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WARSZAWSKI

Wydział Chemii



Warsaw, 19.03.2024

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### An announcement for POSTDOC position

Position of POSTDOC (a group of science positions) in the OPUS NCN project entitled "*Laboratory and field studies on secondary organic aerosol (SOA) aging at suburban sites*" financed by National Science Centre Poland, is open for application. Project leader (at the Warsaw University): *dr Kacper Błaziak*

The post-doc (adiunkt w grupie pracowników badawczych) will run a research in exact and natural sciences, in discipline of Chemistry Available positions: 1

#### We are looking for motivated candidates:

- with a PhD degree in chemistry, physics, biology or relevant
- Having experience in computational chemical methods for small molecules, including modeling of kinetic and thermodynamic properties of metal-catalyzed reaction mechanisms.
- In silico informatics skills: molecular modeling, molecular docking, gas-phase transition state structure modeling, and molecular dynamics simulations (including application of molecular mechanics and/or semiempirical methods).  
Practical skills in use of molecular modeling software such as Gaussian, GROMACS, VMD, Discovery Studio, MOE, AMBER, etc.
  - Knowledge of Windows and Linux operating systems, as well as some basics of programming languages (e.g., Python).
  - Knowledge in the field of mass spectrometry gas-phase chemistry, ion chemistry and reactivity of metal-organic complexes in the gas phase
- Good knowledge of the English language (written and spoken).
- Documented experience in scientific presentation (scientific conferences)

The candidate must meet the requirements of art. 113 of the Act - Law on Higher Education and Science dated July 20, 2018 (Journal of Laws of 2018, item 1668 as amended).

#### Main duties:

- Conducting research within the project topic using quantum-chemical methods (eg. DFT, ab initio, CAS-SCF).
- Applying molecular modeling and high-throughput virtual screening in silico methods to perform thermodynamic and kinetic analysis of selected reaction mechanisms.
- Molecular dynamic simulations of selected metal-ligand complexes, to explore the molecular properties and conformational dynamics.
- Analyze mass spectrometry, MS<sup>2</sup>-fragmentation, and ion energy datasets.
- Visualization and presentation of the obtained results during internal meetings as well as scientific conferences.
- Publishing the obtained results in scientific journals.
- keeping scientific documentation according to the internal regulations of National Science Centre and University of Warsaw.

**We offer:**

a temporary contract with the University of Warsaw (full time position/employment contract) from 1.08.2024 to 1.11.2024 (three months), with possibility of extension for another three months.

**Required documents:**

- a full CV with list of publications.
- copy of the PhD diploma.
- a letter of motivation explaining your general interest for this position.
- two letters of recommendation. Including: name, affiliation, email, and phone number of the referees who can be contacted, if necessary.
- information on the processing of personal data (the template available at: <http://www.chem.uw.edu.pl/oferty-pracy/> ),
- declaration of reading and acceptance of the rules for conducting competitions at the University of Warsaw (a template available at: <http://www.chem.uw.edu.pl/oferty-pracy/>).

Please submit the documents **no later than** 20.04.2024 to: **kblaziak@chem.uw.edu.pl** (PDF is the preferred format). E-mail entitled: "Application for POSTDOC position - OPUS"

The results of the competition will be given by e-mail till 5.05.2024.

The competition is the first stage of the employment procedure as an academic teacher, and its positive outcome is the basis for further proceedings.