Program

Thermoelectrics - from fundamentals to applications

Oslo Science Park (Forskningsparken), Gaustadalléen 21, NO-0349 Oslo, Norway

Room: Hagen 1+2

26. April 2018 09.30-17.00 (+dinner downtown)

09.30 Arrival, coffee

09.45 Welcome. T. Norby, UiO: *From THELMA via THERMiO to innovation and industry*

10.00-11.15 **Session 1: Materials, fundamentals, tutorials.** Chair: Truls Norby

Talk 1.1 Anke Weidenkaff, Univ. Stuttgart: *Materials engineering for alternative solar energy converters*

Talk 1.2 Christian Zimmerman, UiO: *Fundamentals of p-n junctions*

11.10 Break - coffee

11.30-12.30 **Session 2: Fundamentals, novel concepts, THELMA.** Chair: Xin Song

Talk 2.1 Kjell Wiik, NTNU: *THELMA activities at NTNU in Trondheim: Developing TEGs and improve n-type oxides*

Talk 2.2 Christian Berland, UiO: *Strategies to improve thermoelectric transport: Insights from first-principle studies on Half Heuslers*

Talk 2.3 Magnus Sørby, IFE: *Diffraction studies of Half-Heusler alloys*

12.30 Lunch

13.30-14.40 **Session 3: Innovation and devices, THERMiO.** Chair: Raphael Schuler

Talk 3.1 Ngo van Nong, DTU: *High performance thermoelectric materials and modules for energy harvesting*

Talk 3.2 Henrik Riis, UiO: *Interconnects and metallisation for HT-TEGs*

Talk 3.3 Reshma Madathil, UiO: *Composite p-n interconnects for all-oxide HT-TEGs*

14.40 Break - coffee

15.00-16.30 **Session 4: Implementation, commercialisation.** Chair: nn

Talk 4.1 Guttorm Syvertsen-Wiig, CerPoTech: *Preparation of oxide materials by spray pyrolysis*

Talk 4.2 nn, SINTEF: *Thermoelectrics infrastructure national initiative (TENOR)*

Talk 4.3 Tore Vehus, UiA: *New Norwegian startup/spinoff on oxide thermoelectrics*

Talk 4.4 nn, SINTEF: *SFI centre of excellence initiative on thermoelectrics*

16.30 **General discussion and conclusions.** Chair: Truls Norby

17.00 Close

17.00 Free time for individual discussions, planning, etc.

18.00 **Dinner** in downtown restaurant (to be announced) for those who signed up.