

**PhD fellowship at the Chemistry Department, Nicolaus Copernicus University in  
Toruń, Poland - Supramolecular Chemistry**

A 4 year PhD fellowship is available in the framework of the OPUS LAP project: “Molecular crystals adapting as a response to external triggers“, funded by the National Science Centre (Poland). The research will be focused on the host-guest chemistry of organic macrocycles (pillararenes), aiming to design tunable functional (trapping/sensing) molecular crystals. The candidate should have a passion for lab work and be familiar with a range of organic synthesis techniques, as well as methods of compound characterisation ( $^1\text{H}/^{13}\text{C}$  NMR in solution, MS, IR). Furthermore, the work will consist of crystallisations of macrocyclic compounds (using a range of methods), determination of their crystal structure and further studies in the solid state. The candidate should be motivated to get to know (or ideally already be familiar with) methods such as single-crystal and powder X-ray diffraction, thermal analysis (TGA, DSC) and solid-state NMR. The project is being performed in collaboration with KU Leuven (prof. Wim Dehaen) and a research stay of minimum 1 month at KU Leuven is planned.

**Requirements:**

- receiving the status of participant of one of the Doctoral Schools at Nicolaus Copernicus University
- MSc in Chemistry, preferably in the field of organic or supramolecular chemistry
- fluency in English
- scientific curiosity
- flexibility
- ability to work in a group, as well as alone

**Conditions of the employment:**

- remuneration of ~5000 PLN/month which will be adjusted according to the Ministry Rules regarding PhD students (it will be lower than this for the first two years and higher after the evaluation). Applicants should send **(1)** a motivation letter, **(2)** CV, including a list of publications, **(3)** a letter of recommendation and **(4)** the study grades from levels I and II to dr. hab. Liliana Dobrzańska, prof. UMK – e-mail: lianger@umk.pl no later than 15 September 2024. The starting date would be 15 October 2024.