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 expected competences:

Co-investigator has to demonstrate knowledge in experimental techniques of solid oxide electrochemical cells and operation of testing infrastructure. This includes techniques related to electrochemical characterization, electrochemical impedance spectrometry (EIS), high-temperature sealings, gas feeding, temperature and voltage data acquisition, current collection. During the first year of the project the researcher will contribute to establishing testing procedures and elaborating the design of testing bench intended for experimental characterisation of SOCs operated in pressurized electrolysis and co-electrolysis. PhD candidate will participate in operation of the experimental bench as key laboratory infrastructure for experimental activities in frame of RTs 2 and 4. Principal investigator expects co-investigator to be responsible for experimental studies within the aforementioned RTs. If applicable, Co-investigator who is a PhD candidate will prepare PhD thesis or series of doctoral publications based on the results of the project.

Requirements:

- Education engineering degree (power engineering, materials engineering, chemical engineering)
 or process engineering)
- PhD Candidate (proof of the status will be required)
- Skills in the field of measurement, further processing and interpretation of measured data such as current-voltage/polarization profiles, EIS, long-term voltage data collection and other
- General knowledge in field of high temperature electrochemical processes, electrolysis, Power-to-X systems
- Good command of English, publications in English are welcome

Conditions of employment:

Duration: 36 months

Salary: 3500 PLN (stipend)

Required documents:

- 1. Curriculum vitae (CV)
- 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 saying: "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 by e-mail to the following address: agnieszka.wardak@ien.com.pl. In the subject line of the e-mail, type "SONATA BIS 11 — Co-investigator". 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.