



M2ex – Exploiting metal-microbe applications to expand the circular economy

Marie Skłodowska-Curie Action H2020-MSCA-ITN-EJD-2019

ESR12-CSIC: Fate of metals in anaerobic digestates. Opportunities for recovery and reuse

Job description

We are looking for a motivated Early Stage Researcher (ESR) in the field of anaerobic digestate management. The research fellow will be hosted at the Consejo Superior de Investigaciones Científicas – Instituto de la Grasa (CSIC). This group has long expertise in research activities focus on metal influence over the anaerobic digestion systems, leading several projects in this area. He/she will be recruited by CSIC for a period of 36 months with the aim of obtaining a joint PhD degree between Universidade do Porto (UP) and Universidad Pablo de Olavide (UPO).

The M2ex European Joint Doctorate offers to the ESR12 an innovative series of Network-wide training events to ensure a high-quality, engaging and inspirational training environment including secondments in UP/CIIMAR (Portugal), Tratamento de Resíduos Sólidos E.I.M (Portugal) and Institut de Physique du Globe de Paris (France).

Objectives

The bioaccumulation of metal on the digestates becomes interesting its valorization for metal recover. It is necessary to define the mechanism whereby metals are restrained in the digestate and the role of the metal speciation in this process. The objective of this project will be to evaluate the metals concentration and speciation in the digestate to allow the recovering process.

Expected Results

Obtained results will elucidate on the mechanism which affect to the metal speciation on the digestate to allow the recovering process.

Candidate´s profile

We are looking for a candidate with Chemistry, Chemical Engineering or Environmental Science Degree and a Bioprocess Engineering Master Degree. Candidates with a Master of Science Degree in another discipline but with a strong knowledge in chemistry may also be considered.

Our Offer

You will receive an employment contract for 3 years according to the EU contribution for ITN recruitments and general conditions at the host institution. It includes full social security coverage and will start in September 2020.

Enrolment in Doctoral Degrees: UPO / UP