

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, Deutschland

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

15 May 2013 - Notification of abstract acceptance

31 May 2013 - End of early registration

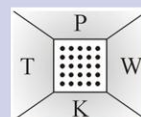
11 Aug 2013 - Beginning of the Conference

Registration and abstracts submission

The registration is possible only through the Conference Website: <http://science24.com/event/iccge17/>.

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)
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Hanna Dabkowska (Canada)	Vyacheslav Puzikov (Ukraine)	Andreas Danilewsky (Germany)	Jolanta Prywer (Poland)	<u>Secretary</u>	<u>Industrial Exhibition</u>
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Thierry Duffar (France)	Marco Rubbo (Italy)	Michael Dudley (USA)	Kevin Roberts (UK)	<u>Treasurer</u>	<u>Sponsorship</u>
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Charles T. B. Foxon (GB)	Wojciech Sadowski (Poland)	Partha Dutta (USA)	Ferdinand Scholz (Germany)	<u>Proceedings</u>	Arne Croell (Germany)
Hiroshi Fujioka (Japan)	Stefano Sanguinetti (Italy)	Michael Fiederle (Germany)	Albrecht Seidl (Germany)	Keshra Sangwal (Poland)	<u>Website</u>
Juan M. Garcia-Ruiz (Spain)	Keshra Sangwal (Poland)	Jochen Friedrich (Germany)	Marek Skowronski (USA)	Ewa Talik (Poland)	Paweł Kempisty (Poland)
Brian Glennon (Ireland)	James Speck (USA)	Marek Godlewski (Poland)	Gunther Springholz (Austria)	Peter Gille (Germany)	Konrad Sakowski (Poland)
Nicolas Grandjean (Switzerland)	G.B. Stringfellow (USA)	Izabella Grzegory (Poland)	Sudhir B. Trivedi (USA)	Wolfram Miller (Germany)	Paweł Strak (Poland)
Michael Heuken (Germany)	Olavo Ferreira Sukarno (Brazil)	Jeffrey J. Derby (USA)	Shiro Tsukamoto (Japan)	<u>Local Arrangements</u>	Mirosław Wróblewski (Poland)
Alain Ibanez (France)	Yoshikazu Takeda (Japan)	Dariusz Kaczorowski (Poland)	Elias Vlieg (The Netherlands)	<u>Accompanying persons</u>	Agnieszka Grabias (Poland)
Koichi Kakimoto (Japan)	Ewa Talik (Poland)	Koichi Kakimoto (Japan)	Deren Yang (China)		
Zdenek Kozisek (Czech Rep.)	Katsuo Tsukamoto (Japan)	Maria Kaminska (Poland)	Thomas Zettler (Germany)		
Stanislaw Krukowski (Poland)	Elias Vlieg (Netherlands)	Michał Leszczynski (Poland)	Zbigniew Zytewicz (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)					

Conference website:

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

Plenary lectures

Anna Pajaczkowska (Poland)
Reinhard Uecker (Germany)
Jim De Yoreo (USA)

G01: Fundamentals and Modeling

Coord.: Koichi Kakimoto (Japan), Jeffrey J. Derby (USA)
Makio Uwaha (Japan)
Elias Vlieg (The Netherlands)
Magdalena Zaluska-Kotur (Poland)

G02: Bulk crystal growth

Coord.: Izabella Grzegory (Poland), Partha Dutta (USA)
Sadik Dost (Canada)
Zbigniew Galazka (Germany)
Hitoshi Sumiya (Japan)
Natalia Zaitseva (USA)

G03: Biological and Biogenic Crystallization *Coord.: Jolanta*

Prywer (Poland), Helmut Coelfen (Germany) Abel Moreno (Mexico)
Denis Gebauer (Germany)

G04: Industrial crystallization *Coord.: Kevin Roberts (UK),*

Govindhan Dhanaraj (USA), Kullaiah Byrappa (India)
Helmut Coelfen (Germany)
Christopher D. Jones (USA)
Narsingh Bahadur Singh (USA)
David H. Wei (China)

G05: Characterization

Coord.: Maria Kaminska (Poland), Marek Skowronski (USA)
Yulin Chen (UK)
Agnieszka Wolos (Poland)

G06: In situ monitoring, new equipment and technologies

Coord.: Thomas Zettler (Germany), Shiro Tsukamoto (Japan)
Michael Heuken (Germany)
Masamitsu Takahasi (Japan)

G07: Defect formation/elimination *Coord.: Andreas Danilewsky*

(Germany), Michael Dudley (USA), Thierry Duffar (France)
Yasufumi Fujiwara (Japan)
Balaji Raghathamachar (USA)

G08: Nanomaterials and low dimensional structures

Coord.: Torsten Boeck (Germany), Joan Redwing (USA)
Yasuhiko Arakawa (Japan)
Li-Chyong Chen (Taiwan)

G09: Surfaces and interfaces *Coord.: Thomas Michely*

(Germany), Elias Vlieg (The Netherlands)
Gen Sazaki (Japan)
Christian Teichert (Austria)
Patric Vogt (France)
Yukiko Yamada-Takamura (Japan)

G10: Thin film and epitaxial growth *Coord.: Michal Leszczynski*

(Poland), Ferdinand Scholz (Germany)
William Alan Doolittle (USA)
Carol Thompson (USA)
Euijoon Yoon (Korea)

T01: Intermetallic and highly correlated electron materials

Coord.: Dariusz Kaczorowski (Poland), Yoshichika Ōnuki (Japan)
Zygmunt Henkie (Poland)
Tsuyoshi Kimura (Japan)

T02: Materials for spintronics

Coord.: Maciej Sawicki (Poland), Fumihiko Matsukura (Japan)
Alberta Bonanni (Austria)
Richard Champion (UK)

T03: Wide bandgap semiconductors

Coord.: Marek Godlewski (Poland), Bruno Daudin (France)
Lutz Geelhaar (Germany)
Jawad ul Hassan (Sweden)
Grzegorz Luka (Poland)

T04: Compound semiconductors *Coord.: Michael Fiederle*

(Germany), Gunther Springholz (Austria)
Aleksandar Ostrogorsky (USA)

T05: Si/Ge for microelectronics and photovoltaics

Coord.: Albrecht Seidl (Germany), Deren Yang (China)
Kasper Erich (Germany)

T06: Oxides and halides including laser and nonlinear optical applications *Coord.: Hanna Dabkowska (Canada), Vyacheslav*

Puzikov (Ukraine)
Sonia Baldochi (Brasil)
Edith Bourret-Courchesne (USA)
Leonid Lytvynov (Ukraine)

Michael Schieber symposium

Michael Roth (Israel)
Andrzej Mycielski (Poland)

T07: Novel materials and structures *Coord.: Jacek Baranowski*

(Poland), Jacek Majewski (Poland), Sudhir B. Trivedi (USA)
Nicolas X. Fang (USA)
Edmondo Gilioli (Italy)
Christian Kloc (Singapore)
Włodzimierz Strupinski (Poland)

T08: External fields, microgravity

Coord.: Arne Croell (Germany), Alexandar Ostrogorsky (USA)
Jeff Derby (USA)
Satoshi Uda (Japan)

T09: Late news session *Coord.: Zbigniew Zytewicz (Poland),*

Jochen Friedrich (Germany)

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/>.

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 bank transfer to the following bank account:

Bank PKO SA V/O W-wa

Account number: 35 1240 1066 1111 0000 0006 2372

Owner: Instytut Wysokich Cisnien PAN

Address: 01-142 Warszawa, Sokolowska 29/37

SWIFT: PKOPPLPW

Note that bank transfer and exchange commission costs have to be paid directly by the registered participants.

The Conference fee may be charged also to Credit cards. 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:

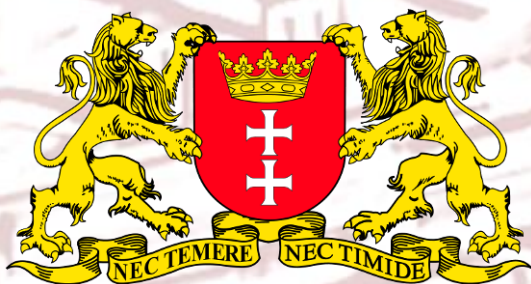
Andorra, Argentina, Australia, Austria, Belgium, Brazil, Brunei, Bulgaria, Canada, Chile, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Honduras, Hong Kong (special administrative region), Hungary, Iceland, Ireland, Israel, 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



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 **social programme** will include a welcome reception at the School site, a banquet, an excursion to a UNESCO World Heritage site (Castle of the Teutonic Order in Malbork), and outings in the Gdansk area. For participants of the school who will also take part in the ICCG-17 Conference, transportation will be provided from the school to the conference site. Along the way, a visit to the birthplace of prof. Jan Czochralski – inventor of one of the most famous crystal growth methods – is planned. Jan Czochralski was born on 23 Oct. 1885 in Kcynia. A variety of social programs for accompanying persons is planned.



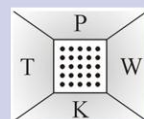
The school venue is located in northern part of Poland, in Gdansk. Gdansk - the thousand-year-old, beautiful port on the Baltic Sea has a gentle climate and beautiful beaches. In its golden age, this " Pearl of the North" enjoyed the unique status of a municipal republic. It was a melting pot of cultures and ethnical groups. The air of tolerance and the wealth built on trade made culture, science, and art flourish. A famous seaside resort Sopot is nearby. 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!

We look forward to welcoming you in Gdansk!



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

Morphological stability

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>