CeNT-24-2021

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 the Laboratory of Small Molecules' Activation – Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	PhD Student
Laboratory:	Laboratory of Small Molecules' Activation
Scientific discipline:	Chemical sciences
Keywords:	Highly reactive cations, weakly coordinating anions, catalysis, olefin, alkyne, inorganic synthesis, structural chemistry
Job type (employment contract/stipend):	Scholarship
Part-time/full-time:	Full-time
Number of job offers:	1
Remuneration/stipend amount/month:	3500-4500 PLN gross gross per month
Position starts from:	1 Oct 2021
Maximum period of contract/stipend agreement:	48 months
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Przemysław J. Malinowski, PhD
Project title:	Highly Lewis acidic metal dication salts with weakly coordinating anions as efficient catalysts for transformations of olefins and alkynes.
Competition type:	Sonata BIS 8
Financing institution:	National Science Centre
Project description:	The main goal of the project is thorough investigation of the role and capabilities of metal cations with extraordinarily high Lewis-acidic character in catalytic transformation of hydrocarbons with double and triple C-C bonds. Tasks within the project include synthesis and characterization of potential catalysts and testing their performance in key organic transformations.
Key responsibilities include:	PhD student will participate in most research tasks within the project, in particular in the synthesis of compounds containing highly reactive closed-shell metal cations, their thorough characterization including elucidation of crystal structure, interpretation of oscillation spectra, determination of thermal stability and decomposition processes. The responsibility of the PhD student will also be testing of reactivity of the obtained species towards unsaturated hydrocarbons, including characterization of the products obtained and participation in

	elucidation of reaction mechanism, which may also require studies involving quantum chemical methods.
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 grant. MSc or M. Res. degree in chemistry or related discipline. The MSc or M. Res. degree should be obtained before the date of the employment in the project. 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 work with highly reactive species and advanced inorganic synthesis, knowledge of analytical techniques (e.g. XRD – single crystal and powder, FTIR, Raman, TGA/DSC, GC-MS, NMR) all related also to highly reactive compounds, laboratory experience (e.g. work in a glovebox or using a Schlenk line), good knowledge of English (minimum B2), Selected candidates may be invited for an interview (in person or *via* internet). 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 must have a confirmed status of a PhD student at the Doctoral School of Exact and Natural Sciences of the University of Warsaw, on the date of employment in the project.
Required documents:	1. Cover letter 2. Current curriculum vitae 3. List of publications and patents (or patent applications) 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) if possible, including a list of main courses taken with marks; 6. PDF copy of a master thesis (if applicable) 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/5/2020/07/Information-clause_personal-data-processing.pdf https://cent.uw.edu.pl/pl/wp-content/uploads/sites/7/2020/07/Klauzula-informacyjna_przetwarzanie-danych-osobowych.pdf (Polish version)
We offer:	• Work on ambitious project aimed at search for novel classes of catalysts for key organic transformations • Authorship of papers in top scientific journals • Possibility to attend international scientific conferences • Decent remuneration • Possibility to learn many advanced synthetic and analytical techniques • Friendly work environment
Please submit the following documents to:	p.malinowski@cent.uw.edu.pl

Application deadline:	8 June 2021
Date of announcing the results:	11 June 2021
Method of notification about the results:	email, website: https://cent.uw.edu.pl/en/career/