EPSRC Thermoelectric Network UK Meeting

Final Programme

16 November 2023

The University of Southampton, UK

Programme (*updated on 24 October 2023*)

9:00-10:00 Registration and coffee

10:00-10:15 Opening remarks

10:15-10:45 “Polymer thermoelectric materials and devices", Dr Oliver Fenwick, Queen Mary University London (Invited)

10:45 – 11:15 “Sustainable half-Heusler and metal phosphide thermoelectric materials”, Dr Jan Willem-Bos, University of St. Andrews (Invited)

11:15 – 11:30 “Role of lone pair rotation in the ultralow thermal conductivity of aikinite”, Dr. Paz Vaqueiro, University of Reading

11:30 – 11:45 “Enhancing the thermoelectric performance of TiO2-based (rutile) ceramics through multi-dimension defect engineering”, Dr Xiadong Liu, University of Manchester

11:45 – 12:00 “SrTiO3-based Thermoelectric Oxides and Neutron Scattering”, Dr. Zhilun Lu, University of Leeds

12:00 – 12:15 “Mixed Anion Chalcogenides with Disordered Structures as New Thermoelectric Candidates”, Dr. Zahida Malik, University of Southampton

12:15 – 14:00 Lunch, exhibitors, networking and posters

14:00 – 14:30 “Thermoelectric Physics of conjugated Polymers”**,** Prof Henning Sirringhaus, University of Cambridge (Invited)

14:30 – 15:00 “Evaluation of mechanical durability and application of oxide-based thermoelectric devices”, Dr. Ryoji Funahashi, National Institute of Advanced Industrial Science & Technology, Japan (Invited)

15:00 – 15:15 “Molecular dynamics simulations of thermal boundary resistance of twin boundaries in Bi2Te3”, Dr Ivana Savic, King’s College London

15:15 – 15:30 “Temperature and Doping Insensitivity of Thermoelectric Properties of High Entropy Half-Heusler Compounds”, Suwei Li, Queen Mary University

15:30 – 15:45 “Computational analysis of hybrid porous-solid/electrolyte systems for optimal thermoelectric power”, Dr Pankaj Priyadarshi, University of Warwick

15:45 – 16:00 “Production of reliable n-type Bi2Te2.7Se0.3 material for large-scale applications”, Hannah Hunter, European Thermodynamics

16:00 – 16:15 “Ab initio prediction of the thermoelectric figure of ZT merit: application to the Sn chalcogenides”, Dr Jonathan Skelton, University of Manchester

16:15 – 16:45 Discussion future activities TE network, Prof Bob Freer and Prof Antony Powell