

Wednesday 16 September 2026

8:30 AM - 9:00 AM	Arrival tea/coffee
9:00 AM - 9:45 AM	Plenary Talk: Kornelius Nielsch , IFW Dresden, Germany Durable thermoelectric devices made from sustainable magnesium-antimony alloys Session Chair: Olga Caballero Room: Pentland
9:45 AM - 10:15 AM	Invited Talk: Aniruddha Ray , Thermagy, The Netherlands Thermoelectric modules and applications: an industrial perspective Session Chair: Olga Caballero Room: Pentland
10:15 AM - 10:30 AM	Heremans Memorial: Bartek Wiendlocha Room: Pentland
10:30 AM - 11:00 AM	Morning Break
11:00 AM - 12:15 PM	Zintl-2 Session Chair: Johannes de Boer Room: Pentland 11:00 AM - 11:15 AM Umut Aydemir Defect-Mediated Thermoelectric Properties in $A_{14}AlBi_{11}$ ($A = Ca, Sr, Yb$) Zintl Phases 11:15 AM - 11:30 AM Radhika Ravindra Stabilizing $Mg_2(Si,Sn)$ Thermoelectric Materials by Suppressing Mg Sublimation Using Aerogels and Atomic Layer Deposition 11:30 AM - 11:45 AM Theo Renard Increasing the thermoelectric performance of $MgAgSb$ by fine-tuning the $MgAg$ synthesis 11:45 AM - 12:00 PM Xiao Xu Improved Thermoelectric Properties of p-Type Mg_3Sb_2 via Cation Site Confinement for all- Mg_3Sb_2 -Based Module Application 12:00 PM - 12:15 PM Kunpeng Zhao Atomic to Nanoscale Chemical Fluctuations: The Catalyst for Enhanced Thermoelectric Performance in High-Entropy Materials

11:00 AM - 12:15 PM	Exotic Effects Session Chair: Andrej Pustogow Room: East Terrace 11:00 AM - 11:15 AM Krzysztof Wojciechowski From Incommensurate Structure to Transport Functionality in Fe–Ge Nowotny Chimney–Ladder Phases 11:15 AM - 11:30 AM Kacper Pryga Zn-induced topological phase transition and thermoelectric enhancement in SnTe 11:30 AM - 11:45 AM Yunhao Mo Thermoelectric Transport in Monolayer and Bilayer MoS₂ 11:45 AM - 12:00 PM Shuva Biswas Low Energy Shear Vibrations of Sb₂ Bilayer Driving Ultralow Lattice Thermal Conductivity in Homologous (Sb₂)_m(Sb₂Te₃)_n 12:00 PM - 12:15 PM Weishu Liu Thermoelectric Figure-of-Merit: from Electrons to Ions
11:00 AM - 12:15 PM	Current Modules and Beyond Session Chair: Kornelius Nielsch Room: Prestonfield 11:00 AM - 11:30 AM Takao Mori Development of high performance thermoelectric materials & modules for power generation and cooling 11:30 AM - 11:45 AM Dario Narducci Transitioning Thermoelectricity from Static to Dynamic 11:45 AM - 12:00 PM Joaquin Gabriel Miranda Design of PN-junctions for energy converters 12:00 PM - 12:15 PM Aravind Babu Sustainable Hybrid Thermoelectrics: Comparative Performance Analysis of Synthetic Material Integrated with Mined Waste Material and Purely Synthetic Material
12:15 PM - 1:30 PM	Lunch

1:30 PM - 3:00 PM	Chalcogenides-2 Session Chair: Emmanuel Guilmeau Room: Pentland 1:30 PM - 2:00 PM Christophe Candolfi (Invited Speaker) Anomalous Lorenz number in heavily-doped semiconductors 2:00 PM - 2:15 PM Hab. Taras Parashchuk Cu-based chalcogenides for reliable near-room-temperature thermoelectric cooling 2:15 PM - 2:30 PM Jincheng Yu Giant ZT enhancement in rhombohedral GeTe-based thermoelectric materials 2:30 PM - 2:45 PM Florian A. Busch Impact of chemical heterogeneity at grain boundaries on the local thermal conductivity of $\text{Sn}_{1-x}\text{Mn}_x\text{Te}$ thermoelectrics 2:45 PM - 3:00 PM Laura Agnarelli Interplay Between Vacancy Ordering and Transport Properties in Ni-base metal-rich chalcogenides $\text{Ni}_7-\delta\text{SnSe}_2$ and $\text{Ni}_7-\delta\text{SnS}_2$
1:30 PM - 3:00 PM	Electronic Transport Theory Session Chair: Elif Ertekin Room: East Terrace 1:30 PM - 2:00 PM Janusz Tobola (Invited Speaker) Interplay of electronic structure, disorder and complexity to improve the performance of thermoelectric materials 2:00 PM - 2:15 PM Ole Martin Løvvik Competing effects of electron scattering in materials with low-dimensional band structures 2:15 PM - 2:30 PM Saff E Awal Akhtar Anisotropic Scattering and Elongated Bands Lead to Ultra-High Power Factors in Full-Heuslers 2:30 PM - 2:45 PM Illia Serhienko Energy-selective transport as a strategy to minimize the Lorenz number in metallic thermoelectrics 2:45 PM - 3:00 PM Sumit Kukreti Dopant-induced bandstructure and power factor modifications in NbFeSb and NbCoSn

1:30 PM - 3:00 PM	Applications-2 Session Chair: David Astrain Room: Prestonfield 1:30 PM - 2:00 PM Patricia Aranguren (Invited Speaker) Thermoelectric Subcooling Technology to Enhance Vapor Compression Systems 2:00 PM - 2:15 PM Patricia Alegría Thermoelectric Energy Recovery in Dual-Fuel Marine Engines: Waste Heat and LNG Cold Energy Utilization 2:15 PM - 2:30 PM Arne Stumpf Development of Thermoelectric Generators with a Manufacturing-Friendly Design for Stationary and Mobile Applications 2:45 PM - 3:00 PM Mirosław Mrozek Multichannel Power Conditioning System for TEG Arrays Under Non-Uniform Temperature Distribution Using a Modified Sine-Cosine MPPT Algorithm
3:00 PM - 6:00 PM	Poster Session and Afternoon Break Room: South Hall (located in a separate building from the main conference venue)
6:00 PM - 7:30 PM	Evening Excursion (pre-booking only): Walking Tour of Edinburgh or Whisky Tasting