



PhD Position in Sustainable Organic/Polymer Chemistry

in the group of Prof. Dr Guillaume Delaittre
Organic Functional (Macro)Molecules, Dpt. of Organic Chemistry, University of Wuppertal, Germany

Our group, originally established at the KIT, relocated a few months ago to the University of Wuppertal (BUW): https://orga-funct-macromol.uni-wuppertal.de/en/ We focus on the synthesis of functional organic polymers using modern methods of macromolecular synthesis (reversible-deactivation radical polymerizations, ring-opening polymerizations) and efficient organic chemistry ligation methods in order to design functional/reactive nanostructured materials for biological, medical, or biotechnological applications. In the near future, we want to move towards a more sustainable polymer chemistry and develop materials offering a better control over their fate (stability, degradability, recyclability). This is precisely the topic of the current PhD offer.

The PhD project will be dedicated to the investigation of building blocks extracted from food loss and used as such or modified to be then polymerized using various methods, thereby giving access to a broad range of polymeric architectures with tunable physical properties. An additional aspect involves the preparation of amphiphilic nanostructures leading to potential therapeutic applications. This project is highly collaborative and will be carried out in the frame of a joint effort with the groups of Prof. Stefan F. Kirsch (Organic Chemistry) and Prof. Nils Helge Schebb (Food Chemistry) at the BUW.

The University of Wuppertal is a young and dynamic university, which currently welcomes about 23000 students (110 nationalities) and is part of a network of 220 partner universities worldwide.

The city of Wuppertal is said to be the greenest of the German large cities and hosts 350000 inhabitants, is very close to Cologne and Düsseldorf, and has recently been listed by CNN as one of the 20 places to visit in 2020 worldwide: edition.cnn.com/travel/article/places-to-visit-2020/index.html

The ideal candidate looks forward to working in a highly collaborative and multicultural team and holds or is about to complete an MSc degree or equivalent strongly focused on organic and/or macromolecular synthesis. She/he must have a hands-on experience of several months in a research laboratory corresponding to these topics. Further knowledge in areas such as self-assembly processes, nanoparticles, protein modification, biocatalysis is welcome. She/he should be familiar with at least some of the following analytical methods: NMR, IR, and UV-Vis spectroscopies, size-exclusion chromatography, and mass spectrometry. An excellent level of English is essential. German language knowledge is a plus but is not mandatory.

Application material cover letter, CV*, University certificates, contact details of 2–3 referees

Starting date as soon as possible from July 1st, 2020 on.

Contract duration 36 months

Salary ca. 1400 Euro after taxes (50% E13 German salary scale)

Please send your **complete** application package to Prof. Dr Guillaume Delaittre asap! (delaittre@uni-wuppertal.de)

^{*}The CV should include a list of synthetic methods (including purification techniques, e.g., column chromatography, recrystallization) and characterization methods with advanced hands-on experience.