PhD fellowship in the Laboratory of Crystal Engineering –

Coordination Chemistry

A 4-years PhD fellowship is available in the framework of a SONATA BIS project: “The role of non-covalent interactions in the formation of supramolecular assemblies and the phenomenon of single-crystal-to-single-crystal transformations”, funded by the National Science Centre.

The research will embrace different aspects of Crystal Engineering, applied towards coordination compounds of 3d electron metals with N-donor ligands based on imidazole derivatives, focussing on subjects such as porosity and triggered structural transformations in single-crystals. The candidate should have a passion for lab work and be able to perform the synthesis of simple organic molecules (ligands) and coordination compounds. Furthermore, she/he should be familiar with basic methods of compound characterisation (¹H/¹³C NMR in solution, MS, IR, UV-VIS).

Besides synthesis, the work will consist of crystallisations (using a range of methods), determination of the crystal structure of the obtained compounds and further studies in the solid-state. The candidate should be motivated to get to know (or be already familiar with) methods, such as single-crystal and powder X-ray diffraction and thermal analyses (TGA, DSC).

Requirements:

- obtaining the status of PhD student at the Chemistry department before November 1st 2017 (information about the procedure of students’ admission for PhD studies at the Chemistry Department of UW can be found on their website)
- MSc in Chemistry in the field of inorganic/coordination chemistry
- fluency in English
- scientific curiosity
- flexibility
- ability to work in a group, as well as alone

Conditions of the employment:

- 4-years fellowship
- opportunity to work in one of the most prestigious scientific centres in Poland - the Centre of New Technologies (CeNT), University of Warsaw

Applicants should send (1) a motivation letter, (2) CV, including a list of publications, (3) two recommendation letters and (4) the study grades from level I and II, to the group leader – dr Liliana Dobrzańska – e-mail: lianger@cent.uw.edu.pl no later than the 15th of August 2017. The starting date would be the 1st of October/November 2017.