

MSCA Postdoctoral Fellowships

HORIZON MSCA 2024 PF



Expression of interest



EXCELENCIA
MARÍA
DE MAEZTU



EXCELLENCE IN RESEARCH



5th of July 2024

Deadline for submission
of documents



Contact Person/ Scientist in charge

Elia Tomás elia.tomas@imdea.org

Brief description of the Research Group

The Biotechnological Processes Unit (BTPU) focuses its research lines on several biochemical technologies based on microorganisms to produce sustainable solutions in the form of biofuels and biochemicals.

Research Area

Chemistry (CHE)

Environmental Sciences and Geology (ENV)

Life Sciences (LIF)

Applications

Deadline for submission of documents 5th of July 2024. Documents to be submitted:

- Complete curriculum vitae stating background and skills
- Letter of motivation including research interests
- Two reference letters



Project description

Yeasts are versatile and interesting cell factories for bioproducts generation from residual carbon sources. Within this context, microbial oils or single cell proteins synthetized in microorganisms and produced from wastes are a feasible alternative for a progressive fossil fuels reduction. Conventionally, sugar-based feedstocks are used in yeast biotechnology however this limits the process to carbohydrate rich substrates. The sugar platform can be substituted by a SCFAs (carboxylate)-based technology which enables bioprocess flexibility upon different substrates while opening the range of utilized molecules. In this context, the fellow will be involved in the development of efficient yeast strains for SCFAs valorization towards different bioproducts.

The postdoctoral fellow is expected to work on the study of fundamental aspects of yeasts metabolism in order to increase the knowledge of this innovative approach and the long-term exploitability of bioprocesses combination. The fellow will also study different fermentation routes for producing lipids and proteins with non-conventional yeasts.

Yeast molecular biology will be valued since different molecular tools will be use for the development and generation of new yeast strains.