e-mail message with " SONATA BIS 11 - scholarship holder ". Documents are considered delivered on time, if they were delivered to the above-mentioned address by March 29th, 2022. Persons qualified for the recruitment interview will be informed about its date by phone. We reserve the right to conduct a competency test during the interview with selected candidates. Due to the COVID-19 pandemic or other circumstances the recruitment process may be conducted online as a videoconference. The results of the opening will be published online upon completion of the evaluation on March 31st, 2022.

Application which are not complete or submitted after the deadline will not be considered. Results of the selection process will be made public in accordance with the regulations of the National Science Centre. The decision of the committee may not be appealed.