

2016 Shanghai International Workshop on Thermoelectric Materials

May 27–28, 2016

Shanghai Institute of Ceramics, Shanghai, China

Announcement

2016 Shanghai International Workshop on Thermoelectric Materials will be held on May 27-28, 2016 at Shanghai, China. This is the third workshop on thermoelectric materials organized by Shanghai Institute of Ceramics, Chinese Academy of Sciences. This workshop is set up to invite world-wide active scientists to join together for addressing the currently hot topics in the field of thermoelectrics. As a resurgent active area in materials science, thermoelectric research has attracted much attention, and quite a few great advancements have been made in recent years. There are, however, still many scientific issues yet to be resolved, which calls for breakthrough effect and interdisciplinary collaboration. Of special importance are the fundamentals, including electrical and thermal transports in complex compounds and composite materials, sophisticated physical measurements and in-depth characterization of those properties.

In the workshop, the invited speakers and lectures are carefully chosen to cover some leading-edge directions in the thermoelectric transport fundamentals and materials. The forum will allow the invited speakers ample time to explain their understanding on scientific problems in detail, and also encourage participants to question and have deep discussions. The two-day meeting will mainly discuss scientific and technological issues related to the following topics: physical mechanisms of electrical and thermal transports; novel aspects of thermoelectric transports; in-depth physical measurement and characterization; thermoelectric performance optimization strategy; novel thermoelectric materials and physical mechanisms.

The workshop will cover the cost of your accommodation and meal expenses. Our program coordinator, Shan Zheng (zhengshan@mail.sic.ac.cn), will assist you in making all your travel arrangements.

Organizing Committee:

Prof. Lidong Chen (chairman, cld@mail.sic.ac.cn)

Prof. Wenqing Zhang (wqzhang@mail.sic.ac.cn)

Prof. Xun Shi (xshi@mail.sic.ac.cn)

Ms. Shan Zheng (Secretary, zhengshan@mail.sic.ac.cn)

Sponsors:

State Key Laboratory of High Performance Ceramics and Superfine Microstructure,
Shanghai Institute of Ceramics, Chinese Academy of Sciences

Invited Speakers:

1. Kamran Behnia (Centre National de la Recherche Scientifique (CNRS), France)
2. Olivier Delaire (Oak Ridge National Laboratory, USA)
3. Yuri Grin (Max Planck Institute, Germany)
4. Qiang Li (Brookhaven National Laboratory, USA)
5. Zhifeng Ren (University of Houston, USA)
6. G. Jeffrey Snyder (Northwestern University, USA)
7. Citrad Uher (University of Michigan, USA)
8. Hsin Wang (Oak Ridge National Laboratory, USA):
9. Tiejun Zhu (Zhejiang University, China)
10. Yanzhong Pei (Tongji University, China)
11. Lidong Zhao (Beihang University, China)
12. Jiaqing He (South University of Science technology of China)
13. Jiong Yang (Shanghai University, China)
14. Yuanhua Lin (Tsinghua University, China)
15. Xun Shi (Shanghai Institute of Ceramics, China)
16. Zhigang Chen (University of Queensland, AUS)
17. Emmanuel Guilmeau (Laboratoire CRISMAT, France)

Tentative Program

May 26

Shanghai Institute of Ceramics

Morning, May 27

Opening ceremony, Chaired by Prof. Lidong Chen

8:30am-9:00am, Welcoming address

Invited lectures, Chaired by Prof. *** (5 talks, 25+5)

KL1 9:00am-9:30am (25+5)

KL2 9:30am-10:00am (25+5)

KL3 10:00am-10:30am (25+5)

Break: 10:30-10:50

KL4 10:50am-11:20am (25+5)

KL5 11:20am-11:50am (25+5)

Lunch, 11:30-1:00pm

Afternoon, May 27

Invited lectures, Chaired by Dr. ** (7 talks, 25+5)

KL6 2:00pm-2:30pm (25+5)

KL7 2:30pm-3:00pm (25+5)

KL8 3:00pm-3:30pm (25+5)

KL9 3:30pm-4:00pm (25+5)

Break: 4:00-4:20

KL10 4:20pm-4:50pm (25+5)

KL11 4:50pm-5:20pm (25+5)

KL12 5:20pm-5:50pm (25+5)

Banquet, 6:00pm

Morning, May 28

Invited lectures, Chaired by Prof. *** (6 talks, 25+5)

KL13 8:30am-9:00am (25+5)

KL14 9:00am-9:30am (25+5)

KL15 9:30am-10:00am (25+5)

Break: 10:00-10:20

KL16 10:20am-10:50am (25+5)

KL17 10:50am-11:20am (25+5)

KL18 11:20am-11:50am (25+5)

Lunch, 12:30am

Leaving for Wuhan to join ICT2016

Lecture list

KLX	Olivier Delaire	Lattice dynamics and thermal transport in thermoelectrics
KLX	Citrad Uher	Progress in $Mg_2Si_{1-x}Sn_x$ -based Thermoelectric Materials
KLX	Kamran Behnia	Low-temperature thermoelectric response of hopping electrons
KLX	G. Jeffrey Snyder	Phonon scattering in Thermoelectrics –A look at grain boundaries, dislocations and alloys
KLX	Tiejun Zhu	Design and optimization of p-type half-Heusler thermoelectric materials
KLX	Zhigang Chen	Realization of high performance thermoelectric nanomaterials by interphase design and band engineering
KLX	Jiong Yang	The General Conductive Network in Compounds with Chalcogenide Sublattices
KLX	Emmanuel Guilmeau	Recent progress in sulfur based compounds
KLX	Lidong Zhao	Oxyselenides: new promising thermoelectric materials
KLX	Jiaqiang He	Lifting up the average thermoelectric figure of merit
KLX	Ryoji Funahashi	Development of thermoelectric technology from material to unit
KLX	Qiang Li	Dirac semimetals and thermoelectric materials
KLX	Zhifeng Ren	New Understanding of Thermoelectric Figure-of-Merit and Efficiency
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Participants

Around 18 speakers, and some audiences. Some students may join us.

Conference place

Workshop is to be held in Shanghai Institute of Ceramics, Shanghai, China.

Hotels:

We will book the PentaHotels (3-minute walk to Shanghai Institute of Ceramics) for all the invited speakers. The address is: 1525 Dingxi Road, Shanghai, China.

Financial

Local expenses, including hotel and food, for all invited speakers and invited participants will be covered.

All invited speakers need to cover their own international traveling fees. We will pay invited speakers some lecture fees.

This workshop is just before the ICT 2016 (May 29-June 2, 2016, Wuhan). Workshop attendants need to cover their own ICT-related expenses if they plan to join ICT2016.

Traveling issues

The workshop is planned to be held in Shanghai city. All participants can fly to Shanghai Pudong airport directly.

Please call a tax to the workshop hotel or Shanghai Institute of Ceramics after you get in Shanghai city. We may provide certain service when necessary.