

17th International Conference on Crystal Growth and Epitaxy

ICCGE-17



Chairs:

Stanislaw Krukowski

Institute of High Pressure Physics PAS, Warsaw, Poland

Roberto Fornari

Leibniz Institute for Crystal Growth, Berlin, Germany

Programme Chairs

Zbigniew R. Zytkiewicz

Institute of Physics PAS, Warsaw, Poland

Jochen Friedrich

Fraunhofer IISB, Erlangen, Germany

August 11-16, 2013
Warsaw, Poland

The 17th International Conference on Crystal Growth and Epitaxy (ICCGE-17) will be held in Warsaw, Poland on August 11-16, 2013. The venue will be at the main campus of the University of Warsaw, established in 1816, which is Poland's largest and finest university. The main campus of the University consists of palatial-style buildings as well as a very modern glass-steel library, with a roof garden. This unique atmosphere will help to make the participation in the conference both comfortable and fruitful. ICCGE-17 will provide a forum for the presentation and discussion of recent research and development activities in all aspects of bulk crystal growth and epitaxial thin film growth, with sessions including fundamentals, experimental and industrial growth processes, characterization and applications. The technical programme will include both oral and poster sessions, as well as plenary and invited talks to provide a complete picture of the latest developments in the field. Some of the sessions are jointly organized with the IUCR Comm. on Crystal Growth. The official language of the conference will be English. The conference papers will be published in a special volume of Journal of Crystal Growth.

Important dates

1 Nov 2012 - Opening of registration

15 Nov 2012 - Start of abstract submission

31 March 2013- Abstract submission deadline

30 April 2013 - Notification of abstract acceptance

31 May 2013 - End of early registration

11 Aug 2013 - Beginning of the Conference

Registration and abstracts submission

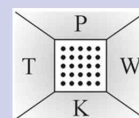
The registration and abstract submission is possible only through the Conference Website:

<http://science24.com/event/iccge17/> .

Abstract submission by e-mail is not possible.

The conference takes place in the capital of Poland – Warsaw. This is Poland's largest city, which nurtures over 400 years of pride as a capital, and moreover as an economic, political, and cultural centre. The symbol of the city is the Mermaid, featured on the city seal. Warsaw is a bustling metropolis and features an unforgettable history. One fourth of the city is covered by parkland. It is located in central Europe and easily reachable by car, train and plane. The conference venue is the University of Warsaw, in the city centre and very close to the Old Town. A wide range of hotels nearby will provide accommodation to suit every pocket. Very convenient and cheap accommodations will be offered to students and other needy participants in the University's dormitories. Warsaw is located not far from UNESCO heritage sites as Zelazowa Wola – Chopin's birthplace; Cracow; and Wieliczka – an exciting and unique salt mine. You can enjoy summer evening life at the Warsaw Old Town, restful atmosphere of the Royal Baths Park – Lazienki; and try a special hot chocolate at Wedel.

We look forward to welcoming you in Warsaw!



International Advisory Committee		Programme Committee		Organizing Committee	Local Committee
Horia Alexandru (Romania)	Wang Mu (China)	Jacek Baranowski (Poland)	Jacek Majewski (Poland)	<u>Conference Chairs</u>	<u>Chairman Organizing Comm.</u>
Wolfgang Assmus (Germany)	Manfred Muehlberg (Germany)	Torsten Boeck (Germany)	Fumihiko Matsukura (Japan)	Stanislaw Krukowski (Poland)	Roman Stępniewski (Poland)
Chuangtian Chen (China)	Tadashi Ohachi (Japan)	Kullaiah Byrappa (India)	Thomas Michely (Germany)	Roberto Fornari (Germany)	<u>Tenders</u>
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Hanna Dabkowska (Canada)	Vyacheslav Puzikov (Ukraine)	Andreas Danilewsky (Germany)	Jolanta Prywer (Poland)	<u>Secretary</u>	<u>Industrial Exhibition</u>
Jim De Yoreo (USA)	Kevin Roberts (GB)	Bruno Daudin (France)	Vyacheslav Puzikov (Ukraine)	Dorota Pawlak (Poland)	Marcin Sarzynski (Poland)
Jeffrey Derby (USA)	Michael L. Roth (Israel)	Govindhan Dhanaraj (USA)	Joan Redwing (USA)	Konrad Sakowski (Poland)	Torsten Boeck (Germany)
Thierry Duffar (France)	Marco Rubbo (Italy)	Michael Dudley (USA)	Kevin Roberts (UK)	<u>Treasurer</u>	Manfred Muehlberg (Germany)
Roberto Fornari (Germany)	Peter Rudolph (Germany)	Thierry Duffar (France)	Maciej Sawicki (Poland)	Bolesław Łuczniak (Poland)	<u>Sponsorship</u>
Charles T. B. Foxon (GB)	Wojciech Sadowski (Poland)	Partha Dutta (USA)	Ferdinand Scholz (Germany)	<u>Proceedings</u>	Michał Leszczynski (Poland)
Hiroshi Fujioka (Japan)	Stefano Sanguinetti (Italy)	Michael Fiederle (Germany)	Albrecht Seidl (Germany)	Keshra Sangwal (Poland)	Arne Croell (Germany)
Juan M. Garcia-Ruiz (Spain)	Keshra Sangwal (Poland)	Jochen Friedrich (Germany)	Marek Skowronski (USA)	Ewa Talik (Poland)	<u>Website</u>
Brian Glennon (Ireland)	James Speck (USA)	Marek Godlewski (Poland)	Gunther Springholz (Austria)	Peter Gille (Germany)	Paweł Kempisty (Poland)
Nicolas Grandjean (Switzerland)	G.B. Stringfellow (USA)	Izabella Grzegory (Poland)	Sudhir B. Trivedi (USA)	Wolfram Miller (Germany)	Konrad Sakowski (Poland)
Michael Heuken (Germany)	Olavo Ferreira Sukarno (Brazil)	Jeffrey J. Derby (USA)	Shiro Tsukamoto (Japan)		Paweł Strak (Poland)
Alain Ibanez (France)	Yoshikazu Takeda (Japan)	Dariusz Kaczorowski (Poland)	Elias Vlieg (The Netherlands)		<u>Local Arrangements</u>
Koichi Kakimoto (Japan)	Ewa Talik (Poland)	Koichi Kakimoto (Japan)	Deren Yang (China)		Mirosław Wróblewski (Poland)
Zdenek Kozisek (Czech Rep.)	Katsuo Tsukamoto (Japan)	Maria Kaminska (Poland)	Thomas Zettler (Germany)		<u>Accompanying persons</u>
Stanislaw Krukowski (Poland)	Elias Vlieg (Netherlands)	Michał Leszczynski (Poland)	Zbigniew Zytikiewicz (Poland)		Agnieszka Grabias (Poland)
Thomas Kuech (USA)	Alexey Voloshin (Russia)				
Janaki Kumar (India)	Jiyang Wang (China)				
Chung-Wen Lan (Taiwan)	Rositza Yakimova (Sweden)				
Abel Moreno (Mexico)	Kader Zaidat (France)				
Yusuke Mori (Japan)					

PLENARY, GENERAL AND TOPICAL SESSIONS: INVITED SPEAKERS (*confirmed*)

Plenary lectures

Anna Pajaczkowska (ITME, Warsaw, Poland)
Reinhard Uecker (IKZ, Berlin, Germany)
Jan Czochralski and historical development of the Czochralski method

Jiyang Wang (Shandong University, China)
Growth and laser performance of rare-earth vanadate family crystals

Tomasz Wojtowicz (Polish Academy of Sciences, Poland)
Diluted magnetic semiconductors for spintronics

Jim De Yoreo (Lawrence Berkeley National Laboratory, USA)
In situ TEM studies of nanoparticle interaction, growth and branching

G01: Fundamentals and Modeling

Coord.:
Koichi Kakimoto (Japan),
Jeffrey J. Derby (USA)

Julian Gale (Curtin University, Australia)
Accurate simulation of aqueous crystal growth - solutions and challenges

Thomas Kuech (University of Wisconsin, USA)
Fundamentals of vapor growth, bulk and epitaxial.

Robert F. Sekerka (Carnegie Mellon University, USA)
Modeling of three phase contact lines by using Density Functional Theory

Makio Uwaha (Nagoya University, Japan)
Step patterns induced by a line source of adatoms

Elias Vlieg (Radboud University Nijmegen, The Netherlands)
The role of liquid ordering in solution growth

Magdalena Zakuska-Kotur (Polish Academy of Sciences, Poland)
Step bunching and meandering processes in the crystal growth dynamics

G02: Bulk crystal growth

Coord.:
Izabella Grzegory (Poland),
Partha Dutta (USA)

Sadik Dost (University of Victoria, Canada)
Growth of bulk crystals of semiconductors by electroepitaxy

Zbigniew Galazka (IKZ, Berlin, Germany)
Growth and properties of bulk single crystals of selected transparent semiconducting oxides (TSOs): β -Ga₂O₃, In₂O₃ and SnO₂

Zlatko Sitar (North Carolina State University and HexaTech, USA)
Growth of AlN crystals and AlGaN epitaxy on AlN wafers

Hitoshi Sumiya (Sumitomo Electric Industries, Japan)
High pressure synthesis of large high-quality single crystal diamonds

Deren Yang (Zhejiang University, China)
Germanium-doped Czochralski silicon

Natalia Zaitseva (Lawrence Livermore National Laboratory, USA)
Growth and application of organic crystals grown from non-aqueous solutions

G03: Biological and Biogenic Crystallization

Coord.:
Jolanta Prywer (Poland)
Helmut Coelfen (Germany)
Abel Moreno (Mexico)

Denis Gebauer (University of Konstanz, Germany)
The role of prenucleation clusters during (bio)mineral nucleation

Hiroaki Imai (Keio University, Japan)
Bioinspired mineralization: branching growth and oriented attachment

André Studart (ETH Zurich, Switzerland)
Synthetic analogues of biomineralized materials

G04: Industrial crystallization

Coord.:
Kevin Roberts (UK),
Govindhan Dhanaraj (USA)
Kullaiah Byrappa (India)

Helmut Cölfen (Universität Konstanz, Germany)
Analysis of the early stages of crystallization processes

Christopher D. Jones (Saint-Gobain Corporation, USA)
Sapphire wafers for LED applications

Ken Lewtas (Infineum UK Ltd., UK)
Keeping a greener world on the move in winter: controlling crystallisation within fuels and biofuels in cold weather.

Narsingh Bahadur Singh (University of Maryland, USA)
Development of acousto-optic crystals for hyperspectral imaging

David H. Wei (Tianjin University, P. R. China)
Challenges in the scale-up of crystallisation from process and product development through to manufacturing

PLENARY, GENERAL AND TOPICAL SESSIONS: INVITED SPEAKERS (*confirmed*)

G05: Characterization

Coord.:

Maria Kaminska (Poland),

Marek Skowronski (USA)

Yulin Chen (Clarendon Laboratory, UK)

Visualization of novel electronic structures in topological insulators

Agnieszka Wolos (Polish Academy of Sciences, University of Warsaw, Poland)

Application of microwave spectroscopy to studies of electron transport properties

G06: In situ monitoring, new equipment and technologies

Coord.:

Thomas Zettler (Germany),

Shiro Tsukamoto (Japan)

Michael Heuken (AIXTRON SE, Germany)

Next generation production MOVPE - on the role of in-situ metrology for process control and yield enhancement

Kiyoshi Kanisawa (NTT Corporation, Japan)

Electronic processes in adatom dynamics at epitaxial semiconductor surfaces studied using MBE-STM combined system

Markus Pristovsek (University of Cambridge, UK)

When the surface rules: topography, defects or facets and the limit of in-situ monitoring

Masamitsu Takahashi (Japan Atomic Energy Agency, Japan)

In-situ monitoring of molecular-beam epitaxial growth of zero-, one-, and two-dimensional structures using synchrotron X-ray diffraction

G07: Defect formation/elimination

Coord.:

Andreas Danilewsky (Germany),

Michael Dudley (USA),

Thierry Duffar (France)

Yasufumi Fujiwara (Osaka University, Japan)

Development of properties and functionalities by precise control of rare earth doping

Balaji Raghothamachar (Stony Brook University, USA)

Synchrotron topography studies of defect formation and elimination mechanisms

G08: Nanomaterials and low dimensional structures

Coord.:

Torsten Boeck (Germany),

Joan Redwing (USA)

Yasuhiko Arakawa (The University of Tokyo, Japan)

Growth and optical properties of quantum dots for quantum electrodynamics

Li-Chyong Chen (National Taiwan University, Taiwan)

The growth of arrayed III-Nitrides and ZnO nanorods and their photoelectrochemical properties

Yi-Chia Chou (National Chiao Tung University, Taiwan)

In situ TEM formation of semiconductor nanowires and nanostructures

Vladimir Dubrovskii (Ioffe Institute, Russia)

Growth modeling of III-V semiconductor nanowires

G09: Surfaces and interfaces

Coord.:

Thomas Michely (Germany),

Elias Vlieg (The Netherlands)

Gen Sazaki (Hokkaido University, Japan)

In-situ observation of ice crystal surfaces by advanced optical microscopy: elementary steps and quasi-liquid layer

Christian Teichert (Montanuniversitaet Leoben, Austria)

Interface controlled crystalline organic layers

Patric Vogt (Technische Universität Berlin, CNRS-CINaM, France)

Growth and properties of epitaxial silicene on Ag(111)

Yukiko Yamada-Takamura (Japan Advanced Institute of Science and Technology, Japan)

Spontaneous formation of silicene on diboride thin films grown on Si wafers

Conference website:

<http://science24.com/event/iccge17/>

G10: Thin film and epitaxial growth

Coord.:

Michal Leszczynski (Poland),
Ferdinand Scholz (Germany)

W. Alan Doolittle (Georgia Institute of Technology, USA)

Growth methodologies for overcoming the perceived limitations of phase separation and p-type doping in InGaN

Shizuo Fujita (Kyoto University, Japan)

Epitaxial growth of wide band gap oxide semiconductor thin films

Wolfgang Stolz (University of Marburg, Germany)

Recent progress for monolithically integrated Ga(NAsP)-laser on (001) Si-substrate

Carol Thompson (Northern Illinois University, USA)

In situ X-ray studies of the epitaxial growth

Euijoon Yoon (Seoul National University, Korea)

Hollow nanostructure-assisted growth of GaN by MOCVD and its applications

T01: Intermetallic and highly correlated electron materials

Coord.:

Dariusz Kaczorowski (Poland),
Yoshichika Ōnuki (Japan)

Zygmunt Henkie (Polish Academy of Sciences, Poland)

Growing uranium and cerium pnictide crystals by chemical vapor transport and flux methods

Tsuyoshi Kimura (Osaka University, Japan)

Crystal growth of multiferroics

T02: Materials for spintronics

Coord.:

Maciej Sawicki (Poland),
Fumihiko Matsukura (Japan)

Alberta Bonanni (Johannes Kepler University, Austria)

MOVPE growth and structural characterization of (Ga,Fe)N and (Ga,Mn)N codoped with Si or Mg

Richard Campion (University of Nottingham, UK)

From GaMnAs to CuMnAs: growth by molecular beam epitaxy

T03: Wide bandgap semiconductors

Coord.:

Marek Godlewski (Poland),
Bruno Daudin (France)

Robert Dwilinski (Ammono S.A., Poland)

Ammonothermal GaN crystallization

Lutz Geelhaar (PDI Berlin, Germany)

Nucleation and MBE growth of GaN nanowires

Jawad ul Hassan (Linköping University of Technology, Sweden)

SiC epitaxial growth

Grzegorz Luka (Polish Academy of Sciences, Poland)

Zinc oxide films grown by atomic layer deposition: from material properties to device applications

PLENARY, GENERAL AND TOPICAL SESSIONS: INVITED SPEAKERS (*confirmed*)

T04: Compound semiconductors

Coord.:

Michael Fiederle (Germany),
Gunther Springholz (Austria)

Christiane Frank-Rotsch (Leibniz Institute for Crystal Growth,
Germany)

*Vertical gradient freeze growth of GaAs using a heater magnet module
(HMM)*

Aleksandar Ostrogorsky (Illinois Institute of Technology, USA)

Czochralski growth of indium mono-iodide

T05: Si/Ge for microelectronics and photovoltaics

Coord.:

Albrecht Seidl (Germany),
Deren Yang (China)

Kasper Erich (Stuttgart University, Germany)

Epitaxy of GeSi heterostructures on silicon substrates

T06: Oxides and halides including laser and nonlinear optical applications

Coord.:

Hanna Dabkowska (Canada),
Vyacheslav Puzikov (Ukraine)

Sonia Baldochi (IPEN-CNEN/SP, Brasil)

Growth and applications of single crystal fibers

Edith Bourret-Courchesne (Lawrence Berkeley National
Laboratory, USA)

Discovery and crystal growth of new scintillators

Haosu Luo (Chinese Academy of Sciences, China)

*Improved performances of relaxor-based single crystals for sensor
applications*

Leonid Lytvynov (National Academy of Sciences of Ukraine,
Ukraine)

Constructional and optical sapphire crystals for application in medicine

Michael Schieber symposium

Ralph James (Brookhaven National Laboratory, USA)

*Cadmium zinc telluride X- and gamma-ray detectors - past, present and
future*

Andrzej Mycielski (Polish Academy of Sciences, Poland)

*Growth of the high-quality crystals of (Cd,Mn)Te for application in X- and
gamma radiation detectors*

Michael Roth (The Hebrew University of Jerusalem, Israel)

Composite boron nitride neutron detectors

T07: Novel materials and structures

Coord.:

Jacek Baranowski (Poland),
Jacek Majewski (Poland),
Sudhir B. Trivedi (USA)

Nicholas X. Fang (Massachusetts Institute of Technology, USA)

Transforming acoustics with metamaterials

Edmondo Gilioli (IMEM-CNR, Italy)

High pressure growth of new multiferroics materials

Christian Kloc (Nanyang Technological University, Singapore)

The role of weak bonds in the growth of low-dimensional crystals

Włodzimierz Strupinski (Institute of Electronic Materials
Technology, Poland)

CVD epitaxial graphene growth

T08: External fields, microgravity

Coord.:

Arne Croell (Germany),
Alexandar Ostrogorsky (USA)

Jeff Derby (University of Minnesota, USA)

*Analysis of the nonlinear behavior of detached Bridgman growth in
microgravity*

Satoshi Uda (Tohoku University, Japan)

*The effect of an external electric field on phase equilibria, nucleation and
growth*

T09: Late news session

Coord.:

Zbigniew Zytkeiwicz (Poland),
Jochen Friedrich (Germany)

Conference website:

<http://science24.com/event/iccge17/>

Call for Nominations for the Frank and Laudise Prize

The next Frank and Laudise Prizes will be awarded during the ICCGE-17 in Warsaw in August 2013. Nominations have to be submitted to the chairman of the selection committee Prof. Elias Vlieg e.vlieg@science.ru.nl.

Guidelines for nominations:

- The nominator should submit a nomination letter (maximum two pages) which clearly states the significant fundamental (Frank Prize) or technological (Laudise Prize) contributions of the nominee to the field of crystal growth. Please specify if the nomination is for the Frank or the Laudise Prize.
- The nomination has to be accompanied by a CV, list of publications, patents, honors etc. of the nominee.
- Support letters by up to two well-known crystal growers are welcome but not mandatory.
- Deadline for submission of the nomination is 31 January 2013.

The IOCG Frank Prize shall be awarded for significant fundamental (not necessarily theoretical) contributions to the field of crystal growth. The IOCG Laudise Prize shall be awarded for significant technological (not necessarily experimental) contributions to the field of crystal growth. Neither prizes should be awarded to honor long and distinguished service to IOCG; recognition of such service should be made in other ways.

Call for Nominations for Schieber Prize

The next Schieber Prize will be awarded during the ICCGE-17 in Warsaw in August 2013. Nominations have to be submitted to the chairman of the selection committee Prof. Tom Kuech kuech@engr.wisc.edu.

Eligibility:

The prize, sponsored by the *Journal of Crystal Growth* (Elsevier Science), shall be awarded to one person who will be less than 40 years of age at the beginning of the ICCGE meeting. The publications for which the award is made should consist of a paper or series of papers, published prior to the opening of that ICCGE. The criteria for selection should be scientific excellence, clarity of presentation and impact on the field of crystal growth. Scientists of all nations, regardless of the geographical or employment location at which the work was done, are eligible.

Guidelines for nominations:

- The nominator should submit a nomination letter (maximum two pages) which clearly states the impact on the field of crystal growth of the nominee's publication(s).
- The nomination has to be accompanied by a CV and list of publications of the nominee.
- Support letters by up to two well-known crystal growers are welcome but not mandatory.
- Deadline for submission of the nomination is 31 January 2013.

Registration

The registration procedure is opened from 1st November 2012 through the Conference website: <http://science24.com/event/iccge17/>.

Abstract submission

To submit an abstract, please first register and login to the Conference site. Then follow to "Abstracts → New abstract". To prepare an abstract, please fill in the form available on the page (the on-line editor is provided). Abstract submission by e-mail is not possible.

Abstracts should contain no more than 20000 characters. Please use only jpg and png image files.

Posters

Posters should be in A0 format.

Conference fee

The Conference fee is 2200 PLN (Polish zloty) for regular participants and 1500 PLN for students if paid before 31st May 2013. After this deadline the fee is 2500 PLN for regular participants and 1800 PLN for students. In order to get the fee reduction the students have to present their university ID at the Conference registration desk.

The conference fee includes:

- Conference materials
- Coffee breaks
- Lunches Monday - Thursday
- Banquet
- Conference excursion
- Publication of conference proceedings in Journal of Crystal Growth

Payment

The conference fee can be paid by a bank transfer or credit card. To make a payment, please register and login to the Conference site (<http://science24.com/event/iccge17/>). Then follow to "Registration → Fee and services" to place order, choose the method of payment (bank transfer, credit card) and generate the form for the bank transfer.

Alternatively the fee could be also paid on arrival in cash with an additional cost of 300 PLN.

Accommodation:

The Congress will be held at University of Warsaw. There is a choice of hotels of different categories, not far from the conference site. Many of them will be listed on the web site of the Congress. Participants should make their own reservations using link to the Mazurkas Travel Office:

https://ssl.mazurkas.com.pl/11267_iccg/

Visas

Citizens of the following countries can enter Poland without a visa:

Andorra, Argentina, Australia, Austria, Belgium, Brazil, Brunei, Bulgaria, Canada, Chile, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Honduras, Hong Kong (special administrative region), Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao (special administrative region), Malaysia, Malta, Mexico, Monaco, the Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Portugal, Romania, San Marino, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, the United Kingdom, the United States of America, Uruguay, the Vatican, Venezuela.

http://www.msz.gov.pl/en/travel_to_poland/entering_poland/entering_poland

The citizens of other countries need visa. The participant who needs visa has to declare that during registration. In order to get invitation the participant needs also to submit an abstract. In case you need any help in the visa procedure please write a message to the Conference secretariat at: iccge17sec@unipress.waw.pl.

Conference secretariat

The general information about the ICCGE-17 Conference could be obtained from Conference Secretariat at: iccge17sec@unipress.waw.pl.



15th International Summer School on Crystal Growth

ISSCG - 15

Chairs:

Ewa Talik

University of Silesia, Katowice

Wojciech Sadowski

Gdansk University of Technology, Gdansk

Elke Meissner

Fraunhofer Institute of Integrated Systems and Device Technology

IISB, Erlangen

Peter Wellmann

University of Erlangen-Nürnberg, Erlangen

August 4-10, 2013

Gdansk, Poland

e-mail: isscg15@mif.pg.gda.pl



The 15th International Summer School on Crystal Growth will be held August 4-10, 2013 at the Technical University of Gdansk in Gdansk, Poland. Following tradition, the School will be organized during the week prior to the 17th International Conference on Crystal Growth in Warsaw, Poland. The

objective of the School is to provide a comprehensive series of lectures on theoretical and experimental aspects of crystal growth and characterization of semiconducting, oxide, metallic, organic, and biological crystals. Lectures by leading researchers will encompass crystal growth processes, nanocrystallization, in-situ and ex-situ characterization, properties, and applications. The level of the school is intended for post-graduate and post-doctoral students as well as for researchers from industry and academia who are interested in fundamental knowledge of crystal growth and epitaxy. Researchers new to crystal growth as well as experts are encouraged to attend.

The Organizing Committee for ISSCG-15 will offer the travel grants to limited number of participants.

A competition for ISSCG-15 students will be held and recognition for 3 outstanding posters will be given. For more details – please check our website.

Important dates

- 1 May 2013 - Deadline for Travel Grant application
- 15 May 2013 - Notification of Travel Grant acceptance
- 31 May 2013 - Abstract submission deadline
- 31 May 2013 - End of early registration
- 4 Aug 2013 - Beginning of the School

Registration, abstracts submission

The registration is possible only through the School

Website: <http://science24.com/event/isscg15/> .

The school venue is located in northern part of Poland, in Gdansk. Gdansk - the thousand-year-old, beautiful port on the Baltic Sea has a gentle climate and beautiful beaches.

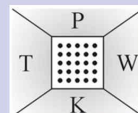
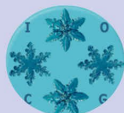
In its golden age, this "Pearl of the North" enjoyed the unique status of a municipal republic. The exclusive architecture of the Old Town, including the largest brick Gothic church in the world, and a dozen gates including the historic Crane Gate (XIV century) situated on the Motlawa River, is undoubtedly worth exploring. No visitor to Gdansk will be able to resist its charm. When visiting the charming and truly unique Mariacka Street you will be amused by the beauty of the amber on sale. To buy a piece of amber from Gdansk is a must!

A number of college rooms (about 1 km from the University) have been reserved for ISSCG15 participants that can be booked with a special discount by 1st of June 2013. The price for a single room is 70 PLN (~ 17 EUR) per night and this is a special rate for the school participants only. In order to book a room please contact directly to the person responsible for booking via e-mail: ds4@pg.gda.pl.



Organized by

Polish Society for Crystal Growth
German Society for Crystal Growth
Gdansk University of Technology



School website:

<http://science24.com/event/isscg15>

Lectures

Izabela Grzegory

From Jan Czochralski to high-pressure nitride growth – the development and topics of crystal growth in Poland

Duffar Thierry

Thermodynamics of crystal growth

Peter Vekhilov

Nucleation and Growth Kinetics

Jeffrey J. Derby

Continuum transport of heat, mass, and momentum in crystal growth processes: Fundamentals and computational modeling

Katsuo Tsukamoto

In-situ observation of crystal growth by advanced optical methods

Antoni Dabkowski

Growth from melt

Peter Wellmann

Vapor (PVT) (with focus on SiC and AlN)

Natalia Zaitseva

Solution growth of inorganic and organic molecular crystals

Peter Rudolph

Crystal defects

Lectures

Darell Shlom

Epitaxial Growth - from Basic Concepts to Reality

Alois Krost

Metalorganic Vapour Phase Epitaxy of GaN on Si: from Principles to Devices

Klaus H. Ploog

Pivotal Role of Molecular Beam Epitaxy (MBE) in the Development of Nanoscience and Nanotechnology

Maria Gdaniec

Fundamentals of crystallography

Elke Meissner

Characterization (electrical, optical, structural, chemical)

Juan Manuel Garcia Ruiz

Biomaterial and Biomimetic Crystallization

Dorota A. Pawlak

Self-organizing materials

Elias Vlieg

Nanocrystals

Jacek Majewski

Graphene - Chemistry and Physics of Epitaxial Growth

Michał Leszczyński

New trends and challenges in crystal growth in scientific and commercial aspects

School website:

<http://science24.com/event/isscg15>