

Marie Skłodowska Curie Action – Postdoctoral Fellowship 2023
Expression of interest – Hosting offer
(MSCA-PF-2023)

Contact Person/Scientist in charge <i>(data of the principal investigator of the research group/lab or scientific supervisor)</i>	Name	Tuba	
	Surname	Okutucu Ozyurt	
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Laboratory /Department /Institute /Centre / <i>(data of the centre/department where the fellow would be located)</i>	Name	Energy Institute, Renewable Energy Division, Istanbul Technical University	
	Address	Istanbul Teknik Universitesi, Enerji Enstitusu No: 318 Ayazaga Kampusu, 34469 Maslak, Istanbul, Turkiye	
Research Area <i>(Please select the research area: corresponding to the eight MSCA evaluation panels. You can select between one and up to three scientific areas per EOJ)</i>		Social Sciences and Humanities (SOC) Economic Sciences (ECO) X Information Science and Engineering (ENG) Environment and Geoscience (ENV)	Life Sciences (LIF) Mathematics (MAT) Physics (PHY) Chemistry (CHE)
Brief description of the Centre/Research Group <i>(max. 1,600 characters including spaces: information about the research centre or research group, scientific staff. Please include URL if possible)</i>		<p>Prof. Tuba Okutucu-Ozyurt of ITU Energy Institute is the ITU Coordinator of a continuing Horizon Europe Project (SolarHub), and a researcher of a continuing Horizon 2020 project (SolarTwins), both on concentrated solar energy. She has completed 1 FP7 project (EU-Solaris) as a researcher, and 4 nationally (TUBITAK), 4 institutionally (3 ODTU and 1 ITU) funded projects as the principal investigator (PI). In the ongoing SolarHub Project, 4 faculty members and a PhD student of ITU Energy institute formed a core research group on concentrated solar thermal (CST) energy and are recruiting graduate as well as post doctoral researchers. The group works in collaboration with national and international partners including but not limited to Cogen-Turk, ODTÜ GÜNAM, CRES, CIEMAT-PSA, DLR. Further background information about the core researchers may be found at the following links:</p> <p>https://akademi.itu.edu.tr/okutucuozyurt https://akademi.itu.edu.tr/unercolak https://akademi.itu.edu.tr/kayalica https://akademi.itu.edu.tr/karabetoglu</p>	
Project description <i>(max. 1,800 characters including spaces: short description of the research project / research line where the fellow would be hosted and develop his /her project)</i>		<p>Targeting the minimization of carbon footprint, a numerical and experimental investigation of novel heat transfer fluids and thermal storage materials are proposed for use in CST or hybrid photovoltaic (PV) / CST systems. The intended application area is industrial process heat. Within the scope of the project, a test set-up will be constructed to assess the heat transfer, pressure drop and thermal storage performances of environmentally friendly heat transfer fluids and storage materials. Indoor tests with solar simulators as well as outdoor tests are planned. The results will be supported with accompanying numerical simulations using open sources. The main deliverable of the project will be a classification/suggestion of materials suitable in low-medium, medium-high, and high temperature operation ranges. Both technical and economic applicability of the lab scale measurements to large scale systems will also be assessed. Potential supporters of the proposal include CRES, Greece and CIEMAT-PSA, Spain. Therefore, although not a strict requirement, we especially encourage post-doctoral researchers from these two institutions/countries to apply.</p>	

Applications: documents to be submitted and deadlines

(Please indicate the documents that the candidate fellow should submit to establish contact: CV, letter of motivation, letter of references, etc., please indicate deadline. Recommended deadline: April 2023)

CV, List of Publications, Summaries of MS and PhD Theses should be submitted to Tuba Okutucu <okutucuozyurt@itu.edu.tr> by April 15, 2023.