Report from the Meetings of the International Organization for Crystal Growth Council and General Assembly held during ICCGE-19 in Keystone, USA, July 28-Aug 02, 2019

The International Organization for Crystal Growth (IOCG) Executive Committee, Council and General Assembly meet during the ICCGE-19 in Keystone, USA, July 28-Aug 02, 2019. Participation quorum was achieved at all the meetings.

IOCG COUNCIL MEETING took place Tuesday 30 July 11.50 –12.50 It was followed by the: **The IOCG General Assembly Meeting, Thursday August the 1st from 12:15 to 1:15**

Both meetings followed the same agenda.

After welcoming remarks, the President, Koichi Kakimoto called for a Moment of Silence to commemorate life and achievements to crystal growth community of Professors Michael Schieber, Naiben Ming, Chuangtian Chen and Pieter Bennema.

The report of the General Assembly Meeting in 2016 in Nagoya [published in the Journal of Crystal Growth, 468 (2017) pp 5-8] was approved.

The report about the IOCG triennial (2016-2019) activities was presented by Koichi Kakimoto. Among the most important initiatives are:

- i) Promotion/endorsement of seventeen meetings related to crystal growth (see http://iocg.org/events/past_events);
- ii) Support to organization of ICCGE-19 and ISSCG-17;
- iii) Updating with the help of community of the website "Artificially Grown Crystals" (<u>http://iycr2014.org/participate/crystal-growing</u>). This initiative was implemented during the International Year of Crystallography (2014) and it is still in progress. A number of researchers submitted pictures of their crystals to this site, which is open and could be quoted. There is a link to this site at IOCG.org.
- iv) Contact with Algerian and Bulgarian National Organizations concerning in IOCG membership
- v) Revision and renewal of the IOCG website (IOCG.org) provided by Ms Iwona Rozko;

The IOCG Secretary, Hanna Dabkowska announced the election results for IOCG Officers and Executive Committee Members. 47 councilors cast their voices in this election. The following ellection results were approved by the Council and by the General Assembly.

Elected Officers and Executive Committee Members of the IOCG (2019-2022)

President: Koichi Kakimoto (Japan) Co-Vice Presidents: Hanna Dabkowska (Canada) Elias Vlieg (Netherlands) Immediate past President: Roberto Fornari (Italy) Secretary: Stanislaw Krukowski (Poland) Treasurer: Jeff Derby (USA)

Executive Committee Members (2019-2022)

Christiane Frank-Rotsch (Germany) Dominique Maes (Belgium) Abel Moreno (Mexico) Yusuke Mori (Japan) Pierre Muller (France) Aleksey Voloshin (Russia, RF) JiYang Wang (China, PRC) Jim DeYoreo (USA)

Ex-officio members of the executive committee

Chairmen ICCGE-19	J.Derby, V.Fratello (USA)
Chairmen ICCGE-20	A. Zappettini, A Vecchione (Italy)

Ex-Officio Executive Committee Members Representing International Unions

International Union of Crystallography, IUCrA. Zappettini (Italy)International Union on Pure and Applied Physics. IUPAPvacantInternational Association of Pure and Applied Chemistry, IUPACvacant

Ex-Officio Executive Committee Members Serving as Representatives to International Unions

International Union of Crystallography, IUCrE. Vlieg (The Netherlands)International Union on Pure and Applied Physics, IUPAPVacantInternational Association of Pure and Applied Chemistry, IUPACVacant

Councilors, as nominated by national organizations:

(a) Representing National Organizations

- Australia: F. Jones
- Brazil: Ana de Spirito Santo
- China: Jiyang Wang, Wanqi Jie, Zhanggui HU
- Czech Republic: Z. Kozisek
- France: M. Velazquez, M. Spano
- Germany: C. Frank-Rotsch, J. Friedrich, W. Miller
- Hungary: L. Granasy
- India: P. Ramasamy, Binay Kumar
- Ireland: B. Glennon
- Israel: M. Roth
- Italy: A. Vecchione
- Japan: H. Fuijoka, G. Sazaki, S. Uda
- Korea: S.M. Kang, J.G. Choi, H.J.P. Kim

- The Netherlands: A. van der Heijden, H. te Nijenhuis
- Poland: D. Pawlak, D. Kasprowicz
- Romania H.V. Alexandru
- Russia: P. Fedorof, A. E. Voloshin, E. Zharikov
- Spain: J.L. Plaza
- Switzerland: E. Giannini
- Ukraine: B. Grinyov, V. Semynozhenko, I. Pritula
- United Kingdom: J. ter Horst, L. Seton, G. Sadi
- USA: R. Biefield, J. M. Redwing, M. Zhuravleva
- (b) The following councilors were nominated by the Council and confirmed to represent the General Assembly on the IOCG Executive Council:
 - Algeria L. Amirouche
 - Bulgaria: V. Tonchev
 - Canada: A. Dabkowski
 - Denmark: H.E. Lundager-Madsen
 - Sweden: S. Lourdodoss
 - Taiwan: C.W. Lan
 - Uruguay: L. Fornaro

The Treasurer's Report, presented by Jeffrey Derby was approved. The account balance on July 15, 2016 was 27,825.90 USD. Expenditures over the last reporting period included the IUPAC membership dues, tax payments for three years, and fees and costs associated with the IOCG (www.iocg.org) website registration and maintenance. The closing account balance on July 15, 2019 was 38506.15 USD. This includes the generous contribution of 13000 USD by JACG from ICCGE-18 in Nagoya.

The updating and revision of the "Chart of National Members" and, consequently, the amendment of the Article VII Section 1 of the IOCG Constitution was moved and approved for the second time. Article VII Section 1 of the IOCG Constitution becomes: "The Charter National/Regional Organizations of IOCG are listed in the Chart of National/Regional Organizations, which is maintained by the Secretary. This Chart begins with the 1971 founding members: Groupe Français de Croissance Cristalline, American Association for Crystal Growth, Japanese Association for Crystal Growth, British Association for Crystal Growth Section of the Swiss Society for Crystallography, Israeli Organization for Growth of Crystals and Thin Films, the Italian Association for Crystal Growth and the Deutsche Gesellschaft für Kristallwachstum and Kristallzüchtung. Members who were admitted at a later date are included along with the admission date. The chart also reports the changes of name and/ or status of Members and will be updated at least every three years."

The Council and the General Assembly approved the amendment and the layout of the revised Chart of National Members (attached). These changes have to be confirmed in 2022 in Naples, after which they will become permanent changes to the Constitution. Following the request of the French Delegate the name French Committee for Crystal Growth (CFFCC, Comité Français de Croissance Cristalline) - will be updated in the Chart of National Members (as the GFCC, an IOCG founding Member, ceased its activity).

All provisional amendments are included in the (on-line version) Constitution with different text color.

IOCG Frank and Laudise and Schieber Prizes.

Elias Vlieg and Thomas Kuech announced the recipients of the IOCG Frank, Laudise and Schieber Prizes.

Frank Prize: Professor Darrell Schlom, Cornell University (USA) and Dr Reinhard Uecker, Leibniz Institute for Crystal Growth (IKZ, Germany) jointly received this prize for their pioneering contributions to the development of new perovskite substrates enabling strain engineering of functional oxides.

Laudise Prize: Professor Emeritus Kazuo Nakajima of Tohoku University, Japan received this prize for his significant technological contributions to the field of crystal growth of both, III-V quaternary layers for optical communication systems and of high-quality Si ingots for high-efficiency solar cells.

Schieber Prize: The Schieber Prize was awarded to Dr. Anton Jesche, Center for Electronic Correlations and Magnetism, Institut for Physik, University of Augsburg, for innovative development of crystal growth processes for complex correlated electron and magnetic materials.

Vincent Fratello and Jeffrey Derby reported on the progress of the ICCGE-19 in Colorado, USA. 621 participants attended this venue. The Program Committee Co-Chairs were Christine Wang and Peter Schunemann. The Conference was a very interesting and successful one. The serene beauty of the surrounding and the excellent weather being also admired.

The Summer School ISSCG-17 was co-organized by Thomas Kuech and Joan Redwing. It was carried out at the YMCA of the Rockies, Snow Mountain near Granby, CO. The summer school was attended by ~75 participants from around the globe. The school consisted of a series of tutorial lectures on the fundamentals of crystal growth as well as other more topical lectures. The setting high in the Rocky Mountains provided a beautiful and healthy venue for the school.

The organizers of both venues and the host organization, AACG, were congratulated for the outstanding efforts and excellent results.

Andrea Zappettini and Antonio Vecchione of the Italian Crystal Growth Section reported on the progress of the ICCGE-20 in Naples and Roberto Fornari on preparation to the ISSCG-18 in Parma, Italy in 2022.

Two proposals to host ICCGE-21and ISSCG-19 in 2025 were presented to the Council: Chinese Delegation (JiYang Wang and Wanqi Jie) presented a bid to host ICCGE-21 and ISSCG-19 in 2025 in Xi'an in China and the Indian Delegation (Binay Kumar and Elisabeth Suja) presented a bid to host ICCGE-21and ISSCG-19 in 2025 Chennai, Tamilnadu, in India. The majority of the

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Councilors voted to have the 2025 meetings in Xi'an, China. This decision was recommended to and confirmed by the General Assembly.

Finally, Koichi Kakimoto thanked the Councilors for having re-elected him as IOCG President for the triennium 2019-2022 and he briefly presented his future activity guidelines to the General Assembly. President's report can be found at http://iocg.org/history/archival_documents.html

The Assembly expressed sincere thanks to:

- the American Association for Crystal Growth and the Organizing Committees of ICCGE-19 and ISSCG-17 for outstanding organization of both events, and for having sponsored the Frank and Laudise Prizes. Thanks also go to Elsevier for sponsoring the Schieber Prize.

- the Officers and Executive Committee members of IOCG who terminated their mandates in Keystone, with special thanks going to Thomas Kuech who very successfully served the IOCG for more than 20 years.

The next Meetings of the International Organization for Crystal Growth Council and General Assembly will be held during ICCGE-20 in Naples, Italy, July 2022

Dr Hanna Dabkowska, Secretary IOCG, 2013-2019

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Attachment: Chart of National Organizations, all members of IOCG Council, 2016

National Organization	Year of admi ssion	Notes	Changes	
France (GFCC)	1971	Founding member	From 2018 the Comité Français de Croissance Cristalline (CFCC) leads the Crystal Growth Chapter of the French Crystallography Association. The Groupe Francais de Croissance Crystalline (GFCC) ceased to exist.	
Germany (DGKK)	1971	Founding member	After 1989 Deutsche Gesellschaft für Kristallwachstum and Kristallzüchtung (DGKK) included the Crystal Growth organization of the former GDR	

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Israel (IACG-TF)	1971	Founding member		
Italy (AICC)	1971	Founding	From 1991 AICC acts as autonomous	
italy (MCC)	13/1	member	chapter of Italian Crystallographic	
			Association	
Japan (JCCG)	1971	Founding	Name changed from Japan Committee	
		member	for Crystal Growth (JCCG) to	
			Japanese Association for Crystal	
Netherlands (DACG)	1971	Founding	Growth (JACG)	
Ineulenalius (DACG)	13/1	member		
Spain (SACG)	1971	Founding		
-F- ()		member		
Switzerland	1971	Founding		
(CGS of SCA)		member		
UK (BACG)	1971	Founding		
USA (AACG)	1971	member Founding		
05/1 (////00)	13/1	member		
Hungary	1989			
India	1989			
Russia	1989			
Poland	1992			
South Korea	1992			
Brazil	1995			
Czech Republic	1995			
Romania	1995			
Australia	1998			
China	1998			
Ukraine	2004			
Ireland	2010			
		Ex-Officio members of the IOCG Council		
IUCr	1980	Intern. Union of Crystallography		Yes
IUPAC	1980	Intern. Union of Pure and Applied Chemistry Yes		Yes
IUPAP	1995	Intern. Union of Pure and Applied Physics Yes		Yes
ICSU	1995	Intern. Council of Science Yes		