



INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

The IUGG Electronic Journal

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This monthly newsletter is intended to keep IUGG Members and individual scientists informed about the activities of the Union, its Associations and interdisciplinary bodies and about the actions of the IUGG Secretariat, Bureau, and Executive Committee. Past issues are posted on the IUGG website (<http://www.iugg.org/publications/ejournals/>). E-Journals may be forwarded to those who will benefit from the information. Your comments are welcome.

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1. IUGG Bureau Meeting 2018

The IUGG Bureau met on 24-26 October 2018 in Mexico City, Mexico. The meeting was held at El Colegio Nacional and hosted by Jaime Urrutia-Fucugauchi, a Colegio Fellow, former President of the Mexican Academy of Sciences and Member of the IUGG Nominating Committee. The Bureau received the reports by the Officers: President, Vice President, Secretary General, and Treasurer as well as the Chair of the Finance Committee. The following agenda topics were considered and discussed: membership issues (including the engagement of least developed countries in activities of the Union); activities of the Union Commissions and the International Lithosphere Program; the work of the Union Ad-hoc and Standing Committees. In particular, a list of candidates for the 2019-2023 Bureau and Finance Committee (see later in this issue of the E-Journal) provided by the Nominating Committee was approved; the responsibilities of the Site Evaluation Committee were considered; 10 scientists were approved to receive IUGG Early Career Scientist Awards (announced on 5 November 2018); the activities of the Outreach and Visioning Committees were discussed; basic principles for the Standing Committee membership renewal were discussed and approved.

The Bureau considered the development of the IUGG Grants Program, the Science Education Program, and Special Publications Series Program, and decided on the future of these programs. An important part of the discussion was the IUGG Centennial and the activities related to this anniversary

organized in China (August), Japan (September), Turkey (June), and USA (December) as well as at UNESCO in Paris, France on 29 July 2019. The Bureau received a report of the Chair of the Centennial Task Force including information on the development of the IUGG Centennial Special Volume to be published in the Journal of History of Geo- and Space Sciences.

The Bureau considered the progress made in organizing the 27th IUGG General Assembly, Montréal, Canada, 8-18 July 2019 including the updates of administrative arrangements and the scientific program. The Bureau drafted the Agenda for the IUGG Council Meeting to be held on occasion of the General Assembly. Cooperation between IUGG and international and intergovernmental organizations was considered based on the analysis of IUGG Liaisons' reports, and the process of the renewal of IUGG Liaison Officers was discussed. The Bureau discussed IUGG's future relationship with the International Science Council (ISC): the President reported on the last ICSU General Assembly, which was held in Taipei, in October 2017, and on the inaugural ISC General Assembly, which was held in Paris, in July 2018. The emphasis was on the role of Scientific Unions and especially the cooperation of IUGG with the eight ISC GeoUnions.

At the Templo Mayor Museum. From left to right: K. Whaler, J. Krynski, I. Ansorge, P. Hubert, C. Rizos, A. Hansen, F. Kuglitsch (upper row), A. Ismail-Zadeh, J. Urrutia Fucugauchi, and M. Sideris (lower row).

The Bureau met with Hugo Delgado Granados, President of the Mexican National Committee for IUGG, along with several Members of the Committee and discussed ways of promoting international scientific cooperation in Earth and space sciences in Mexico and in the Latin American region via international scientific events and programs. At the end of the Bureau meeting, members visited the Templo Mayor Museum. An IUGG Reception was hosted by the President at El Colegio Nacional for the members of the Colegio, the Mexican National Committee, leaders of the Mexican geoscience societies, and distinguished guests including Carlos Slim, a Mexican business magnate, engineer, and science philanthropist. The next Bureau Meeting will be held in Montréal during the IUGG General Assembly.

2. IUGG Nominating Committee names the candidates for the IUGG Bureau and Finance Committee (2019-2023)

On 8 November 2018, the IUGG Nominating Committee announced the names of candidates for election as IUGG officers at the 27th IUGG General Assembly in Montréal, Canada:

President

Kathy WHALER (United Kingdom, IAGA)

President-elect

Chris RIZOS (Australia, IAG)

Secretary General

Aksel HANSEN (Denmark, IAMAS)

Alexander RUDLOFF (Germany, IASPEI)

Treasurer

Niels ANDERSEN (Denmark, IAG)

Bureau Members

Positions #1, #2, and #3

Eduard PETROVSKY (Czech Republic, IAGA)

Virendra TIWARI (India, IAG)

Jun XIA (China, IAHS)

Gordon YOUNG (Canada, IAHS)

Finance Committee

Position #1:

Corina RISSO (Argentina, IAVCEI)

Positions #2 and #3 are vacant (and further nominations are accepted)

The officers of the Union and Associations, and the National Adhering Bodies for IUGG may make further nominations and/or recommendations to the Nominating Committee by **8 April 2019**. Any new nominations for a given position, supported by at least three Presidents or equivalent officers of National Committees of Member Countries, and accompanied by the written acceptance of candidates and a resumé outlining their position, research interests and Union related activities, shall be added to the list above.

3. Early career scientists receive IUGG awards

On 5 November 2018, IUGG announced the ten winners of the Early Career Scientist Awards for their outstanding research in Earth and space sciences and for international research cooperation:

- Juan Carlos Afonso (Australia; seismology)
- Amir AghaKouchak (USA; hydrology)
- Emilie Capron (UK; climatology)
- Ira Didenkulova (Russia; oceanography)
- Marie Dumont (France; cryospheric sciences)
- Binbin Ni (China; aeronomy)
- Katrin Schröder (Italy; oceanography)
- Flavia Tauro (Italy; hydrology)

- Takeshi Tsuji (Japan; seismology)
- Qiuzhen Yin (Belgium; climatology)

The IUGG Early Career Scientist Awards will be presented at the 27th IUGG General Assembly in Montréal, Canada, on 13 July 2019 during an Award Ceremony. The awardees will give a talk at the Union Symposium U9 “Celebrating Early Career Scientists” to be held on 12-13 July 2019. All Assembly delegates are welcome to attend the symposium.

The Award Committee was chaired by Jenny Baeseman (USA). The Committee Members were Gregory Foltz (USA), Salvatore Grimaldi (Italy), Futoshi Takahashi (Japan), and Thorsten Wagener (UK).

4. Last call for invitations to host the 28th IUGG General Assembly

Invitations to host the 28th IUGG General Assembly in 2023 must be received by **8 January 2019** (six month before the next General Assembly, consistent with IUGG By-Law 6). The Guidelines for proposals are posted on the IUGG website (<http://www.iugg.org/assemblies/>). The members of the IUGG Site Evaluation Committee will evaluate all invitations, and a report will be given to the IUGG Council Delegates before their final vote.

5. Celebration of the IUGG Centennial in Mexico



**FORO
GEOFÍSICA
100 AÑOS**



**Reunión Anual
Unión Geofísica
Mexicana**

En 2019 se celebra el centenario de la creación de la Unión Internacional de Geodesia y Geofísica (IUGG) y de la Unión Geofísica Americana (AGU). En el Foro se discutirán programas, proyectos y oportunidades sobre colaboración internacional en Ciencias de la Tierra

28 octubre – 2 noviembre, 2018

Foro Geofísica 100 Años
Panelistas
 Lucía Capra
 Hugo Delgado Granados
 Alik Ismail-Zadeh
 William Lee Alardin
 Christine McEntee
 Joaquin Ruiz
 Efrain Villanueva Arcos
 Kathryn Whaler

Coordinadores
 Alik Ismail-Zadeh
 Ligia Pérez Cruz
 Jaime Urrutia
 Fucugauchi

**Hotel Sheraton
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Puerto Vallarta,
Jalisco, México**

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The celebration of the IUGG Centennial in Mexico started in Mexico City. A symposium dedicated to the 100th anniversary of international geoscience cooperation was held at El Colegio Nacional on 25 October 2018. Jaime Urrutia-Fucugauchi, a Fellow of the Colegio Nacional, welcomed the participants of the symposium and introduced two public lecturers given by Michael Sideris, IUGG President, and Alik Ismail-Zadeh, IUGG Secretary General. The lectures were delivered in English and simultaneously translated into Spanish. The IUGG President delivered a lecture entitled “Satellite Earth Observation and Geosciences” and the IUGG Secretary General lectured on “Centennial Anniversary of International Cooperation in Earth and Space Sciences”, which were followed by questions. The IUGG lectures were videotaped and can be accessed at https://www.youtube.com/watch?time_continue=7949&v=wFj5MXjuNlc

The celebration was continued during the Annual Meeting of the Mexican Geophysical Union on 29 October 2018 in Puerto Vallarta, Mexico. The Plenary Session discussed past development of international geoscience cooperation and future perspectives related to challenging problems of society, involving early career scientists, female scientists, and cooperation between North-South and South-South. Representatives of IUGG (Vice President Kathy Whaler and Secretary General Alik Ismail-Zadeh), the American Geophysical Union (Executive Director Christine McEntee), the Mexican Geophysical Union (President Ligia Pérez Cruz), the Mexican National Committee for IUGG (President Hugo Delgado Granados) and others were among the panellists of the Plenary Session chaired by Jaime Urrutia Fucugauchi.

6. IUGG booth at the 2018 AGU Fall Meeting

To learn more about the 27th IUGG General Assembly (8-18 July 2019, Montreal, Canada) and about the Union in general, there will be an IUGG exhibition booth (No. 527) at the 2018 Fall Meeting of the American Geophysical Union (AGU). The Fall Meeting will be held at the Walter E. Washington Convention Center in Washington, DC, USA from 10 to 14 December 2018. If you attend the Fall Meeting, please visit the IUGG booth. Franz Kuglitsch, IUGG Assistant Secretary General / Executive Secretary, looks forward to meeting you at the booth.

7. News from the International Science Council

The ISC Governing Board (GB) released a communiqué with the outcome of the GB meeting (8-10 October 2018) and about the initiation of intensive work by the GB after the meeting. The GB agreed to communicate with ISC Members regularly. The intention is to keep the Members informed about the work of GB and the ISC Secretariat and to share strategic ideas and actions for the future development of the Council. The GB welcomes questions, insights and ideas that Members may have in response to the information provided.

The ISC GB is developing a program of action to implement the mission of the Council, which is to be “the global voice for science.” As agreed in the ISC’s high-level strategy, adopted by ISC Members in Taipei in October 2017, the Council will use its voice to: (i) speak for the value of science and of evidence-informed understanding and decision-making; (ii) stimulate and support international scientific research and scholarship on major issues of global concern; (iii) articulate scientific knowledge on such issues in the public domain; (iv) promote scientific rigor, creativity and relevance in all parts of the world; and (v) defend the free and responsible practice of science.

The ISC GB issued a draft document where four strategic challenge domains are discussed. These domains are those in which the global voice for science is most needed and could be most effective. It gives the rationale for, and describes the landscape of, each domain in some detail. The document does not contain proposals for new activities. That will be the next task for the ISC GB, to be undertaken in consultation with ISC Members and partners. This will entail identifying which specific issues from these landscapes are to be prioritized and how they will be addressed, using criteria of importance, timeliness and credible pathways to impact. It is important to note that there are major synergies between the four domains, which will contribute to the Council's need for rapid development of awareness, brand and reputation whilst favoring the efficient use of resources. Domain choices are as follows.

Domain 1: The 2030 Agenda for Sustainable Development. Better understanding the globally coupled natural, physical and social systems of our planet and finding pathways for more sustainable and equitable evolution is a major and urgent task. The 2030 Agenda for Sustainable Development including its 17 Sustainable Development Goals (SDGs) adopted by in 2015 by Member States of the United Nations provides an integrated framework for this task. The contribution of science to the development and implementation of the goals at national, regional and global levels is vital.

Domain 2: The digital revolution. Global society is in the throes of a disruptive, digital revolution in the means by which information and knowledge, which have always been powerful drivers of human material and social progress, are acquired, stored, communicated and used. There are few areas of individual, commercial, social or political action to which this is not relevant. It poses powerful opportunities and radical challenges both to science and to society.

Domain 3: Science in policy and public discourse. As exemplified by challenge domains 1 and 2, society unarguably needs science more than ever, but it is arguably less inclined than in the past to listen to its voice. It is therefore essential to the ISC vision of "advancing science as a global public good" to ensure understanding and strengthening of the ways in which science contributes effectively both to policy processes and to the increasingly contentious public discourse about global priorities.

Domain 4: The evolution of science and science systems. The scientific enterprise has always needed to adapt to the changing environment within which it operates. New awareness of inherent structural inequalities, new socio-political demands and norms, new technologies, new funding practices and new scientific opportunities and challenges are creating mounting pressures for a renewed period of adaptation, which affects all scientists and science systems in all parts of the world.

Alik Ismail-Zadeh, ISC Secretary

8. Report on the Conference on Science of Seas

The Conference on Science of Seas ("X Jornadas Nacionales de Ciencias del Mar") hosted by the University of Buenos Aires, Argentina was held from 30 July to 3 August 2018. The main goal of this conference was to create an adequate framework for the exchange of opinions among the various national and foreign experts, and to increase cooperation among professionals with the aim of understanding, assessing and solving problems related to the care of the marine environment. The program activities included conferences, courses, and presentations in oral sessions and panels, all of them covering an ample spectrum of subjects and points of view. Thematic areas addressed included diversity and conservation, populations and communities, ecosystems, natural and anthropogenic processes, renewable/non-renewable resources, climate change, geology, oceanography, education, and legal aspects.

The meeting was a resounding success as the participants themselves confirmed. More than 800 people attended, including students, educators, and researchers belonging to institutes and universities from across Argentina. The meeting also had important international participation, with presentations by researchers or students from Belgium, Brazil, Canada, Chile, France, Uruguay, and the USA. 122 presentations were delivered in oral format, 413 as posters, and 8 as plenary lectures. Additionally, there were seven workshops, one six-hour course, and eight exhibition booths representing local and foreign universities, private companies, and government institutions. All abstracts were peer-reviewed before being accepted for presentation and will become a part of an electronic book.



Conference group photo (photo: Martin Saraceno)

The conference was co-sponsored by IUGG. For more information on the program and the abstract book please visit: <http://jornadasdelmar2018.exactas.uba.ar/las-jornadas/cronograma>.

Martin Saraceno, Viviana Alder, Fabiana Capitanio, Organizing Committee

9. Report on the SOTA7 (“State of the Arc”) workshop

The SOTA7 (“State of the Arc”) workshop was held from 2 to 9 September 2018 in San Pedro de Atacama, Chile. The workshop was organized for geoscientists interested in all aspects of arc magmatism, arc and subduction physics modelling, and the role of arcs in the formation and evolution of planet Earth and its continents. Informal scientific discussion was the main mode of interaction, based on selected short presentations on certain topics. The organizers strove to include a number of prospective early career scientists (ECSs) at the postdoc level as well as researchers from local institutions of the host country. This workshop was attended by nine ECSs (5 male and 4 female) from Latin and North Americas, Australia and New Zealand, UK and USA. The workshop’s main topics were (1) magmatism and volcanism in the Central Andes; (2) constraints on arc magma evolution; (3) on arc speed; and (4) fluids and ore deposits. ECSs held a pre-workshop that was initiated by the organizing committee and organized by three young colleagues (including one ECS): Lucy McGee (Australia), Luca Caricchi (Switzerland), and Philipp Ruprecht (USA). One day consisted of a poster session in which all attending ECSs presented their work amongst themselves; general attendees did not participate. The entire day was shaped around the posters, and these were displayed for the entire conference for further discussion amongst all attending scientists. This gave the ECSs the opportunity to present their work to each other and get into the workshop discussion mode for the coming days. Six ECSs also gave oral presentations at the SOTA7. During the main sessions, each ECS also presented a 3 minute summary of their poster to encourage scientific

discussion on their poster later in the week. Feedback from the ECSs was positive and confirmed our approach to “loosen up” ECSs to enter more easily into the workshop discussions during the week. The workshop was co-sponsored by IUGG.

Gerhard Wörner, Organizing Team

10. Meeting calendar

A calendar of meetings of interest to IUGG disciplines (especially those organized by IUGG Associations) is posted on the IUGG website (<http://www.iugg.org/calendar.php>). Individual Associations may list more meetings on their websites according to their disciplines.

December

- 9, AGU, IUGG, Washington, DC, USA, AGU-IUGG Workshop on Disaster Science.
- 10-14, AGU, Washington, DC, USA, AGU 2018 Fall Meeting. Web: <http://fallmeeting.agu.org/2018>

February 2019

- 11-15, AGU, Pasadena, CA, USA, Chapman Conference on Scientific Challenges Pertaining to Space Weather Forecasting Including Extremes. Web: <https://connect.agu.org/aguchapmanconference/upcoming-chapmans/space-weather-forecasting>

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