ANNOUNCEMENT OF A COMPETITION FOR A POST-DOC POSITION UNDER THE NCN PROJECT

SONATA BIS 14

2024/54/E/ST8/00100

Dean of the Faculty of Energy and Environmental Engineering of The Silesian University of Technology in Gliwice,
announces the competition for the position
assistant professor - academic teacher in the group of research
in the Department of Thermal Technology
at the Faculty of Energy and Environmental Engineering

Name of Unit: Faculty of Environmental and Energy Engineering, Silesian University of Technology – Gliwice Position

Title: post-doc– academic teacher in the research group

Job description:

1. The competition is open to individuals who meet the requirements specified in the Act of 20 July 2018 – Law on Higher Education and Science (consolidated text: Journal of Laws of 2024, item 339, as amended) and the Statute of the Silesian University of Technology of 3 June 2019 (consolidated text: Monitor Prawny PŚ of 2020, item 339) for the position of assistant professor.
2. Place of work and type of contract: full-time employment contract, Silesian University of Technology, Konarski 22, 44-100 Gliwice, POLAND
3. Period of employment: 12 months with the possibility of extension to 48 (in total) months. **The condition for contract extension is the submission of a submitted scientific publication in accordance with the guidelines of the National Science Centre** including elements of executed project
4. The employed person will participate in the implementation of the tasks of the project: Hybrid method of supporting the selection of aortic valve prosthesis using CFD simulation, machine learning and multi-stage validation, (2024/54/E/ST8/00100)

Requirements:

1. PhD in technical sciences
2. The mandatory formal criterion for admission to the competition is obtaining a doctoral degree in the year of employment in the project or within the seven years prior to January 1st of the year of employment in the project. This period may be extended by the duration of long-term (over 90 days) documented sickness benefits or rehabilitation benefits due to incapacity for work. Additionally, this period may be extended by the number of months spent on childcare and parenting leave granted under the terms of the Labor Code. In the case of women wishing to enter the competition, this period may be extended by 18 months for each born or adopted child, if this method of indicating career breaks is more favorable.
3. Obtained a doctoral degree in an entity other than the entity where employment in this position is planned, or completed at least a 10-month, continuous and documented postdoctoral internship in an entity other than the entity carrying out the project and in a country other than the country in which the doctoral degree was obtained

4. Experience in performing CFD analyses confirmed by scientific publications
5. Experience in performing multiphase calculations
6. Documented knowledge of fluid mechanics, thermodynamics, and mathematical modeling
7. Programming skills using PYTHON confirmed by publications/certificates or participation in projects where this programming language was used
8. Fluent knowledge of English confirmed by personal presentation of papers at peer-reviewed international scientific conferences, foreign internship, or a relevant language certificate (at least at B2 level)
9. Authorship or co-authorship in at least four (4) scientific publications with a minimum Impact Factor of 4.0
10. Experience in presenting papers at scientific conferences
11. Ability to think analytically and formulate conclusions independently
12. Ability to write and edit scientific texts;
13. High motivation for further development and ability to work in a team.
14. Experience in preparing scientific publications. Authorship/co-authorship confirmed by copies of the first pages of articles, monographs, papers, or their abstracts.
15. Hirsch index of at least 5 according to the Scopus database,

Tasks (description of tasks in points):

1. Conducting VUQ analyses for the in silico models developed as part of the project to determine the model's confidence limits.
2. Development of AI/ML models based on source data from CFD simulations, in vitro, and in vivo studies to predict flow patterns in the valve area after its virtual implementation into a segmented aortic model.
3. Participation in in vitro research conducted at the laboratory of the Department of Thermal Engineering.
4. Supporting a PhD student in developing an in silico model for modeling deformable valve leaflets based on a combination of in vitro data.
5. Participation in the creation of publications on the obtained research results as well as other work commissioned within the scope of the project.

Competition deadline and rules:

1. Invitation of selected candidates to interviews which will be held via the MS TEAMS application

Submission deadline: 08.05.2026.

Submission format: Documents must be submitted electronically to the Office of the Dean of the Faculty of Environmental and Energy Engineering, Silesian University of Technology, 44-100 Gliwice, Konarskiego Street 18, by email: rie@polsl.pl or to wojciech.adamczyk@polsl.pl.

Employment conditions: Employment contract PLN 10,000.00/month (gross) for a period of 48 months, starting on 01.10.2026 + possibility of obtaining an additional allowance for scientific publications

Additional information:

- A CV, including a current email address, completed training and courses, project participation, publications, and conference presentations. Consent to the processing of personal data for the purposes necessary to carry out the recruitment process must be attached to the CV.
- Other confirmations confirming that the candidate meets the above-mentioned requirements for the advertised position.
- The Selection Committee reserves the right to: o interview selected candidates who, based on the information contained in the submitted documents, received the highest ratings. o notify

only the selected candidate of the decision regarding the position. o reserve the right to declare the competition ineligible.

- The application must include the following statement: "I consent to the processing of my personal data contained in my competition documentation for the purposes necessary to carry out the recruitment process" (in accordance with the Act of May 10, 2018 (Journal of Laws of May 24, 2018, item 1000).

Incomplete or late offers will not be considered.
Please be informed that we will contact only with the candidates that meet formal requirements.

Informative clause

According to art. 13 of the Regulation on Personal Data Protection of 27 April 2016, please be informed:

1) The controller of your personal data is the Silesian University of Technology with its registered office at Akademicka 2A St, 44-100 Gliwice,
2) The Silesian University of Technology has appointed the Data Protection Officer who can be contacted via the email address: iod@polsl.pl,
3) Your personal data will be processed in order to carry out the recruitment process for work at the Silesian University of Technology,
4) the basis for the processing of your personal data is art. 221 of the Labour Code and, if you agree to use your CV in future recruitments at the Silesian University of Technology, art. 6 clause 1 point a of the GDPR Regulation shall apply,
5) only employees authorized to process personal data to the necessary extent will have access to your personal data within the organizational structure of the Silesian University of Technology,
6) Your personal data shall not be disclosed to other entities, except in cases provided for by law,
7) Your personal data shall be stored for the period necessary to carry out the recruitment process or for the next 9 months from the end of the recruitment process, if you authorize the processing of personal data in future recruitment processes,
8) You have the right to request the access to the content of your data and, to the extent provided for by applicable regulations, the right to: rectify, delete, limit processing, raise objections; if you consent to the processing of data, you have the right to withdraw your consent at any time,
9) You have the right to lodge a complaint with the President of the Office for Personal Data Protection, if you feel that the processing of your personal data violates the provisions of the General Data Protection Regulation,
10) providing data is voluntary, but necessary to achieve the purposes for which they are collected.

Dziekan

Prof. dr hab. inż. Mariusz Dudziak