





University of Warsaw Biological and Chemical Research Centre

# 2 PhD positions are available

## in the fields of organic/materials chemistry

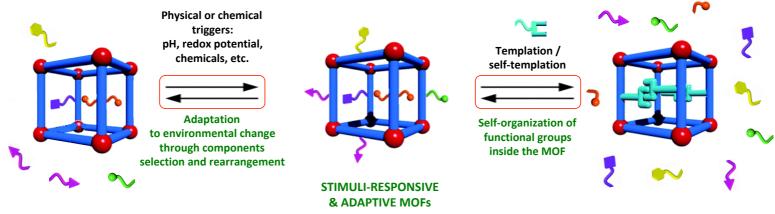
### in a research project

## **'Dynamic Combinatorial Chemistry in Metal-Organic Frameworks'**

funded by the National Science Centre, Poland, and realised in

## Supramolecular Chemistry Laboratory under the guidance of Dr Michal Chmielewski

### www.mchmielewski.pl



Metal-Organic Frameworks (MOFs) are porous crystals made of organic ligands connected by metal cations (or clusters) into a 3D network. They are actively investigated in leading scientific laboratories all over the world owing to their intriguing structures (regular and well-defined molecular scale cavities!), unique properties as well as numerous potential applications, such as gas storage, drug delivery, catalysis, sensor technology, ion exchange, non-linear optics and many others.

The aim of this project is to create a revolutionary new class of 'intelligent' MOFs, able to adapt to their environment in response to external physical or chemical stimuli. To reach this goal we plan to functionalise the MOFs' organic linkers by means of reversible reactions and then to investigate the exchange and reorganisation of the attached functional groups in response to external physical or chemical stimuli. For details of the application procedure, see below:







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#### We offer:

- Participation in groundbreaking and interdisciplinary research project run in collaboration with leading laboratories from USA and Germany (**MIT**, Augsburg University)
- State-of-the-art research facilities Supramolecular Chemistry Laboratory is located in a new, modern building of Biological and Chemical Research Centre. For pictures and more information see: <u>www.mchmielewski.pl</u>
- An opportunity to work in a 6-membered team: PI (dr Michał Chmielewski), 1 postdoctoral researcher with many years of experience in the field, 2 PhD students and 2 MSc students
- An access to modern and sophisticated research equipment,
- Fellowship: 4500 PLN net per month for 36 months financed from the NSC grant and likely supplemented by other fellowships (for example, current PhD fellowship from the Faculty of Chemistry, Warsaw University is > 1800 PLN net per month [subject to a separate recruitment process])
- Expected starting date: February 2019.

#### Major research tasks:

- 1. Synthesis and characterisation of organic building blocks for the construction of MOFs
- 2. Studies of reversible functionalisation of MOFs

#### We expect:

- 1. MSc in chemistry (preferably organic or supramolecular chemistry). NB.: it is possible to apply at the final year of MSc studies if the defence is planned before 31.01.2019 in that case please provide the title of your thesis and the name of your supervisor.
- 2. Doctoral student status by February 28<sup>th</sup>, 2019 (we offer help in applying for PhD studies at the Faculty of Chemistry, University of Warsaw).
- 3. Not obligatory but highly advantageous: track record of scientific experience (such as publications, participation in research projects, posters and presentations at scientific conferences, participation in Chemistry Olympiad and other competitions).
- 4. Solid knowledge of organic chemistry and experience in the synthesis, purification and characterisation of organic compounds; experience in dynamic combinatorial / supramolecular / MOF chemistry would be an asset, but is not compulsory.
- 5. Other professional skills: ability to analyse and present results; computer skills (including chemical software), proficiency in English (writing and speaking).
- 6. Personal skills: strong motivation for scientific work, ambition, creativity, goal-orientation, responsibility, capability of team work, communicativeness, and willingness to learn.

#### How to apply:

Applicants should submit the following documents:

- a) Motivation letter
- b) Professional CV.
- c) A signed Consent Clause attached at the end of this document
- d) A pdf file with his/her MSc thesis or an information about predicted date of the thesis submission
- e) Contact details of their MSc thesis supervisor
- f) Complete list of grades from studies (both BSc (part I) and MSc (part II) studies)

The aforementioned documents should be sent by e-mail to Dr Michał Chmielewski: <u>mchmielewski@chem.uw.edu.pl</u> no later than **21.01.2019** (Monday) inclusive.

#### **Additional information:**

After preliminary verification and assessment of the submitted documents, selected candidates will be invited for interviews. The interviews will take place between 21<sup>st</sup> and 25<sup>th</sup> January 2019. In case of foreign applicants who cannot attend the interview, videoconference may be organised. Competition results will be published by 30.01.2019 on the Faculty webpage. The organisers reserve the right to contact only selected applicants and to reject all submitted applications, if a competition commission finds that they do not meet the criteria.

For additional information concerning the project leader and the Supramolecular Chemistry Laboratory see: <u>www.mchmielewski.pl</u> or send an e-mail to: <u>mchmielewski@chem.uw.edu.pl</u>.









#### Information clause on the processing of personal data

Pursuant to Article 13 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), University of Warsaw hereby informs that:

- 1. The Controller of your personal data is the University of Warsaw with its registered office at Krakowskie Przedmieście 26/28, 00-927 Warszawa;
- 2. The Controller has designated the Data Protection Officer who supervises the processing of personal data, and who can be contacted via the following e-mail address: iod@adm.uw.edu.pl;
- 3. Your personal data will be processed for the purpose of carrying out a recruitment process, selecting a fellow and concluding a fellowship contract with the University of Warsaw;
- 4. The provided data will be processed pursuant to Article 221 § 1 of the Act of 26 June 1974 Labor Code (uniformed text: Dz.U. of 2018, item 917) and your consent for processing of personal data;
- 5. Provision of data in the scope stipulated in the Labor Code is mandatory, and the remaining data are processed according to your consent for processing of personal data;
- 6. The data will not be shared with any external entities;
- 7. The data will be stored until you withdraw your consent for processing of personal data;
- 8. You have the right to access your personal data, to rectify, erase them, restrict their processing, object to processing, and to withdraw the consent at any time;
- 9. You have the right to lodge a complaint to the President of the Office for the Protection of Personal Data.

#### Consent clause

I hereby consent to have my personal data processed by the University of Warsaw with its registered office at ul. Krakowskie Przedmieście 26/28, 00-927 Warszawa for the purpose of carrying out a recruitment process, selecting a fellow and concluding a fellowship contract with the University of Warsaw.

I have been informed of my rights and duties. I understand that provision of my personal data is voluntary.

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(place and date)

(signature of the person applying for fellowship)

