

RESTORE Short Term Scientific Mission Hosting proposal

STSMs are research visits to a host institution where the applicant will perform research activities that advance the objectives of RESTORE. STSMs must be between 5 and 90 days (although, they may exceed that duration in specific instances for Early Career Investigators). Successful STSM applicants are financially supported by the Action with a fixed contribution of up to 2500 EUR. STSMs do not fund research activities, only travel related costs. This information will be posted on the RESTORE website for potential applicants to review.

HOST Institution:	Name:	Universidad Politécnica de Madrid. Escuela Técnica Superior de Edificación	
	Country:	Madrid, Spain	
	ITC Country	no	
	Website:	https://www.edificacion.upm.es/tema/ENG_index.html	
Supervisor of the STSM:	Name:	Mercedes del Río Merino / Paola Villoria Sáez (TEMA Research Group)	
	Position:	Full Professor / Assistant Professor	
	Email:	mercedes.delrio@upm.es / paola.villoria@upm.es	
	Phone :	+34913367576	
	RESTORE MC Member:	yes	ECI: yes

The scope of the proposed research and its relevance for RESTORE Action:

A post-doctoral Short Term Scientific Mission (STSM) researcher is required to support our research, which is **linked to WG 3 Sbg 2 "Restorative construction processes"**.

At the TEMA Research Group from the Technical University of Madrid we are focused on innovation and sustainability in building construction technology. We are involved in several projects covering different topics including construction and demolition waste management and their recycling as alternative materials in the manufacture of new building products. Built environment sustainability is shifting from a narrow focus on minimisation of environmental impacts –trying to do things less bad– to a broader context which enriches places, people, ecology, etc. with particular emphasis on the benefits towards health. Despite many strategies and programmes have been launched, built environment sustainability fails to address these factors. Consequently the built environment sector needs to adopt restorative sustainability thinking to incrementally do 'more good'. In this sense, within the construction stage, construction materials are key elements influencing the indoor and outdoor environment of the building and thus the occupant's health.

For this, a post-doctoral STSM researcher will collaborate with TEMA Research Group in developing a literature review regarding building materials in order to identify those which contribute to improve the indoor and outdoor environment, and will consolidate the information obtained into a coherent report. The activities to be carried out by the Grantee during the STSM are:

1. Define a STSM research plan, milestones and deliverables.
2. Carry out a literature review on sustainable gypsum based materials
3. Carry out a literature review on building materials improving the indoor environment.
4. Carry out a literature review on other sustainable cement based materials
5. Carry out a literature review on building materials improving the outdoor environment
6. Perform data analysis emanating from the literature review and harmonise it into a final report.
7. Draft and submit a journal paper based on the final report.

The STSM should be performed during 3 consecutive months any time between October 2018 and February 2019.

Potential applicant requirements:

A post-doctoral Short Term Scientific Mission (STSM) researcher is required to support the delivery of a RESTORE literature report on sustainable building materials and also materials improving the indoor/outdoor environment.

The ideal applicant should have at least some knowledge about building materials and inorganic chemistry. Fluent knowledge of spoken and written English is desired. The candidate should have high motivation and team working capability.

NOTE: This form should not exceed one page.