

JOB OFFER

Date: 03/11/2025

PRINCIPAL INVESTIGATORS: Silvia Bolado Rodríguez & Israel Díaz Villalobos

RESEARCH CENTER: Institute of Sustainable Processes – University of Valladolid

JOB POSITION: Post-doctoral Researcher in Environmental Biotechnology

PROJECT TITLE: Sustainable Extraction of Valuable Bioproducts from Sewage Sludge: Analyzing Chemical and Biological Risks (SafeWW)

OFFER DESCRIPTION: The project addresses an important societal challenge: the safe and sustainable recovery of valuable components from an abundant and constantly growing waste stream - the sludge generated in wastewater treatment plants. The candidate will:

- Design and perform laboratory-scale experiments on the extraction and purification of biomolecules using deep eutectic solvents (DES) and other unconventional solvent systems.
- Contribute to the identification and quantification of chemical and biological risks during extraction and valorization stages, including the monitoring of emerging contaminants, microplastics, and antibiotic resistance genes (ARGs).
- Participate in the optimization and validation of analytical and bioprocess methodologies, ensuring reproducibility and environmental relevance.
- Collaborate in data interpretation and process integration, bridging molecular biology, environmental chemistry, and process engineering.
- Prepare scientific publications, technical reports and presentations, and actively contribute to dissemination and knowledge transfer activities.

DURATION: 18 months

ANNUAL GROSS SALARY: €28,000 (approx.)

REQUIREMENTS:

- PhD in Chemical Engineering, Environmental Engineering, or Molecular Biology.
- Experience in any of the following areas will be valued: extraction processes, analytical chemistry, microbiological or molecular analysis (e.g. qPCR), or wastewater/sludge valorization.
- Oral and written communication skills in English.
- Strong teamwork, communication, and interdisciplinary collaboration skills.

CONTACT: israel.diaz@uva.es

DEADLINE FOR APPLICATION: 21/11/2025

OTHER INFORMATION: CV should be sent to israel.diaz@uva.es before the deadline.



INSTITUTE OF SUSTAINABLE PROCESSES



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