

Conference Chair

M. Hara, *Tokyo Tech.*

International Advisory Committee

R. Hoffmann, Cornell Univ, US

A. Janotti, Univ Delaware, US

K. Poeppelmeier, Northwestern Univ, US

S.-W. Kim, Sungkyunkwan Univ, Korea

Jun Chen, Univ Sci Tech Beijing, China

Steering Committee

MSL, Tokyo Tech.

M. Azuma, K. Kamata, H. Kawaji,

H. Hiramatsu, Y. Majima, F. Oba

Dept. Mater. Sci. Eng., Tokyo Tech.

H. Funakobo, T. Ikoma, Y. Kitamoto, M. Matsushita,

M. Miyauchi, T. Yano, H. Yokota

MDX, Tokyo Tech.

T. Kamiya, M. Kitano

NIMS

N. Ohashi, H. Segawa

Program Committee

M. Azuma *Tokyo Tech.*

Local Organizing Committee

MSL, Tokyo Tech.

S. Izawa, K.G. Nakamura, T. Sasagawa, T. Yamamoto

Dept. Mater. Sci. Eng., Tokyo Tech.

Y. Anraku, T. Hayashi, T. Hoshina, A. Matsuda, S. Matsushita,

T. Isobe, T. Kishi, K. Yoshida

MCES, Tokyo Tech.

T. Katase

Sponsored by

- Laboratory for Materials and Structures, Institute of Innovative Research, Tokyo Tech
- Dept. Mater. Sci., Tokyo Tech
- MDX Research Center for Element Strategy, Tokyo Tech
- National Institute for Materials Science

YOKOHAMA

is the second largest population city in the Tokyo Metropolitan area. It is famous for the beautiful bay scenery, the largest china town in Japan, and so on. It also has a long history since the Kamakura era in the late 11th century and is close to the historical place Kamakura. It is located approx. 30 km south of central Tokyo, taking approx. 50 minutes from Tokyo station by train.



Climate / Weather

Early October is the mid-autumn and temperatures may vary from 10 to 20 degrees Celsius.

Passport and VISAs

It is the responsibility of participants to prepare for appropriate passports 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.

Call for papers

April 2024



The Fourteenth International Conference on the Science and Technology for Advanced Ceramics (STAC-14)

October 8 – 10, 2024

Tokyo Tech Suzukake Hall

Yokohama (Kanagawa), Japan

<http://conf.msl.titech.ac.jp/STAC14.html>



Address of the conference site

Suzukake Hall

4259, Nagatsuta,

Mirdori-ku, Yokohama JAPAN 226-8501

<https://www.szc.titech.ac.jp/gakumu/horule.htm>

Contact: Conference Secretary, Dr. M. Azuma

Laboratory for Materials and Structures,
Institute of Innovative Research, Tokyo Institute of Technology
4259 Nagatsuta, Midori-ku, Yokohama 226-8501, Japan
E-Mail: mazuma@msl.titech.ac.jp

STAC-14:

Cutting edge of ceramic research is rapidly expanding and advancing, being far beyond the traditional scope of ceramics. The primary driving forces for such advanced researches are society's needs such as to realize safe society as well as researchers' desire of "want to create a dream material." The main materials of ceramics are oxides which are the main constituents of the earth's crust. They are abundant and benign for environment, and have many unique properties, which are not seen in conventional semiconductors and in organic materials. We believe new properties further remain untapped as exemplified by the discovery of high- T_c superconductors.

The Laboratory for Materials and Structures (MSL, formerly The Materials and Structures Laboratory) of Tokyo Institute of Technology is a center of excellence in ceramics research in Japan and has made major contribution to cultivating new frontiers in ceramic research. Ceramic researches have been contributing to true nano-technology through appropriate fusion of the neighboring disciplines. We, thus, launched this international conference as a new forum to stimulate the interaction among different disciplines through the discussion on high-level research outputs.

The first conference was held in 2006 in Shonan, Japan, organized by MSL. After then, MSL, Division of Ceramics Science, Tokyo Institute of Technology and National Institute for Materials Science have organized the series of STAC conferences. This is the fourteenth conference, and will be accompanied by special sessions of 'MDX Special Session: Materials DX'.

The program will feature approximately 30 invited talks, contributed oral and poster presentations, and a banquet. Anybody interested in the following areas is welcome to participate.

CONFERENCE TOPICS

- **Advanced Characterization**
Fast dynamics, Scanning probe technique, Nanoindentation, SR, etc Thin Films,
- **Bio/medical/environmental materials**
Bioceramics, Ecomaterials, etc.

- **Chemical materials**
Novel chemistry, Catalyst, etc.
- **Engineering materials**
Sustainable materials and systems, Catastrophic fracture, Smart materials, Ecomaterials, etc.
- **Electro-magnetic materials**
Magnetic Oxides, Multi-Ferroids, High- T_c Superconductors, etc.
- **Semiconductors**
Semiconductors, Dielectrics (high- k , ferroelectrics),
- **Solid State Chemistry**
Advanced processes, Structure- property relationship etc.,
- **MDX Special Session: Materials DX**

Invited Speakers

- Mamoru Aizawa, Meiji Univ, Japan
- Jake Barralet, McGill Univ, Canada
- Wei-tin Chen, National Taiwan Univ, Taiwan
- Kazuhiko Deguchi, Nagoya Univ, Japan
- Marco Deluca, Silicon Austria Labs GmbH, Austria
- Richard DV. Espiritu, Univ Philippines Diliman, Philippines
- Susumu Fujii, Kyushu Univ, Japan
- Jianping Guo, Chinese Academy of Sciences, China
- Michael Hayward, Univ Oxford, UK
- Jianbo Hu, CAEP, China
- Ken-ichi Ikeda, Hokkaido Univ, Japan
- Akihiko Ito, Yokohama National Univ, Japan
- Manish Jain, IIS, India
- Ryhota Kabe, OIST, Japan
- Daisuke Kan, Kyoto Univ, Japan
- Sea-Hoon Lee, KIMS, Korea
- Geraldine Merle, Polytechnique Montréal, Canada
- Sébastien Paul, UCCS/Centrale Lille, France
- David Pesquera, Catalan Institute of Nanoscience and Nanotechnology (ICN2), Spain
- Shohei Tada, Hokkaido Univ, Japan
- Hirosuke Takenaka, Osaka Univ, Japan

- Ryo Tamura, NIMS, Japan
- Takeshi Yajima, Nagoya Univ, Japan
- Sho Yamaguchi, Osaka Univ, Japan
- Tetsuya Yamaki, QST, Japan
- Rikizo Yano, Nagoya Univ, Japan
- Toru Yoshitomi, NIMS, Japan
- Anton Van der Ven, UCSB, USA
- Erjun Zhou, NCNST, China
- Bowen Zhu, Westlake Univ, China

IMPORTANT DATES (tentative)

Abstract	Aug 2, 2024
Submission	
Acceptance notice	By end of Aug, 2024
Early-bird	Sept 1, 2024
Registration	
Accommodation	By individual participants

NUMBER OF PRESENTATIONS (approximate)

Invited (30 min)	30
Oral (15 min)	60
Poster	100

ABSTRACT (Submission deadline: Aug 2, 2024).

Abstracts will form the basis for selecting papers for presentation at the conference. Each abstract must state clearly the purpose and specific results of the work. Lack of such descriptions may cause rejection of a paper. Instructions for abstract preparation and submission is provided on our web page. All abstracts will be reviewed by the members of the Program Committee 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.