



ESR 9 | Development of a cascade combining in vitro and in vivo catalysis for dearomatized vinyl compounds

ROLES AND RESPONSIBILITIES

The half part of your PhD research (18 months) will be carried out at the Austrian Centre of Industrial Biotechnology (acib, Austria) under the supervision of Dr. Sandy Schmidt in the group of Protein Engineering and Biocatalysis at the Institute of Molecular Biotechnology (TU Graz). The second half of the PhD work (18 months) will be at the company Henkel (Germany) under the supervision of Dr. Andreas Taden. 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) Interdisciplinary project on biocatalysis, polymer chemistry and material science,
- (ii) Up-scaling of enzymatic polymer precursor synthesis,
- (iii) Targeted enzyme engineering for application in an enzyme cascade, followed by assembly and optimization of the two-step cascade;
- (iv) Copolymerization studies of monomers followed by characterization of the obtained polymers at industry partner Henkel,
- (v) Analysis of monomers for either cationic or radical polymerization followed by material characterization in the area of adhesives.

Recruiting Institution: Henkel (Germany)

Address applications to: Dr. Andreas Taden (andreas.taden@henkel.com)

REQUIREMENTS

- An outstanding M.Sc. degree in Biotechnology, Chemistry, Biochemistry or related field
- Eligible as a graduate student at Graz University of Technology, Austria,
- At the time of recruitment, the applicant must not have resided (or carried out his/her main activity e.g. work, studies, etc.) in Germany, for more than 12 months in the last three years immediately prior to the reference recruitment date,
- Research experience in molecular biology, biocatalysis, protein engineering, organic synthesis or related fields, experience in analytical methods (HPLC, GC, MS, etc.),
- Ability to work in an international team,
- Inter- and multidisciplinary thinking,
- High motivation,
- An integrative and cooperative personality with excellent communication and social skills,
- Fluency in English – written and oral.

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 ESR9, your last name and first name (using “**ESR9_surname_firstname.pdf**”).

DEADLINE



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.