



PhD Position in Bioscience Engineering: Chemistry and Bioprocess Technology

Job Description:

The Marie Skłodowska Curie Doctoral Network “DyeAnotherWay” is inviting applications for a 36 month full time fixed term position as a Doctoral Candidate (DC). This research project is a collaboration between 17 organisations, including 9 academic and 8 non-academic, from 11 countries (AT, BE, BR, DE, ES, FI, FR, PT, SE, UK, USA) across Europe and beyond. The research aims to investigate all aspects of biogenic dyes, from the identification of dye-producing bacteria and the characterization of their pigments, through the optimization of their production and application, to the comprehensive ecological and economic evaluation of the resulting solutions.

The successful applicant will be employed by Bio Base Europe Pilot Plant in Ghent (Belgium), with planned intersectoral and interdisciplinary stays with collaboration partners totalling a maximum of 7 months.

The research and PhD thesis will be on “(*In situ*) product recovery development for novel biobased dyes and evaluation of the integrated production process”.

The DC will:

- contribute to the early fermentation development by studying fermentation behaviour and biogenic dye production of native producing strains in collaboration with TU Wien
- investigate the extraction of novel dyes with respect to yield and sustainability using a broad repertoire of solvents and methods
- design and optimize sustainable (*in situ*) extraction and purification strategies for intra- and/or extracellular biogenic dyes
- study the optimized fermentation and downstream recovery process and the impact of important process parameters (e.g., pressure, mixing) in industrially relevant and scalable fermentation equipment.

Beyond the specific expertise gained during the DC's completion of their research work, this position offers an opportunity to gain international research experience, as well as an array of soft skills relevant to project management, research management and career development.

Candidates must:

- hold, or be close to completing, a Master's degree in Bioscience Engineering, Biotechnology, Chemical Engineering or a related field.
- not have resided or carried out their main activity (work, study, etc) in Belgium for more than 12 months in the three years immediately prior to 01.01.2026, unless as part of a procedure for obtaining refugee status under the Geneva Convention, but may be of any nationality
- be available to start on 01.01.2026
- have excellent English language skills
- be able to travel internationally on a regular basis, for example to attend regular project meetings or to take part in conferences



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- be able to work in an international environment, be highly motivated and reliable, be able to work to strict deadlines

Preference will be given to candidates with previous experience in bioprocess development (e.g. fermentation, purification technologies) and analytical procedures (e.g. HPLC, GC, TGA).

Research Fields:

Bioscience engineering, biotechnology, chemical engineering, microbiology, downstream processing

Career Stage:

According to EU HORIZON EUROPE guidelines, Doctoral Candidates must have fewer than four years research experience at the date of employment (1st January 2026) and must not have been awarded a doctoral degree.

Benefits:

Annual Salary: within the range of EU Marie Curie European Training Network programs, Monthly Mobility Supplement and Monthly Family Allowance (if eligible): according to the rules of EU Marie Curie European Training Network programs

How to Apply:

Please send a letter of motivation and your full CV, along with any supporting documents, as a single PDF to recruitment.dyeanotherway@tuwien.ac.at before 15th October 2025. Please include “DC4 Application” in the email reference line. Please include the clause “I consent to the processing of my personal data for the purposes of this recruitment process in accordance with the EU GDPR”. CVs should follow the Europass template available for free download at: https://www.eea.europa.eu/about-us/jobs/application-documents/europass_cv_template.doc.



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