

# AMTC1 The 1st International Symposium on Advanced Microscopy and Theoretical Calculations



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## Scope

The properties of materials are strongly dependent on their nano- and micro-structures. Multi-dimensional lattice imperfections such as interfaces, surfaces, dislocations, point defects and impurities/dopants interacting with the imperfections play key roles in determining properties of the materials. With the aid of recent developments in advanced microscopy and computational techniques, structure-property relationships can be analyzed quantitatively in both atomic and electronic scales. Such information leads to the rational design of new materials that are not only excellent in terms of performance but that are also superior in terms of environmental protection and sustainable development. The symposium provides an excellent opportunity for all participants from universities, from industry and from research institutes, including students, to learn about leading-edge activities in the field, and to take part in exchanges of ideas and information.

## Symposium Topics

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

- High Resolution Electron Microscopy (HREM),
- Scanning Transmission Electron Microscopy (STEM),
- Electron Holography,
- Nano-scale spectroscopy with the use of EELS, EDS and XAFS,
- Theoretical Spectroscopy,
- Advanced Techniques in Electron Microscopy,
- Environmental Microscopy,
- Interface and Grain Boundaries,
- Lattice Imperfections,
- First Principles Theory and Modeling,
- Materials Informatics,
- Fundamental Issues in Materials Science,
- Scanning Probe Microscopy.

## Program

- [Oral Session](#)
- [Poster Session](#)

## Poster Session

- **Poster size**  
AO (A0 (Weidth 84cm Height 120cm))

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Nanostructures Research Laboratory  
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