



Lodz University of Technology

International Centre for Research on Innovative Biobased Materials
International Research Agenda



POST DOCTORAL RESEARCHER in BIO-ELECTROCHEMISTRY

ICRI-BioM is seeking for a young researcher to fill up a full-time position in the **POLYBIOMAT** (polymers & biomaterials) research laboratory of Dr. Vignesh Kumaravel

ICRI-BioM is an International Research Agenda, established within Lodz University of Technology under the Foundation for Polish Science MAB PLUS Program in collaboration with the Max Planck Institute for Polymer Research in Mainz. It aims at the creation of an excellent scientific unit that focuses on combining the **polymer chemistry** with **molecular biosystems engineering** experimentally and with the aid of **computational sciences**. It is expected that the collaboration and synergy between these groups, local scientific environment, and international cooperation will lead to breakthrough research in basic and applied sciences.

This post-doctoral position will involve a research project on the **fabrication bio-cathode materials for the electrocatalytic conversion of carbon dioxide (CO₂) into value-added products**.

Qualifications:

The candidates should have completed their PhD (materials science, chemistry, physics, molecular biology, etc) degree not longer than 5 years prior. **Expected skills include:**

- Strong research background in electrocatalysis, electrode/biocathode fabrication, CO₂ reduction experiments, engineering of ion-exchange membranes, and reactor designs.
- Expertise with the analytical techniques like TEM, SEM, XRD, BET, and XPS.
- Experience in microbial fuel cells, molecular biology, and microbial sequencing techniques.
- Hands on experience with HPLC, GC-TCD/FID, EIS, CV, and other electrochemical characterizations.
- Knowledge on 3D printing, DFT calculations, Kinetic models, and passion for multidisciplinary research is an added advantage.

We offer:

- Gross monthly salary in the range 7500-9500 PLN (plus 13th salary) based on the qualifications.
- Starting date from January 2022.
- Contract until the end of 2023 (ca. two years contract, with conditional renewal).
- Full public health insurance and great research environment at the Lodz University of Technology.

Recruitment:

Interested candidates are requested to e-mail the following documents in a single PDF file. The e-mail should have a subject line - **POST DOCTORAL RESEARCHER in BIO-ELECTROCHEMISTRY for POLYBIOMAT**.

- Cover letter with a brief CV (up to 3 pages with the list of publications, conference presentations, experience in grant writing, industry collaborations, other key achievements, and two references)
- Research statement (up to 2 pages).

by January 10th, 2022 (or until 31st January if the position is not filled) to
Dr. Vignesh Kumaravel, Senior Principal Investigator at ICRI-BioM
vignesh.kumaravel@p.lodz.pl

By submitting your application, you agree with the following statement:

"I hereby consent to have my personal data processed by the Lodz University of Technology with its registered office at ul. Zeromskiego 116, 90-924 Lodz for the purpose of carrying out a recruitment process and selecting an employee, and concluding a contract for employment at the Lodz University of Technology. I have been informed of my rights and duties (as described http://www.icri-biom.p.lodz.pl/sites/default/files/RODO-TUL_en.pdf). I understand that provision of my personal data is voluntary".

TUL values diversity and is committed to equal opportunity

