

# The 41st International Conference on Thermoelectrics & 7th Asian Conference on Thermoelectrics 2022

**First Announcement**

**June 26 (Sun.) ~ June 30 (Thu.), 2022**  
Sendai International Center, Sendai, Miyagi, Japan

Conference Chair : **Takao Mori** (National Institute for Materials Science) and **Yuzuru Miyazaki** (Tohoku University)

Organizer : **Organizing Committee of The 41st International Conference on Thermoelectrics**

Contact information :

Secretariat of ICT/ACT 2022

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URL : <http://ict2022.jp/>

## Topics

### A : Theory

- A1 : theoretical study of bulk materials
- A2 : nanoscale and low-dimension induced effects
- A3 : novel concept and related physical phenomenon
- A4 : informatics, data mining, machine learning
- A5 : other theory considerations

### B : Thermoelectric Materials

- B1 : pnictides
- B2 : chalcogenides
- B3 : Heusler compounds
- B4 : oxides & silicides
- B5 : organic & hybrid compounds
- B6 : magnetic related materials
- B7 : phonon engineering
- B8 : novel materials
- B9 : processing
- B10 : other material topics

### C : Measurement & Characterization

- C1 : nano/microstructure
- C2 : properties
- C3 : other characterization techniques

### D : Thermoelectric Modules

- D1 : design and fabrication
- D2 : thin film devices
- D3 : bulk devices
- D4 : standardization
- D5 : other TE module considerations

### E : System & Industrial Applications

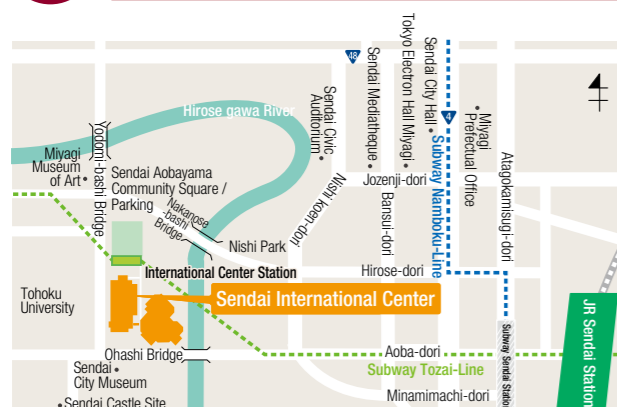
- E1 : cooling applications
- E2 : automotive applications
- E3 : generator applications
- E4 : sensor applications
- E5 : other waste heat recovery
- E6 : other industrial aspects

## Key Dates

**Abstract Deadline January 31, 2022**

**Early Registration Deadline March 31, 2022**

## Venue



### Sendai International Center

Aobayama, Aoba-ku, Sendai, Miyagi 980-0856 Japan

<http://www.aobayama.jp/english/>

## Registration Fees

Registration as	Early Registration (by March 31, 2022)	Late Registration (after March 31, 2022)
Regular participant	¥85,000	¥95,000
Student	¥45,000	¥55,000
Accompanying person	¥35,000	¥45,000





## Welcome Message

It is almost exactly 200 years since Thomas Seebeck discovered the Seebeck effect. The field of thermoelectrics is now at an exciting time in history, with new high performance materials, novel enhancement principles being discovered, innovative module development, and the long held dream of wide-spread power generation applications appearing to be closer to realization than it has ever been before. With the urgent necessity of energy saving to approach the carbon neutral/zero emission goals for the environment, and also energy harvesting to dynamically power the trillion sensors for the IoT society, for example, thermoelectric technology is expected to play a large and critical role.

It has been an extremely difficult and tragic two years with the worldwide pandemic, and hopefully in 2022 we are finally coming out and in the stage of recovering from it. Online conferences can never replace the dynamical and myriad exchanges and discussions organically blossoming at onsite conferences. It is our great pleasure and honor to invite the worldwide thermoelectric community and any interested members of the whole scientific or industrial or even political community to join us for the 41st International Conference on Thermoelectrics (& 7th Asian Conference on Thermoelectrics) ICT/ACT2022 to be held in the vibrant and attractive Sendai City in northern Japan from June 26-30, 2022.

Japan has held the conference before in Yokohama in 1993, Nagoya in 1998, and Kobe in 2013, and has had a long history of active research and development on thermoelectrics. By hosting ICT in Japan for the first time in about 10 years, it will be a good chance to relay the recent academic and industrial ongoings of Japan to thermoelectric conversion technology experts around the world and to make a significant contribution to the development of this field.

Hopefully all participants can create a new chapter for thermoelectrics at this conference, and we can recover our in-person vital and dynamic exchanges which are critical for science advancement and innovation.

Looking forward to seeing you there!

### Takao Mori & Yuzuru Miyazaki Chairs of ICT/ACT2022



## Conference Organization

### Conference Chair

**Takao MORI**  
National Institute for Materials Science

**Yuzuru MIYAZAKI**  
Tohoku University

### Advisor

**Kunihito KOUMOTO**  
Nagoya University

**Ryoji FUNAHASHI**  
National Institute of Advanced Industrial Science and Technology (AIST)

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KELK

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**Paolo MELE**  
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