



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

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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. News from the IUGG Secretariat

Ms. Katina Rogers, Assistant Secretary General, will leave the IUGG Secretariat in January 2009. Katina worked for IUGG for several years, and her assistance has been greatly appreciated by JoAnn Joselyn, Alik Ismail-Zadeh, many IUGG Executive Committee and IUGG Council members. Recently, Katina took PhD courses at the University of Colorado in Boulder. We wish Katina all the best in her future research and thank her very much for her excellent work for the International Union of Geodesy and Geophysics.

Ms. Simone Oswald will replace Katina Rogers as the Assistant Secretary General of IUGG. Simone's contact details:

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2. News from the International Council of Science (ICSU)

Nobel Prize winning scientist elected as future ICSU President (ICSU Press release, 7 November 2008)



Professor Yuan Tseh Lee, a Nobel Prize winning chemist from China, Taipei has been elected as the future President of the International Council for Science (ICSU). A world leader in the field of chemical dynamics, Lee was elected by representatives from ICSU's 114 National Members and 29 International Scientific Unions at the 29th General Assembly in Maputo, Mozambique, 21–24 October. He will take up the appointment in April 2010 and will succeed the current ICSU President, Catherine Bréchnac, in October 2011.

Professor Lee was born and educated in China: Taipei, before moving to the US where he obtained a PhD in chemistry from the University of California, Berkeley, in 1965. In the ensuing years, his career flourished, both as a creative scientist and an inspiring teacher. In 1986, he was awarded the Nobel Prize in Chemistry for his seminal contribution to the development of reaction dynamics—a new field of research in chemistry at the time. His use of crossed molecular beams allowed the study of complex reaction mechanisms beyond the capability of previous methods. Lee returned home in 1994, taking up the position as President of the Academy of Sciences located in Taipei. Under his 12-year leadership the institution was transformed into a world-class research centre, attracting scholars and creative young scientists from around the world. His achievements have been recognized with many awards and professional memberships, which include the US National Academy of Sciences and the Academy of Sciences for the Developing World (TWAS). He has been involved with ICSU for 15 years and served on the Standing Committee on Freedom in the Conduct of Science from 1996 to 2005. 'I am honoured and excited to be elected the next President of ICSU, an organization that has been at the forefront of international science for more than 75 years,' said Lee. 'As a child I was inspired by Madame Curie who believed that scientific knowledge belonged to all mankind. It is my strong belief that ICSU will pave the way in ensuring that scientific knowledge is available to all—a critical factor in providing the solutions for sustainable development, climate change mitigation, global human health issues and alleviating poverty.' Lee's demonstrated leadership qualities and extensive experience in international academic cooperation, will serve ICSU well as the organization forges ahead to strengthen international science for the benefit of society.

Other Members elected to the ICSU Executive Board Officers.

Vice-President for Scientific Planning and Review: Kari Raivio, University of Helsinki, Finland

Vice-President for External Relations: Reiko Kuroda, University of Tokyo, Japan

Secretary-General: Maurice Tchente, University of Yaounde 1, Cameroon

Treasurer: Hans Rudolf Ott, Swiss Federal Institute of Technology (ETH Zürich), Switzerland

Catherine Bréchnac, *President* (Centre national de la recherche scientifique, France) and

Goverdhan Mehta, *Past-President* (Indian Institute of Science, Bangalore, India) assumed their offices during the General Assembly.

Ordinary Members:

from National Members Fu Congbin, China: CAST; Maurizio Iaccarino, Italy; Sergio Pastrana, Cuba; Abdul Hamid Zakri, Malaysia

from Union Members Bryan Henry, chemistry; Dov Jaron, physical and engineering sciences in medicine; Bruce Overmier, psychology; Uri Shamir, geodesy and geophysics.

Geosphere-Biosphere and Climate

The fourth International Geosphere-Biosphere Programme (IGBP) Congress was held in Cape Town, South Africa, in May. About 380 delegates from 65 countries attended the event and contributed ideas to the development of IGBP's scientific agenda for 2008–13. IGBP is focusing on how it can better contribute to sustainable solutions including mitigation, innovation and adaptation. The Congress resulted in the *Cape Town Declaration on Science for Environmental Sustainability*, which outlined an enhanced plan of international collaboration to pursue science that will help achieve sustainable development.

The Joint Scientific Committee for the World Climate Research Programme (WCRP) met in Arcachon, France, 31 March–4 April, to discuss past progress and the future direction for the WCRP and its projects. The Committee concentrated discussions on intermediate (2008–13) and long-term (post-2013) time horizons. The world's leading climate researchers from within WCRP and IGBP met in May during the 'World Modelling Summit for Climate Prediction' in Reading, UK, to discuss progress in state-of-the-art climate modelling capabilities. In an editorial on the Summit, which appeared in *Nature* (453, 268-269, 2008), climate scientists called for greater investment in computer and research resources to drastically improve modelling capabilities.

The ICSU-IGFA review of IGBP and the ICSU-WMO-IOC-IGFA review of WCRP will be completed in early 2009. Most recently IUGG commented on the draft reports of IGBP and WCRP. A copy of the documents can be obtained by request from the IUGG Secretariat.

Carbon offsetting for ICSU travel

The Executive Board has approved carbon offsetting for all ICSU travel. The decision follows on from a suggestion made by the young scientists attending the 2007 Global Scientific Challenges conference in Lindau, Germany.

Global Observations

- The Integrated Global Observing Strategy Partnership (IGOS-P) held its final meeting at UNESCO in May. The Partners discussed the development of the IGOS-P Themes and their transition to the Group on Earth Observations (GEO). The Themes will play a strong role in the future of GEO, including strengthening the science and user interface, as well as the definition of priorities, observational gaps and overlaps in the implementation of the Global Earth Observation System of Systems (GEOSS). A symposium is planned for 2009 to recognize the many achievements of the IGOS-P Themes during the past ten years and to highlight the planned activities of the Themes as part of GEO.
- The seventh session of the Interagency Coordination and Planning Committee for Earth Observations (ICPC) was held at UNESCO, Paris, in May. The Committee, which ICSU is an associate member of, agreed to develop one Memorandum of Understanding (MoU) to replace the three MoUs which currently exist for the three observing systems – Global Climate Observing System, Global Ocean Observing System and Global Terrestrial

Observing System. UNEP took over as Chair of the ICPC, from UNESCO, at the end of the session.

3. News from the Electronic Geophysical Year

IUGG Grant for eGY-Africa

The International Union of Geodesy and Geophysics has awarded a grant of USD 10,000 in support of eGY-Africa programs. eGY-Africa is an eGY-inspired initiative to reduce the Digital Divide by promoting better Internet connectivity in universities and other research and education institutions in Africa. The grant will be used to help run a pan-African workshop to address the problem and coordinate action. Information about the eGY-Africa Working Group is available at <http://www.egy.org/egyafrika.php>.

EOS article on Informatics and eGY

EOS, Transactions of the American Geophysical Union, has published an article on Informatics and the 2007-2008 Electronic Geophysical Year (Vol. 89, No. 48, 25 November 2008, pp. 485-486). The paper highlights the achievements of the eGY and presents the eGY Declaration for an Earth and Space Science Information Commons. The authors of the article are Daniel N. Baker (eGY Executive Director), C. E. Barton (Chair, eGY International Committee, and Vice-Chair, IUGG Union Commission for Data and Information), W. K. Peterson (eGY Secretary), and P. Fox (Chair, IUGG Union Commission for Data and Information).

The Tsukuba Declaration

The participants in the four "IGY+50" programs-the International Polar Year (IPY), the International Year of Planet Earth (IYPE), the Electronic Geophysical Year (eGY), and the International Heliophysical Year (IHY)- met in Tsukuba, Japan, on 10-13 November 2008 <http://wdc2.kugi.kyoto-u.ac.jp/igy50/>. These programs extend and enhance the legacy of IGY fifty years ago. An outcome of the meeting was the "Tsukuba Declaration" that advocates continued cooperation among the global science community, national academies of sciences, research funding agencies, industry, national governments, and inter-governmental bodies so that society and its leaders will have at their disposal the best possible data and information to make the decisions necessary for a sustainable future for humankind. Participants recognized the unique value of conducting international science year programs and envisaged an IGY+75 or even an IGY+100 exercise. A complete copy of the declaration is available on the eGY website (www.egy.org).

Received from B. Peterson (eGY)

Proceedings of the Conference "50th Anniversary of the International Geophysical Year and Electronic Geophysical Year"

Proceedings published in English, as well as abstracts in English and Russian and pointers to PowerPoint presentations made at this conference, held 16-19 September 2007 in Suzdal, Russia, are now available on the website of the Conference:

<http://eos.wdcb.ru/igy50/proceedings.html> and <http://eos.wdcb.ru/igy50/>

Received from A. Gvishiani (President, Russian National Committee for IUGG)

4. News from the International Year of Planet Earth (IYPE)

International Seminar on Prediction of Earthquakes, Lisbon, Portugal

The First International Seminar on Prediction of Earthquakes was organized in Lisbon in 1988 under the sponsorship of UN and the EC (ECE at the time) with the following objectives: (i) to provide a platform for meetings, discussions and exchange of views between specialists in earthquake forecasting; (ii) to review the state-the-art concerning the existing possibilities of predicting major seismic movements and their intensities; (iii) to identify the most promising lines of research; and (iv) to examine the improvement of international co-operation in the field of earthquake prediction. The great development in earthquake research, in earthquake prediction, and in new technologies for earthquake observation and monitoring during the last two decades demands the organization of a Second International Seminar. The Seminar will be held in Lisbon, Portugal, 23-24 April 2009.

The inclusion of the Seminar in the framework of the International Year of Planet Earth is certainly a matter of interest. Also, the evocation of the 100th anniversary of the Benavente, Portugal, occurred on 23 April 1909, is a motivation for organizing this Seminar. This proposal is supported by many scientific organizations in Portugal. The Seminar intends to clarify the various approaches and scientific methodologies developed in specific geological environments. The objectives of the Seminar are as follows: (i) to review the state-the-art concerning the major developments and existing possibilities of predicting major seismic events and their magnitudes; (ii) to assess the most promising lines of research; and (iii) to evaluate the improvement of international co-operation. Organizing Committee of the Seminar: Luiz A. Mendes-Victor (Lisbon University); Carlos Sousa Oliveira (Lisbon UT University); António Ramos Ribeiro (Lisbon University); Rui Correia (LNEC) and José Vieira de Lemos (Lisbon UT University).

Received from L. Mendes-Victor, President of the Portuguese National Committee for IUGG

5. News from the International Polar Year

The first International Polar Year (IPY) Open Science Conference took place in St Petersburg, Russia, in July. This was the largest polar science meeting yet held, with over 1100 participants. Key agreements were signed defining SCAR and IASC's relationships with: (1) the International Association of Cryospheric Sciences (IUGG Association); (2) the Climate and Cryosphere (CliC) project of the World Climate Research Programme; and (3) the Association of Polar Early Career Scientists – a group of 1400 young scientists developed within the framework of the IPY.

The ICSU-WMO IPY Joint Committee met in St Petersburg prior to the conference, with discussions focusing on the legacy of IPY. In particular, the need to continue the coordination function, currently provided by the International Programme Office, at least until the IPY Oslo Science Conference in 2010 was discussed. A great deal of work still lies ahead with respect to data management, and ensuring the long-term future of the education, outreach and communication and early-career scientists networks. The Committee also discussed the celebrations for the end of the IPY observance period in February 2009 – which will be held in Geneva.

The fifth quarterly International Polar Day took place on 18 June. The day focused on land and life, in particular permafrost, snow and ice cover and how biological communities survive through remarkable adaptations and extensive migration.

The sixth International Polar Day was on 24 September and focused on the people who live in the Arctic and the skills, strategies and community knowledge they use to survive in polar conditions. Climate change and renewed exploitation present urgent challenges to Arctic people.

More information on Polar Days and other activities is available on the IPY website: <http://www.ipy.org/>

6. Report on the 26th CODATA General Assembly

This report complements the preliminary news item in the IUGG Electronic Journal, Nov., 2008.

This 21st Conference of ICSU's Committee on Data for Science & Technology (CODATA, <http://www.codata.org>) was held at the National Technical University of Ukraine, Kiev, 5-8 October 2008. It continued the emphasis on the Information Society that has emerged in the last few biennial meetings. Conference details and program can be found at CODATA website: <http://www.codata.org/08conf/index.html>. The meeting attracted nearly 600 participants from 30 countries. CODATA Conferences are growing in popularity as the organization becomes an increasingly important forum for informatics developments internationally – covering data science, systems technologies, e-Science, data access, data preservation, data policy, and legal issues (intellectual property rights). CODATA covers all scientific disciplines, ranging from agriculture to health to archeology, and encompasses education and social issues. Geoscience is strong and growing, due in part to a close association with GEOSS. ICSU recognizes that CODATA is well-positioned to play a central role, consistent with the recommendations of the ICSU Strategic Committee for Data & Information (SCID). A special “ICSU Unions” session and discussion meeting were held to identify how CODATA can become more effective in meeting the needs of ICSU and its Unions.

The Conference was followed by a 2-day CODATA General Assembly (equivalent to an IUGG Council meeting). The Executive now comprises: President: K. Lal (India), Vice Presidents: S. Rossouw (South Africa) and G. Wood (Canada), Secretary General: R. Chen (USA), Treasurer: M. Sabourin (Canada), and members P. David (UK), M. Gaune-Escard (France), S. Graves (USA), Guo Huadong (China), F. Kuznetzov (Russia), R. Norris (Australia), A. Nowakowski (Poland), and M. Zgurovsky (Ukraine). Australia and UK have been admitted as new member countries and IUGG has renewed membership.

Twelve Task Groups (<http://www.codata.org/taskgroups/index.html>) were approved, including one called *eGY: Earth and Space Science Interoperability* (chair: A. Gvishiani, co-chairs: E. Kihn and J. Bonnin). This group will continue some functions of the Electronic Geophysical Year beyond the end of 2008 when eGY ends. There continues to be a mismatch in CODATA between the ad-hoc set of Task Groups and the new strategic directions of the organisation. If CODATA is to capitalise on the new opportunities and become the principal international body and forum for informatics, it will need a formal internal structure that gives comprehensive coverage of all aspects of the business.

Received from C. Barton, IUGG liaison to CODATA

7. Jubilees

Helmut Moritz's 75th Birthday



On 14 November more than 60 scientists (from Austria, Canada, Czech Republic, Denmark, Finland, Germany, Hungary, Italy, Poland, Russia, and Serbia) gathered together at the colloquium organized by the Leibniz Society to celebrate Professor Helmut Moritz's birthday and to present recent advances in physical, mathematical, astronomical, satellite and space geodesy.

H. Moritz made major contributions to international geodesy and geophysics programs. He was President of the International Association of Geodesy from 1979 to 1983 and President of IUGG from 1991 to 1995. On behalf of the IUGG, President Tom Beer congratulated Professor Moritz on the occasion of his 75th birthday.

Helmut Moritz was born on 1 November 1933 in Graz (Austria). He studied geodesy at the Graz University of Technology (TUG) and received his PhD in 1959 from TUG. Since 1955, he held various positions at TUG, Geodetic Service of Austria, Ohio State University, Hannover University of Technology, and Wuhan University. In 1964 he became a professor of physical geodesy at the Berlin University of Technology and worked there until he accepted the professorship in TUG in 1971. Since 2002 H. Moritz is Professor Emeritus of the University.

Helmut Moritz contributed to fundamental geodesy, especially to physical geodesy, gravitational field, inverse problems in geodesy and geophysics. His books on geodesy (*Physical Geodesy*, with W. Heiskanen; *Advanced Physical Geodesy*; *Geometry, Relativity, Geodesy*, with B. Hofmann-Wellenhof; and some others) were translated into many languages. He is a member of the Austrian Academy of Sciences, was elected to more than 10 foreign Academies of Sciences and was awarded Honorary Doctor degrees of the Munich University of Technology, the Ohio State University, and Moscow University of Geodesy and Cartography.

50th Anniversary of the German Federal Institute for Geosciences and Natural Resources

On 25 November the German Federal Institute for Geosciences and Natural Resources (BGR), Adhering Organization to IUGG, celebrated its 50th Anniversary. More than 200 guests from politics, civil authorities, industry and geosciences attended the meeting organized at the GEOZENTRUM Hannover. This occasion offered an opportunity to review five decades of successful geoscientific work of BGR. IUGG President Tom Beer congratulated BGR President Hans-Joachim Kämpel on this occasion. In his letter, T. Beer wrote: "This 50th Anniversary illustrates the important role that BGR has both within German geosciences and within the international geoscience community. BGR is well-known for its active involvement with developing countries, and I was most interested to learn that the BGR-Thailand partnership has also been functional for 50 years". We look forward to continuing fruitful interaction between IUGG and BGR.

8. IUGG-related meetings occurring during December 2008 – February 2009

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.

- December 1-5, IAHS, Christchurch, New Zealand, International Symposium on Sediment Dynamics in Changing Environments.
- December 14-17, IAHS, Djibouti, Republic of Djibouti, International Symposium on Hydrogeology of the Volcanic Rocks.
- December 15-19, AGU, San Francisco, California, Fall Meeting.
- January 10-16, IASPEI, Cape Town, South Africa, IASPEI General Assembly.
- February 9-11, ICSU-ROA, Pretoria, South Africa, International workshop of experts on Global Environmental Change in sub-Saharan Africa.
- February 23-26, IAHS, Port Elizabeth, South Africa, International Conference on Implementing Environmental Water Allocations.
- February 26-27, IACS, Innsbruck, Austria, 13th Alpine Glaciology Meeting.

End of IUGG Electronic Journal Volume 8 Number 12 (December 1, 2008)

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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.