

COST Action CA19126 PED-EU-NET



PED EU NET Short Term Scientific Mission Hosting proposal

Short-Term Scientific Mission consists in a visit to a **host organization** located in a different country than the country of affiliation (for Affiliation, see Article 4.1.1.1.1) by a researcher or innovator for specific work to be carried out and for a determined period of time.

Short-Term Scientific Missions benefit to:

- STSM Grantee: receives funding for implementing a project with an international team and gains new knowledge or access to equipment or techniques not available in the home institution;
- STSM Host: receives an international partner in their institution and can develop long lasting collaboration.

STSMs need to be carried out in their entirety within a single Grant Period and always within the Action's lifetime. Successful STSM applicants are financially supported by the Action with a contribution of up to 3000 EUR. STSM Grants do not necessarily cover all expenses related to undertaking a given mission. A STSM Grant is a contribution to the overall travel, accommodation and meal expenses of the Grantee. STSMs should support COST policies on promoting gender balance, enabling Early Career Investigators (ECI), broadening geographical inclusiveness.

HOST Institution:	Name:	Dalarna University
	Country:	Sweden
	ITC Country	no
	Website:	www.du.se
Supervisor of the	Name:	Xingxing Zhang
STSM:	Position:	Professor in Energy Technology
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	Phone :	+46 23-77 87 89
	PED-EU-NET M	C Member: yes
Preferred timing for	01.04.2023 -	30.08.2023
STSM stay:		

The topic/scope of the proposed research and its relevance for PED EU NET Action

The City Information Modelling (CIM) group in Dalarna University has an on-going PED project, (called 'PED-ACT). It is about to use machine learning to study the database developed by PED EU NET Action. Meanwhile, PED-ACT will also support the development of this database, particularly to increase the interactivity between the database and users, by developing digital models of the PEDs.

The potential researcher would work together with the partners in PED-ACT project. There are three potential tasks for the researcher to choose: (1) study the database, (2) help to improve the interoperability of the database, and (3) develop digital models of the targeted PED in the PED-ACT project.

The proposed research is very relevant to the PED EU NET Action. It contributes directly the development of the database, and extract the main characteristics of PED after studying it. Meanwhile, the research will focus on City Energy Analyst tool to develop the digital mode, which will contribute to the development of tools in this cost action.

Potential applicant requirements:

Experience in development of models for buildings and energy systems

Or Experience in machine learning algorithms