



**INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS**  
**UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE**

## **The IUGG Electronic Journal**

**Volume 16 No. 7 (1 July 2016)**

This informal newsletter is intended to keep IUGG Member National Committees informed about the activities of the IUGG Associations, and actions of the IUGG Secretariat. Past issues are posted on the IUGG website (<http://www.iugg.org/publications/ejournals/>). Please forward this message to those who will benefit from the information. Your comments are welcome.

### **Contents**

1. IUGG Bureau and Executive Committee meetings
2. IUGG grant awards for promotion of interdisciplinary research and science education
3. Cooperation with UNESCO
4. News from the International Council for Science (ICSU)
5. Awards and honors
6. Meeting calendar

---

### **1. IUGG Bureau and Executive Committee meetings**

The IUGG executives met in Paris, France, on 16-18 June to discuss the progress and activities since the 2015 IUGG General Assembly in Prague and to elaborate the work plan and new initiatives for the forthcoming years. The meeting was hosted by the UNESCO Earth Sciences and Geo-Hazard Risk Reduction (ESGHRR) Section. Besides the usual business related to reporting on the activities of the Officers related to administrative and financial matters, the Bureau revised the Guidelines on IUGG Administration; discussed the grant applications, which were thoroughly analyzed by the Bureau Members, and approved the grant awards (see article 2, this issue); considered the proposal on administrative structuring and activities of the College of Fellows established by the Council in 2011; discussed the Strategic Plan and its Implementation for 2016-2023; analyzed the recent activities of the Union Commissions and Committees, and the International Lithosphere Program; discussed the news related to the International Council for Science (ICSU), especially associated with the proposed merger with the International Social Sciences Council (see article 5, this issue); and analyzed how to strengthen the relationship with international and intergovernmental organizations (see articles 3 and 4, this issue).

At the opening of the Executive Committee (EC) meeting, Dr. Patrick McKeever, Head of the ESGHRR Section, welcomed the participants and discussed recent changes in the structure and activities of this UNESCO Section. He called for closer cooperation between IUGG and the ESGHRR Section. Dr. Heide Hackmann, ICSU Executive Director, addressed the EC describing recent changes in ICSU programs, activities, joint initiatives, and a proposed major change in structure of the Council. IUGG Officers reported on the scientific, administrative, membership, and financial activities of the Union. Association Presidents reported on the activities of their associations for the last year and highlighted future work mostly associated with scientific

assemblies in 2017. The EC discussed (i) Union-standard abstract and program management at IUGG general and Association scientific assemblies; (ii) Strategic Plan and draft Implementation Plan (2016-2023); (iii) a proposal related to structuring the College of Fellows; (iv) strengthening cooperation with early career scientists via existing networks, e.g. APECS (polar researchers), MIREs (solid Earth researchers), YES (geoscientists), and YESS (Earth system scientists); (v) planning for the IUGG centennial event in 2019; and some other topics. The next meeting of the Bureau and EC will be held in the fall of 2017 in Montreal, Canada.



*At the Executive Committee meeting on 17 June 2016, UNESCO, Paris, France*

On the occasion of the IUGG business meetings in Paris, the French National Committee for Geodesy and Geophysics (CNFGG) invited the Executive Committee Members for a cocktail party held at the UNESCO Headquarters. IUGG thanks the French National Committee for the wonderful party!

IUGG is very grateful to the UNESCO ESGHRR Section for hospitality and cooperation!

---

## **2. IUGG grant awards for promotion of interdisciplinary research and science education**

The IUGG Grants Programme aims to support projects, of importance to the international geophysical and geodetic community, which explore new scientific ideas, develop future international initiatives, and promote geoscience education. For 2016-2017, IUGG awarded grants to the following projects:

- Data intensive systems analysis for geohazard studies
- Determination of the Earth's mathematical surface in Africa towards the realization of the International Height Reference System
- Marine magnetics in remote areas: filling gaps together in education, research and observations
- Seismological contributions to earthquake risk reduction
- Training school for students and early career atmospheric scientists from Asian monsoon countries
- Training school on stratosphere-troposphere interactions

The total amount of funds allocated to the projects is US\$ 40,000.

---

### 3. Cooperation with UNESCO

#### *The Intergovernmental Oceanographic Commission Executive Council Meeting*

The 49th Session of the Executive Council (EC) of the Intergovernmental Oceanographic Commission (IOC) was held on 7-10 June 2016 in Paris, France. IUGG/IAPSO Liaison Dr. Eugene Morozov and IUGG Secretary General Dr. Alik Ismail-Zadeh attended the EC meeting.

The EC meeting considered and discussed the IOC activities since the 28<sup>th</sup> session of the IOC Assembly in May 2016, which included among others (i) the work done in ocean observations, data/information management, and tsunami warnings; (ii) contribution to the decisions of the UN Framework Convention on Climate Change and Conference of the Parties (COP21) Information Centre; (iii) development of IOC Capacity Development and Communication strategies; (iv) contribution to the initial UN debates on the role of ocean science and observations in protection of biodiversity beyond areas of national jurisdiction and to the work of UN-Oceans; (v) a successful start to the 2nd International Indian Ocean Expedition; and (vi) progress on the Global Ocean Science Report. Also the EC discussed the activities related to Global Ocean Observing System (GOOS), Global Climate Observing System (GCOS), World Climate Research Programme (WCRP), Intergovernmental Coordination Group on Tsunami Warning Systems, General Bathymetric Chart of the Oceans (GEBCO), IOC-SCOR research program “Global Harmful Algal Bloom”, and Small Island Developing States. More information can be found at webpage: [http://ioc-unesco.org/index.php?option=com\\_oe&task=viewEventRecord&eventID=1753](http://ioc-unesco.org/index.php?option=com_oe&task=viewEventRecord&eventID=1753)

2016 *World Oceans Day* was held on 8 June 2016 in a conjunction with the IOC EC meeting (<http://www.unesco.org/new/en/oceans-day>). The UNESCO Campus, entitled “Healthy Ocean, Healthy Planet: Plastic Pollution”, opened the World Oceans Day. Its aim was to educate youth about current social, educational and environmental challenges. The debate “Climate – The ocean is part of the solutions”, organized by the *Ocean and Climate Platform*, an international think tank bringing together academic institutions, NGOs, foundations, and business associations, was dedicated to promotion of maritime solutions for climate change mitigation and adaptation. The central scientific event of the Day was the 2016 Roger Revelle Memorial Lecture (a lecture series in the memory of Roger Revelle, IAPSO President, 1963-1967) delivered by Ken Caldeira of the Carnegie Institution for Science, Stanford, USA, on ocean acidification. The lecture was followed by a thematic round table “Mobilizing Society and Stakeholders for Effective Ocean Science Communication”. The final point of the Day was a high-level panel representing UNESCO, WMO and some other intergovernmental, international and national organizations, which discussed how three major agreements reached by governments in 2015 (Sendai Framework for Disaster Risk Reduction, UN Sustainable Development Goals, and Paris Agreement on climate change) can be implemented through ocean science and governance. Well attended by National Members of UNESCO, the event showed the IOC National Members the strength of science in solving problems of the ocean.

IUGG Secretary General met Dr. Vladimir Ryabinin, IOC Executive Secretary, and presented him with the IUGG/IAPSO – ICSU/SCOR Report on marine sustainability “*Future of the Ocean and its Seas*” prepared for the G7 Science and Technology Ministers meeting in Tsukuba, Japan in May 2016.

### ***The International Hydrological Program Intergovernmental Council meeting***

The 22<sup>nd</sup> Session of the Intergovernmental Council of the International Hydrological Programme (IHP) was held in Paris, France, from 13 to 17 June 2016 (<http://en.unesco.org/events/22nd-session-intergovernmental-council-international-hydrological-programme-ihp-unesco?language=en>). The IUGG/IAHS Liaison Prof. Christophe Cudennec attended the Session. Major institutional developments were considered at the meeting, namely, (i) a report on developments in the Natural Sciences Sector and the Division of Water Sciences, (ii) consultation on the update to the IHP Statutes and to the Rules of Procedure of the IHP Council; (iii) a report on the consultation regarding the establishment of an Intergovernmental Panel on Water; (iv) a report on the celebration of the 50th anniversary of the UNESCO water programs. Also the meeting considered the IHP actions in the implementation and monitoring of the Sustainable Development Goal 6 relating to water and sanitation; the status and operation of UNESCO's Water Family, namely, the proposed centers under the auspices of UNESCO, UNESCO-IHE Institute for Water Education (category 1), and World Water Assessment Programme; cooperation with the UN System on freshwater issues; IHP's contribution to the UN World Water Development Report, and the role of IHP in the International Decade for Action – Water for Life (2005-2015).

Every two years, the International Hydrological Programme (IHP) of UNESCO and the International Association of Hydrological Sciences (IAHS) organise the Kovacs Colloquium, a series of international scientific meetings in the most challenging fields of water resources research. These meetings also commemorate the late George Kovacs, an established authority on hydrology, who served as Chairman of the Intergovernmental Council of IHP and as Secretary General and President of IAHS. The 12th Kovacs Colloquium was organized by the IHP and IAHS on 15 June 2016 in conjunction with the IHP Intergovernmental Council Meeting. The colloquium's program can be found at the IAHS webpage: [http://iahs.info/uploads/Meetings/Kovacs%202016/Programme-12-Kovacs-Colloquium\\_07\\_06\\_16.pdf/](http://iahs.info/uploads/Meetings/Kovacs%202016/Programme-12-Kovacs-Colloquium_07_06_16.pdf/). The Colloquium focused on the inputs for implementation of water-related Sustainable Development Goals (SDGs) adopted by the 193 Member States of the United Nations in September 2015. It addressed methodological issues and challenges for SDGs implementation and monitoring using a set of global indicators.

### ***The Earth Sciences and Geo-Hazards Risk Reduction Section***

To strengthen cooperation between IUGG and UNESCO in the area of disaster risk reduction, IUGG Secretary General Dr. Alik Ismail-Zadeh met on 30 May with Dr. Flavia Schlegel, UNESCO Assistant Director General for Natural Sciences, and representatives of the Earth Science and Geohazard Risk Reduction Section. The main topic for discussion was negotiation on the intergovernmental science-based risk assessment initiative put forward by IUGG and endorsed by the 2014 ICSU General Assembly in Auckland.

---

## **4. News from the International Council for Science (ICSU)**

### ***ICSU and the International Social Science Council (ISSC) are considering a merger***

The ICSU President Gordon McBean has called an extraordinary session of the ICSU General Assembly, to allow members “to consider the recommendation to merge ICSU and ISSC and agree – in principle – to pursue this; to discuss and provide feedback on the planning framework; to agree on the appointment of a Transition Task Force; and to mandate this group to develop detailed transition plans, including new statutes/rules of procedure, for accomplishing a merger”. This General Assembly will be held in Oslo, Norway, on 24 October 2016, coinciding with the ISSC

General Assembly. For more background information: <http://www.icsu.org/general-assembly/extraordinary-general-assembly-oslo-2016/background>

### ***New Executive Director of the Integrated Research on Disaster Risk Programme***

Rajib Shaw has been appointed Executive Director of the International Programme Office of the Integrated Research on Disaster Risk (IRDR) Programme hosted at the Institute of Remote Sensing and Digital Earth in Beijing, China. He will assume his position on 1 July 2016. Previously a Professor in the Graduate School of Global Environmental Studies of Kyoto University, Japan, he has extensive experience in disaster risk reduction research and has worked closely with local communities, NGOs, governments and international organizations in Asia. For more information: <http://www.icsu.org/news-centre/news/top-news/rajib-shaw-appointed-executive-director-of-the-integrated-research-on-disaster-risk-programme>

### ***New ICSU paper published: “A draft framework for understanding SDG interactions”***

2016 is the year when the implementation phase of the Sustainable Development Goals (SDGs) really kicks into action. The principle obstacle to implementation at the national level is the complex web of interactions between different goals. To that end, the International Council for Science has just published a new working paper that presents a new tool to analyze and understand interactions between different SDGs. The ICSU paper “A draft framework for understanding SDG interactions” (<http://www.icsu.org/publications/reports-and-reviews/working-paper-framework-for-understanding-sdg-interactions-2016>) was developed as part of a project led by the Council to explore an integrated and strategic approach to implementation of the SDGs. It goes hand in hand with a commentary article published in *Nature* (<http://www.nature.com/news/policy-map-the-interactions-between-sustainable-development-goals-1.20075>).

### ***A new logo for the International Council for Science***



Following a decision by the ICSU Executive Board in March 2015, the logo and its visual identity were updated. The Board felt that it was important to give stronger emphasis to the full name of the organization. The new logo sharpens up the previous design by optimizing it for digital publishing and social media.

Source: ICSU website

---

## **5. Awards and Honors**

The 2016 Early Career Scientist Prize of the IACS is jointly awarded to **Thorben Dunse** (University of Oslo, Norway) and to **Rachel Tilling** (University College London, UK) for their research papers published in *The Cryosphere* (available at: <http://www.the-cryosphere.net/9/197/2015/tc-9-197-2015.pdf>) and *Nature Geoscience* (<http://www.nature.com/ngeo/journal/v8/n8/full/ngeo2489.html>) journals, respectively. The IACS Early Career Scientist Prize is a bi-annual cash prize of EUR 1000 awarded to each of two nominated early career scientists, who are assessed as having published the best scientific papers on a cryospheric subject during the previous two calendar year. The objective of the prize is to recognize excellence in cryospheric science by honoring and promoting early career scientist and to draw attention to the work of IACS.

The 2016 Tison Award of the IAHS was presented to **Guillaume Thirel, Jean-Nicolas Audouy, Lionel Berthet, Carina Furusho, Anna Kuentz, Julien Lerat, Thibault Mathevet & Denis Ruelland** for their paper published in the *Hydrological Sciences Journal* (available at: <http://www.tandfonline.com/doi/abs/10.1080/02626667.2014.967248>). The IAHS Tison Award,

established in 1982, aims to promote excellence in research by young hydrologists. The Award is granted for an outstanding paper published by IAHS in a period of two years previous to the deadline for nominations.

The International Hydrology Prize is awarded annually by IAHS, with UNESCO and WMO, to two people who have made an outstanding contribution to hydrological science. The 2016 International Hydrological Prize was presented to *Jeffrey McDonnell* (Canada), who received the Dooge Medal, and *Denis Hughes* (South Africa), who received the Volker medal. The medals honor outstanding achievements by hydrological scientists but with a different focus. The Dooge medal is aimed at fundamental contributions to the science of hydrology, whereas the Volker medal is aimed at outstanding applications of hydrological science for the benefit of society at large.

---

## 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 also list more meetings on their websites according to their disciplines.

### July

- 3-10, IAVCEI, IUGG, Mt. Etna, Aeolian Islands, Italy, 3rd International Workshop on Volcano Geology. Web: <http://www.iavcei.org/news/2015-news/41-news-from-commissions/52-3rd-workshop-on-volcano-geology-july-3-10-sicily-italy.html>
- 4-8, IAHS, Vienna, Austria, Summer School - Runoff Predictions in Ungauged Basins. Web: [http://www.waterresources.at/fileadmin/user\\_uploads/News\\_items/Summer\\_School\\_PUB\\_2016.pdf](http://www.waterresources.at/fileadmin/user_uploads/News_items/Summer_School_PUB_2016.pdf)
- 4-8, EAS, IAGA, Athens, Greece, European Week of Astronomy and Space Science. Special session SS2 "Solar-Terrestrial Coupling and Space Weather: State-of-the-Art and Future Prospects". Web: <http://eas.unige.ch/EWASS2016/session.jsp?id=SS2>
- 4-17, CODATA, Beijing, China, CODATA International Training Workshop in Big Data for Science. Web: <http://www.codata.org/news/105/62/CODATA-International-Training-Workshop-in-Big-Data-for-Science-Beijing-4-17-July>
- 10-16, IACS / WGMS, La Paz, Bolivia, Training Course on Mass Balance Measurements and Analysis 2016. Web: <http://wgms.ch/mb-training-course-2016/>
- 11-15, IAHS, Okehampton, UK, 2016 ICCE Symposium. Web: <http://www.icce.altervista.org/icce-events.html>
- 12-19, ISPRS, Prague, Czech Republic, 12th Congress. Web: <http://www.isprs2016-prague.com/>
- 18-21, IUGG, IAGA, CODATA, Sochi, Russia, International Conference "Data Intensive System Analysis for Geohazard Studies". Web: <http://sochi2016.gcras.ru/>
- 18-23, IAU, IAG, IERS, Wuhan, China. Geodesy, Astronomy and Geophysics in Earth Rotation (GAGER2016) - A Joint IAU / IAG / IERS Symposium. Web: <http://gager2016.sgg.whu.edu.cn/>
- 18-29, ICTP, IUGG, Pune, India, Advanced School on Earth System Modelling & Workshop on Climate Change and Regional Impacts over South Asia. Web: <http://indico.ictp.it/event/7619/>
- 22-25, IAG, Tianjin, China, International Symposium on Geodesy and Geodynamics (ISGG2016). Web: <http://isgg2016.csp.escience.cn/dct/page/1>
- 24-28, IAHS, Shenzhen, China. 9th International Association of Hydrological Sciences (IAHS) Groundwater Quality Conference (GQ16). Web: <http://www.gq16.org/>
- 24-29, SEDI, Nantes, France. SEDI 2016 – 15th International Symposium on the Study of the Earth's Interior. Web: <http://www.sedi2016.org/>

- 25-29, IAMAS, IUGG, Manchester, UK. 17th International Conference on Clouds and Precipitation. Web: <https://www.meeting.co.uk/confercare/iccp2016/index.html>
- 27-29, IAHS, Liege, Belgium, 4th IAHR Europe Congress. Web: <http://www.iahr2016.ulg.ac.be/>
- 27-30, IAG, Shanghai, China. 1st International Conference on GNSS+ (ICG+2016). Web: <http://202.127.29.4/meetings/icg2016/>
- July 30 - August 7, COSPAR, Istanbul, Turkey, 41st COSPAR Scientific Assembly. Web: <https://www.cospar-assembly.org/>
- July 31 - August 5, AOGS, Beijing, China. 13th Annual Meeting Asia Oceania Geosciences Society. Web: <http://www.asiaoceania.org/aogs2016/public.asp?page=home.htm>

### **August**

- 1-12, ICSU-CODATA, RDA, TWAS, Trieste, Italy, The CODATA-RDA Research Data Science Summer School. Web: <http://indico.ictp.it/event/7658/>
- 14-20, IAGA, IUGG, Chiang Mai, Thailand, 23rd International Workshop on Electromagnetic Induction in the Earth. Web: <http://emiw2016.org/>
- 15-17, IASPEI, Taipei, Taiwan, IASPEI/IAEE International Symposium “Effects of Surface Geology on Seismic Motion (ESG5)”. Web: <http://esg5.ncree.org.tw>
- 20-30, SCAR, Kuala Lumpur, Malaysia, XXXIV SCAR Meetings and Open Sciences Conference. Web: <http://scar2016.com/>
- 21-25, IGU, Beijing, China, 33rd International Geographical Congress. Web: <http://www.igc2016.org/dct/page/1>
- 21-26, IAHS, Incheon, Republic of Korea, HIC 2016 12th International Conference on Hydroinformatics. Web: <http://www.hic2016.org/html/index.php>
- 23-25, EMSEV, CSES, Beijing, China, 2nd International Workshop on China Seismo-Electromagnetic Satellite Mission. Web: [www.aconf.org/en-us/conf\\_73066.html](http://www.aconf.org/en-us/conf_73066.html)
- 25-29, EMSEV, IUGG, Lanzhou, China, International 2016 EMSEV Workshop. Web: <http://www.emsev2016.com/>
- August 27 - September 4, IUGS, Cape Town South Africa, 35th International Geological Congress. Web: <http://www.35igc.org/>

### **September**

- 4-9, IAMAS, IUGG, Edinburgh, UK, QOS2016 Quadrenial Ozone Symposium. Web: <http://www.ozone-symposium-2016.org>
- 4-10, IASPEI, Trieste, Italy, 35<sup>th</sup> General Assembly of the European Seismological Commission. Web: <http://www.35esc2016.eu>
- 5-9, IACS, Reykjavik, Iceland, 6th International Conference on Mars Polar Science and Exploration. Web: <http://www.hou.usra.edu/meetings/marspolar2016/>
- 11-17, CODATA, WDS, Denver, CO, USA, International Data Week 2016. Web: <http://www.internationaldataweek.org/>
- 19-23, IAGA, IUGG, Hermanus, South Africa, 7th Workshop of the VLF/ELF Remote Sensing of Ionospheres and Magnetospheres (VERSIM) working group. Web: <http://events.sansa.org.za/versim-information>
- 19-23, IAG, Thessaloniki, Greece, 1st Joint Commission 2 and IGFS Meeting. International Symposium on Gravity, Geoid and Height Systems 2016. Web: <http://gghs2016.com/>
- 23-25, Chinese National Committee for IUGG, Nanjing, China, 2nd Congress of China Geodesy and Geophysics (2nd CCGG).

---

*End of IUGG Electronic Journal Volume 16 Number 7 (1 July 2016)*

Editors: Tom Beer, Alik Ismail-Zadeh (Editor-in-Chief), Franz Kuglitsch (Associate Editor), and Kathryn Whaler.