

Expression of Interest – UPM Supervisor

Marie Skłodowska Curie Action –Postdoctoral Fellowship 2025 (MSCA-PF-2025)

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Department /Institute /Centre Name	Departamento de proyectos arquitectónicos, Escuela Técnica Superior de Arquitectura de Madrid.
Address	Avda Juan de herrera, 4. 28040
Province	Madrid
Research Area	Social Sciences and Humanities (SOC) Life Sciences (LIF)
Brief description of the Centre/Research Group	The Research Group TRANS: Observatory of Transdisciplinary Practices in Architecture, is based at the Escuela Técnica Superior de Arquitectura de Madrid (ETSAM UPM), focuses on fostering interdisciplinary connections to address contemporary challenges in architecture and urbanism. TRANS aims to bridge cultural, ecological, and technological innovations with architectural practice, enhancing its societal impact. The group operates at the intersection of architecture, environmental sciences, education, art, industry, and open culture, creating synergies with institutions, research centers, and professionals worldwide. Through participation in high-impact funded projects such as Madrid Platform Cities: Deep Demonstration (EIT Climate-KIC) or LINA - Learning Platform for Architecture, as well as organizing international conferences like Critic all and EDUMEET, TRANS facilitates cutting-edge research and fosters cross-sectoral knowledge exchange. Furthermore, TRANS contributes to the development of new pedagogical models for architectural education, focusing on experimental methodologies and the integration of real-world issues into design and research processes. The group emphasizes hands-on learning and interdisciplinary collaboration as key drivers for innovation in architectural knowledge production.
Project description	The MSCA Fellow will join the TRANS-NATURES research line, which investigates the intersection of architecture, ecology, and circularity. The proposed project will develop innovative approaches to material reuse and the regeneration of urban ecological niches, focusing on the implementation of Material Flow Accounting (MFA) models to assess and optimize resource cycles in architectural and urban systems. By analyzing how different material strategies impact urban sustainability, the project aims to contribute to a paradigm shift in circular architecture and ecological urbanism.
	The research will focus on developing architectural solutions that reduce dependency on external resources, promoting symbiotic relationships between urban and natural environments. Key areas of investigation include adaptive reuse strategies, biomaterial integration, and circular construction systems that minimize environmental impact while fostering biodiversity and ecosystem resilience. The fellow will



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	work closely with other researchers, practitioners, and institutions engaged in sustainable urban transformation.
	Using a combination of empirical case studies, digital simulations, and experimental prototyping, this project will contribute to redefining the role of architecture in the transition towards more sustainable, resilient, and circular built environments. The fellow will be encouraged to publish in high-impact journals, participate in international research networks, and engage in knowledge transfer activities to maximize the project's academic and professional impact.
Applications: documents to be submitted and	CV
deadlines	Letter of motivation
	Due date: April 30th