Important Dates

- Begin of registration: October 11, 2010
- End of applying for financial aid: December 31, 2010
- End of abstract submission: February 20, 2011
- Notification of poster acceptance: March 18, 2011
- End of early registration: April 15, 2011
- End of registration: May 15, 2011

Workshop Chairs

- R. Fornari, IKZ Berlin, DE
- D. Bliss, Air Force Research Laboratory, Hanscom AFB, US
- K. Kakimoto, Kyushu University, Fukuoka, JP

Steering Committee

- E. Bourret-Courchesne, Lawrence Berkeley National Laboratory, University of California, US
- P. Capper, SELEX Galileo, UK
- M. Chou, National Sun Yat-Sen University, TW
- B. Depuydt, Umicore, BE
- J. Derby, University of Minnesota, US
- E. Dieguez, Auton. University Madrid, ES
- T. Duffar, SiMaP-EPMM, Grenoble, FR
- R. Fornari, IKZ Berlin, DE
- V. Fratello, Integrated Photonics Inc., Hillsborough, US
- A. Gektin, Institute for Single Crystals, Kharkov, UA
- F. Kiessling, IKZ Berlin, DE
- Y. Mori, Osaka University, JP
- K. Nakajima, Tohoku University, JP
- M. Porrini, MEMC, IT
- H. Scheel, CH
- A. Seidl, Schott Solar Wafer, DE
- N. Stoddard, BP Solar, US
- R. Uecker, IKZ Berlin, DE
- Y. Wu, Beijing Center for Crystal Research & Development, CN
- E.V. Zharikov, Mendeleyev University, Moscow, RU

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Location

http://www.pentahotels.com/de/berlin-koepenick/
Penta Hotel Berlin-Koepenick

International Organization for Crystal Growth
http://www.iocg.org/

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Release date: January 19, 2011

June, 26-30, 2011 · Berlin, Germany
Scope
This Workshop is the fifth of a series initiated by Hans Scheel in Beatenberg (Switzerland) in 1998 and aims at filling a gap in the conference coverage of topics, that of Crystal Growth Technology industrial crystal production and crystal machining. In essence, these workshops act as a bridge between the science and the practice, i.e. between R&D and the actual production.
IWCGT-5 is organized under the auspices of the International Organization for Crystal Growth and its programme consists of 45 min.long invited talks from international specialists. It is foreseen that the Workshop should maintain its traditional manageable size (altogether about 100 participants) to enable lots of discussions and debate including some evening sessions of a more general nature. While the oral presentation will be on invitation only, we invite all participants to present their own results in two evening poster sessions.

Topical Sessions
Melt growth technologies for ultra pure and perfect semiconductors, e.g. silicon and germanium, III-V, II-VI
(Coordinated by B. Depuydt, P. Rudolph)
- Kearns, J., MEMC, US: Continuous CZ technology for electronic and solar silicon production
- Neubert, M., IKZ Berlin, DE: Model based control of the Czechowski process
- Eichler, St., FCM Freiberg, DE: State-of-the-art crystal growth of bulk GaAs
- Franc, J., Charles University Prague, CZ: Melt growth and quality assessment of (Cd,Zn)Te for radiation detectors

Advances in solution growth
(Coordinated by A. Ibanez, D. Bliss)
- Demazeau, G., ICMCB, ENSCBP, Pessac, FR: Hydrothermal/Solvothermal crystal growth: an old but adaptable process
- Rytz, D., FEE Idar Oberstein, DE: State-of-the-art nonlinear optical crystals for ultraviolet applications
- Zaitseva, N., LLNL Berkeley, US: Rapid solution growth of organic/inorganic crystals
- Zajac, M., Ammono, PL: Ammonothermal growth of GaN - principles and applications

Growth technologies for solar silicon
(Coordinated by T. Duffar, N. Stoddard)
- Flahaut, E., CEA-INES, FR: What is a good silicon for the production of crystalline silicon based solar panel?
- Ambert, L., NTNU, NO: State-of-the-art growth of silicon for PV applications
- Buonassisi, T., MIT, US: Characterisation and control of defects in solar Si

Advances in crystal machining and wafer processing
(Coordinated by K. Jacobs, U. Juda)
- Möller, H.-J., TUB Freiberg, DE: Wafering of Si crystals - basics and technological details of the sawing process
- Kozlowski, P., ComSeCore, PL: Chemo-mechanical polishing of semiconductor substrates for epitaxial applications

Crystal growth technologies for crystal fibers and metamaterials
(Coordinated by R. I. Merino, A. Yoshikawa)
- Pawlak, D., ITM, PL: Bottom-up approach via micro-pulling down method towards metamaterials
- Watauchi, S., Yamanashi University, JP: Crystal growth by a modified infrared heating floating zone method
- Chani, V., Tohoku University, JP: Micro-pulling-down technology and its applications

Melt growth technologies for dielectric crystals for applications as piezo-devices, scintillators, NLO and lasers
(Coordinated by A. Gektin, E. Bourret-Courchesne)
- Akselrod, M., Landauer Inc., US: Modern trends in crystal growth and new applications of sapphire
- Chai, B., Crystal Photonics Inc., US: Crystal growth of scintillating crystals for high performance ToF PET/CT scanners
- Zharkov, E., Mendeleev University, Moscow, RU: Recent advances in melt crystal growth technology
- Schunemann, P., BAE Systems, US: Recent Advances in Infrared Nonlinear Optical Crystal Technology

Technologies for growth of bulk wide-bandgap semiconductors
(Coordinated by J. Friedrich, Z. Sitar)
- Paskova, T., Kyma Technologies, Inc. US: Status of HVPE GaN
- Tsvelev, V., Cree, Inc., US: Status of SiC sublimation technology
- Kumagai, Y., TUAT Tokio, JP: Growth of AlN on homo- and hetero-substrates by HVPE

Preliminary Program
(as of January 2011)
June, 26
14:30 Arrival & Registration
18:30 Welcome, Address, Cocktail
20:00 Panel discussion: Modern crystal growth equipments and use of external fields in the melt growth

June, 27
09:00 Melt growth technologies for ultra pure and perfect semiconductors, e.g. silicon & germanium, III-V, II-VI
13:00 Lunch
14:30 Advances in crystal machining and wafer processing
18:30 Dinner
20:00 Poster session 1

June, 28
09:00 Growth technologies for solar silicon
13:00 Lunch
14:30 Advances in crystal growth and wafer processing
16:30 Workshop photo
17:00 Workshop Dinner & boat trip

June, 29
09:00 Crystal growth technologies for crystal fibers and metamaterials
13:00 Lunch
14:30 Melt growth technologies for dielectric crystals for applications as piezo-devices, scintillators, NLO & lasers
18:30 Dinner
20:00 Poster session 2

June, 30
09:00 Technologies for growth of bulk wide-bandgap semiconductors
13:00 Lunch
14:30 End