

AMTC2 The 2nd International Symposium on Advanced Microscopy and Theoretical Calculations



Scope

The properties of materials are strongly dependent on their nano- and microstructures. Lattice imperfections such as interfaces, surfaces, dislocations, intrinsic point defects and impurities/dopants, as well as the interactions between them, play a key role in determining the macroscopic properties of a material. With the aid of recent developments in advanced microscopy and computational techniques, structure-property relationships can be analyzed quantitatively on both the atomic and electronic scales. Such information leads to the rational design of new materials that are not only excellent in terms of performance but are also superior in terms of environmental protection and sustainable development. This symposium seeks to provide productive opportunities for participants from universities, industry and research institutes, including students, to learn about cutting-edge R&D, and to take part in the exchange of ideas and information. It is hoped that the symposium will lead to future innovations in this field.

Symposium Topics

The symposium covers all relevant fields in advanced microscopy and theoretical calculations:

- Interfaces and Grain Boundaries
- Electron Holography and Lorentz Microscopy
- Environmental TEM
- Modeling and Simulations
- AMTC2 Special Topic: Frontiers of Materials Science

Program

- [The symposium program \[PDF file\]](#)

Poster Session

- [Poster Presentations \[PDF file\]](#)

Organizing Committee

Chairpersons

T.Hirayama (JFCC), Y.Ikuhara (Univ. Tokyo/JFCC), I.Tanaka (Kyoto Univ./JFCC)

Advisory Board Members

A. Tonomura (Hitachi), S. Iijima (Meijyo Univ.), S. Tanemura (JFCC)

Organizing Committee Members

N.Tanaka (Nagoya Univ.), S.Muto (Nagoya Univ.), K.Kuroda (Nagoya Univ.), T.Tanji (Nagoya Univ.),
M.Kusunoki (Nagoya Univ./JFCC), T.Yamamoto (Univ.Tokyo/JFCC), K.Matsunaga (Kyoto Univ./JFCC), M.Yoshiya (Osaka Univ./JFCC), H. Moriwake (JFCC), Y. Sasaki (JFCC),
A.Kuwabara(JFCC),
T.Kato(JFCC) ,T.Mizoguchi(Univ.Tokyo), N.Shibata(Univ.Tokyo), Craig A. J. Fisher (JFCC)

Secretariat

Y.Kubo (JFCC), O.Imai (JFCC), N.Shibata(JFCC)

Organized by/Co-Organized by/Sponsor/Collaborators

Organized by

Nanostructures Research Laboratory
The Japan Fine Ceramics Center(JFCC)

Co-Organized by

Grant-in-Aid for Scientific Research on Priority Areas "Nano
Materials Science for Atomic-scale Modification" from the
Ministry of Education, Culture, Sports and Technology
(MEXT)

Sponsor · Collaborators

The Global Industrial and Social Progress Research Institute
(GISPRI)
Ministry of Economy, Trade and Industry
Ministry of Education, Culture, Sports, Science and
Technology
Aichi Prefecture, Nagoya City
Gifu Prefecture, Mie Prefecture,
The Chubu Economic Federation,
The Ceramics Society of Japan
The Physical Society of Japan
The Japan Society of Applied Physics
The Japan Institute of Metals
The Japanese Society of Microscopy
The Chemical Society of Japan
and some other societies



[▲ Scroll Window to Top](#)