

As a series of successful conferences, CGCT-1 in Sendai, 2000, CGCT-2 in Seoul, 2002, CGCT-3 in Beijing, 2005, and CGCT-4 in Sendai, 2008, the Asian Conference on Crystal Growth and Crystal Technology continues to be a great event to celebrate the great success of sciences and technologies in the Asia Community of Crystallization. The 5th Asian Conference on Crystal Growth and Crystal Technology (CGCT-5), organised jointly with the International Conference on Materials for Advanced Technologies (ICMAT 2011), is to provide a forum where the latest achievements and challenges in crystal growth and crystal technology will be discussed among researchers and engineers from both industry and academia.

Local Organizing Committee

Members:

X Y Liu (NUS, DongHua U) (Chair)
 Christian Kloc (NTU) (Co-Chair)
 Zhang Dao Hua (NTU)
 Ann Chow (ICES, A-Star)
 Raj Rajagopalan (NUS)
 Kunchithapadam Swaminathan (NUS)
 H. Gong (NUS)
 Liu Ruchuan (NUS)
 Du Ning (NUS)
 Sören Enemark(NUS)

Publication (J. Crystal Growth):

X Y Liu (NUS)
 Christian Kloc (NTU)
 Zhang Dao Hua (NTU)
 Ann Chow (ICES, A-Star)

Secretariat:

Materials Research Society of Singapore
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Organised by



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CGCT 5

The 5th Asian Conference on
 Crystal Growth and Crystal Technology
 June 26-July 1, 2011, Singapore

held in conjunction with

ICMAT 2011

International Conference on Materials
 for Advanced Technologies

Organised by



Materials Research Society
 SINGAPORE

CGCT-5 ABSTRACTS - Submit to
 Symposia DD, EE, FF & GG only
 Abstract Submission

Opens: 30 Sep 2010, Closes: 31 Dec 2010

www.mrs.org.sg/icmat2011



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Scope

The scope of the CGCT-5 will cover all aspects of fundamental and applied researches related with crystal growth and crystal technology. The scientific program will encompass every area of crystal growth and crystal technology, which can be highlighted by the following four symposia:

I. Fundamentals of Crystallization and Low Dimensional Crystallization (Symposium DD in ICMAT-2011)

- Theory of Nucleation and Growth
 - Simulation
 - In-situ observation on Surface and Interfacial process
 - Morphology of Crystals
 - Dots, Wire and Nanostructure
 - Crystallization in Soft Condensed Matter
 - Characterization (X-ray, Neutron, Defects)
- Xiang Yang Liu (NUS, Singapore), Gen SAZAKI (Hokudai University, Japan), Raj Rajagopalan (NUS, Singapore).

II. Functional Materials Crystallization, Characterization and Devices (Symposium EE in ICMAT-2011)

- Semiconductor materials and devices
- Quantum well/wire/dot and related devices
- Semiconductor related metamaterials
- Bulk Substrate and Thin Films
- Oxide Crystals (NLO, Piezoelectric, Magnetic, Scintillator, Superconductor)
- Photonic Applications (Laser, detector, Lens, Filter, Photorefractive, Nonlinear optics)
- Piezoelectric Application
- Spintronics, Correlated electron and superconductivity

The 5th Asian Conference on
Crystal Growth and Crystal Technology
June 26–July 1, 2011, Singapore

- Solar cells and Clean Energy Technology
 - Fluoride Crystal
- Zhang Dao Hua (NTU, Singapore), C. Jagadish (ANU, Australia), H. Gong, (NUS, Singapore).
- ### III. Organic and Bio Related Crystallization (Symposium FF in ICMAT-2011)
- Organic Crystal Growth
 - Single crystals of organic semiconductors
 - Crystal engineering of multicomponent molecular crystals
 - Physical properties resulting from pi electron interactions in single crystals
 - Biomolecule crystallization
 - Biomineralization
 - Organic and Biological Materials
 - Crystallization controlled by Biomolecules
 - Bioinspired Crystallization
- Christian Kloc (NTU, Singapore); Liu Ruchuan (NUS, Singapore), Wenping HU, (National Academy of Sciences, China)
- ### IV. Industrial Crystallization (Symposium GG in ICMAT-2011)
- Crystallization process design, scale-up and control
 - In-situ observation of crystallization process
 - New materials – co-crystals and amorphous forms
 - Downstream processing (micronization, formulation)
 - Advances in characterization and stability analysis of crystallization products
 - Crystallization related to industrial process
- Ann Chow (ICES, A-Star, Singapore), David Hongyuan Wei (Tianjin University, China), Zaiqun Yu (IMRE, A-Star, Singapore)

Greeting

International Conference on Materials for Advanced Technologies (ICMAT 2011), the 6th in the series, organized by the Materials Research Society of Singapore (MRS-S), is an event where participants will be able to take part in Plenary and Public lectures by Nobel Laureates, Plenary and Theme lectures by distinguished scientists, 37 Technical Symposia including those of the 5th Asian Conference on Crystal Growth and Crystal Technology (CGCT-5), and Exhibition. It will be held from 26 Jun to 1 July 2011 and over 2500 participants are expected to attend. It is with great pleasure that you are invited to participate in both ICMAT 2011 and CGCT-5. After the series of successful ICMAT conferences, MRS-S is now organizing ICMAT 2011 with CGCT-5 as one of its constituents. It is for the first time that CGCT is being organized in Singapore.

Global issues such as the worldwide depletion of natural resources as well as the destruction of the global environment have imposed great difficulty in sustaining human development and providing high living standards. To provide a brighter and more secure future for the next generation, immediate attention and action from our materials scientists and engineers is required. In this regard, our colleagues from the materials science and crystallization community certainly have important progress to report and ideas to share in both ICMAT 2011 and CGCT-5.

Singapore, already playing a leading role in bio- and nano- sciences and technologies in the region, has been gearing up its efforts in the aforementioned area. Located in the heart of Asia, the garden city-state will accommodate people and their ideas to address these issues from the point of view of materials science in general and advanced crystal growth and growth technologies in particular. Both ICMAT 2011 and CGCT-5 will provide a timely forum for scientists and engineers from Asia and beyond to discuss latest achievements and the challenges concerned. We look forward to welcoming you at ICMAT 2011 and also for your valuable contributions for CGCT-5.



Prof. Xiang Yang Liu
Chairman, Organizing Committee of CGCT-5

Local CGCT-5 Organizing Committee

Members:

- | | |
|----------------------------------|---|
| X Y Liu (NUS, DongHua U) (Chair) | Publication (J. Crystal Growth): |
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| Raj Rajagopalan (NUS) | Ann Chow (ICES, A-Star) |
| Kunchithapadam Swaminathan (NUS) | Secretariat: Meeting Matters International |
| H. Gong (NUS) | Email: icmat2011@meetmatt.net |
| Liu Ruchuan (NUS) | |
| Du Ning (NUS) | |
| Sören Enemark (NUS) | |

General Information

To be provided.

Organization

Organized by

Asian Society for Crystal Growth and Crystal Technology
Materials Research Society of Singapore

Abstract Submission

The submission of abstract to CGCT-5 should be made ONLY to Symposia DD, EE, FF and GG in ICMAT-2011.

Open: 30 Sept 2010, close: 31 Dec. 2010

Web: www.mrs.org.sg/icmat2011

Proceedings

The proceedings of the conference will be published as a special issue of the Journal of Crystal Growth. Only those papers presented at the conference will be peer reviewed and considered for publication.

Committees

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