

JOB OFFER

Position in the project	PhD Student
Scientific discipline	Chemistry: Electrochemistry, Physical Chemistry, Inorganic Chemistry
Job type	Scholarship for PhD student in doctoral school
Number of job offers	1
Remuneration/scholarship amount/month	5 000 PLN/month (total gross)
Position starts on	1.04.2026
Period of contract/ scholarship agreement	24 months (with a possibility of extension)
Institution	University of Warsaw, Faculty of Chemistry
Project leader	Bartosz Hamankiewicz, PhD
Project title	Toward Sustainable and Safe Energy Storage – New Polymeric Systems in the Lithium-Ion Cells Technology. Project is carried out within the OPUS 29 programme of the National Science Center (Poland).
Project description	The project aims to develop and validate new electrolyte–cathode systems for lithium-ion batteries, combining <i>in situ</i> synthesized gel polymer electrolytes with cobalt-free, high-capacity cathode materials. The expected outcome is a set of optimized new materials and processing methods that improve battery performance and safety, supporting the transition to efficient and sustainable energy storage technologies. The scientific goal of the project is to create polymer electrolytes that exhibit high ionic conductivity, high lithium-ion transference number, low interfacial resistance, and enhanced thermal and electrochemical stability.
Key responsibilities	Performing electrochemical characterization of prepared cathode materials and gel polymer electrolytes. Analysis of obtained data and preparing reports. Preparation of publications and dissemination of the results at national and international conferences.
Profile of candidate	Experience in methodology of testing active materials and electrolytes for lithium-ion cells (technical preparation of cells, operating lab equipment such as glove-boxes and battery testers). Competence in analysis of results obtained with electrochemical methods such as chronopotentiometry, cyclic voltammetry, electrochemical impedance spectroscopy for novel Li-ion systems. Experience in research projects regarding electrode materials development for lithium-ion batteries. A track record of patents or

patent applications in the relevant field will be considered an asset.
Candidate admitted to Doctoral School.

Required documents

1. CV (in English) including (1) achievements: especially scientific achievements like publications, patent applications, patents, conference presentations or a short description of MSc/BSc thesis findings, (2) information about awards, student stipends, internships or summer schools experience etc.; (3) involvement into scientific grants at the university, national and/or international level; (4) list of know synthesis methods and laboratory characterization techniques; (5) involvement into student science clubs and/or student councils; (6) work experience, cooperation with industry, work internships.
2. Cover letter (in English) explaining why the candidate is interested in the project topic, what is their current laboratory experience, what is their best scientific achievement, why they think they are a suitable person for this position;
3. Transcription of records from Bachelor/Engineer and Master degree programmes;
4. Copy of the most recent diploma.
5. Certification of acceptance to the doctoral school or enrolment as the PhD student in Polish institution carrying the PhD studies; This certification is mandatory at the time of application. **The candidate must hold a current PhD student status in the doctoral studies at the University of Warsaw or other Polish scientific institution by 1st April 2026.**
6. A PDF copy of the MSc thesis abstract (in Polish or English)
7. PDF copies of **2** most important articles published as co-author:
 - (I) at least one article regarding research on electrode materials for lithium-ion batteries
 - (II) at least one article on application of novel polymeric materials for Li-ion systems.
8. Certification of English knowledge, or other proof (self-statement, grade from the MSc/BSc studies, studies in English (e.g. Erasmus) etc.); English level will be verified during the interview.
9. At least **1** reference letter from previous supervisor/mentor sent directly to: **b.hamankiew@uw.edu.pl**.

We offer

A PhD position in a young, dynamic group working in the field of energy storage. We provide opportunities for personal and scientific self-improvement and the possibility to travel by attending conferences and gain international experience. Your work will be performed in a well-equipped laboratory for lithium technology research in collaboration with Warsaw University of Technology, other scientific institutions in Poland and abroad.

Please submit the following documents to

b.hamankiew@uw.edu.pl with the e-mail entitled: *OPUS 29 PhD Student Application* – sent in **one** PDF file (**except point 9**).

Application deadline

27.03.2026 12:00 (CEST, Warsaw, Poland). Candidates will be informed about the decision by email by 31.03.2026.

