



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

The IUGG Electronic Journal

Volume 9 No. 11 (1 November 2009)

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.

Contents

1. IUGG Executive Committee met in Melbourne
2. Science Program Committee for 2011 IUGG General Assembly met in Melbourne
3. Priestley Workshop and Lecture
4. News from the International Council for Science (ICSU)
5. New Director-General of UNESCO
6. Report on the General Assembly of the Scientific Committee on Problems of the Environment (SCOPE)
7. Announcement: IUGG Conference on Mathematical Geophysics, Pisa, Italy, June 2010
8. IUGG-related meetings occurring during November 2009 - January 2010

1. IUGG Executive Committee met in Melbourne, Australia

The IUGG Executive Committee (EC) met in Melbourne on 9-11 August. The IUGG EC is comprised of the IUGG Bureau (which met on 8-9 October), immediate Past President and Presidents of 8 Union Associations. Association Secretaries-General and the Chair of the IUGG Finance Committee were invited to attend the meeting. Representatives of the International Union of Geological Sciences (IUGS) and International Union of Radio Sciences (URSI) attended the EC meeting as guests of the IUGG President. The IUGG President and Presidents of the Union Associations reported on the activities after the last EC meeting (Karlsruhe, Germany, August 2008). The IUGG Vice President reported on the activities of Union Commissions on Mathematical Geophysics (CMG), Geophysical Risk and Sustainability (GeoRisk), Study of Earth's Deep Interior (SEDI), and on Data and Information (UCDI), and EC approved the Terms of Reference for each of the Commissions. The IUGG Secretary-General reported on the activity of the IUGG Secretariat, IUGG membership, interaction with the Secretariat of the International Council for Sciences (ICSU) and its committees. The IUGG Treasurer reported on the financial situation of the Union. Other topics on the agenda included (i) preparation for the 2011 IUGG General Assembly (Ray Cas, Chair of the Local Organising Committee, reported on the activity of the Committee); (ii) appointments to the Statutes / By-Laws Committee, Nominating Committee for 2011 Election, and Site Comparison Committee for the 2015 General Assembly, (iii) the International Lithosphere Program (ILP) and ad-hoc joint IUGG-IUGS review committee; (iv) GeoUnions activity; (v) Results of the International Year of Planet Earth (IYPE), International Polar Year (IPY), Electronic Geophysical Year (eGY), and International Heliophysical Year

(IHY); (vi) reports of IUGG liaisons to ICSU committees and to other international bodies; (vii) cooperation with the Preparatory Commission for the Comprehensive Nuclear-Test Ban Treaty Organization (CTBTO) and World Bank Institute; (viii) relationship with national and regional geophysical unions and societies. The IUGG Executive Committee established three new Union Committees: (i) Visioning, (ii) Capacity Building and Education, and (iii) Honors and Recognitions.

On 8 October, prior to the EC meeting, the IUGG Executive Committee members and Association Secretaries-General met the members of the Local Organising Committee for 2011 IUGG General Assembly and visited the venue of the future Assembly.

On 11-12 October the IUGG Finance Committee met in Melbourne to discuss the IUGG financial report for 2007 and 2008, to review the IUGG accounts for 2008, and to overview administrative matters and representative travel expenses, IUGG grants, allocations, and inter-association activities. The IUGG Treasurer and Secretary-General were invited to attend the meeting.

2. Science Program Committee for 2011 IUGG General Assembly met in Melbourne

The Science Program Committee (SPC) is comprised of the Chair (Peter Manins), IUGG Secretary General, 8 Association Secretaries General, and IUGG President (ex-officio). The Committee met in Melbourne on 12 October together with the Australian and New Zealand representatives to the SPC, the Chair of the Local Organising Committee for the 2011 IUGG General Assembly, and representatives of the Professional Organisers. The tentative draft of the science program was discussed including topics of Union and inter-Association symposia. The science program should be finalized by end January 2010.

3. Priestley Workshop and Lecture

The 2009 Priestley Workshop was held on 13 October at the CSIRO Marine and Atmospheric Research Laboratory in Aspendale (Australia). The major topics of the workshop were the 90th anniversary of the International Union of Geodesy and Geophysics, launch of the 25th IUGG General Assembly in Melbourne (27 June – 8 July 2011) with the theme “Earth on the Edge: Science for a Sustainable Planet”, and reports on Australia’s involvement in the International Year of Planet Earth and International Polar Year in 2008. The workshop’s speakers were Ian Allison (IACS President), Tom Beer (IUGG President), Alik Ismail-Zadeh (IUGG Secretary-General), Setsuya Nakada (IAVCEI President), and Steve Rintoul (Acting Chief of CSIRO Marine and Atmospheric Research).

The Priestley series of annual lectures began in 1995 to honour Bill Priestley (1915-1998), founding Chief of the former Atmospheric Division, and has continued following the formation of CSIRO Marine and Atmospheric Research. The 2009 Priestley Lecture was delivered by Lawrence Mysak (IAPSO President, and Professor of McGill University, Montreal, Canada) who is internationally known for his extensive applications of mathematics to physical oceanography, his basic research on natural climate variability of the Arctic, and the development and application of global earth system models to various climate phenomena. Lawrence spoke about long-term changes (from 1500 to the present) in climate, sea ice, ocean properties and wind reconstructed using observations and a global reduced complexity climate model.



Speakers at the Priestley Lecture and Workshop. From left Setsuya Nakada (IAVCEI President), Tom Beer (IUGG President), Lawrence Mysak (IAPSO President), Ian Allison (IACS President), and Alik Ismail-Zadeh (IUGG Secretary-General).

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

ICSU President on cooperation between UNESCO and ICSU

ICSU President Catherine Brechignac delivered a plenary speech at UNESCO's 35th General Conference in Paris. She highlighted the partnership between the two organisations and the challenges in addressing the issue of global change and society. She stressed that:

“The ICSU-UNESCO partnership is inscribed in a Framework agreement that identifies our joint priorities. This joint commitment was renewed in 2008 and includes the following areas: environment, capacity building and science policy, natural disasters, ethics and science, linking science and policy, access to scientific information ...

The international science programmes and necessary infrastructure, including observing systems that feed into the Intergovernmental Panel on Climate Change (IPCC) are sponsored by ICSU and many of these are co-sponsored with UNESCO and its Intergovernmental Oceanographic Commission (IOC). These programmes have served the society well and we are optimistic that the unambiguous scientific evidence will enable brave decisions on carbon emissions by Governments in Copenhagen at the end of the year. However, the science of environmental change is far from finished and there are new challenges related to coupled-human-environment interactions, ecosystem services, resilience, adaptation and mitigation. These require new scientific approaches, integrating social and natural sciences.

ICSU has initiated a ‘visioning exercise’ to identify the key scientific questions for the future and develop a strategic framework to address these. We need to be open-minded in this exercise and prepared to modify or change existing structures and programmes as necessary. UNESCO, as a co-

partner in several of the programmes will, of course be involved in this visioning. And we ask for UNESCO's full support in implementing change where this is called for.

After several years of scoping and planning, including close consultation with UNESCO, ICSU launched a new international and interdisciplinary programme on natural disasters at our General Assembly in Maputo in October 2008. This Integrated Research on Disaster Risk (IRDR) programme is co-sponsored by the International Social Sciences Council (ISSC) and the UN International Strategy for Disaster Reduction (ISDR). We look forward to welcoming UNESCO and its IOC as full partners ...

ICSU looks forward eagerly to working with the new leadership at UNESCO to ensure that science is given the high priority that is necessary to effectively address the major challenges that are facing our global society."

World Science Forum

The World Science Forum, organised by the Hungarian Academy of Sciences in partnership with UNESCO and ICSU, will take place in Budapest on 5-7 November 2009. The Forum, which focuses on 'Knowledge and Future', will look forward and provide a strategic vision for the future of science in the global society of the XXIst century.

This is the fourth World Science Forum and marks the tenth anniversary of the first World Conference on Science, which was also held in Budapest. The themes of the previous forums were 'Knowledge and Society', 'Knowledge, Ethics and Responsibility' and 'Knowledge: Investing in the Future'.

Source: <http://www.icsu.org>

5. New Director-General of UNESCO

The 35th session of the General Conference of UNESCO on 15 October elected Irina Bokova as Director-General of the Organization. Born in Sofia in 1952, Irina Bokova is the Ambassador of Bulgaria to France and Permanent Delegate to UNESCO. A career diplomat and politician, she studied at the Moscow State Institute of International Relations (Russia) and at the School of Public Affairs of the University of Maryland (USA). She served as the Bulgarian Minister of Foreign Affairs.

In her vision for UNESCO, Irina Bokova wrote: "My belief is that science must be one of the priorities. UNESCO should become the leader and mobilizer of governments, specialized agencies and the scientific community in the field of science, innovation and new technologies, including green technologies, under the slogan «Science and technology serving humanity». Climatic change, biodiversity, mitigation of natural disasters, water resources management, energy and pandemics, are the new key challenges in science, which should be given priority in UNESCO's programmes ... UNESCO should complement national policies to better integrate science, research and science education."

Source: <http://www.unesco.org>

6. Report on the General Assembly of the Scientific Committee on Problems of the Environment (SCOPE)

The 13th General Assembly of the Scientific Committee on Problems of the Environment (SCOPE) met on 9-11 June 2009 at the Royal Society in London, United Kingdom. The business meeting was followed by a scientific symposium at Imperial College on "Finance, food and energy crises: consequences for the environment and land use change". The business meeting discussions primarily focused on the future directions of SCOPE to address the severing of formal ties with ICSU in October 2010. Members of SCOPE presented fundamentally new directions that are aligned with the rapidly changing needs of global science and the use of science in decision- and policy-making. Important results of the meeting, which are in line with a draft strategic plan, are:

- SCOPE will develop and implement an interdisciplinary science agenda of high relevance to decision makers. SCOPE will continue to undertake its credible and authoritative assessments and syntheses that address the priorities of specific regions while maintaining global relevance. Founded on partnerships, SCOPE will develop a range of products and services with and for its users.
- SCOPE remains open to historical partners, the academic, scientific and research institutions, scientific academies, research councils, or associations of such institutions, and international scientific unions. Potential new members will have a demonstrated interest in bringing the best science to bear on environmental stewardship.
- SCOPE will seek out and encourage active membership from businesses and associations and federations of business and industry, civil society organizations, and governmental and inter-governmental organizations.
- Membership in SCOPE offers opportunities with reciprocal rights and responsibilities. *Each Member has one vote and pays an annual subscription fee* that is used for operational core funding and seed funds towards project development.
- SCOPE will continue to undertake individual projects and serial collaborations with non-member organizations; the new approach will enhance and widen the spectrum of partnerships.
- SCOPE's finances in recent years have been beset by a host of problems that collectively have gravely imperilled its reactive capacities. The newly elected Executive Committee will give high priority to seeking alternative funding.
- The Paris Secretariat of SCOPE will require new premises as of October 2010, when formal ties are severed with ICSU. All aspects of this re-location will be explored by the Secretariat and the Executive Committee, taking into account the several overtures from possible host organizations in Paris and outside France.
- The SCOPE constitution now requires review and revision. The new constitution will be submitted to SCOPE Members by the end of 2009.

New officers: President: Paul Risser (USA); 1st Vice President: Lu Yonglong; 2nd Vice-President: Holm Tiessen, Treasurer: Ahmed M. Hassan (Egypt); Secretary General: Mary C. Scholes (South Africa); Members: Magdy Mahamed Attia (Egypt), Chang-Hung Chou (China-The Academy in Taipei), Carlos Alfredo Joly (Brazil), Annelies Pierrot-Bults (The Netherlands, SCOR), Jon Samseth (Norway, IUPAP)

Received from Norman (Jake) Peters, the IUGG liaison to SCOPE

7. Announcement: IUGG Conference on Mathematical Geophysics, Pisa, Italy, June 2010

The 28th International Conference on Mathematical Geophysics sponsored by the IUGG Union Commission on Mathematical Geophysics (CMG) will be held in Pisa, Italy, on 7-11 June 2010 and will focus on Modelling Earth Dynamics: Complexity, Uncertainty and Validation. Understanding the evolution of our planet is becoming of increasing importance. The variable dynamics of the Earth's solid and fluid components testify to the complexity of non-linear relationships governing such coupled and multiphase systems. Mathematical models are a key tool for understanding these relationships, and represent the only means for forecasting their evolution. The goal of this meeting is to present the state-of-the-art modelling capability to represent the different dynamics of Earth's components. Theoretical models of solid-earth dynamics, such as earthquake and volcanic processes, and of atmospheric and oceanic dynamics, including climatic and biological evolutionary processes, are welcome. The focus will be on the capability of models to describe the complex evolution of Earth systems and quantify the sources of uncertainty in their dynamics, as well as to reproduce direct observations and laboratory experiments of the investigated processes. For further Conference information and circulars please visit <http://cmg2010.pi.ingv.it>

Received from Augusto Neri, Chair of the Conference LOC

8. IUGG-related meetings occurring during November 2009 – January 2010

A calendar of meetings of interest to IUGG disciplines (especially those organized by IUGG Associations) is posted on the IUGG web site [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.

- November 10-13, IACS, Vienna, Austria, International Workshop on Glacier Hazards, Permafrost Hazards and GLOFs in Mountain Areas: Processes, Assessment, Prevention, Mitigation
 - November 11-12, IUGG, Tanta, Egypt, 6th International Symposium on Geophysics
 - November 30 - December 11, IAGA, Brazzaville, Congo, Scientific School on GPS and GIS
 - December 14-18, AGU, San Francisco, California, USA, Fall Meeting
 - December 18-22, IAGA, Cairo, Egypt, Symposium 2: Solar wind - Space Environment Interaction
 - December 5-9, ILP, Abu Dhabi, United Arab Emirates, 5th Workshop of ILP Task Force on Sedimentary Basins
-

End of IUGG Electronic Journal Volume 9 Number 11 (1 November 2009)

A.T. Ismail-Zadeh, Secretary General [<http://www.IUGG.org>]
E-mail: Alik.Ismail-Zadeh@gpi.uka.de Fax: +49 721 71173.

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.