PhD Position in Molecular Biology and Biochemistry

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 Technische Universität Wien in Austria, with planned intersectoral and interdisciplinary stays with collaboration partners totalling a maximum of 11 months.

The research and PhD thesis will be on “Enzymes, pathways and production of biogenic dyes.”

The DC will:

- identify and characterize the enzymes and genes involved in the biosynthesis of novel dyes
- optimize the cultivation process towards maximized productivity and yield of biobased dyes for most promising native producers
- study biogenic dye production and fermentation behaviour of native producing strains
- pre-screen for best conditions for the biogenic dye production in native producers using a multi-variant design of experiment (DoE) approach
- construct plasmids for recombinant enzyme production in *E.coli* or yeast
- contribute to the establishment of cost-effective multi enzyme cascades for the production of biogenic dyes

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 a University Master’s Degree in any discipline that makes them eligible for a PhD in biochemistry or molecular biology
- not have resided or carried out their main activity (work, study, etc) in Austria 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

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

Research Fields:

Enzymology, biochemistry, microbiology, molecular biology, analytical chemistry

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 Currie 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 "DC3 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.

This project gratefully received funding from the European Union's Horizon Europe research and innovation programme under the Marie Skłodowska-Curie grant agreement No 101225857.