



Olomouc 24.02.2023

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

POST-DOC POSITIONS IN THE FIELD OF “Automated Miniaturized Chemistry”

Research Field: Chemistry – Synthetic chemistry – Engineering

Number of Posts: 3

Researcher Profile: R2

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 Innovative Chemistry group of CATRIN at Palacký University Olomouc \(Czech Republic\)](#) **announces the opening of three new postdoctoral positions.** 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

- Support the basic research efforts of novel MCRs, applications to the fields of material science, medicinal chemistry, or plant science and help to build the miniaturized, automated synthetic chemistry technology platform.
- Actively work with and mentor staff, including the review and interpretation of data and revision of experimental plans to achieve program goals.
- Summarize data for reports, patents, and presentations.

Requirements

- Broad knowledge of synthetic organic chemistry is essential;
- PhD or equivalent in the field of synthetic, computational or medicinal chemistry or chemical engineering;
- good publication record;
- excellent oral and written English;



- high level of independence in performing experiments, analyzing data, and drawing conclusions regarding experimental progress and results of work. Good communication regarding experiment execution and analysis with supervisor and colleagues;
- excellent time-management skills and manage experiments in several projects concurrently;
- DIY attitude;
- Excellent team working spirit.
- PhD or equivalent in Chemistry or Chemical Engineering; good publication record, excellent oral and written English.
- Experienced researcher of 4-10 yrs. (Post-Doc)

Add-on experiences (not necessary required):

- Python programming;
- knowledge in multicomponent reaction chemistry;
- cancer, bacterial biochemistry;
- assay development;
- RNA expression;
- small molecule crystallography;
- protein crystallography;
- entrepreneurial spirit;

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. Moreover, the position is suitable to further to a group leader position.

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.

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.

The successful candidates will receive a one-year (to be possible extended up to five-years) contract



at Palacký University Olomouc in the Czech Republic. These unique positions are open immediately for qualified applicants.

The applicant responsibilities: 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. Projects include 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 one-year contract (which would be extended up to four-years in the case of positive annual evaluation) at Palacký University in Olomouc in the Czech Republic. The position can be expanded to group leader positions in case of successful major funding acquisition by the candidates. The positions are open immediately for qualified applicants.