

Thursday 17 September 2026

8:30 AM - 9:00 AM	Arrival tea/coffee
9:00 AM - 9:45 AM	Plenary Talk: Ken-ichi Uchida , National Institute for Materials Science (NIMS) & The University of Tokyo, Japan Transverse Thermoelectrics and Spin Caloritronics Session Chair: Christophe Candolfi Room: Pentland
9:45 AM - 10:15 AM	Invited Talk: Emmanuel Guilmeau , CRISMAT, CNRS, France Crystal and defect chemistry in thermoelectric sulfides Session Chair: Christophe Candolfi Room: Pentland
10:15 AM - 10:30 AM	Anthony Powell Memorial: Emmanuel Guilmeau Room: Pentland
10:30 AM - 11:00 AM	Morning Break
11:00 AM - 12:15 PM	Novel Material Directions Session Chair: Sylvie Hebert Room: Pentland 11:00 AM - 11:15 AM Kim-Isabelle Mehnert-Birk Enhanced thermoelectric power factor by transition metal substitution in the Kagome metal Ni ₃ Sn 11:15 AM - 11:30 AM Yu Pan Topological thermoelectrics for solid state cooling 11:30 AM - 11:45 AM Sheng Qian Anomalous Nernst Effect and Transverse Thermoelectric Conversion in Co ₂ MnAl-Based Heusler Magnets 11:45 AM - 12:00 PM Jan Koenig Au-Ni thin film thermoelectrics 12:00 PM - 12:15 PM Monika Lužnik Nonlinear transverse transport in Weyl-Kondo semimetals

11:00 AM - 12:15 PM	Composites Session Chair: Muhammet S. Toprak Room: East Terrace 11:00 AM - 11:15 AM Daniela Schönauer-Kamin Powder Aerosol Deposition of Bi_2Te_3: Thermoelectric Properties from Thick Films to Bulk Like Samples 11:15 AM - 11:30 AM Beate Krause Melt-mixed thermoplastic polymer/CNT composites for energy generation through the thermoelectric effect 11:30 AM - 11:45 AM Davide Spirito Toward flexible and conformable thermoelectric energy harvesting based on poly(vinylidene fluoride) with Bi_2S_3 and Bi_2Te_3 11:45 AM - 12:00 PM Savvas Hadjipanteli Composite thermoelectric samples made via cold-press sintering based on PEDOT:PSS aerogels 12:00 PM - 12:15 PM Kaspars Pudzs Thermoelectric Composites Based on Chalcogenide Particles and Organic Charge-Transport Molecules
11:00 AM - 12:15 PM	Applications-3 Session Chair: Eckhard Muller Room: Prestonfield 11:00 AM - 11:15 AM Reshma krishnan Madathil Design and Integration Framework for Thermoelectric Technologies in Buildings 11:15 AM - 11:30 AM Haiyang Li Geometry-Driven Design of Thermoelectric Coolers via Topology Optimization 11:30 AM - 11:45 AM Filip Janasz Quantifying the Effect of Lateral Heat Flux Heterogeneity on the Output of Anisotropic Thermoelectric Heat Flux Sensors 11:45 AM - 12:00 PM José F. Serrano-Claumarchirant Hybrid Thermoelectrics as a Platform for Printable Wearable Energy Harvesting Systems 12:00 PM - 12:15 PM Qian Zhang Three-dimensional flexible thermoelectric network for energy harvesting and sensing
12:15 PM - 1:30 PM	Lunch

1:30 PM - 3:00 PM	Nanomaterials Session Chair: Luis Fonseca Room: Pentland 1:30 PM - 2:00 PM Iris Nandhakumar (Invited Speaker) Enhanced Interfacial Charge Transport in Hybrid Materials for High Thermoelectric Performance 2:00 PM - 2:15 PM Elena Pérez-Picazo Record Thermoelectric Performance at Room Temperature Via Electrodeposited Films of Silver Selenide (Ag₂Se) and Copper Selenide (Cu₂Se) 2:15 PM - 2:30 PM Abayomi Lawal Sustainable Solution Processing of High-Performance PbTe 2:30 PM - 2:45 PM Antonio Mazzacua Nanocrystalline Si Thin Films Grown by Low-Temperature E-Beam Evaporation for Thermoelectric Applications 2:45 PM - 3:00 PM GwangMin Park Nanowire-Bundled Grain Boundaries in Thermoelectric Materials
1:30 PM - 3:00 PM	Materials Theory Session Chair: Ole Martin Løvvik Room: East Terrace 1:30 PM - 2:00 PM Philippe Jund (Invited Speaker) Machine Learning for Thermoelectric Materials Discovery: From Data Curation to Validation 2:00 PM - 2:15 PM Bartłomiej Wiendlocha Electronic structure, transport and lattice dynamics of a novel Cu-based thermoelectric chalcogenide Cu_{6+y}Te_{3-x}S_{1+x}: theoretical study 2:15 PM - 2:30 PM Ankit Kumar Ab initio thermoelectric transport calculations of high entropy materials 2:45 PM - 3:00 PM Romain Claes BaCuP: A Promising Layered Phosphide Thermoelectric from First-Principles and Machine-Learning Simulations

1:30 PM - 3:00 PM	Heusler Modules Session Chair: Aniruddha Ray Room: Prestonfield 1:30 PM - 2:00 PM Michihiro Ohta (Invited Speaker) Thermoelectric waste heat recovery for vehicles with lean-burn spark-ignition engines 2:00 PM - 2:15 PM Geoffrey Roy Improved performances of Fe₂VAl-based thermoelectric modules 2:15 PM - 2:30 PM Panagiotis S. Ioannou Metallization routes for low resistance contacts in p-type (Nb,Ta)FeSb half-Heuslers: experimental characterization and thermoelectric modelling 2:30 PM - 2:45 PM Soufiane Eloualid Diffusion-Controlled Interfacial Evolution in Ti Contacts to n-type Half-Heusler 2:45 PM - 3:00 PM Xiaofang Li Dual High Performance ZrCoBi-based Half-Heusler Module for Thermoelectric Generation
3:00 PM - 3:30 PM	Afternoon Break
3:30 PM - 5:00 PM	Zintl/Heusler-3 Session Chair: Chenguang Fu Room: Pentland 3:30 PM - 3:45 PM Andres Conca Parra Maximizing thermoelectric performance in Fe₂VAlM_x (M=W, Ti) thin films by synergistic combination of chemical ordering and controlled doping 3:45 PM - 4:00 PM Huili Liu P-type to n-type transition in excitonic insulator Ta₂NiSe₅ and its thermoelectric transport 4:00 PM - 4:15 PM Saba Shahgoli High-Performance 14-1-11 Thermoelectrics via Sb-Induced Carrier Tuning in Ca₁₄AlBi_{11-x}Sb_x 4:15 PM - 4:30 PM Blair Kennedy Mechanistic insight into phase formation and fast processing of Cu doped thermoelectric half-Heusler TiNiSn 4:30 PM - 4:45 PM Panagiotis Mangelis The important role of Ti doping in the thermoelectric efficiency improvement of p-type (Nb,Ta)FeSb-based half-Heusler phases 4:45 PM - 5:00 PM Andreas Delimitis Nanostructural Modifications in Ti-doped Nb_xTa_{1-x}FeSb Half-Heusler Thermoelectrics

3:30 PM - 5:00 PM	Measurement and Characterisation Session Chair: António Pereira Gonçalves Room: East Terrace 3:30 PM - 3:45 PM Mahjabeen Fatima Fabrication of robust hBN-Encapsulated Graphene Sensors: A Path to Practical Johnson Noise Thermometry 3:45 PM - 4:00 PM Subhra Sourav Jana Probing Local Electrical Properties at Thermoelectric–Electrode Interfaces via Correlative KPFM and Seebeck Microprobe Techniques 4:00 PM - 4:15 PM Dominique Mattlat Understanding the mechanisms behind Zn-diffusion in Zn₄Sb₃ thermoelectric materials for long term material stability 4:15 PM - 4:30 PM Patricia Carvalho Data-driven design principles of tetrahedrites: Statistical analysis and experimental validation 4:30 PM - 4:45 PM Marc Aceituno Silicon-Based Planar μTEG Platform for the Integration and Evaluation of Thin-Film Thermoelectric Materials 4:45 PM - 5:00 PM František Mihok Accessible thermoelectrics characterization at room temperature and observed anisotropy in polycrystalline SnSe materials
3:30 PM - 5:00 PM	Interfaces and Stability Session Chair: Richard Tuley Room: Prestonfield 3:30 PM - 3:45 PM Li Yin Combining CALPHAD with low-temperature sintered nano-silver forms a powerful technology chain for design and fabrication of high-performance thermoelectric generators 3:45 PM - 4:00 PM Arige Hodroj From material to device: impact of microstructure on oxidation and stability of skutterudites 4:00 PM - 4:15 PM Tianran Wei Plastic deformation and metalworking for inorganic thermoelectric materials 4:15 PM - 4:30 PM Swagata Patra What Makes a Diffusion Barrier Effective for Colusite? 4:30 PM - 4:45 PM Anilkumar Bohra Sustainable Interfacial Engineering in Low-Cost Cu_{6.2}Te_{2.3}S_{1.7} 4:45 PM - 5:00 PM Kyuseon Jang Retarding moisture-induced chemical degradation of Yttrium Tellurides by tailoring grain boundary chemistry

7:00 PM -
11:00 PM

Drinks Reception and Conference Dinner

Dynamic Earth, Holyrood Road, Edinburgh, EH8 8AS

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