ANNOUNCEMENT

DEAN OF THE FACULTY OF ENERGY AND ENVIRONMENTAL ENGINEERING
announces the competition for the position
postdoc researcher
in the Department of Technologies and Installation for Waste Management at the Faculty of Energy and Environmental Engineering, at the Silesian University of Technology in Gliwice, Akademicka 2A St.

Department: Department of Technologies and Installation for Waste Management

Faculty of Energy and Environmental Engineering

Location: Gliwice, Poland

Project Title: Pyrolysis-Integrated Biorefineries for Holistic Waste Upcycling

Funding: MAESTRO 15, National Science Center (NCN) Poland

Grant Number: UMO-2023/50/A/ST8/00512

Internal Grant Number: 08/030/PBU24/0141

Position Overview:

The Faculty of Energy and Environmental Engineering at the Silesian University of Technology is pleased to invite applications for a Postdoctoral Researcher to join the Regenerative Waste Conversion and Net-zero Emission Research Group. The position is part of a groundbreaking project titled "Pyrolysis-Integrated Biorefineries for Holistic Waste Upcycling," funded by the National Science Center (NCN) Poland under the prestigious MEASTRO 15 program. The project aims to develop innovative pyrolysis-based technologies for transforming various waste streams into valuable products, contributing to a sustainable, circular economy. The successful candidate will work closely with Prof. PŚ dr. inż. Balal Yousaf (PI), experts in pyrolysis, waste conversion, and environmental remediation, and will engage in high-impact research that aligns with global efforts for carbon-neutral technologies.

Key Responsibilities:

- Conduct advanced research on pyrolysis technologies and biorefinery processes for waste upcycling.
- Collaborate with a multidisciplinary team to develop AI-driven process optimization in environmental applications.

- Guide and mentor Master's and Ph.D. students within the research group.
- Prepare and publish research articles in top-tier scientific journals.
- Assist in project management, including writing progress reports and contributing to future grant proposals.

Position Requirements:

- Ph.D. in Environmental Science and Engineering, Chemical Engineering, or a closely related field obtained in the year of employment in the project or within 7 years prior to 1 January of the year of employment in the project (mandatory requirement). This period may be extended by the duration of any long-term (more than 90 days) documented sick leave or rehabilitation benefits received during that time due to an inability to work. Additionally, this period may be extended by the number of months spent on leave related to the care and upbringing of children granted under the terms set forth in the Labor Code, and in the case of women—by 18 months for each child born or adopted, if this method of accounting for breaks in the academic career is more advantageous.
- Postdoctoral Experience: 1-5 years of postdoctoral experience in a relevant research area.
- Publication Record: Strong track record of publications in high-impact journals.
- The ideal candidate will possess strong expertise in pyrolysis technologies, as well as hands-on experience with advanced analytical instruments such as GCMS and FTIR, which are essential for the characterization of pyrolysis products and waste conversion processes.
- ***Preferred Skills***: Experience with AI applications in environmental science (e.g., process optimization, modeling).

Additional Requirements:

- Proficiency in experimental design and analytical techniques related to waste management and pyrolysis.
- Strong communication and interpersonal skills, with the ability to collaborate effectively in a multidisciplinary team.
- Proven ability to work independently, manage time efficiently, and meet deadlines.

Research Facilities:

The selected candidate will have access to state-of-the-art research facilities, including:

- Advanced pyrolysis unit
- Pyrolysis-GCMS (Gas Chromatography-Mass Spectrometry)
- FTIR (Fourier-Transform Infrared Spectroscopy)
- Other essential instruments for conducting cutting-edge research in waste conversion and environmental engineering.

Salary and Benefits:

I. Annual Salary: 140,000 PLN
II. Additional Allowances: Performance-based incentives, including additional allowances for high-quality publications.
III. Contract Duration: 2 years, with potential extensions based on performance and funding availability.

Application Process:

Interested applicants should submit:

- A detailed CV with a list of publications.
- A cover letter explaining research experience, interests, and fit for the project.
- Contact information for two academic references, who should send recommendation letters directly to the PI at balal.yousaf@polsl.pl.

Application Deadline: **31 March 2026** (Applications will remain open until the position is filled).

This is an excellent opportunity to join an innovative and dynamic research group that is addressing critical challenges in waste management and environmental sustainability. If you are passionate about waste-to-energy technologies and want to contribute to net-zero emission solutions, we encourage you to apply.

For any inquiries, please contact: balal.yousaf@polsl.pl.

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.

Prodziekan ds. Nauki i Współpracy

Prof. dr hab. inż. Ireneusz Szczygieł