in the group of Prof. Dr Guillaume Delaittre; Organic Functional (Macro)Molecules, Dpt. of Organic Chemistry, University of Wuppertal, Germany; <u>www.orga-funct-macromol.uni-wuppertal.de/en/</u>

IVERSITÄT IPPERTAL

Our group based at the University of Wuppertal (BUW) focuses 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. We currently move towards a more sustainable polymer chemistry (sourcing, stability, degradability, recyclability). We also work with engineers in the development of new smart devices for communication, sensing, and electronics. The current PhD offer deals with these technological applications.

The PhD project will encompass various aspects ranging from surface modification of 2D (nano)materials to the synthesis of small organic molecules and polymers for implementation in photo(re)active materials. This project is highly collaborative and will be carried out in the frame of a joint effort with the Faculty of Electrical, Information and Media Engineering, particularly the groups of Prof. Patrick Goerrn (Large Area Optoelectronics), Prof. Daniel Neumaier (Smart Sensor Systems), and Prof. Ullrich Pfeiffer (High-frequency and Communication Technology) 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: <u>edition.cnn.com/travel/article/places-to-visit-2020/index.html</u>

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 (not engineering)**, with further knowledge in areas such as **surface chemistry**, **photochemistry**, **3D printing**, and/or **self-assembly processes** being welcome. She/he must have a **hands-on experience** of several months in a research laboratory. She/he should be familiar with at least some of the following **analytical methods**: NMR, IR, and UV-Vis spectroscopies, size-exclusion chromatography, mass spectrometry, XPS. An **excellent** level of **English** is essential.

Application material	cover letter, CV, University certificates, contact details of 2–3 referees
Application deadline	September 20, 2021
Starting date	as soon as possible from December 1 st , 2021 on.
Contract duration	36 months
Salary	ca. 1400 Euro after taxes (50% E13 German salary scale)

Please send your **complete*** application material to Prof. Dr G. Delaittre asap! (
(Model 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**. Incomplete applications will not be considered.