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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. Inaugural General Assembly of the International Science Council

Maison des Océans, the venue of the inaugural ISC General Assembly (Photo: Simon Cassanas for ISC)

On 4 July 2018, the International Council for Science (ICSU) and the International Social Science Council (ISSC) merged to form the International Science Council (ISC), a unique global non-governmental scientific organization representing both the natural and social sciences, bringing together 141 Member Organizations (national and regional academies, research councils), 39 Member Unions and Associations (international scientific organizations), and 29 Affiliated Members. The ISC

General Assembly opened with addresses from Catherine Brechignac, Secrétaire Perpetuel of the French Academy of Sciences, and Prince Albert II of Monaco, who particularly welcomed participants of the assembly in the “Maison des Océans” built in 1911 for dissemination of knowledge on the oceans under supervision of Prince Albert I (who served IUGG as the first Vice President, 1919-1922).

The main item of business for the meeting was the election of a Governing Board to lead the Council. The ISC Governing Board consists of 6 Officers and 10 Ordinary Members. In total, 74 people were placed on the ballots for voting (20 for the Officer positions and 54 for the Ordinary Member positions). The following people were elected by the Council’s Members to the Officer positions of the ISC Governing Board: President: *Daya Reddy*, mathematics, South Africa; President-elect (to become ISC President in 2021): *Peter Gluckman*, health science/science policy, New Zealand; Vice President: *Elisa Reis*, sociology, Brazil; Vice President: *Jinghai Li*, engineering, China: China Association of Science and Technology; Secretary: *Alik Ismail-Zadeh*, geophysics, Germany/Russia; Treasurer: *Renée van Kessel*, anthropology, The Netherlands. The following people were elected as Ordinary Members of the ISC Governing Board: *Geoffrey Boulton*, geology, UK; *Melody Burkins*, environmental sciences /science policy, USA; *Saths Cooper*, psychology, South Africa; *Anna Davies*, geography, Ireland; *Pearl Dykstra*, sociology, The Netherlands; *Sirimali Fernando*, health science, Sri Lanka; *Ruth Fincher*, geography, Australia; *James C. Liao*, chemical engineering, China: Academia Sinica in Taipei; *Natalia Tarasova*, chemistry, Russia; and *Martin Visbeck*, oceanography, Germany.



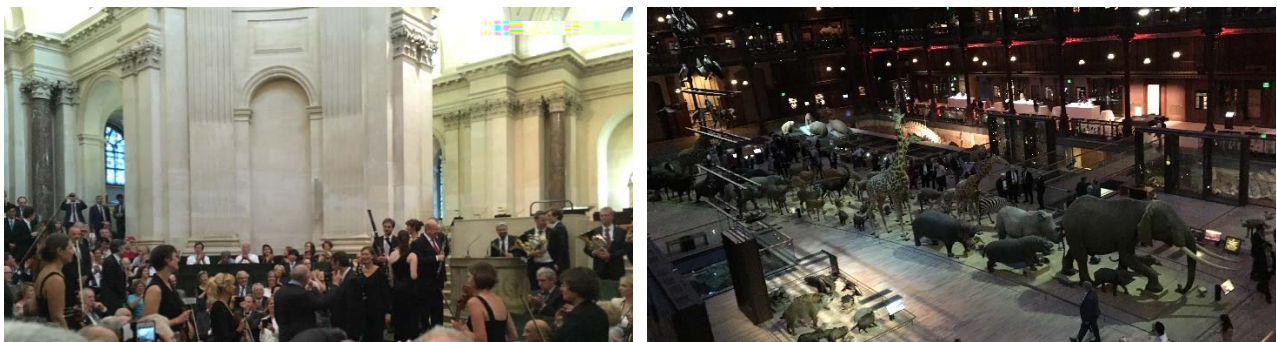
The elected ISC Officers: (from the left to the right) Jinghai Li, Daya Reddy, Renée van Kessel, Elisa Reis, Peter Gluckman, and Alik Ismail-Zadeh (Photo: Simon Cassanas for ISC)

The ISC founding was celebrated on 5 July 2018 with a Science Day at the Maison des Océans in Paris, featuring leading scientists showcasing the range of issues the new organization will be working on. The program (<https://council.science/events/international-science-day>) included addresses by high-level representatives of the French government and the United Nations, as well as by the first ISC President. “The importance of deliberative scientific understanding to society has never been greater,” said *Thierry Coulhon*, Advisor for Education, Higher Education, Research and Innovation to the French President. “The challenge for this Council and for our academies as well is to make the voice of science heard by those taking decisions, to promote reasoning, logical systematic analysis, quantitative evidence and rigorous thinking in place of emotions in a world dominated by opinions,

beliefs, ready-to-think ideas and off-the-shelf solutions,” said *Sébastien Candel*, Président of the Académie des sciences.

Craig Calhoun, former president of the Berggruen Institute, gave a wide-ranging talk on the need for a voice for science in today’s world. *Ismail Serageldin*, founding director of the Library of Alexandria, pointed out that freedom and science were indissociable. “History shows that scientific progress and freedom always walk together,” he said, adding “There is no science without freedom and no freedom without science.” *Esther Duflo*, development economist from the Massachusetts Institute of Technology (MIT), spoke about science fighting poverty, and deconstructed multiple poverty myths such as “giving away money is bad”. *Cédric Villani*, a member of the French National Assembly and the French Academy of Sciences, gave a closing keynote which focused on insights from his perspective of moving from science into politics. “Often what seems to be debates about technology turn out to be debates about the shape of society.” The event was livestreamed and can be watched here: https://www.youtube.com/watch?v=RFEuO8ptWZQ&feature=player_embedded

The host of the inaugural ISC General Assembly was the French Academy of Sciences (Académie des sciences), which provided not only an excellent scientific environment but also organized wonderful cultural events in the evenings. On 4 July the Academy invited all participants to the classical concert in the building of the Institut de France and on 5 July for a reception at the Muséum national d’Histoire naturelle.



Left: after the concert. Right: Before reception at the museum (Photo: Alik Ismail-Zadeh)

Source: ISC news and press release

GeoUnions meeting

On the occasion of the Inaugural General Assembly, the Steering Committee of the ISC GeoUnions (9 international scientific unions dealing with Earth and space sciences; <http://www.icsu-geounions.org>) met on 2 July at the Institut national de l’information géographique et forestière (IGN) in Paris, France, to elaborate their future relationship within the framework of the new Council. The attendees discussed the role of GeoUnions in the Council and future collaboration with social science unions/associations. Also, they considered several proposals for the new initiatives mentioned in the ISC General Assembly’s documents: namely, the future of scientific publishing, artificial intelligence and machine learning, science and the making of sustainable urban living, indigenous and local knowledge systems, mental health, science education, and collaborative research for the 21st century. The meeting’s participants considered also the possibility of mapping the GeoUnions’ scientific interests onto the Sustainable Development Goals (SDGs) in order to identify common goals and targets and to put forward new initiatives contributing to the SDGs. It was agreed that representatives of the GeoUnions should meet to discuss new initiatives in more detail. ISPRS extended an invitation to GeoUnions to hold the next Steering Committee meeting in Istanbul, Turkey.

2. XXVII IUGG General Assembly 2019: Progress Report

The XXVII IUGG General Assembly (IUGG2019) will be held from 8 to 18 July 2019 in Montréal, Québec, Canada. This is a special opportunity for participants from Canada and from around the world to come together and share their science and culture. The year 2019 marks the 100th anniversary of IUGG, and we will look back on the accomplishments of the previous century of Earth and space science research, and forward to the next century of scientific advancement. IUGG2019's theme is closely related to the Union's centenary celebrations: "*Beyond 100: the next century in Earth and Space Science / Sciences de la Terre et de l'espace : un siècle de progress, un autre à bâtir*". The IUGG2019 will be held in partnership with the Canadian Geophysical Union (CGU) and the Canadian Meteorological and Oceanographic Society (CMOS). We look forward to welcoming over 5,000 delegates at the Assembly.

The Local Organizing Committee (LOC) has been assembled from researchers across Ontario and Québec, and JPdL International appointed as the professional conference organizer for IUGG2019. In autumn 2017, following the IUGG business meetings in Montréal, a legal entity partnership was negotiated between JPdL, CGU and CMOS, and finalized in early 2018. The Memorandum of Understanding with the IUGG was completed in April 2018. A number of important activities have taken place so far, including the active promotion of IUGG2019 at the EGU, AOGS, CGU, and CMOS annual meetings.

The first meeting of the Scientific Program Committee (SPC) for IUGG2019 was held on 22 September 2017 at the Palais des congrès de Montréal (Assembly venue). During that meeting, the SPC members visited the facilities of the Palais des congrès de Montréal and discussed the basic philosophy of the scientific program. At this first meeting, the SPC confirmed the dates of IUGG2019 and the duration of the scientific program (9 days). The meeting focused on the Union Symposia, the Inter-Association symposia proposals and the preliminary proposals of the Association symposia. First discussions on the theme of IUGG2019 ensued. The IUGG2019 website (<http://iugg2019montreal.com>) gives provisional time schedules for technical and business meetings, Union Symposia, Union Lectures, main social events as well as important deadlines.

The second SPC meeting was held on 8 April 2018 at the Technical University of Vienna, Austria. At that meeting, the SPC firmed up the deadlines of the SPC and the LOC activities leading up to IUGG2019 and finalized the Union Symposia and Union Lectures in terms of conveners, co-conveners, and time schedule; nine Union Symposia will be spread over the entire technical program; and nine Union Lectures will be grouped into three lectures and delivered by distinguished scientists on 11, 13, and 16 July 2019. In addition, the Inter-Association symposia proposals have been examined in detail and improved.

Currently, 70 Inter-Association symposia proposals have been accepted and are in the final stages of preparation. At the association level, over 150 symposia proposals are under consideration. The next and final stage includes their refinement by the lead conveners and the approval by the lead associations with the planned date of posting in the middle of September 2018. The next face-to-face SPC meetings are scheduled for the fall 2018 and spring 2019 to finalize the timing and space allocation of the symposia.

Local Organizing Committee: Fiona Darbyshire (Chair), Lawrence Mysak (Deputy Chair), Laxmi Sushama (Secretary), Francesco Pausata and Brian Branfireun (Grants, Sponsorship & Exhibition), Kim Berlo and Yajing Liu (Field trips & Workshops), Alexandre Langlois (Media & Communications), Sandrine Solignac and Jeff McKenzie (Members at large), David Boteler (Government scientists' liaison), Georgia Fotopoulos (CGU liaison), and Dominique Paquin (CMOS liaison).

Scientific Program Committee: Spiros Pagiatakis (Chair, Canada), Alik Ismail-Zadeh (IUGG, Germany), Andrew Mackintosh (IACS, New Zealand), Hermann Drewes (IAG, Germany), Mioara Manda (IAGA, France), Christophe Cudennec (IAHS, France), Teruyuki Nakajima (IAMAS, Japan), Stefania Sparnocchia (IAPSO, Italy), Johannes Schweitzer (IASPEI, Norway), and Roberto Sulpizio (IAVCEI, Italy).

Fiona Darbyshire (LOC Chair) and Spiros Pagiatakis (SPC Chair)

3. Report on the Scientific Congress of the Turkish National Union of Geodesy and Geophysics

The Scientific Congress of the Turkish National Union of Geodesy and Geophysics (TNUGG) was organized by the General Command of Mapping (the IUGG Adhering Organization for Turkey), Dokuz Eylül University, İzmir Katip Çelebi University and İZFAŞ (İzmir Fair Services, Cultural and Art Affairs) in Izmir, Turkey, from 30 May to 1 June 2018. The Congress enabled scientists from geodesy, geophysics and other related fields to come together and discuss interdisciplinary issues. The scientific meetings were organized by individual commissions under the auspices of the TNUGG. This congress was the first which was held with the participation of all commissions of the National Union. At the Opening Ceremony, participants of the conference were welcomed by Orhan Polat from Dokuz Eylül University as the head of the Local Organizing Committee. Then Osman Alp, President of the Turkish General Command of Mapping (GCM) of the Ministry of National Defense and head of TNUGG, gave a presentation about TNUGG and GCM's responsibilities, achievements and products. Alik Ismail-Zadeh, IUGG Secretary General, made a presentation on 100 years' history and future vision of the IUGG, and on Disaster Risk and Sustainability. In total, there were about 200 participants; 95 papers were presented at 18 oral sessions and 11 papers were selected for poster presentations. The Congress drew public attention to many subjects especially seismology and earthquake risk related topics in the media. For more information: <http://www.tujjbkongre2018.org>.

Participants of the Scientific Congress of the Turkish National Union of Geodesy and Geophysics

Erdinc Sezen, Secretary of the IUGG National Committee for Turkey

4. Report on the 12th General Assembly of the Asian Seismological Commission

The Asian Seismological Commission (ASC) is one of four regional commissions of the International Association of Seismology and Physics of the Earth Interior (IASPEI) of IUGG. The 12th ASC General Assembly was held from 12 to 14 May 2018 at the Century City International Conference Center, Chengdu, China, and was jointly organized along with the 4th International Conference on Continental Earthquakes (<http://www.4thicce.com>), as part of the International Conference for the Decade Memory of the Wenchuan Earthquake. The Conference welcomed 1,408 registered participants from 49 different countries of which 129 were with ASC as their primary affiliation. There were 436 oral and 401 poster presentations. The ASC General Assembly had, in total, 107 abstracts, among which there were 52 oral presentations. The assembly was supported by IUGG, IASPEI, the Seismological Society of Japan, and the China Earthquake Administration. The ASC pre-assembly workshop was co-organized with the Northern-Central Asia Earthquake Observation Techniques Training Courses from 16 April to 11 May 2018. There were 21 participants from Armenia, Kazakhstan, Kyrgyzstan, Mongolia, Russian and Tajikistan. The theory of earthquake observation was the main topic from 16 to 28 April 2018 in Beijing, practice on seismograph and earthquake related software was the main topic from 29 April to 9 May 2018 in Zhuhai, and the effort to mitigate earthquake hazards was the main topic from 10 to 11 May 2018 in Chengdu.

At the opening ceremony of the ASC General Assembly, the IASPEI President Thorne Lay gave his opening remarks. Four keynote lectures were delivered by Harsh Gupta (India), Kenji Satake (Japan), Paramesh Banerjee (Singapore), and Wu Zhongliang (China). Scientific sessions included (i) strong motion, early warning, and lessons from great earthquakes, (ii) anthropogenic seismicity: induced and triggered earthquakes, (iii) global seismo-geodetic observations: GPS, strain accumulation and silent earthquakes, (iv) seismic hazard assessment, and (v) regional cooperation in seismo-geodesy. During the three-day assembly, the ASC Executive Committee organized its Bureau and Council meetings. The ASC Statutes were revised for the first time since the inception of ASC in 1996, and unanimously adopted by the National Correspondents who were present at the assembly. The venue for the next ASC General Assembly was also discussed, and it was decided to solicit proposals from different countries. The participants endorsed two ASC Resolutions, which were presented by ASC President Paramesh Banerjee during the closing ceremony of ASC. In Resolution 1, ASC strongly encourages efforts for sharing earthquake related observational experiences and related data among ASC member countries. Recognizing the importance of earthquake forecasting studies, Resolution 2 calls on ASC to set up a working group for the coordination and collaboration of test sites in the Asian-Pacific area, especially along the Belt & Road region. More information on the assembly can be found at the ASC website (<https://www.asc-iaspei.org/>).

Li Li, Secretary of the Asian Seismological Commission

5. Report on the 10th Workshop on Long-term Changes and Trends in the Atmosphere

The 10th Workshop on Long-Term Changes and Trends in the Atmosphere was held at Hefei, China, from 14 to 18 May 2018. The workshop was attended by about 130 participants from several countries including many graduate students and young scientists. This highly successful meeting was the most attended in this Trend Workshop series with over 120 abstracts received.

Group photo of the Trend Workshop

The six traditional sessions include trends and variability in the troposphere, stratosphere, mesosphere, thermosphere, ionosphere and modeling trends. In addition, three tutorials for students and young scientists were given on the history of trend researches, dynamics and modeling. Jan Lastovicka gave a special seminar for early career scientists on how to publish in scientific journals. This meeting was co-sponsored by IUGG, IAMAS, IAGA, SCOSTEP and several national organizations. A special joint issue of Journal of Geophysical Research - Space Physics and Journal of Geophysical Research - Atmosphere is planned. The Workshop's program is available at the website: <http://trends2018.ustc.edu.cn/programs.html>.

Tao Li and Jia Yue, Workshop's organizers

6. 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.

August

- 1-3, UN-GGIM, New York City, NY, USA, Eighth Session of the United Nations Committee of Experts on Global Geospatial Information Management. Web: <http://ggim.un.org/meetings/GGIM-committee/8th-Session/>
- 6-10, IGU, CAG, Quebec, Canada, 2018 IGU Regional Conference and Annual Meeting of the CAG. Web: <http://igu2018.ulaval.ca/>
- 6-10, IAGA, Santa Maria-RS, Brazil, 7th Symposium of the Brazilian Space Geophysics and Aeronomy Society (SBGEA). Web: <http://www.sbgea.org.br/en/vii-sbgea-2/>
- 12-17, IUSS, Rio de Janeiro, Brazil, RIO18. 21st World Congress of Soil Science. Web: <http://www.21wcss.org/>
- 13-20, IAGA, IUGG, Helsingør, Denmark, 24th Electromagnetic Induction Workshop. Web: <https://emiw2018.emiw.org>
- 20-27, CCEC, IAMAS, NC China, Beijing and Lanzhou, China, 2018's IUGG Centennial Celebration Activities in China. Web: TBA
- 20-31, IAU, IAG, Vienna, Austria, 30th General Assembly of the International Astronomical Union. Web: <http://astronomy2018.univie.ac.at/>

- 26-31, IAHS, Birmingham, UK, Catchment Science Summer School 2018. Web: <https://www.usask.ca/watershed/teaching/catchment-science-summer-school.php#ClassDescription>
- 27-31, IAHS, Moscow, Russia, The Second International Young Scientists Forum on Soil and Water Conservation and ICCE symposium 2018 "Climate Change Impacts on Sediment Dynamics: Measurement, Modelling and Management". Web: <http://www.eng.geogr.msu.ru/IYFSWC/home.php>

September

- 1-8, IAVCEI, IUGG, San Pedro de Atacama, Chile, State of the Arc (SOTA 7). Web: <https://www.sota7.org/>
- 2-4, IAHS, WMO, Lyon, France, 4th IAHR-WMO-IAHS Training Course on Stream Gauging. Web: <https://riverflow2018.irstea.fr/program-2/training-course-on-stream-gauging/>
- 2-7, IASPEI, IUGG, Valetta, Malta, 36th General Assembly of the European Seismological Commission. Web: <http://www.escmalta2018.eu/de-DE/page/home>
- 2-7, IAVCEI, Naples, Italy, Cities on Volcanoes 10. Web: <https://www.citiesonvolcanoes10.com/>
- 10-13, IAG, Grenoble, France, 19th General Assembly of WEGENER. On Earth deformation & the study of earthquakes using geodesy and geodynamics. Web: <https://wegener2018.sciencesconf.org/>
- 10-19, GFZ, Potsdam, Germany, Potsdam Summer School 2018 – The Skin of the Earth. The Earth Surface System. Web: <http://potsdam-summer-school.org/>
- 17-21, EMSEV, Potenza, Italy, International 2018 EMSEV Workshop. Web: <http://web.unibas.it/emsev2018/index.php/en/>
- 17-21, IAG, Copenhagen, Denmark, Gravity, Geoid and Height Systems (GGHS 2) Symposium. Web: <http://www.space.dtu.dk/english/gghs2018>
- 17-21, IAGA, L'Aquila, Italy, Course of the International School of Space Science (ISSS) on "The Polar upper Atmosphere: From science to operational issues". Web: <http://www.cifs-iss.org/futurecourses.asp>
- 21-27, IAVCEI, Toba Caldera, Sumatra, Indonesia, 7th Workshop on Collapse Calderas. Web: <https://staff.aist.go.jp/geshi-nob/CCC/>
- 24-26, IAG, Ponta Delgada, Azores, Portugal, International DORIS Service (IDS) Workshop. Web: <https://ids-doris.org/ids/reports-mails/meeting-presentations/ids-workshop-2018.html>
- 24-26, IAHS, Adelaide, Australia, STAHY 2018. Web: <https://www.stahy2018.org/>
- 25-27, AGU, Washington, DC, USA, Chapman Conference on Hydrologic Research in the Congo Basin. Web: <http://chapman.agu.org/congo-hydrologic-research/>
- 25-29, IAMAS, IUGG, Takamatsu, Japan, 2018 joint iCACGP 14th Quadrennial Symposium and IGAC 15th Science Conference (iCACGP). Web: <http://icacgp-igac2018.org/>

October

- 2-4, IAG, Tsukuba, Japan, GGOS Days 2018. Web: <http://176.28.21.212/en/meetings/2018/ggos-days/general/>
- 4-5, IAHS, Potsdam, Germany, International Conference on "Natural Hazards and Risks in a Changing World". Web: <http://www.j-work.de/up/nathazardsrisk/>
- 9-12, IAG, PAIGH, Aguascalientes, Mexico, SIRGAS 2018, Web: <http://geoweb2.inegi.org.mx/sirgas2018/html/en/index.html>

- 15-17, IAG, PAIGH, Aguascalientes, Mexico, SIRGAS Workshop 2018 on Vertical Reference System. Web: <http://geoweb2.inegi.org.mx/sirgas2018/html/en/index.html>
- 16-18, IAHS, Xi'an, China, International Symposium of Eco-Hydrology and Water Security: Opportunities & Challenges from Developing Countries. Web: <https://iahs.info/uploads/Meetings/2018%27International%20Symposium%20in%20Xian%2C%20China.pdf>
- 24-26, GEO, Kyoto, Japan, 11th GEOSS Asia-Pacific Symposium. Web: <https://aogeoss.com/en/>
- 28 October – 2 November, Mexican Geophysical Union, IUGG, Puerto Vallarta, Jalisco, México, Annual Meeting. Web: <https://www.raugm.org.mx>
- 29 October - 2 November, GEO, Kyoto, Japan, GEO Week 2018. Web: <http://earthobservations.org/geo15.php>
- 29 October - 2 November, IAG, Wuhan, China, IGS 2018 Workshop. Web: <https://kb.igs.org/hc/en-us/sections/115000788432-2018-IGS-WORKSHOP-WUHAN-CHINA>

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