



CeNT-50-2025

Director of Centre of New Technologies of the University of Warsaw, with the Project Leader, announce opening of the competition for the position of PhD Student in the project of Dr Karol J. Fijalkowski – Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	PhD student
Laboratory:	Laboratory of Technology of Novel Functional Materials
Scientific discipline:	Chemical sciences
Keywords:	Inorganic synthesis, pyrolysis, doping, ammonia borane, impedance spectroscopy, ionic conductivity, solid electrolyte, Li-ion batteries
Job type (employment contract/stipend):	Scholarship
Number of job offers:	2
Remuneration/stipend amount/month:	3500-4500 PLN gross gross
Position starts on:	1 December 2025
Maximum period of stipend agreement:	3 months
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Karol J. Fijalkowski, PhD
Project title:	SOLID Li-ION. Novel light-weight lithium conductors to be used as solid electrolytes in Li-ion batteries. https://projekty.ncn.gov.pl/index.php?s=17091
Competition type:	Sonata Bis 8
Financing institution:	NCN
Project description:	SOLID Li-ION considers design, synthesis and characterisation of novel light-weight lithium conducting materials as potential new class of solid electrolytes suitable for solid-state Li-ion batteries. https://projekty.ncn.gov.pl/opisy/418737-en.pdf
Key responsibilities include:	PhD Student will be involved in all research tasks within the project. She/he will plan and perform experiments, interpret the results obtained and prepare advanced scientific reports. PhD Student will work on novel Li-B-N-H and Li-B-H lithium conducting systems to confirm the results obtained earlier in the project. She/he will also prepare reports comprising selected results of the project.
Profile of candidates/requirements:	The competition is open for persons who meet the conditions specified in the regulations on the allocation of resources for the implementation of tasks financed by the National Science Centre for SONATA BIS 8 grant. PhD Student should have M.Sc. or M.Res. degree in chemistry, materials science, or in closely related subject. The MSc degree should be obtained before the date of employment in the project. The candidate should have a confirmed status of a PhD student (on the date of starting work in the project at the latest). She/he should be experienced either in electrochemistry (preferably EIS and battery research) or in materials chemistry (preferably Li-B-N-H and Li-B-H, e.g. ammonia borane derivatives, borohydrides) considering inorganic materials. She/he should speak English fluently to ensure proper communication.



	<u>Ranking list would be made judging:</u> – academic achievements, i.e. scientific publications, patents, conference talks and posters, etc. – research experience, i.e. participation in scientific projects, internships, stipends, awards, etc. – competence related to the project, i.e. experience in electrochemistry and/or materials chemistry, good knowledge of English (minimum B2), analytical techniques (e.g. PXRD, FTIR, Raman, EIS, TGA/DCS, MS), laboratory experience (e.g. work in glovebox, anaerobic conditions) <u>The following will be considered an asset:</u> – experience in EIS spectroscopy and battery research – experience in chemistry of Li-B-N-H and Li-B-H compounds – experience in leading research projects in the past – inventiveness (patents, patent applications) – knowledge of other languages (apart from mother tongue) – supervision of younger students Selected candidates may be invited for an interview (in person or zoom). Competition may be closed with recommendation of no candidate if all the applicants would not fulfill the requirements or represent insufficient academic level. Important: Candidates need to have confirmed status of a PhD student on the date of engagement in the project.
Required documents:	1. Cover letter 2. Current curriculum vitae 3. List of publications and patents (or patent application) 4. List of scientific projects (lead or participated), awards, internships, etc. 5. Copy of M.Sc. or M.Res. diploma (or, if the degree has not been obtained yet, a certificate/document about the date of the defense); 6. PDF copy of a master thesis (if obtained so far) 7. Recommendation letter from the supervisor of master thesis (optional) 8. Document confirming the status of PhD Student (to be provided before starting work in the project); 9 Signed information on the personal data processing. Before entering the competition, candidates are obliged to familiarise themselves with Internal Reporting Procedure.
We offer:	Participation in the project regarding ionic conductivity in solid state, possibility to learn unique methods of chemical analysis, work in friendly environment, possibility for scientific self-development
Please submit the following documents to:	karol.fijalkowski@cent.uw.edu.pl
Application deadline:	12.11.2025
Date of announcing the results:	15.11.2025
Method of notification about the results:	email, website: https://cent.uw.edu.pl/job-offers/