



ESR 5 | Transaminase-catalyzed synthesis routes from HMF to renewable monomers

ROLES AND RESPONSIBILITIES

You will be enrolled as a PhD student at KTH Royal Institute of Technology, Stockholm (Sweden), with Prof. Per Berglund, KTH, and Dr. Luuk van Langen, ViaZym B.V., Delft (The Netherlands) as supervisors. The first part of your PhD research work (18 months) will be carried out at KTH at the Department of Industrial Biotechnology. The next 30 months will be performed at ViaZym in Delft. This PhD project is funded for three years from H2020 and one year from KTH Royal Institute of Technology in Stockholm and you will be employed by ViaZym B.V. for the entire 48 months. 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).

You will 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) Protein engineering to enhance transaminase stability and facilitate enzyme immobilization by fusion with binding modules,
- (ii) Rational development of a highly stable and productive transaminase formulation via immobilization of engineered omega-transaminase on solid supports, that can be used in flow reactors,
- (iii) Design of a process with efficient use of a cheap and renewable amine donor focusing on a flow reactor concept with constant product removal to shift the equilibrium towards the product and to increase the productivity.

Recruiting Institution: ViaZym B.V. (The Netherlands)

Address questions to: Dr. Luuk van Langen (vanlangen@viazym.com)

Apply through the announcement at KTH: <https://www.kth.se/en/om/work-at-kth/doktorander-1.572201>

REQUIREMENTS

- High motivation and an outstanding M.Sc. degree,
- Experience in biotechnology and/ or molecular biology and organic chemistry,
- Eligible as a graduate student at the biotechnology doctoral program at KTH Royal Institute of Technology, Sweden (<https://www.kth.se/en/studies/phd/admission-requirements-1.520175>),
- At the time of recruitment, the applicant must not have resided (or carried out his/her main activity e.g. work, studies, etc.) in The Netherlands, for more than 12 months in the last three years immediately prior to the reference recruitment date,
- 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 ESR5, your last name and first name (using “**ESR5_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

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