Report on the outcomes of a presentation and participation - Young Researcher and Innovator Conference[1]

Action number: CA 21126

Applicant name: Daria SZEWCZYK

Conference Details

Conference title: Nanoscale and Microscale Heat Transfer IX International Conference

Conference web-page: https://premc.org/nmht2026/

Conference venue[2]: Berlin, Germany

Accepted contribution details

Title of the presentation: Microscale Heat Transfer and Flexural Phonon Dynamics in Expanded Graphite–MWCNT Composites

Type of the presentation: (oral/~~poster~~) oral

Co-authors: Andrzej Jeżowski, Maksym Barabashko, Galina Dovbeshko, Alexander Krivchkov

Other details of the presentation: specify here any additional details related to the contribution (e.g. title of the session / track of the conference programme in which the contribution is accepted) Phonon Transport Session,2st talk in the session on the 2nd day of Conference, after the morning invited talk

Outcome of the conference participation

Description of the outcome of the presentation of the accepted contribution, in terms of grantee's visibility, including the establishment of new contacts for future collaborations

(max.500 word)

My talk at the *Nanoscale and Microscale Heat Transfer IX International Conference* represented a significant milestone in strengthening my visibility within the field of nanoscale and microscale heat transfer, particularly as an early-career researcher positioning herself as a young expert in this area. The presentation entitled "Microscale Heat Transfer and Flexural Phonon Dynamics in Expanded Graphite–MWCNT Composites" was delivered to a new and highly specialized audience, providing an excellent opportunity to test my ability to communicate complex results on phonon-mediated heat transfer and low-temperature thermal behavior to leading experts in the field.

The presentation was well received, generating engaged questions and constructive feedback during the session and in informal discussions. It also confirmed the relevance and clarity of my work and contributed to increased recognition of my research profile within the heat-transfer and nanoscale

[1] This report is submitted by the grantee to the Action MC for approval and for claiming payment of the awarded grant. The Grant Awarding Coordinator coordinates the evaluation of this report on behalf of the Action MC and instructs the Grant Holder Manager to verify the grant documents compliance and proceed with the payment.

[2] For an online conference, specify virtual participation; for hybrid conferences, specify whether it is an in-person or virtual participation.

thermal physics communities. The conference proved to be an ideal environment to benchmark my work against current international research, gain visibility beyond my immediate research network, and consolidate my scientific standing.

In addition, the conference enabled the renewal of a long-standing professional contact with Prof. Jay Amrit, dating back to the early stage of my PhD. The discussions led to a concrete plan to prepare a joint research proposal, scheduled for submission in June. Furthermore, new collaboration opportunities were initiated with the group of Prof. Saskia Fisher from Humboldt University of Berlin, with close-distance collaboration formats under consideration, as well as with researchers from the Universidad Autónoma de Barcelona.

Overall, the conference participation resulted in enhancing my recognition in the field, expanding my professional network, and opening concrete pathways for future international collaborations.

Acknowledgement of inclusion of necessary supporting documents to claim the grant

I confirm that the following documents have been uploaded on e-COST as an integral part of this report:

- the certificate of conference attendance issued by the conference organiser.

- the programme of the conference or book of abstracts / proceedings indicating the presentation (oral or poster) of the grantee. – no PDF version of the abstract book, only to be viewed online under the link https://premc.org/nmht2026/schedule/ or https://nmht2026.exordo.com/programme/at-a-glance by clicking each day, a printed version of Phonon Transport Session was included in the report.