



ESR 10 | Compartmentalized chemo- and biocatalysts for chiral amine synthesis

ROLES AND RESPONSIBILITIES

The half of your PhD research (18 months) will be carried out at the University of Bielefeld (Germany) at Faculty of Chemistry, Industrial Organic Chemistry and Biotechnology (IOCB) under the supervision of Prof. Dr. Harald Gröger. The other half of the PhD work (18 months) will be at the company AENEAM Advanced Membrane Technologies S.L. (Spain) under the supervision of Dr. Jonas Gorauskiš. The H2020 Marie Skłodowska-Curie Actions (MSCA) – Innovative Training Network (ITN) project starts in January 2020 (M1). PhD project is funded for three years and the date of recruitment, start of the PhD project, is planned for July 2020 (M7) latest on December 2020 (M12).

Your PhD degree will be awarded based on successful completion of the research work. You will also be required to participate in the training events and workshops organized by the ITN-European Industrial Doctorates (EID) program. As a Marie Skłodowska-Curie Actions (MSCA) fellow, you are also expected to contribute your time in the dissemination of your PhD project's result through public engagement and other scientific platforms.

The PhD research will focus on:

- (i) Chemo- and biocatalytic reactions without the need for protecting groups for subsequent combination in one-pot processes,
- (ii) Heterogenization of chemo- and biocatalysts,
- (iii) Combination of the individual reactions with compartmentalized catalysts & identification of an ideal "process win dow",
- (iv) Proof-of the modularity of the concept by demonstrating a broad biocatalyst range,
- (v) Implement in commercial scale production for a prioritized synthetic example.

Recruiting Institution: University of Bielefeld (Germany)

Address applications to: Prof. Dr. Harald Gröger (harald.groeger@uni-bielefeld.de)

REQUIREMENTS

- An outstanding relevant University degree (e. g. M. Sc. in Chemistry, Biochemistry, Life Science, Molecular Science, or related disciplines),
- Profound knowledge and practical experience in synthetic organic chemistry,
- Profound knowledge and practical experience in enzyme catalysis,
- Practical experience in analytical methods (NMR spectroscopy; chromatographical methods: HPLC and/or GC),
- Team-oriented and cooperative working attitude,
- Excellent English language skills as well as in scientific writing (reports, manuscripts).

APPLICATION PROCEDURE

To apply for the position, kindly provide:

- (i) A letter of motivation including a one-page statement of your research interests, relevant skills and experience;
- (ii) A CV including publication list; and
- (iii) Names and contact details of three referees willing to write confidential letters of recommendation.

Applications of women and disabled persons are particularly welcome.

All materials should be attached as a single PDF file (max. size 5MB). The PDF file name should include ESR10 your last name and first name (using "ESR10_surname_firstname.pdf").

DEADLINE

The closing date for all applications is 01st of March 2020 or as soon as suitable candidates have been identified.



Innovative Training Network – European Industrial Doctorates

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 860414.