



SCIENTIFIC PROGRAM

21ST EUROPEAN CONFERENCE
ON THERMOELECTRICS

FROM MONDAY 8TH TO FRIDAY 12TH SEPTEMBER 2025.



General overview

Monday, 8 Sept.	Tuesday, 9 Sept.	Wednesday, 10 Sept.	Thursday, 11 Sept.	Friday, 12 Sept.
Registration at City Hall & Welcome party 17:00 – 21:30	Welcome participant 8:00– 8:30			
	Introduction 8:30–9:00	Welcome participant 8:30–9:00		
	Plenary 9:00–9 45 Paz Vaqueiro	Plenary 9:00–9 45 Atsushi Togo	Plenary 9:00–9 45 Olga Caballero	Plenary 9:00–9 45 Thierry Caillat
	Invited talks 9:45–10:15			Coffee Break 9:45–10:15
	Coffee break 10:15–10:45			Sessions Regular talks 10:15–11:15
	Sessions Regular talks 10:45–12:00			
	Lunches 12:00–13:30			Aryan Sankhla - ETS thesis 11:15–11:45
				Conclusion 11:45–12:15
				Lunch 12:15–13:30
	Sessions Regular & Invited talks 13:30–15:00		Sessions Regular & Invited talks 13:30–15:15	Farewell - Departure
	Coffee Break 15:00–15:30	Poster Session 15:00–17:00		
	Sessions – Regular talks 15:30–17:00			
			Coffee Break 15:15–15:45	
		Sessions Regular talks 15:45–17:00		
		Gala dinner		
		Group departure at 17:30 17:30–22:30		

TUESDAY, 9 SEPT | MORNING

8:00	Welcome participant		
8:30 9:00	Introduction & ETS General Assembly – Auditorium 300		
9:00 10:15	Auditorium 300 Chair: Antonio Pereira Goncalves		
9:00	Lone pairs as a design strategy for thermoelectric materials Paz Vaquero <i>University of Reading, United Kingdom</i>		
9:45	Emerging thermoelectric properties from semimetal to semiconductor Susan Kauzlarich <i>UC Davis, USA</i>		
10:15	<i>Coffee Break</i>		
	Auditorium 300	Room 201	Room 101
10:45 12:00	Zintl phases Chair: Johannes de Boor	Thin films 1 Chair: Marie-Christine Record	Theory 1 Chair: Bartłomiej Wiendlocha
10:45	Exploring High-Temperature Thermoelectric Properties of $(\text{Ca}, \text{Sr})_{14}(\text{Al}, \text{Ga}, \text{In})(\text{Sb}, \text{Bi})_{11}$ Zintl Phases Umut Aydemir <i>Koç University, Istanbul, Türkiye</i>	Thin Film Nanodecoration and Nanostructuring Techniques to Enhance Thermoelectric Efficiency in Silicon Micro-Thermoelectric Generators Marc Aceituno <i>(IMB-CNM-CSIC, Bellaterra, Spain)</i>	Theoretical study of electronic structure and transport properties of halfmetallic ferromagnetic $\text{Cu}_2\text{FeSnS}_x\text{Se}_{4-x}$ with strong electron correlations Dariusz Wiczorek <i>University of Krakow, Krakow, Poland</i>
11:00	Grain Boundary Electrical Resistance in the High Temperature Thermoelectrics $\text{Yb}_{14}\text{MgSb}_{11}$ and La_3Te_4 Duncan Zavanelli <i>Northwestern University, Evanston, USA</i>	Heavily Doped p-type Silicon Nanopillars Obtained by Metal-Assisted Chemical Etching for Thermoelectric Applications Federico Giulio <i>University of Milano-Bicocca, Milano, Italy</i>	A high-throughput framework for ab initio deformation potential extraction for thermoelectric materials Zhao Yao <i>University of Warwick, Coventry, UK</i>
11:15	Grain Boundary Engineering to Enhance $\text{Mg}_2(\text{Si}, \text{Sn})$ Stability Amandine Duparchy <i>German Aerospace Center, Cologne, Germany</i>	Design and optimization of flexible free-standing PEDOT:PSS-based thermoelectric composites Adrianna Lis <i>AGH University of Krakow, Krakow, Poland</i>	Electronic properties of thermoelectric pseudo-hollandite and hollandite-like phases Bruno Fontaine <i>ISC Rennes, Rennes/ Saint-Cyr, France</i>
11:30	A computational study on type-I Sn clathrates with inorganic and organic guests Nikolaos Kelaidis <i>National Hellenic Research Foundation, Athens, Greece</i>	Energy Filtering in Heavily Boron-Doped SiGe Thin Films Antonio Mazzacua <i>University of Milano Bicocca, Milan, Italy</i>	When are elongated bands most effective for the power-factor? Sahni Bhawna <i>University of Warwick, UK</i>
11:45	Improved thermoelectric performance in very finely grained $\text{Co}_{0.91}\text{Ni}_{0.09}\text{Sb}_3$ skutterudites Johari Kishor Kumar <i>Univ Paris Est Creteil, CNRS, Thiais, France</i>	Thermoelectric properties of Nb doped ScN multilayer structures Joris More-Chevalier <i>Institute of Physics of the Czech Academy of Sciences, Praha, Czechia</i>	The use of descriptors within featurization for improved machine learning prediction of half-Heusler thermoelectric materials Ramalingam Nirmal Kumar <i>University of Warwick, Coventry, UK</i>
12:00 13:30	<i>Lunch</i>		

TUESDAY, 9 SEPT | AFTERNOON

	Auditorium 300	Room 201	Room 101
13:30 15:00	Half-Heuslers 1 Chair: Eric Alleno	Organic materials Chair: Mickaël Beaudhuin	Device 1 Chair: Dario Narducci
13:30	Recent developments in n-type XNiSn half-Heusler thermoelectrics using Cu dopants Jan-Willem G. Bos University of St Andrews, Scotland	Performance of thermoelectric PEDOT:PSS composite films with Bi _{0.4} Sb _{1.6} Te ₃ Savvas Hadjipanteli University of Cyprus, Nicosia, Cyprus	Coupling of a Genetic Algorithm and a Thermoelectric Network Model for Radioisotope Thermoelectric Generator (RTG) Optimisation Stylianos Kyrimis Institute of Materials Research, German Aerospace Centre (DLR)
13:45		Polymorphism Controls Thermoelectric Properties In Oriented PBTtT Films Said Oummouch University of Strasbourg, Strasbourg, France	Fabrication of Thermoelectric Devices Based on Colusites Koichiro Suekuni Kyushu University, Kasuga, Fukuoka, Japan
14:00	Thermoelectric properties of single-crystalline TiCoSb-based half-Heuslers Jun Mao Harbin Institute of Technology, Shenzhen, P.R. China	From macromolecular engineering and doping efficiency to structural control and device engineering, the latest advances in polymer thermoelectrics Laure Biniek Institut Charles Sadron (ICS), Strasbourg, France	Digital and scalable laser-based fabrication of reusable bismuth telluride thermoelectrics with superior performance and mechanical flexibility Isidro Florenciano Cano Department of Materials Engineering (MTM), KU Leuven
14:15	Improved Thermal Stability of NbCoSn Half-Heusler compounds via Sb Doping-induced Complementary Point Defect Evolution Kyuseon Jang Max Planck Institute for Sustainable Materials, Germany		Planar Silicon-Based μTEG Test Platform for Evaluating Thermoelectric Materials and Optimizing Thermal Management Alex Rodriguez-Iglesias IMB-CNM-CSIC, Bellaterra, Spain
14:30	Half-Heusler thermoelectric compounds with intrinsically low thermal conductivity Fu Chenguang Zhejiang University	Graphene-based Organic semiconductor composites for low-temperature grade energy harvesting: from cell to module Muhammad Sajid University of Rome Tor Vergata, Rome, Italy	Thermoelectricity as an energy source for the powering of industrial IoT sensors: use cases and perspectives Dimitri Taïnoﬀ Institut Néel – Start-up Moïz, Grenoble, France
14:45	p-type Dopability in Half-Heusler Thermoelectric Semiconductors Lirong Hu Zhejiang University, Hangzhou, China	Role of Polymer Electrodes for Liquid and Gelified Thermoelectrochemical Redox Systems for waste-heat recovery applications Momna Haq University of Rome Tor Vergata, Rome, Italy	
15:00 15:30	Coffee Break		

TUESDAY, 9 SEPT | AFTERNOON

	Auditorium 300	Room 201	Room 101
15:30 17:00	Half-Heuslers 2 Chair: Jun Mao	Emerging materials Chair: Koichiro Suekuni	START WORKSHOP
15:30	Cation-deficient Half-Heusler Thermoelectric Materials Tiejun Zhu <i>Zhejiang University, Hangzhou, China</i>	Direct electron cooling at millikelvin temperatures with quantum-well heat pump Matthew Grayson <i>Program in Applied Physics Northwestern University, USA</i>	15:15– 17:00 Round Table with Marisol Martín-Gonzalez Filipe Neves Hao Yin Aniruddha Ray Frederic Lani Kornelius Nielsch Vicente Pacheco
15:45	New efficient thermoelectric half-Heusler compositions from Machine Learning Philippe Jund <i>ICGM, Univ. Montpellier, CNRS, ENSCM, Montpellier France</i>	Transverse thermoelectric effect in WSi₂ with/without magnetic field Shoya Ohsumi <i>Fac. of Science and Technology, Tokyo Univ. of Sci.</i>	
16:00	Heavier element substitution in <i>p</i>-type Fe₂VAl Heusler alloy Moorthy Manojkumar <i>Univ. Paris Est. Creteil, CNRS, ICMPE, THIAIS, France</i>	Thermoelectric properties of kagome metals Ni₃Sn and Ni_{3-x}Co_xSn Shogo Yoshida <i>Department of Physics and Astronomy, Tokyo University of Science</i>	
16:15	Dominance of Coulombic scattering in the power factor of half Heuslers Rajeev Dutt <i>University of Warwick, Coventry, UK</i>	Decoupling electrical and thermal properties in Ca₁₂Al₁₄O_{33-δ} ceramics Jesus Prado-Gonjal <i>Universidad Complutense de Madrid, Madrid, Spain</i>	
16:30	Plastic deformation mechanism of single-crystal thermoelectric materials Tianyu Zhang <i>Harbin Institute of Technology, Shenzhen, China</i>	Thermoelectric Potential of Te-Free Diamond-Like Cu_{2-x}Ag_xIn₂Se₄ Chalcopyrites: Low Thermal Conductivity and High Carrier Mobility Federico Serrano-Sanchez <i>CSIC, Cantoblanco, Madrid, Spain</i>	
16:45	Prefer-oriented Ag₂Se crystal for high-performance thermoelectric cooling Jiang Feng <i>Harbin Institute of Technology, China</i>	Frustrated vacancy order in diamagnetic metal Kutinaite Ag₆Cu_{14.4}As₇ Pavan Kumar Ventrapati <i>SRM University Amravati-AP, Mangalagiri, Andhra Pradesh, India</i> <i>Department of Chemistry and iNANO, Aarhus University, Aarhus, Denmark</i>	

WEDNESDAY, 10 SEPT | MORNING

8:30	Welcome participant		
9:00 10:15	Auditorium 300 Chair: Janusz Tobola		
9:00	Computational strategies for modeling transport: electron, phonon, and machine learning Atsushi Togo <i>National Institute for Materials Science (NIMS), Tsukuba, Japan</i>		
9:45	Combining the Power of High-Throughput Ab Initio Calculations and Machine Learning towards Materials Informatics Gian-Marco Rignanese <i>Université Catholique de Louvain, Belgique</i>		
10:15	<i>Coffee Break</i>		
	Auditorium 300	Room 201	Room 101
10:45 12:00	Chalcogenides 1 Chair: Eleonora Isotta	Oxides Chair: Sylvie Hébert	Device 2 Chair: Guillaume Savelli
10:45	The devil is in the detail(s): How to get the synthesis of high performance MgAgSb right? Johannes De Boor <i>German Aerospace Center (DLR, Cologne, Germany)</i> <i>University of Duisburg-Essen, Duisburg, Germany</i>	Oxide Thermoelectric Materials – Challenges and Opportunities Kriti Tyagi <i>CSIR-National Physical Laboratory, New Delhi, India</i> <i>AcSIR, Ghaziabad, Uttar Pradesh, India</i>	Thermoelectric Metamaterials for Enhanced Power Generation Modules Xanthippi Zianni <i>National and Kapodistrian University of Athens, Greece</i>
11:00	Crystal structure and thermoelectric properties of Cu₃₀Ti₆Sb₂S₃₂ and Cu₇VSnS₈: New phases discovered with the pseudo-binary approach Pierric Lemoine <i>Université de Lorraine, CNRS, IJL, Nancy, France</i>	Spark Plasma Sintering: an efficient tool for thermoelectric oxides Fabien Giovannelli <i>University of Tours, INSA Centre Val de Loire, France</i>	Investigation of Titanium as a Potential Diffusion Barrier in Bismuth Telluride Thermoelectric Generators Ilayda Terzi <i>Institut Jean Lamour, UL, Nancy, France</i>
11:15	Defect controlled thermal and electric properties of single crystalline Bi₂O₂Se Jiri Hejtmanek <i>Institute of Physics of the Czech Academy of Sciences, Prague, Czech Republic</i>	Decoupling the Electrical Conductivity and Thermopower by Chemically Manipulating Ni²⁺/Ni⁰ and Ti⁴⁺/Ti³⁺ Redox Pairs in Ni-doped Sr(Ti,Nb)O₃ Michitaka Ohtaki <i>Kyushu University, Kasuga, Fukuoka, Japan</i>	Ultra-low Power Thermoelectric Sensor for Sweat Rate Monitoring Ping Sun <i>Harbin Institute of Technology, Shenzhen, Guangdong, China</i>
11:30	High thermoelectric performance in novel Cu-based chalcogenide with Cr₃Si-type structure Oleksandr Cherniushok <i>AGH University of Krakow, Krakow, Poland</i>	Electrochemical and thermoelectric properties of multicomponent oxides Tadeusz Miruszewski <i>Gdańsk University of Technology, Gdańsk, Poland</i>	Design of Oxide Thermoelectric Uni-leg Modules Yoshimi Shimizu <i>Department of Applied Physics, Graduate School of Engineering, Tohoku University</i>
11:45	Crystal structure and transport properties of Cu_{2-x}Ag_xSn_{1-y}Ga_ySe₃ Arthur Wieder <i>Institut Jean Lamour, UL, Nancy, France</i>	Cost-Effective Performance Enhancement: How High-Entropy Engineering Optimizes In₂O₃-Based Thermoelectric Oxides Jia Chuang <i>Université Paris-Saclay, Gif sur Yvette, France</i>	Smart Thermoelectric IIoT for Steam Trap Leak Detection: A Sustainable Approach Raúl Aragonés <i>Alternative Energy Innovations SL, Terrassa, Spain</i> <i>UAB, Edifici Q, Barcelona, Spain</i>
12:00	<i>Group photo – 15 min</i>		
12:15 13:30	<i>Lunch</i>		

WEDNESDAY, 10 SEPT | AFTERNOON

	Auditorium 300	Room 201	Room 101
13:30 15:00	Theory 2 Chair: Neophytos Neophytou	Lattice dynamics 1 Chair: Stéphane Pailhès	Device 3 Chair: Olivier Fenwick
13:30	Resonant Levels in Thermoelectrics: What They Are and How They Work in Metals and Semiconductors Bartłomiej Wiendlocha <i>AGH University of Krakow, Pologne</i>	Mechanochemical Synthesis and Low-Energy Phonon Scattering in Mixed-Anion Chalcogenides $\text{Bi}_{13}\text{S}_{18}\text{X}_2$ (X = I, Br, Cl) Tiadi Minati <i>Laboratoire CRISMAT, CNRS, Caen, France</i>	Tuning ionic thermoelectric behaviour of Lignin derived hydrogels Mario Culebras Rubio <i>ICMUV, Universitat de València, Paterna, Spain</i>
13:45		Exploring Defect-Driven Phonon Dynamics in GeTe: Raman and Thermal Perspectives Vinayak Kamble <i>Indian Institute of Science Education and Research Thiruvananthapuram, India</i>	Thermoelectric Flexible Module with Anodized Aluminum Substrate Hitoshi Kohri <i>Kogakuin University, Shinjuku, Japon</i>
14:00	Enhanced Thermoelectric Performance of PbSnTeSe High-Entropy Alloys via Magnetic Doping and Strain Engineering Pascal Boulet <i>Aix-Marseille University, Marseille, France</i>	Inelastic Neutron Scattering, an Experimental Tool for Understanding Phonons and Diffusion Processes in Thermoelectric Materials Michael Marek Koza <i>Institut Laue Langevin (ILL), Grenoble, France</i>	Life Cycle Assessment (LCA) as a Design Tool for Sustainable Thermoelectric Materials, Modules and Systems Geoffrey Roy <i>Institute of Mechanics, UCLouvain, Belgium</i>
14 :15	Scattering exponent approximation for complex electronic structure thermoelectric materials from ab initio calculations Yuji Go <i>University of Warwick, Coventry, UK</i>		Elevating the thermoelectric performance in the sub-ambient temperature range for electronic refrigeration Xiaojing Ma <i>Harbin Institute of Technology, Shenzhen, China</i>
14:30	Quantifying the impact of band change upon alloying on the power factor Ankit Kumar <i>University of Warwick, UK</i>	Unraveling the Lattice Dynamics of Silicides: Strategies for Improved Thermoelectric Efficiency Mickael Beaudhuin <i>ICGM, Univ Montpellier, CNRS, Montpellier, France</i>	Perspective on thermoelectric applications of heat pump, cooling and geothermal energy David Astrain <i>University of Navarre, Spain</i>
14:45	A novel method for evaluating dimensionless thermoelectric properties of fine-grained n-type Bi_2Te_3 by scattering parameter γ, materials parameter β, and reduced Fermi energy η at room temperature Ayumu Iijitsu <i>Tokushima University, Tokushima, Japan</i>	s-d Coupling Induced Dynamic Off-centering of Cu Drives High Thermoelectric Performance in TiCuS Animesh Bhui Animesh <i>New Chemistry Unit), Jakkur P.O., Bangalore, India</i>	
15:00 17:00	Poster session – Foyer 850 – 2 nd floor		

THURSDAY, 11 SEPT | MORNING

8:30	Welcome participant		
9:00 10:15	Auditorium 300 Chair: Jan König		
9:00	Driving Innovation and Empowering Wearables: Advances in Thermoelectric Generators for Automotive and Body Heat Harvesting Olga Caballero <i>Instituto de Micro y Nanotecnología (IMN-CNM) of the Spanish Research Council (CSIC), Madrid, Spain</i>		
9:45	Advancing Thermoelectrics to Market: An Industrial Perspective Richard Tuley <i>European Thermodynamics, UK</i>		
10:15	<i>Coffee Break</i>		
	Auditorium 300	Room 201	Room 101
10:45 12:00	Chalcogenides 2 Chair: Tetiana Tavrina	Emerging materials 2 Chair: Jiri Hejtmanek	START project / SOLAR-TEG Chair: Peter Baláz
10:45	Defect Engineering in Cu-Based Diamond-Like Chalcogenides for Enhanced Energy Conversion Taras Parashchuk <i>AGH University of Krakow, Krakow, Poland</i>	Semiconducting-to-metallic transition leading to large n-type Seebeck coefficient in a copper thiolate-based coordination polymer Chloe Andrade <i>Univ Lyon 1, CNRS, Villeurbanne, France</i>	Temperature-Driven Electrochemical Separation of Oxygen Krzysztof Wojciechowski <i>University of Science and Technology, Krakow, Poland</i>
11:00	Manipulating Charge Carrier in Thermoelectric Sulfides Xiaoyuan Zhou <i>College of Physics, Chongqing University</i>	Seebeck coefficient measurement in bidimensional thickness dependant topologically insulated WSe₂ Nathan Aubergier <i>Université Grenoble Alpes, Grenoble, France</i>	Thermoelectric-Based Energy Harvesting System with Integrated Electromagnetic Induction Unit Mert Şener <i>Balikesir University, Balikesir, Türkiye</i>
11:15	Process-controlled defect engineering and intrinsic low thermal conductivity in layered Cu₂ZrS₃ Carmelo Prestipino <i>Laboratoire CRISMAT, UMR 6508, Caen, France</i>	Towards a better understanding of the complex defect diffusivity in Mg₂Si/metal contact interfaces using Kelvin Probe Force Microscopy Emily Beck Sarah <i>University of Duisburg-Essen, Duisburg, Germany</i>	Personalized Thermal Management through Thermoelectric Technology and Textile-based Heat Exchange Systems Giovanna Latronico <i>CNR - ICMATE, Lecco, Italy</i>
11:30	Improved thermoelectric efficiency of Sb₂Si₂Te₆ through yttrium-induced nanocompositing Kivanc Saglik <i>Nanyang Technological University, Singapore</i>	Thermal conduction in free-standing monolayer MoS₂ and its nanoscroll Liu Huili <i>ShanghaiTech University, Shanghai, China</i>	Concept of Solar Tri-generation Using Cold-Side Time-Modulated Heat Withdrawal Dario Narducci <i>University of Milano Bicocca, Milan, Italy</i>
11:45	Improving Thermoelectric Efficiency of Hybrid Lignin-Copper Iulfide Materials Clara Maria Gomez <i>ICMUV, Universitat de València, Paterna, Spain</i>	Electrical transport and Seebeck measurements in highly disordered channels buried in diamond Sana Salami <i>CNRS, University Lyon 1, Lyon, France</i>	The Impact of Electrical Connections on Maximum Power Point Tracking within Hybrid Photovoltaic-Thermoelectric Devices Mashiul Huq <i>Institut Jean Lamour, UL, Nancy, France</i>
12:00 13:30	<i>Lunch</i>		

THURSDAY, 11 SEPT | AFTERNOON

	Auditorium 300	Room 201	Room 101
13:30 15:00	Additive manufacturing Chair: Geoffrey Roy	Nano Materials Chair: Marisol Martín-Gonzalez	Device 4 Chair: Nicole Fréty
13:30	Leveraging Additive Manufacturing to Re-envision Thermoelectric Systems Saniya LeBlanc <i>George Washington University, USA</i>	Scalable Solution Chemical Synthesis of Nanostructured Thermoelectric Materials Bejan Hamawandi <i>Institute of Solid State Physics, University of Latvia, Riga, Latvia</i>	Development of Reliable Interfacial Barrier for Low-Cost Argyrodite Thermoelectric Module Anilkumar Bohra <i>AGH University of Krakow, Krakow, Poland</i>
13:45		Solution-based synthesis of inorganic metal chalcogenide particles: Methods and thermoelectric properties analysis Mohammad Waqar Uddin Siddiqui <i>Univeristy of Caen Normandy, France</i>	Effect of gamma radiation on Mg-based thermoelectric materials Antonio Pereira Goncalves <i>Universidade de Lisboa, Bobadela, Portugal</i>
14:00	Laser Sintering of Thermoelectric Chalcogenides Nanopowders Carlo Fanciulli <i>CNR-ICMATE, Lecco, Italy</i>	Optimizing Thermoelectric Materials: Balancing Performance, Cost, and Sustainability Maria Ibañez <i>Institute of Science and Technology Austria, Klosterneuburg, Austria</i>	Oxidation of skutterudites and their protective coatings: a comparative study Arige Hodroj <i>Univ Rennes, CNRS, Rennes, France</i>
14:15	Silicon Germanium alloys developed by additive manufacturing: influence of thermal treatments Guillaume Savelli <i>Univ. Grenoble Alpes, CEA, Liten, Grenoble, France</i>		Oxidation Behavior and Integration into High Power Density Thermoelectric Generators of Commercial Half-Heusler Alloys Soufiane El Oualid <i>Institut Jean Lamour, UL, Nancy, France</i>
14:30	Additive screen-printed 3D thermoelectric generators for energy harvesting Mallick Mofasser <i>Light Technology Institute, KIT, Karlsruhe, Germany</i>	Seeking for high-performance Ag₂Se using a sustainable solution synthesis Francesco Milillo <i>Institute of Science and Technology Austria, ISTA</i>	Thermoelectric Measurement Methods: From Transport Properties to Generator Characterization Pawel Ziolkowski <i>Deutsches Zentrum für Luft- und Raumfahrt (DLR, German Aerospace Center, Cologne, Germany)</i>
14:45	Tailoring the microstructure and thermoelectric properties of CuNi and NiCr by laser powder bed fusion Karolin Amstein <i>IFW Dresden, Dresden, Germany</i>	Enhancement of Thermoelectric and Flexibility Performance of Bi-Sb-Te Thin Films <i>via</i> MAPbI₃ Composite Strategy Dong Yang <i>Univ Rennes, Rennes, France</i>	
15:00		Induction melting synthesis of Mg-based thermoelectric materials Beatriz Santos <i>Universidade de Lisboa, Bobadela LRS, Portugal</i>	Comprehensive Insights into the Carbon Footprint and Energy Intensity of Thermoelectric Generator (TEG) Production through Life Cycle Analysis Amir Pakdel <i>The University of Dublin, Dublin, Ireland</i>
15:15 15:45	Coffee Break		

THURSDAY, 11 SEPT | AFTERNOON

	Auditorium 300	Room 201	Room 101
15:45 17:00	Lattice dynamics 2 Chair: Emmanuel Guilmeau	Thin films 2 Chair: Latronico Giovanna	Theory 3 Chair: Philippe Jund
15:45	Glass Like Thermal Conductivity in n-type Pb-Sb-Sn-based Sulfide Mineral: Interstitial Rattling and Soft Phonon Modes Krishnendu Maji <i>Institute of Science and Technology Austria, Austria</i>	Thermoelectric Properties of (MoO₃)_x-doped C₆₀ films Masato Nakaya <i>Nagoya University, Japan</i>	Amorphous-like thermal conductivity and high thermoelectric figure of merit in "π" SnS and SnSe Min Zhang <i>University of Manchester, UK</i>
16:00	Stability and lattice dynamics of thermoelectric type IX Clathrates Romain Viennois <i>ICGM, Univ Montpellier, ENSCM, Montpellier, France</i>	Tailoring Defects in ScN Thin Films via Ion Implantation Charlotte Poterie <i>Université de Poitiers-ENSMA, Poitiers, France</i>	Structural and stacking fault modelling of low-density Cu_{2+y}Zn_{1-y}SnS_{4-x}Se_x systems for thermoelectric applications Marcelo Malagutti <i>University of Trento, DICAM, Trento, Italy</i>
16:15	Phonon Transport in K₃SbS₄ Solid-State Battery Incorporating an Ion Diffusion Mechanism Using Machine Learning You Hao-Jen <i>Institute of Physics, Academia Sinica, Taipei, Taiwan</i>	Influence of electron-phonon coupling and phonon-drag effect at interfaces on the electronic and thermoelectric transport properties of thin films Max Marrot <i>CNRS and University Lyon 1, Lyon, France</i>	Tuning of electronic structure and thermoelectric properties via defects engineering in Cu_{8-x}Si(S₃Se₃)_{1-y}ly argyrodites Janusz Tobola <i>AGH University, Krakow, Poland</i>
16:30	Decoupling Thermoelectric Parameters in CuCrO₂: Role of Interlamellar Porosity via Zn²⁺, Mg²⁺, and Ni²⁺ Multi cation-Doping Sanam P.k Jamshina <i>University of Calicut, Malappuram, Kerala, India</i>	Non-Contact Electrical and Thermal Characterizations of Electrodeposited SnSe Films Axel Tahir <i>Université de Lorraine, CNRS, IJL, Metz, France</i>	Enhancing thermoelectric properties of n-type (Pb-Sn)Te via resonant doping Kacper Pryga <i>AGH University of Krakow, Krakow, Poland</i>
16:45	Electron-phonon interaction-driven phonon transport attenuation above ambient temperature Wentian Li <i>Zhejiang University, Hangzhou, China</i>	Relative Leg-Height Optimized Micro-Thermoelectric Devices Bharadwaj Pulumati Nithin <i>TU Dresden, Dresden, Germany</i>	
17:30	<i>Group departure to the Gala Dinner at the Abbaye from the Center Prouvé</i>		

FRIDAY, 12 SEPT | MORNING

8:30	Welcome participant		
9:00 9:45	Auditorium 300 Chair: Eckhard Müller		
9:00	Radioisotope Thermoelectric Generators for US Space Missions: Past, Present, and Future Thierry Caillat <i>Jet Propulsion Laboratory (JPL), NASA, Pasadena, USA</i>		
9:45	<i>Coffee Break</i>		
	Auditorium 300	Room 201	Room 101
10:15 11:00	Device 5 Chair: Eckhard Müller	Chalcogenides 3 Chair: Taras Parashchuk	Emerging materials 3 Chair: Carlo Fanciulli
10:15	A Support to Deep Space Exploration: Transuranium Thermoelectrics Properties Studies Jean-Christophe Griveau <i>European Commission, JRC, Karlsruhe, Germany</i>	Multinary sulphides for thermoelectrics: Mechanochemical synthesis via industrial milling Peter Balaz <i>Slovak Academy of Sciences, Košice, Slovakia</i>	Halide perovskites as thermoelectric materials Oliver Fenwick <i>Queen Mary University of London, UK</i>
10:30	Silicide thermoelectric modules based on high purity Si and recycled Si-kerf Panagiotis S. Ioannou <i>University of Cyprus, Nicosia, Cyprus</i>	Magneto-thermoelectric properties of selected sulfides Sylvie Hebert <i>Normandie Université, CNRS, Caen, France</i>	The Potential of High-Entropy Oxides: Insights from Perovskite Structures Adrien Moll <i>ICMMO, University Paris-Saclay, Orsay, France</i>
10:45	Primary and Secondary Properties of Amorphous TiNiSn for Flexible Thermoelectric Devices Sana Khayyamifar <i>Malmö University, Malmö, Sweden</i>	Solid solution alloying strategy to enhance thermoelectric efficiency of layered metal chalcogenides; (Bi, Sb)₂Te₃, Bi₂(Se, Te)₃ and beyond Sang-Il Kim <i>University of Seoul, South Korea</i>	Optimization of Copper Iodide nanoparticle based composite thermoelectric material Oskars Bitmets <i>Institute of Solid State Physics, University of Latvia</i>
11:00	<i>Thermal Wave Dynamics and Thermoelectric Transport in InGaAs/GaAs Superlattices</i> Ankur Chatterjee <i>Nicolaus Copernicus University, Torun, Poland</i> <i>Ruhr-University Bochum, Bochum, Germany</i>	Thermal conductivity imaging to advance microstructure engineering in thermoelectrics Eleonora Isotta <i>Max-Planck-Institute for Sustainable Materials, Düsseldorf, Germany</i>	V₂Se₂O and Janus V₂SeTeO: Monolayer altermagnets for thermoelectric applications? Shubham Singh <i>PSE, KAUST, Thuwal, Saudi Arabia</i>
11:15 11:45	Interplay between composition, electronic band structure and electronic transport properties in n-type Mg₂X (X: Si, Sn) materials Dr. Aryan Sankhla – ETS PhD Award Winner <i>Justus-Liebig-University Giessen and DLR, Germany</i>		
11:45 12:15	<i>Poster awards</i> <i>Announcement ECT2026</i>		
12:15 13:30	<i>Lunch</i>		



LIST OF POSTERS



Thermoelectric Materials & Processing

P01	Emmanuel Guilmeau <i>CRISMAT, France</i> Insights Into the Crystal Chemistry of Thermoelectric Sulfides, Halides and Sulfochlorides
P02	Cecilia Piscino <i>University of Genova, Italy</i> Tailoring Thermoelectric Properties in Double-Filled Skutterudites $(\text{La,Sm})_y(\text{Fe}_x\text{Ni}_{1-x})_4\text{Sb}_{12}$: Insights from Bulk and Thin-Film Studies
P03	Hiroaki Konishi <i>Tohoku University, Japan</i> Preparation and Thermoelectric Properties of Doubly-Substituted Fe-based Half-Heusler Alloys $(\text{V}_{1-x}\text{Ti}_x)(\text{Fe}_{1-y}\text{Co}_y)\text{Sb}$
P04	Nan Luo <i>Karlsruhe Institute of Technology, Germany</i> Screen-Printed Ag_2Se Fabric for High-Performance Thermoelectric Energy Harvesting
P05	Adriana Maurucaite <i>University of Latvia, Latvia</i> Thermoelectric Composite Systems: Applications of Organic Low Molecular Weight Compounds with Nano and Microparticles
P06	Yuechu Wang <i>Zhejiang University, China</i> Iterative Sublattice Amorphization Facilitates Exceptional Processability in Inorganic Semiconductor
P07	Arthur Wieder <i>Institut Jean Lamour, France</i> Lattice Symmetry as a Key Factor Governing the Thermoelectric Properties of Cu_2SnSe_3 -based Compounds
P08	Sonia Sahir <i>CRISMAT, France</i> Crystal Structures and Thermoelectric Properties in the Cu-Sn-S system
P09	Michal Szot <i>Polish Academy of Sciences, Poland</i> Two-Phase Thermoelectric PbTe - CdTe Nanocomposite
P10	Abdelkader Alleg <i>Laghout University, Algeria</i> Thermoelectric Properties of Filled Skutterudites $\text{ThFe}_4\text{P}_{12}$ and $\text{CeFe}_4\text{P}_{12}$ Using DFT calculations
P11	Ilayda Terzi <i>Institut Jean Lamour, France</i> Addressing Instability in n-Type SnTe - PbTe Thermoelectrics via Phase Equilibria Investigations

P12	Andrés Conca <i>Instituto de Micro y Nanotecnología, Spain</i> Thermoelectric Properties of W- and Ti-Doped $\text{L}_{21}\text{Fe}_2\text{VAl}$ Epitaxial Thin Films Grown by Magnetron Sputtering
P13	Ketan Lohani <i>Instituto de Micro y Nanotecnología, Spain</i> Nanoporous Substrate-Driven Nanostructuring for Enhanced Thermoelectric Performance of SiGe Alloy
P14	Anjan Karmakar <i>Institut Jean Lamour, France</i> Optimization of Contact Elements in Bismuth Telluride and Half-Heusler Based Segmented Thermoelectric Generators
P15	Jesús Prado-Gonjal <i>Universidad Complutense de Madrid, Spain</i> Thermoelectric optimization via compositional engineering in Ag-deficient AgSbTe_2
P16	Tetiana Tavrina <i>University of Bonn, Germany</i> Thermoelectric Properties of Few-Layer Transition Metal Dichalcogenides
P17	Rana Ghannam <i>Institut Jean Lamour, France</i> Comparative Study of the Thermoelectric Properties of High-Entropy Semiconductor (HES) AgMnGePbSbTe
P18	Helmut Baumgart <i>Old Dominion University, United States</i> Realization of Thermoelectric Film Nanopatterning by Atomic Layer Deposition and Porous Template Replication
P19	Shen Han <i>Zhejiang University, China</i> Filling Faults and Vacancy Swap Occupation in Half-Heusler Compounds
P20	Héloïse Martin-Victorine <i>CEA, France</i> Effect of a Heating Plate on SiGe Alloys Manufacturing by Laser Powder Bed Fusion
P21	Kaspars Pudzs <i>University of Latvia, Latvia</i> Exploring the Thermoelectric Characteristics of Cold-Pressed Copper Iodide Composites
P22	Niraj Singh <i>Uppsala Universitet, Sweden</i> CrN Based Thin Films for Thermoelectric Applications: Experimental and DFT Study

P23	Hyoju Son <i>Kyungpook National University, South Korea</i> Effects of Non-Stoichiometric Co-Doping on the Thermoelectric Properties of SnTe
P24	Joseph Moreau <i>Institut Lumière Matière, France</i> Magnetic Nanoparticle Doping for Thermoelectricity
P25	Savvas Hadjipanteli <i>University of Cyprus, Cyprus</i> Half-Heusler Thermoelectrics Based on $\text{TiFe}_{0.5}\text{Ni}_{0.5}\text{Sb}$ and $(\text{Nb,Ta,Ti})\text{FeSb}$ Compounds Synthesized via Mechanical Alloying
P26	Abayomi Lawal <i>Institute of Science and Technology, Austria</i> Solution-Processed PbTe Thermoelectrics with Enhanced Performance via Post-Synthetic Modification
P27	Muhammad Isram <i>Institute of Condensed Matter Chemistry and Technologies for Energy, Italy</i> Structure and Thermoelectric Properties of Hydrothermally Grown $\text{Bi}_2\text{Te}_{3-x}\text{Se}_x$ Nanocrystals
P28	Hannah Baker <i>European Thermodynamics Ltd, United Kingdom</i> Production of Reliable Mg_3Sb_2 Material and Components for Use in Larger Scale Devices
P29	Midhun Shah <i>Farook college, India</i> Enhanced Power Factor in Nb Doped SrTiO_3 Thin Films via Strain Induced Band Degeneracy and Energy Filtering
P30	Stefano Boldrini <i>Institute of Condensed Matter Chemistry and Technologies for Energy, Italy</i> Thermoelectric and Mechanical Properties of $\text{Ti}_{0.25}\text{Zr}_{0.75}\text{NiSn}$ Half-Heusler Alloy Produced by Ultrafast High-Temperature Sintering
P31	Petr Levinský <i>Institute of Physics of the Czech Academy of Sciences, Czech Republic</i> Thermoelectric Properties of Thin ScN Layers Doped with W
P32	Tongwei Zhu <i>Matériaux Fonctionnels et Nanostructures, France</i> Towards P-Type Thermoelectric LaCoO_3 -Based Epitaxial Thin Films
P33	Baopeng Ma <i>Harbin Institute of Technology, China</i> Phase diagram Engineering Advances the Thermoelectric Performance of Zintl Phase EuZn_2Sb_2

P34	Shizhen Zhi <i>Harbin Institute of Technology, China</i> Significant anharmonic scattering in single-crystalline $\text{Mg}_{4.8}\text{Ag}_{1.4}\text{Sb}_4$ with site-occupation disorder
P35	Lars Hållidahl <i>Kagaku Analys AB, Sweden</i> Hard-to-Sinter materials in Easy-to-Sinter wave-forms
P36	Katsumichi Hanzawa <i>Nagoya University, Japan</i> Improvement of Thermoelectric Performance of Mg_2Si Compound by Removing Ag impurities in Si Extracted from Photovoltaic Waste

Theory & Modelling	
P37	Shubham Singh <i>King Abdullah University of Science and Technology, Saudi Arabia</i> Ultralow Lattice Thermal Conductivity and Colossal Thermoelectric Figure of Merit of the Room Temperature Antiferromagnet CsMnBi
P38	Rongrong Bi <i>Nagoya University, Japan</i> High-Efficient Search for High-Performance Al-O Based Thermoelectric Materials Working at High Temperatures Using First-Principles Calculations in Combination with Machine Learning
P39	Jose Javier Plata Ramos <i>Universidad de Sevilla, Spain</i> Exploring the Synthesizability of High-Entropy Skutterudites for Thermoelectric Applications
P40	Mei-Jiau Huang <i>National Taiwan University, Taiwan</i> Transmission and Reflection Coefficients of a Nonlinear Acoustic Mismatch Model
P41	Johannes de Boor <i>German Aerospace Center – DLR, Germany</i> Uncertainty Analysis of Microscopic Parameters Obtained from the Single Parabolic Band (SPB) Modelling of Thermoelectric Materials
P42	Saff E Awal Akhtar <i>University of Warwick, United Kingdom</i> Possibility of Large Power Factor in Full-Heuslers With Elongated Bands
P43	Ankur Chatterjee <i>Nicolaus Copernicus University, Poland</i> Tuning Thermoelectric Properties of PEDOT:PSS Thin Films through strategit : A First-Principles and Experimental Approach
P44	Sunit Kukreti <i>University of Warwick, United Kingdom</i> Effect of aliovalent/isoelectronic alloying on the power factor of half-Heuslers

Emerging Topics	
P45	K. P. Mohamed Jibri <i>Nanotechnology Research Center – NRC, India</i> Spin Orbital Entropy Driven Enhanced Thermopower in Bi-Doped $\text{La}_{0.95}\text{Sr}_{0.05}\text{CoO}_3$ Strongly Correlated Perovskite
P46	Beatriz Santos <i>Centro de Ciencias e Tecnologias Nucleares, Portugal</i> A Structured, Standardized, and Accessible Data Format for Thermoelectric Materials

Thermoelectric Devices & Applications	
P47	Aravind Babu <i>RGS Development, Netherlands</i> Tellurium-Free Thermoelectric Modules for Waste Heat Recovery
P48	Zirui Wang <i>Karlsruhe Institute of Technology, Germany</i> Printed Thermocouple Sensor Array for Human-Machine Interaction
P49	Seong-Jae Jeon <i>Korea Insitute of Machinery and Materials, South Korea</i> Thermochromic Display Modules Using Localized Peltier Cooling
P50	Mateusz Pindel <i>AGH University of Krakow, Poland</i> 3D Printed Bi_2Te_3 -Based Thermoelectric Converter: Process Optimization and Performance Evaluation
P51	Shin Sato <i>Tohoku University, Japan</i> Characterization of Thermoelectric Single Leg Using High-Performance Mg_2Sn -Based Single Crystal
P52	Roman Kobylanskyi <i>Institute of Thermoelectricity of the NAS of Ukraine and MES of Ukraine, Ukraine</i> Computer Design of Multi-Stage Thermoelectric Cooler for Cryoablation
P53	Vikhor Lyudmyla <i>Institute of Thermoelectricity, Ukraine</i> Simulation and Testing of Thermoelectric Cooling Modules for IR Detectors
P54	Radion Cherkez <i>Chernivtsi National University, Ukraine</i> Multifactor Optimization of Permeable Thermoelectric Structures

P55	Şeyma Özkan <i>Dokuz Eylul Universitesi, Turkey</i> Design of Multi-Leg Flexible Thermoelectric Modules Using Polymer-Based Conductive Composites
P56	Xiaofang Li <i>Harbin Institute of Technology, China</i> Phase Diagram Design of Thermoelectric Materials and Devices
P57	Swagata Patra <i>Institut Jean Lamour, France</i> Development of Colusite Based Thermoelectric Devices
P58	Haoji Yang <i>School of Electronics and Computer Science, United Kingdom</i> Machine Learning Enabled Thermoelectric Cooler Design and Optimisation
P58	Tianzhuo Zhan <i>Beihang University, China</i> CMOS-Compatible Cavity-Free Si-Nanowire Thermoelectric Generator
P60	Irantzu Erro <i>Public University of Navarre, Spain</i> Computational Study of the Potential Use of Thermoelectric Generators (TEGs) for Geothermal Energy and Volcanic Monitoring in New Zealand
P61	Amir Pakdel <i>Trinity College Dublin, Ireland</i> Printable and Flexible Thermoelectric Generators from Organic/Inorganic Hybrid Materials
P62	Pankaj Gupta <i>Indian Institute of Science Education and Research Pune (India)</i> Enhanced Thermoelectric Properties of Zinc-Indium Co-Doped $\text{Sn}_{1.03}\text{Te}$

Measurements & Characterizations	
P63	Masanori Ueta <i>Tokushima University, Japan</i> Various Estimations of Lorenz Number in Fine-Grained Bi ₂ Te ₃ and Their Verification by Dimensionless Figure of Merit ZT at Room Temperature
P64	Florian Busch <i>Max-Planck-Institute for Sustainable Materials, Germany</i> Unravelling Grain Boundary Influences on Electric and Lattice Thermal Conductivity in Mn-Doped SnTe Thermoelectrics
P65	Karl-Heinz Gresslehner <i>University of Applied Sciences Upper Austria, Austria</i> NDT-Characterization of Thermoelectric Materials and Modules by Scanning Acoustic Microscopy
P66	Oliver Fenwick <i>Queen Mary University of London, United Kingdom</i> Thin Film Thermal Conductivity: Accounting for Topography and Measuring Anisotropy