

Work offer for a PhD student

A work offer for a PhD student in the project OPUS 16 „ Chemistry of the secondary organic aerosols (SOA) in the atmospheric aqueous phase” financed by National Science Centre.

Project leader: prof. dr hab. Tomasz Gierczak (email: Gierczak@chem.uw.edu.pl)

Terms of employment:

A monthly stipend of 4500 PLN (tax-free) for a 3-year period, participation in an interesting research project related to climate change and atmospheric chemistry, the opportunity to be a part of a productive and dynamic team.

In this project, water soluble derivatives of terpenes will be synthesized in order to investigate reactions of these organic compounds in the aqueous solutions. Reaction rate coefficients of the synthesized compounds with the ozone and OH, SO₄⁻ and NO₃ radicals, UV absorption cross-sections and photolysis quantum yields will be measured. Laboratory reactors will be used to simulate these atmospherically-relevant chemical reactions. Identification of the products formed will be carried out with capillary gas chromatography and high-performance liquid chromatography coupled with the mass spectrometry.

<https://www.ncn.gov.pl/sites/default/files/listy-rankingowe/2018-09-14/streszczenia/431079-en.pdf>

Requirements:

- Master's degree in analytical or organic chemistry or similar
- Practical experience with analyzing organic compounds with liquid and/or gas chromatography
- Very good command of the English language in speech and in writing
- Self-reliance, a strong motivation for the professional development and the ability to quickly acquire new skills

Additional skills that will be greatly appreciated:

- Experience with the identification of organic compounds using the state-of-the art instrumental analysis methods, particularly with the mass spectrometric techniques
- Experience with organic synthesis and with the practical organic chemistry
- Experience with analyzing mechanisms of chemical reactions of organic compounds

Required documents

-Curriculum Vitae (CV), motivation letter, list of publication in a peer-reviewed journals, list of conference presentations and the most important professional achievements, copy of the master's degree diploma. Please send the required documents to the email address: Gierczak@chem.uw.edu.pl before September 19th 2019.