



INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

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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 Web site (<http://www.iugg.org/publications/ejournals/>). Please forward this message to those who will benefit from the information. Your comments are welcome.

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1. Happy New Year!

It is a tradition to summarize IUGG activities during the past year in the January issue of the Electronic Journal.

The Year 2011 was remarkable in the history of the Union: The 25th IUGG General Assembly was held in Melbourne, Australia (27 June – 8 July), bringing together more than 3400 Earth and space scientists from 86 countries. Delegates from 49 IUGG Adhering Bodies attended the Union Council Meeting. The IUGG Council ratified the membership of Azerbaijan, Costa Rica, Georgia, and the F.Y.R. Macedonia. A number of changes to the Statutes and by-Laws were approved, among them an Affiliate membership to provide a mechanism to formalize linkages with various international and regional organizations dealing with Earth and space sciences and an IUGG Fellowship to honor individuals for their exceptional contribution to international cooperation in geodesy or geophysics and attained eminence in the field of Earth and space sciences. The IUGG Council elected the new IUGG officers and appointed liaison officers to several scientific international and intergovernmental organizations, where it is advantageous to both organizations. The Council selected Prague (Czech Republic) as the venue for the 26th General Assembly in 2015. The IUGG budget for 2012-2015 was approved, and five Resolutions were passed.

The Union was involved in various other activities during the last year and showed its strength in international cooperation and science promotion. A few major activities and events in the life of the Union for this year are highlighted below.

- IUGG continued to strengthen cooperation with the Scientific Unions and multi-disciplinary bodies of the International Council for Science (ICSU) as well as with the World Meteorological Organization (WMO), the United Nations Education, Science and Culture Organization (UNESCO), the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the American Geophysical Union (AGU), the Asia-Oceanic Geosciences Society (AOGS), the European Geosciences Union (EGU), and some other international and intergovernmental organizations.
- IUGG initiated and supported two ICSU-sponsored projects: “Better Internet Connectivity for Research and Education Institutions in Africa – eGYAfrica” (led by IUGG and supported by International Union of Geological Sciences - IUGS, the ICSU Committee on Data for Science and Technology - CODATA, and the ICSU Regional Office for Africa - ROA) and “Trans-Disciplinary Intercultural Ecological Research for Sustainability” (led by the International Geographical Union - IGU).
- IUGG was actively involved in the trans-disciplinary international project “Extreme Natural Hazards and Societal Implications – ENHANS” (<http://www.enhans.org>) co-organizing several scientific events around the world: (i) workshop in Pretoria (South Africa) focused on Africa, (ii) special session in Antalya (Turkey) focused on the Middle East, (iii) Union symposium and Open Forum in Melbourne (Australia) focused on Asia and the Pacific, (iv) advanced school in Trieste (Italy) to train early career scientists in the developing countries, and (v) sessions in San Francisco (USA) related to the predictability of extreme events.
- IUGG was involved in the new ICSU programs related to the Integrated Research on Disaster Risk (IRDR) and the World Data System (WDS).
- IUGG strengthened cooperation with WMO organizing a joint IAVCEI-WMO workshop on Ash Dispersal Forecast and Civil Aviation, and with CTBTO participating in the CTBTO Science Conference in Vienna and organizing a joint Union symposium in Melbourne.
- IUGG co-sponsored several international scientific meetings worldwide in 2011.
- IUGG and the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy, signed an agreement to enhance geophysical and geodetic education and science collaboration for 2012-2015.
- As a response to the great earthquake and tsunami disaster in Japan, IUGG adopted the statement on Great East Japan Earthquake and Tsunami (18 April).
- The past and new IUGG Bureau and Executive Committee met in Melbourne in June and July to discuss the Union business.
- President Gupta and Secretary General Ismail-Zadeh attended the 30th General Assembly of the International Council for Science (ICSU), held in Rome, Italy, 27–30 September, and the business meeting of the ICSU Scientific GeoUnions on 25 September. Major outcomes of the assembly were the approval of two new international programmes: the Earth System Sustainability Initiative, and Health & Well-being in the Changing Urban Environment. Dr. Gordon McBean and Dr. Guoxiong Wu (prominent members of IUGG) were elected ICSU President-Elect and ICSU Executive Board Member, respectively.

The IUGG Bureau thanks the Adhering Bodies and National Committees, Union Associations and Commissions as well as all individuals who helped making the year 2011 exciting and productive in strengthening international Earth and space sciences for the benefit of society.

Best wishes to everyone for a happy, healthy, and prosperous year 2012!

2. IUGG Yearbook for 2012

The 2012 Yearbook is now electronically available in PDF format at the IUGG web site (<http://www.iugg.org/publications/yearbooks/yearbook2012.pdf>). The IUGG web site maintains the directory of Union and Association officials and the archive of IUGG memberships and General Assemblies. Thanks to all of the National Committees and the Associations for helping to update the information in the IUGG Yearbook!

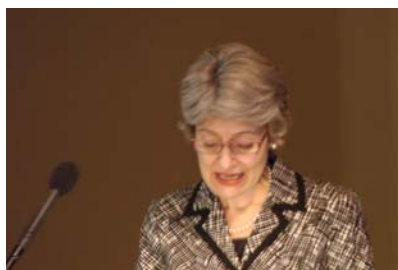
During 2012, updates on addresses and other information in the Yearbook should be sent to the Secretariat (secretariat@iugg.org) as soon as they are known. Our aim is to update the Yearbook as needed throughout the year. The 2012 Yearbook will be published together with the 2011 Annual Report and sent to the National Members in May 2012.

3. Report on the World Science Forum, Budapest, Hungary



Entitled “The Changing Landscape of Science: Challenges and Opportunities”, the 2011 World Science Forum (WSF) was organized by the Hungarian Academy of Sciences in cooperation with UNESCO, the International Council for Science (ICSU), and several other scientific organizations.

The Forum was opened on Sunday, 16 November, in the Ceremonial Hall of the Hungarian Academy of Sciences. *Irina Bokova*, UNESCO Director-General, and *József Pálincás*, President of the Hungarian Academy of Sciences and the WSF, addressed the participants of the Forum. The Opening Ceremony was followed by an inauguration of the Photography Exhibition “Environmental Preservation towards Sustainable Development in Oman”, concert and an Opening Reception.



Irina Bokova



József Pálincás



Viktor Orbán



Ban Ki-moon



Yuan Tseh Lee



Sergei Volkov (from ISS)

On 17 November, the Conference continued with the Opening Addresses from *Viktor Orbán*, Prime Minister of Hungary, *Ban Ki-moon*, Secretary-General of the United Nations (video message), *Yuan Tseh Lee*, President of ICSU, *Alan Leshner*, Chief Executive Officer of AAAS, *Dominique Ristori*, Director-General of the Joint Research Centre of the European Commission, and the Russian cosmonaut *Sergei Volkov* (video message) who welcomed the participants of the Conference from the International Space Station (ISS). Several plenary sessions discussed the changing landscape of

science and related challenges, opportunities, emerging scientific powerhouses, emerging fields of science, higher education's perspectives, policy implications and drivers. On 18 November the conference continued its work in several parallel sessions organized by the Hungarian Academy, AAAS, and ICSU on various topics including scientific collaboration and new generation of science and researchers, forum of global fora (like AAAS Annual Meetings, the EuroScience Open Forum, the OECD Global Science Forum, the STI Global Forum). A special session "Foresight Scenarios: What will international science be like in 2031?" was convened by *Carthage Smith*, Deputy Executive Director of ICSU. Three speakers presented the reports on a foresight analysis related to natural science, social science and global energy, namely, *John Marks* presented the ICSU Taskforce on Foresight, *Francoise Caillods* spoke about the World Social Science Report, and *Nebojsa Nakicenovic* discussed the global energy assessment report. *Attila Havas* of the Hungarian Academy of Sciences, *Michael Keenan* of OECD, and *Yuan T Lee* of ICSU were invited to comment on the report.

At the closing session held in the Hungary's Parliament Building on 19 November 2011, Hungary's President *Pál Schmitt* emphasized the importance of international cooperation. Science is not the arena for competition, he said, but of uniting our strengths. The ethical responsibility of science to cause no harm is tied up with its great achievements, said *Katalin Bogyay*, President of the 36th General Conference of UNESCO. The highlight of the WSF closing event was the endorsement of the Declaration on a New Era of Global Science. The Declaration states that the treasure of scientific knowledge and its underlying research approaches are a common heritage of humankind. The full text of the Declaration can be found at <http://www.sciforum.hu/declaration/index.html> or at <http://www.icsu.org/publications/icsu-members-and-bodies-statements/declaration-of-the-budapest-world-science-forum-2011/declaration-wsf-2011>. The next World Science Forum will be held in Rio (Brazil) in 2013.

IUGG was invited to attend the World Science Forum. On behalf of President *Harsh Gupta*, Secretary General *Alik Ismail-Zadeh* attended WSF to represent IUGG at the meeting.

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



ICSU Strategic Plan for 2012-2017

Approved by the 30th General Assembly in Rome, the full text of the ICSU Strategic Plan II, 2012-2017 is now available at: <http://www.icsu.org/publications/reports-and-reviews/icsu-strategic-plan-2012-2017/icsu-strategic-plan>. This strategic plan lays out how ICSU intends to build on the strengths of its global network of international disciplinary Unions, National Member organizations and strategic partners to address key issues for science and society over the coming medium term.

"Future Earth"

"Future Earth – research for global sustainability" will be the name of the new ten-year initiative on Earth system research for global sustainability being established through the partnership of ICSU, ISSC, the Belmont Forum, UNESCO, UNEP and UNU, with WMO as observer. At its meeting (San Francisco, 9-12 December) the Transition Team overseeing the design phase for the initiative (<http://www.icsu.org/earth-system-sustainability-initiative/about-initiative>) agreed on the name and worked towards defining the conceptual framework, research strategy and institutional design for Future Earth.

Foresight Analysis Report 1

The first of two reports describing the ICSU Foresight Analysis is now available. Report 1 describes the analysis carried out under Phases 1 and 2 of a process that has engaged the ICSU community in an important long-term planning exercise – exploring the future of international science in 20 years' time. From an ICSU perspective, the next step is to develop a 'success scenario' for 2031 and extrapolate back to identify feasible steps that ICSU can take to help realize this scenario. Of course, the future cannot be predicted, and this is not the aim of the foresight exercise. However, ICSU and international science can make a significant contribution to shaping the future; exploring where we would like to be two decades from now can help in selecting the best pathways to achieve this vision. An article in *Nature* (Vol. 479, 24 November 2011) reflects on the scenarios developed as part of the Foresight process and suggests the need for better engagement between disciplines and with the public. Publication of Report 2 devoted to the 'success scenario' is expected during the first half of 2012.

Source: ICSU Newsletter and web site

5. Report of the IUGG Liaison Officer to the Cartographic Section of the United Nations

The First High Level Forum on Global Geospatial Information Management, co-organized by the Korean National Geographic Information Institute (NGII Korea) and the UN Department of Economic and Social Affairs (UN-DESA) and supported by the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP), the Permanent Committee for Geospatial Data Infrastructure of the Americas (PC-IDEA), and the Committee on Development Information, Science and Technology (CODIST) for Africa, was held from 24-26 October 2011 in Seoul, Republic of Korea. 350 participants from 90 countries, 22 United Nations representatives, and 37 representatives from international organizations and the private sector attended this meeting. The Forum acknowledged that common frameworks and methodologies are useful to increase the accessibility and sharing of data and welcomed the suggestions put forward on the global geodetic reference system (e.g. towards its adoption by countries in the world) and a global consultation mechanism on the adoption of technical standards. Also the Forum adopted the Seoul Declaration on Global Geospatial Information Management (GGIM), which particularly expresses a "support for the initiative of the United Nations to foster geospatial information management among UN Member States, international organizations, and the private sector".

At the same occasion, the United Nations Committee of Experts on Global Geospatial Information Management (UNCE-GGIM), established by the United Nations Economic and Social Council (ECOSOC) Resolution 2011/24 on 27 July 2011, as the official UN consultative mechanism on GGIM, convened its inaugural session on 26 October 2011. The inaugural meeting brought together experts from Member States and observers from international organizations to adopt the Terms of Reference of the Committee, review the Rules of Procedure of the Committee, and discuss its contribution to Rio+20 Conference as well as an inventory of critical issues to be addressed by the Committee. The second session of Committee will be held on 13-15 August 2012 at the United Nations Headquarters in New York. Additional information can be found at web: <http://ggim.un.org> and <http://www.unggim2011.org>.

Received from Luiz Paulo Fortes, IUGG Liaison to the U.N. Cartographic Section

6. Report on the eGYAfrica Workshop, Accra, Ghana



eGYAfrica evolved from the Electronic Geophysical Year (www.egy.org) in response to the need for better Internet connectivity for research and education in Africa – i.e., to help reduce the digital divide. The objective is to strengthen research and education in Africa to serve national interests and to increase African participation in international science. The two-day eGYAfrica Workshop and planning meeting, held in Accra, Ghana in November 2010, was supported through a grant from IUGG, together with additional support from IAGA. Seven African countries were represented.

The first day focused on Internet issues in Africa, particularly the digital divide, the rapid expansion of fibre-optic cabling around and within Africa, and the development of National Research and Education Networks (NRENs). The PingER Project (<http://www-iepm.slac.stanford.edu/pinger/>) that measure end-to-end Internet performance shows, despite this impressive progress, that a digital divide persists in Africa that hampers progress. Limitations at the institutional level are often an important factor.

The second day was devoted to eGYAfrica review and planning. A solid working relationship was established with the Association of African Universities and with the ICSU Regional Office for Africa. Workshop participants were pleased with the progress of eGYAfrica and were enthusiastic about its future; officers were elected for the eGYAfrica Committee for the next 2 years; and a monograph based on the themes of eGYAfrica and the developments of NRENs in Africa is planned.

A key activity of eGYAfrica is to establish national groups who will seek to influence decision-makers. This is currently being pursued in Cote d'Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Senegal, and South Africa. The importance of working through existing groups when possible was emphasized. A full report on the Workshop can be downloaded from the following site: <http://dl.dropbox.com/u/31851729/eGYAfrica%20Workshop2010.doc>

Received from Victor Chukwuma (Nigeria), eGYAfrica Chair, Alem Mebrahtu (Ethiopia), eGYAfrica Secretary, and Charles Barton (Australia), International Liaison.

7. Awards & Honors

Günter Blöschl (Austria; President of the IAHS International Commission on Water Resources Systems) and **Mioara Manda** (France; IAGA Secretary General) have been elected President-Elect and Secretary General (respectively) of the European Geosciences Union (EGU). Congratulations to Mioara and Günter!

At the 2011 American Geophysical Union (AGU) Fall Meeting in San Francisco **Yehuda Ben-Zion** (USA; Chair of the IUGG Union Commission on Mathematical Geophysics), **Michael Kendall** (UK; Member of the United Kingdom's National Committee for IUGG) and **Alan Robock** (USA; IAVCEI life member and member of several commissions of IAVCEI and IAMAS including the Commission on Volcanism and the Earth's Atmosphere, the International Climate Commission, and the International Commission on the Middle Atmosphere) each received AGU Fellow award. Congratulations to Alan, Michael and Yehuda!

8. IUGG-related meetings occurring during January – March

A calendar of meetings of interest to IUGG disciplines (especially those organized by IUGG Associations) is posted on the IUGG web site (<http://www.IUGG.org/calendar>). Specific information about these meetings can be found there. Individual Associations also list more meetings on their web sites according to their disciplines.

January

- 22-26, American Meteorological Society, New Orleans, USA, 92nd Annual Meeting

February

- 16-17, IOC-UNESCO, Tokyo, Japan, Japan-UNESCO/UNU Symposium “The Great East Japan Tsunami on 11 March 2011 and Tsunami Warning Systems: Policy Perspectives”
- 20-24, IAVCEI, Auckland, New Zealand, IAVCEI-IAS 4th International Maar Conference: a multidisciplinary congress on monogenetic volcanism

March

- 26-29, DIVERSITAS, ESSP, IHDP, IGBP, WCRP; London, UK; Conference “Planet Under Pressure: New Knowledge Towards Solutions”
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Note: Contributions to IUGG E-Journal are welcome from members of the IUGG family. Please send your contributions to Alik Ismail-Zadeh by e-mail (insert in Subject line: *contribution to E-Journal*). The contributions will be reviewed and may be shortened by the Editor.