PhD position available

Institution: Faculty of Chemistry, Nicolaus Copernicus University in Toruń (Poland)

About: Nicolaus Copernicus University is internationally acclaimed for academic and research excellence. We encourage applications from students with the ability, enthusiasm, curiosity, and commitment needed to pursue further education, irrespective of their background. There are five doctoral schools at Nicolaus Copernicus University (NCU) which offer a unique experience to graduate students from all over the world, including the opportunity to conduct research with leading academics in state-of-the-art laboratories. The modern study programmes at the doctoral schools at NCU equip PhD students with the highest qualifications in a chosen scientific field and skills essential in high-profile research.

Position title: PhD Student at the Faculty of Chemistry

The position:
The research related to the proposed project will embrace the synthesis of new porous materials based on coordination polymers (metal-organic frameworks, or in short MOFs) containing organic ligands equipped with 1,2,3-triazole rings, and the modulation of their porous capacity.
Description of tasks:
a) to design synthetic pathways towards novel di-, tri- and tetrapodal organic ligands containing 1,2,3-triazole rings.
b) to synthesize porous coordination polymers by applying metal ions, such as Fe(II), Co(II), Ni(II), Cu(II), Zn(II)
c) to modulate the sorption capacity of the obtained materials by:
- changing the pore size
- functionalizing the pore surfaces by introducing (in the relevant region) substituents of different nature

Experience: The candidate should be familiar with synthetic lab equipment, as well as with basic methods of compound characterisation ($^{1}H/^{13}C$ NMR in solution, MS, IR).

Candidate qualities: The candidate should have a passion for lab work (which forms a big part of the project).

Requirements for the candidate:

- MSc in Chemistry, preferably in the field of organic or coordination chemistry
- fluency in English
- scientific curiosity
- flexibility
- ability to work in a group, as well as alone

Extra info:

Project PhD@NCU: Porous materials based on coordination polymers containing multipodal ligands bearing 1,2,3-triazole units.

Deadline for submitting offers: 31 May 2021, 00:00
Form of submitting offers: email: ster@umk.pl

The conditions of employment:

Stipend for 4 years; 4 266,00 PLN/month.

Scholarship: a PhD student stipend is available from July 1st, 2021.

The candidate should submit:
a) CV (research experience, publications, projects, presentations, scholarships, awards)
b) cover letter
c) list of published research papers and documented participation in research projects.
d) letter of recommendation from master thesis supervisor.
e) information about previous doctoral studies or education at a doctoral school.
f) a copy of the master's diploma or completion of graduate studies (or equivalent).
g) if English is not the mother tongue or higher education studies were not conducted in English, a document confirming the knowledge of English at B2 level.
h) declaration of selection of the project (available for download at https://www.ac.umk.pl/nawa-ster/list-of-documents/).
i) declaration of selection of the Doctoral School within which the project will be implemented, (available for download at https://www.ac.umk.pl/nawa-ster/list-of-documents/).
j) a statement that the candidate does not possess a doctoral degree (available for download at https://www.ac.umk.pl/nawa-ster/list-of-documents/).
k) statements of readiness to join the project and consent to the processing of personal data in connection with the implementation of the project (available for download at https://www.ac.umk.pl/nawa-ster/list-of-documents/).

Please send the application to: **ster@umk.pl**

By submitting the application, the candidate agrees to the processing of her/his personal data in the recruitment process.

Additional information: Opportunity to be part of a young, dynamic, and international team.