



Olomouc 24.02.2023

The Director of Czech Advanced Technology and Research Institute announces a selection procedure for the job position of

Ph.D. POSITIONS IN THE FIELD OF “Automated miniaturized chemistry”

Research Field: Chemistry – Synthetic chemistry – Engineering

Number of Posts: 2

Researcher Profile: R1

Department/Facility: CATRIN - Innovative Chemistry

Type of contract: Fixed-term contracts

Job Status: Full-time

Hours per Week: 40

Location: Olomouc

Offer Starting Date: After an agreement

Department/Facility description

[The Czech Institute of Research and Advanced Technologies \(CATRIN\)](#) at Palacký University in Olomouc (Czech Republic) announces the opening of two new Ph.D. positions. The successful candidates will receive a four-year contract at Palacký University in Olomouc in the Czech Republic. These unique positions are open immediately for qualified applicants.

The research group: Innovative chemical group is a part of [Czech Advanced Technology and Research Institute](#). The research group ‘Innovative Chemistry’ at CRH in Olomouc under the supervision of Prof. Dömling is closely following the mantra ‘AUTOMATION + MINIATURIZATION = ACCELERATION’. In collaboration with CATRIN groups in material science (RCPTM), drug discovery and development (IMTM), and plant science (CRH) the group is developing solutions for pressing issues of the future society, e.g. sustainable materials, drugs for unmet medical needs, and food security. The group is heavily building on the decades long experience of Prof. Dömling in sustainable multicomponent reaction (CR) chemistry. Graphene surface modification methods will be developed in view of globally exhausting data memory and catalysis. Sustainable chemistry is developed for the development of novel biostimulants to help ‘feeding future society’. In the area of drug discovery and development, active research areas include novel targeted antibiotics, antiviral, anti-inflammatory, and anti-cancer drugs. To accomplish novel discoveries the group develops forefront synthesis and structure-based methods, as well as artificial intelligence-enabled generative nano synthesis machines.

Job Profile

The successful candidates will join the ‘Innovative Chemistry’ group and will work on projects related to the automated miniaturized chemistry platform to support material science, medicinal chemistry and plant science projects. A diversity of projects will be pursued including method and technology developments around miniaturized automated chemistry, multicomponent reaction chemistries and its applications to material, plant science and drug discovery. The candidate will receive a four-year contract at Palacký University in Olomouc in the Czech Republic. The positions are open immediately for qualified applicants.

Requirements

- Highly enthusiastic, hard working students with a strong motivation in synthetic organic



chemistry and an understanding of compound purification and characterisation are encouraged to apply.

- Interest in multicomponent reaction (MCR) chemistry, applications to the fields of material science, medicinal chemistry, plant science, or catalysis, and help to build the miniaturized, automated synthetic chemistry technology platform.
- Interest in neighboring disciplines, plant, medicine, or material science.
- Good English language skills.
- Excellent communication skills.
- Good writing skills.
- DIY attitude;
- Excellent team working spirit.
- Candidates should hold or expect to gain a first-class degree or a good and/or an appropriate Master's level qualification (or their equivalent).

What we offer

- Steady background of the top scientific university.
- 30 days for non-academic workers and researchers.
- Meal allowance and other benefits
- Education and career growth possibilities
- International mobility of all employees.
- We offer a stimulating environment, attractive salary, and a unique opportunity to join a well-known research group to perform forefront science. Beyond performing science there is the opportunity to translate inventions to innovations.

Documents requested

- Scan of Diploma
- Submit an application including a curriculum vitae and a list of publications to: alexander.domling@upol.cz; petra.skoupilova@upol.cz. Arrange for a letter of recommendation to be sent directly to the same email addresses.

Screening of applicants will resume immediately. Selected applicants will be invited for an interview.

If you are interested in this position, please, fill in the contact form and attached the requested documents no later than 31.03.2023.

Contact person

Klimparová Monika, Mgr., monika.klimparova@upol.cz, +420585634337

Additional Information

The Palacký University reserves the right not to fill the position in an exceptional case without giving any reason or to cancel the selection procedure.