



10 international PhD fellowships in the European Doctoral Network *BiocatCodeExpander* for a training on innovative biotechnological applications of non-canonical amino acids for biocatalysis, synthetic biology, organic chemistry and computational biology.

PhD fellow # 4

WP2: NOVEL STRATEGIES FOR COUPLING & IMMOBILIZATION

METAL-FREE SITE-SELECTIVE HYDRO-SILYLATION OF PROTEINS

Organization

University of Rovira i Virgili, Spain

The **Universitat Rovira i Virgili** (URV) is a public institution of higher education from Tarragona, Spain. It is one of the leading universities in Catalonia and also ranked in the top 5 of the Spanish higher education system – classified #136 in 2021 Young World University Times Higher Education ranking. URV is the first Spanish University in Chemistry and the only one located in the top 100 according to the Shanghai Rankings Global Ranking of Academic Subjects. Authorised to use the logo HR Excellence in Research and active member of the AURORA network, URV is made up of 12 faculties and schools with 24 departments and >40 undergraduate courses (12.000 students), 50 master's degrees (1200 students), and extensive doctoral programmes (1200 students). Bibliometrics: 1702 Articles published (WOS-SCOPUS 2020) and 10 ESI Excellence Areas; 21.2 M€ granted from European/international funds (mainly H2020 Funds); 51 H2020 Projects; 2.9 M€ co-funded for Scientific Infrastructure; 5.4 M€ in 350 Technology Transfer Contracts (2020); 158 Doctoral Theses Defended (Academic Year 2019/20); 44 patents and 104 extensions applications, 13 startup, 5 Technologies Licensed, 31 Property Rights Registrations, 26 spin-off, and 6 start-up (2005-2020)

Doctoral Supervisor

Dr. Omar Boutureira

Enrolment in Doctoral degree

University of Rovira i Virgili (URV)



Secondments

At ACIB (Vienna, Austria) with Dr. Birgit Wiltschi
& AstraZeneca UK (Cambridge, United Kingdom) with Dr. Hanna Bolt

Objectives

- Synthesis of new Si-containing non-canonical amino acids (NCAA)
- Reaction development using radical and strain-promoted systems
- Chemical and genetic incorporation of Si-NCAA into proteins
- Evaluation of Si-NCAA as catalytic residues and for protein immobilization
- Exploring the system for *in vivo* probing

Fields related to the project

- (1) Synthetic chemistry
- (2) Biochemistry
- (3) Synthetic biology

Qualifications

- Researchers can be of any nationality
- The researcher must not have carried out his/her main activity (work, studies, etc.) in the country of his/her host organization for more than 12 months in the 3 years immediately prior to recruitment.
- The researcher should not have obtained a PhD degree and should not have more than 4 year full-time or equivalent research experience since obtaining the degree which makes them eligible for starting the PhD degree
- Applicants must demonstrate excellent proficiency in English language to be eligible
- Researchers must demonstrate an excellent academic record. Hold a master's degree (or equivalent) relevant to the project (chemistry, biochemistry, biotechnology, molecular sciences or related disciplines)

We offer

- Full-time contract (36 months) with the recruiting institution, enrolled in a PhD programme



- Salary and benefits are in accordance with the MSCA regulations for PhD students
- *BiocatCodeExpander* promotes gender equality, open science practices and cutting-edge training.
- PhD students will be trained in an international, inter-disciplinary academic and industrial environment through state-of-the-art research
- Two secondments per PhD position and exciting summer schools

Application

The application, in English, must be submitted electronically by email to the *BiocatCodeExpander* email address biocatcodeexpander.beta@vu.nl before the 22/01/2023 (only applications that are complete, in English and submitted before the deadline will be considered eligible)

The preferred starting date is between April-September 2023

Please, submit the following documents in one PDF document:

- A cover letter, stating your motivation to join the doctoral network, and mentioning the choice of project you would prefer to apply for (max. 3 projects)
- CV: a one- to two page synopsis of yourself, your scientific interests, experience, current research work and list of publications
- Two letters of recommendation from former advisors/professors

More information

Web site for additional job details: <http://www.biocatcodeexpander.com>