

Marie Skłodowska Curie Action–Postdoctoral Fellowship 2026 (MSCA-PF-2026)

Supervisor Name	Antonio Nieto-Márquez Ballesteros	
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Department /Institute / Centre Name/Location	ETSIDI-UPM	
Research Area	Information Science and Engineering (ENG) Environment and Geoscience (ENV)	Chemistry (CHE)
Research team/group	<p>ACOM is an established research group with extensive experience in applied research projects funded at regional, national, and European levels, as well as in industry-collaborative contracts. The group has its own laboratories equipped with facilities for the synthesis, characterization, and testing of functional materials for energy and environmental applications.</p> <p>https://www.upm.es/recursosidi/map/analisis-y-caracterizacion-optica-de-materiales/</p>	
Keywords	Chemical Engineering, Environmental Engineering, electrochemistry, catalysis, process simulations	
Research Focus	<p>Waste management and valorization</p> <p>Our research line focuses on the sustainable valorization of municipal solid waste incineration (MSWI) fly ash, a challenging residue due to its high content of soluble salts and potentially hazardous elements. The work aims to transform this waste into valuable materials through innovative treatment and stabilization strategies, enabling its safe use in energy and environmental applications. Current research addresses the evolution of ash composition, chloride removal and immobilization pathways, and the design of porous and functional materials for energy storage and environmental remediation. The line also integrates advanced characterization techniques and data-driven approaches, including machine learning, to optimize treatment processes and predict material performance, contributing to circular economy strategies and the reduction of landfill disposal.</p>	
Applications: documents to be submitted and deadlines	<p>Please send the following documents to the supervisor: CV and letter of motivation</p> <p>Deadline: End of april</p>	