CeNT-8-2021

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 Laboratory of Technology of Novel Functional Materials the project of Dr Piotr J. Leszczynski – Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	**PhD student**
Laboratory:	LTNFM, Project of Piotr J. Leszczynski
Scientific discipline:	Chemical sciences
Keywords:	Silver(II), cycloaddition, organic synthesis, catalysis, NMR
Job type (employment contract/stipend):	Scholarship
Part-time/full-time:	Full-time, 40 h/week
Number of job offers:	1
Remuneration/stipend amount/month:	4500 PLN gross gross
Position starts on:	1 October 2021
Maximum period of stipend agreement:	12 months
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Piotr J. Leszczynski, PhD, DSc
Project title:	CYCLO. Ag(II) promoted cycloaddition processes https://projekty.ncn.gov.pl/opisy/463083-en.pdf
Competition type:	Opus 18
Financing institution:	NCN
Project description:	CYCLO aims at design of a novel synthetic protocol allowing various organic compounds to undergo DA reactions even when both reactants exhibit very high ionisation potentials, which is unavailable with use of know DA protocols. CYCLO considers a synthetic use of divalent silver compounds as novel, highly reactive redox initiators of [2+2] cycloaddition and/or [4+2] DA reactions driven by radical cation initiation. https://projekty.ncn.gov.pl/opisy/463083-en.pdf
Key responsibilities include:	Planned role in the project: – participation in the NMR experiments related to heterogeneous Ag(II)-induced [4+2] Diels-Alder and/or [2+2] cycloaddition reactions under shared supervision of the PI and the collaborating NMR specialist; – determination of reaction products, pathways, mechanisms and yield using 2D NMR (HSQC and HMBC) spectroscopy under guidance of the PI and the collaborating NMR specialist; – data processing and preliminary analysis of the results obtained; – writing up scientific reports and learning to write manuscripts of scientific publications.

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 OPUS 18 grant. PhD Student should have M.Sc. or M.Res. degree in chemistry, materials science, or in closely related subject. She/he should be experienced in NMR, organic chemistry and chemistry of Ag(II) species. She/he should speak English fluently to ensure proper communication. PhD Student should be able to work in a group because she/he will closely collaborate with PI and NMR Specialist, and might also supervise a younger Student. Ranking list would be made judging: – 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 NMR including sophisticated algorithms, good knowledge of English (minimum B2), organic synthesis, laboratory experience (e.g. work in glovebox, anaerobic conditions) The following will be considered an asset: – fair knowledge of new 2D NMR spectroscopy techniques – experience in processing non-uniformly sampled NMR data – experience in NMR *in situ* monitoring of organic synthesis – experience in analysis of NMR data, e.g. Mestre Nova – experience in use of silver(II) species in organic synthesis – experience in conference presentations of research results – experience in work with younger students Selected candidates may be invited for an interview (in person or zoom) expected in mid May 2021. Competition may be closed with recommendation of no candidate if all the applicants would not fulfill the requirements or represent insufficient academic level. **Important:** Prior to start of the scholarship, the candidate will have to obtain the status of PhD student at the University of Warsaw (Doctoral School of Exact and Natural Sciences) according to standing procedures including filing an extra application.
Required documents:	1. Cover letter 2. Current curriculum vitae 3. List of publications and conference presentations 4. List of scientific achievements, 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. Signed information on the personal data processing, available at: https://cent.uw.edu.pl/en/wp-content/uploads/sites/5/2020/11/Information-clause_personal-data-processing.pdf
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:	piotr.leszczynski@cent.uw.edu.pl
Application deadline:	30 April 2021
Date of announcing the results:	31 May 2021
Method of notification about the results:	email, website: https://cent.uw.edu.pl/en/career/