

# ICMOVPE-XVI

The Sixteenth International Conference  
on Metal Organic Vapor Phase Epitaxy

[www.icmovpe2012.org](http://www.icmovpe2012.org)

**May 20~25, 2012**

Paradise Hotel Busan, Busan, Korea

## IMPORTANT DATES

Abstract Submission Due	December 2, 2011
Abstract Acceptance Notification	February 3, 2012
Late News Abstract Submission Due	March 2, 2012
Late News Abstract Acceptance Notification	March 30, 2012
Advance Registration Due	April 20, 2012
Final Manuscript Submission Due	April 30, 2012

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## INTRODUCTION

The sixteenth International Conference on Metal Organic Vapor Phase Epitaxy (ICMOVPE 2012) Will be held from May 20 through 25, 2012 at the Paradise Hotel Busan, Busan, Korea. The conference builds upon the strong tradition of previous conferences of presenting the latest advances in science, technology and applications of MOVPE and related growth techniques. The objective of the conference is to bring together a wide spectrum of specialists from Industry, Commerce, Academia, and National Laboratories to present their most recent progress in the fundamental and applied aspects of MOVPE technology. The program is designed to provide a wide range of opportunities for formal and informal discussions of and presentations on all topics.

## TOPICS

- Basic Growth Studies
- Nitride Semiconductors and Devices
- III-V Compound Semiconductors (Arsenides, Phosphides, Antimonides) and Devices
- II-VI Compound Semiconductors and Devices
- Narrow Bandgap Materials
- Oxides (TFT, TCO, Dielectrics, etc)
- Novel Materials (Magnetic Materials, Graphene, Diamond, etc)
- Heteroepitaxy
- Nanostructures and Hybrid Devices
- Patterned Growth and Selective Area Epitaxy
- Atomic Layer Deposition and Epitaxy
- Virtual Substrates and Epitaxial Lift-off
- In Situ Monitoring and Process Control
- Characterization
- Energy Technology (Solar Cells, Thermoelectrics, Piezoelectrics etc)
- Equipment, Safety, Environmental and Production Issues

## PLENARY & INVITED SPEAKERS

### • PLENARY SPEAKERS



**Prof. Yasuhiko Arakawa**  
The University of Tokyo, Japan

Advances in quantum dots: From science to practical implementation



**Prof. Alois Krost**  
Otto-von-Guericke Universität Magdeburg, Germany

GaN-on-Si: A platform for electronic and optoelectronic devices



**Dr. Cheolsoo Sone**  
Samsung LED, Korea

Recent Progress of GaN-based LED Technology



**Prof. Thomas Kuech**  
University of Wisconsin at Madison, USA

Growth of Metastable Epitaxial Alloys: Approaches, Problems and Some Successes

### • INVITED SPEAKERS

- **Prof. Hiroshi Amano** (Nagoya University, Japan) "Indium and Impurity Incorporation in InGaN"
- **Prof. Ishwara Bhat** (Rensselaer Polytechnic University, USA) "Recent Advances on the Epitaxial growth of CdTe and ZnTe on Si Substrates by MOVPE"
- **Dr. Oliei Briot** (Laboratoire Charles Coulomb, France) "MOVPE of Mismatched and Strained Semiconductor Systems : from II-VI to Nitrides"
- **Prof. James Coleman** (University of Illinois, USA) "Patterned Nanostructure Lasers by Metalorganic Chemical Vapor Deposition"
- **Dr. Frank Dimroth** (Fraunhofer ISE, Germany) "Next Generation Multi-junction Solar Cells for Concentrator Photovoltaic Applications"
- **Prof. Takashi Fukui** (Hokkaido University, Japan) "Compound Semiconductor Nanowire Solar Cells"
- **Prof. Mitsuru Funato** (Kyoto University, Japan) "High Quality AlGaN-based Quantum Wells for Deep-ultraviolet Emitters"
- **Prof. Han Jung** (Yale University, USA) "Selective Area Growth of GaN: Prospects and New Twists"
- **Prof. Sang Woo Kim** (Sungkyunkwan University, Korea) "ZnO/Graphene Heterostructures for Piezoelectric Nanogenerator and OPV Applications"
- **Prof. Hao-Chung Kuo** (National Chiao Tung University, Taiwan) "Improvement in Efficiency Droop of GaN-based Light-emitting Diodes by Optimization of Active Regions"
- **Prof. Luke Mawst** (University of Wisconsin - Madison, USA) "Deep Well Quantum Cascade Lasers"
- **Dr. Kirsten Moselund** (IBM Zurich, Germany) "III-V Nanowire Heterostructures on Silicon for Tunneling Devices"
- **Prof. Seong-Ju Park** (GIST, Korea) "Prospects for High Performance GaN LED"
- **Prof. Wolfgang Stolz** (Universität Marburg, Germany) "MOVPE of Monolithically Integrated, Lattice-matched Ga(NAsP)-laser Material on (001) Si Substrate"

## ORGANIZING COMMITTEES

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• Christine Wang (MIT, USA)

• Hui Yang (Chinese Academy of Sci., China)

## ABSTRACT SUBMISSION

All prospective authors are invited to submit abstracts for oral or poster presentations. All contributions will be reviewed before inclusion in the program. Abstracts must be submitted electronically via the conference website ([www.icmovpe2012.org](http://www.icmovpe2012.org)), and a detailed submission guideline can be found on it.

The deadline for the on-line abstract submission is December 2, 2011 and the e-mail notification of the abstract acceptance in either an oral or a poster presentation will be sent by February 3, 2012.

## PAPER PUBLICATION

All submitted papers will be peer reviewed and papers accepted for presentation will be bound in proceedings of ICMOVPE-XVI.

Selected full-length high quality papers will also be published in special issues of CRYSTAL-Growth, the world's leading journal of scientific information.

Further information on the Special Issue will appear on the conference website ([www.icmovpe2012.org](http://www.icmovpe2012.org)).

## ICMOVPE-XVI SECRETARIAT

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