

# STAC-11 Organization

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## Sponsored by (tentative)

- National Institute for Materials Science
- Laboratory for Materials and Structures, Tokyo Institute of Technology
- Materials Research Center for Element Strategy, Tokyo Institute of Technology
- School of Materials and Chemical Technology, Tokyo Institute of Technology
- The Ceramic Society of Japan
- Tsukuba Tourism and Convention Association
- Tsukuba City

# TSUKUBA

is the largest science technology accumulation site in Japan, where more than 300 public and private academic/research institutions and enterprises are located. The topography is rather flat covered with rich nature, such as Mt. Tsukuba in the north and Lake Kasumigaura in the east which is the second largest lake in Japan. It is located approx. 50 km from Tokyo, taking only 45 min. by Tsukuba Express line (express railway) from Akihabara station.



## Climate / Weather

Early July is summer season and temperatures may vary from 20 to 30 degrees Celsius. It is nice to walk around.

## Passport and VISAs

It is the responsibility of participants to prepare for appropriate passport and visas to enter Japan. Please consult your travel agency or your local Japanese Embassy/Consulate. If you need a personal invitation, please contact the organizing committee members.

## Insurance

All participants are advised to obtain necessary insurances for personal accidents, sickness, theft, property damage or loss.

## Accommodation

A Local committee does not provide any service for accommodation.



## Call for papers

(First Circular)

March 2019

## The 11<sup>th</sup> International Conference on the Science and Technology for Advanced Ceramics (STAC-11)

July 9 – 11, 2019

Tsukuba International Congress Center  
EPOCAL TSUKUBA (JAPAN)

<https://www.nims.go.jp/fm/STAC2019/index.html>



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**Contact:** Conference Secretariat  
National Institute for Materials Science  
C/O Electroceramics Group  
1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan  
E-Mail: [STAC11-inquiry@ml.nims.go.jp](mailto:STAC11-inquiry@ml.nims.go.jp)

## The 11<sup>th</sup> International Conference on the Science and Technology for Advanced Ceramics (STAC-11):

Cutting edge of ceramic research is rapidly expanding and advancing, being far beyond the traditional scope of ceramics. The primary driving forces for such advance researches are society's needs, such as to realize safe society, and researchers' desire of "want to create a dream material toward bright future." The main materials of ceramics are oxides, which are the main constituents of the earth's crust. They are abundant in resource, benign for environment, and have many unique properties, which are not seen in conventional semiconductors and in organic materials.

The first conference STAC-1 was held in 2006 in Shonan, Japan, organized by Materials and Structures Laboratory of Tokyo Institute of Technology (MSL). After then, MSL, Division of Ceramics Science, Tokyo Institute of Technology and National Institute for Materials Science (NIMS) have organized the series of STAC conferences.

The program will feature plenary and invited talks, contributed oral and poster presentations, and a banquet. Anybody interested in the following areas is welcome to participate.

### CONFERENCE TOPICS

- **Materials Design and Characterization via Computer:**  
*First-principles calculation, Particle-based simulation, Continuum model, Machine learning, etc.*
- **Solid State Chemistry:**  
*Inorganic materials, Magnetism, Strongly correlated systems, Crystallography, Phase transitions, etc.*
- **Analysis and Characterization:**  
*Advanced beam techniques, Fast dynamics, Scanning probe techniques, Nanoindentation, SR, etc.*
- **Engineering Ceramics:**  
*Oxides, Non-oxides, Composites, Coatings, High-temperature materials, Sintering, etc.*
- **Chemical Processes:**  
*Solution process, Colloid process, Biomimetic process, Nanoparticles, Thin films, etc.*

- **Opto-electronic Materials:**  
*Semiconductors, Dielectrics (high-k, ferroelectrics), Magnetic oxides, Multi-ferroics, High-Tc superconductors, etc.*
- **Transparent Semiconductors:**  
*Growth, Wide bandgap, Thin films, Heterojunctions, Devices, etc.*
- **Optical Materials:**  
*Phosphor, Laser, Scintillator, Optical sensor, etc.*
- **Biorelated Ceramic-Based Materials:**  
*Ceramics, Medicine, Biomimetics, Biology, Biotechnology, etc.*
- **Batteries:**  
*Li-ion, Ionics, Solid-state, etc.*
- **Growth and Physical Properties of Thin Films and Single Crystals:**  
*Growth techniques and characterizations, Functional physical and chemical properties, Novel electronic and magnetic properties, Device applications, etc.*
- **New Materials, Structures and Processes:**  
*Novel functional materials, Novel Organic/Inorganic hybrid structures, Novel Metal/Ceramic integrated structures, New processes for functional materials and structures, Modeling of hybrid/integrated system, etc.*

### INVITED SPEAKERS (partial list)

- S. Majumder, *NIT Patna, India*
- W. Kada, *Gunma Univ., Japan*
- Y. Shi, *CAS, China*
- T. Fukumura, *Tohoku Univ., Japan*
- K. Toda, *Niigata Univ., Japan*
- J. Kim, *UT Dallas, USA*
- Z. Galazka, *IKZ, Germany*

### IMPORTANT DATES

<b>Submission</b>	<b>April 30, 2019</b>
SUPER early bird registration	May 20, 2019
Abstract (for book) submission	May 30, 2019
Acceptance notice	Late May, 2019
Early bird registration	June 10, 2019

### REGISTRATION FEE

	Before May 20	Before June 10	After June 10
Regular	JPY34,000	JPY37,000	JPY40,000
Student	JPY16,000	JPY18,000	JPY20,000

#### Payment

Registration with Early-Bird and SUPER-Early-Bird rate:

Only bank transfer is acceptable.

Registration with Regular Rate:

Payment must be made at the conference site with CASH.

### BANQUET (July 10, 2019)

Regular: JPY3,000-, Student: JPY1,000-

#### Cancellation policy

Cancel by June 21:

Cancellation fee (10% of the total fee) is charged and 90% of the total fee will be refunded.

Cancel after June 22:

Nothing will be refunded, but an abstract book (in a USB memory) will be delivered after the conference.

### SUBMISSION (Submission form)

**Submission deadline: April 30, 2019**

<https://www.nims.go.jp/fm/STAC2019/submission.html>

Submission form will form the basis for selecting papers for presentation at the conferences. All submission form will be reviewed by the members of the Program Committees on the basis of scientific and technical novelty and importance. Acceptance of the papers will be informed by e-mail with the decision of presentation style. A few papers may be selected for special invited talks. Please follow the submission instructions that is provided on our web pages. Fill the form with necessary information and save locally as FirstName.LastName.pdf. Submission form should be submitted via E-mail <[STAC11-submission@ml.nims.go.jp](mailto:STAC11-submission@ml.nims.go.jp)>.

### ABSTRACT SUBMISSION

**Submission deadline: May 30, 2019**

<https://www.nims.go.jp/fm/STAC2019/submission.html>

Each abstract must state clearly the purpose and specific results of the work. Please follow the format that is provided at the Abstract Submission Form. Instructions for abstract preparation and submission are provided on our web pages. Abstracts should be submitted via E-mail <[STAC11-submission@ml.nims.go.jp](mailto:STAC11-submission@ml.nims.go.jp)>.