

Expression of Interest-UPM Supervisor

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

Supervisor Name	Sandra Paola Bianucci
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Department /Institute / Centre Name/Location	Department of Civil Engineering: Hydraulic, Energy and Environment. School of Civil Engineering, UPM (Madrid, Spain) CIVILis Research Centre, UPM (Madrid, Spain)
Research Area	Information Science and Engineering (ENG) Environment and Geoscience (ENV)
Research team/group	CIVILis is a multidisciplinary research centre which involves researchers from 11 research groups at School of Civil Engineering – UPM. CIVILis promotes smart and sustainable civil engineering, from multidisciplinary and interdisciplinary perspectives aligned with current challenges, like climate change: <ul style="list-style-type: none"> • Representative competitive projects related to research topic: SECA-SRH; AGWAMED; CONSOLE; Bottom-up climate adaptation strategies towards sustainable Europe; ARCO. • About 4,500 m² of laboratories related to water engineering research (hydroinformatic, hydraulic, water quality and environment coast) • Advanced consultancy services developed for private enterprises (water consultancy and civil engineering companies), Government institutions and other entities. Website: https://blogs.upm.es/civilis/
Keywords	Water resources modelling, water stress indices, drought persistence, resilient water systems, decision support
Research Focus	Sustainable Water Management and Decision Support Tools for Climate Adaptation in Semi-Arid Regions Our research centres on assessing water availability and sustainable management in climate-vulnerable systems, especially Mediterranean basins. We analyse hydrological dynamics, drought characteristics (such as intensity and persistence), and adaptive strategies to guide planning for increasing resilience of semi-arid areas. Candidate is expected to develop models, based on set of indices or simplified data-driven models for assisting in decision-making process. This decision-aid system should help managers for developing policies and early-warning frameworks. Ideal candidates bring expertise in hydrology, time-series analyses, water management indices and modelling. Skills on data-driven tools, like machine learning, are desirable. Candidate should be able to integrate her/him skills for impactful publications and workflows in climate change adaptation.
Applications: documents to be submitted and deadlines	Candidates should send the following documents to the supervisor to apply for this research opportunity: CV, letter of motivation and letter of references. It is suggested to include in the letter of motivation the general lines (schematically) proposed by the candidate for addressing this research. Recommended deadline for applying April 30th 2026.