

**C-C Bond Formation by Top Performing Enzymes.** 

ITN- Marie Skłodowska-Curie Actions CC-TOP: C-C Bond Formation by Top Performing Enzymes. We are currently looking for a highly motivated Early Stage Researcher (ESRs) to embark on a path towards their PhDs at the Institute for Advanced Chemistry of Catalonia (IQAC) (Supervisor Prof. Pere Clapés), one of the research centres of the Spanish National Research Council (CSIC). This fellowship position is immediately available and will begin the soonest possible, in the academic year of 2022-2023.

Project: Construction of artificial metalolyases consisting of artificial metal cofactor allocated into an adequate protein scaffold for carbon-carbon bond formation reactions. The PhD candidate will join an ongoing project. The research of the group focuses on: (i) synthesis of metal ligands and their metalation, to be used as artificial cofactors into the protein scaffold; (ii) expression and production of the protein scaffold and attachment of the artificial cofactor into its cavity; (iii) evaluation of the artificial metalolyases in C-C bond formation, including the synthesis of non-commercial substrates; (iv) optimization of the activity and selectivity of selected candidates by directed evolution techniques.

You will also be required to participate in the scheduled training and workshop activities organized by the CC-TOP consortium. As a Marie Skłodowska-Curie Actions fellow, you are also expected to contribute your time in the dissemination of your project's result through public engagement and various scientific platforms.

Required candidate profile:

- The applicant should have completed at least four or five years education with a Master's degree or Diploma in Biochemistry, Chemistry, Biotechnology and should be eligible as graduate student at the University of Barcelona, Spain.
- The applicant should have some hands-on research experience in the following areas: biocatalysis, molecular biology, organic synthesis,

microbiology, instrumental analytics (HPLC, GC, NMR, MS...) or related fields.

- The applicant should show interest in conducting a research project independently and should enjoy the work in an international, interdisciplinary environment.
- The applicant should have an excellent command of the English language at a proficient level (spoken and written), a high level of commitment and a drive to excel.

Eligibility Criteria:

- To qualify for this position, the applicant must be in the first 4 years (fulltime equivalent) of their research career. This is calculated from the date they obtained a qualification (Masters or equivalent) allowing them to embark on a doctorate.
- At the time of recruitment, the applicant must not have resided (or carried out his/her main activity e.g. work, studies, etc.) in Spain, for more than 12 months in the last 3 years immediately prior to the reference recruitment date.

## Application Procedure

To apply for the position, please provide: (i) a letter of motivation including a 1page statement of your research interests, relevant skills and experience; (ii) a CV including publication list; and (iii) names and contact details of two to three referees willing to write confidential letters of recommendation. All materials should be attached as a single PDF file (max. size 5MB) and send it to: Professor Pere Clapés <u>Pere.clapes@iqac.csic.es</u>; Ms Agapi Theodoridou (Project manager): <u>agapi@cc-top-itn.eu</u> and Prof. Wolf-Dieter Fessner (coordinator of the CC-Top): wolf-dieter.fessner@tu-darmstadt.de

## Deadline:

The closing date for all applications is 15th March 2022.