



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

## **The IUGG Electronic Journal**

**Volume 9 No. 3 (1 March 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.

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### **1. Bulgaria now a Regular Member of IUGG**

The Bulgarian Academy of Sciences, the IUGG Adhering Body for Bulgaria, became a member in 1930 but had been in Associate Status. However, Prof. Dimitar Jordanov, President of the Bulgarian National Committee for IUGG, recently requested a change of status from Associate to Regular Member in Category 1. The IUGG Executive Committee accepted the request. Upon receiving a membership due, we will be pleased to welcome Bulgaria as a new voting member of IUGG; scientists from Bulgaria will be eligible to hold office in IUGG and all of our Associations.

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### **2. Scientific meetings selected for IUGG support in 2009 (an additional call)**

IUGG co-sponsors symposia and workshops appropriate to our disciplines of study. IUGG allocated US\$20,000 to assist scientific meetings and especially to support the participation of young scientists and scientists from developing countries. Officers of the Union, Associations and Union Commissions propose meetings to receive these awards. IUGG has already supported seven scientific meetings to be held in 2009 (see IUGG E-Journal, Vol. 9, No. 1, 1 January 2009). In the second call, IUGG selected three research meetings for support (all available funds for 2009 are now allocated):

- Second International Seminar on prediction of earthquakes, Lisbon, Portugal, 23-24 April
  - 24th International Tsunami Symposium, Novosibirsk, Russia, 14-17 July
  - IAGA Symposium 2: Solar wind - Space Environment interaction, Cairo, Egypt, 18-22 December
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### **3. Report on the IASPEI Scientific Assembly**

The IASPEI Scientific Assembly was held in Cape Town, South Africa, 11-16 January 2009. The Assembly, held for the first time on the African continent, provided a very good platform for seismologists worldwide to meet and to discuss the latest developments in seismology and physics of the Earth's interior research. There were 347 participants from 60 countries registered for the Assembly. Eighty three of them were students, young researchers and researchers from less-developed countries who were partially sponsored. Thabo Guzi, gave the welcome address on behalf of Minister Sonjica. IUGG Vice-President Harsh Gupta welcomed the participants of the Assembly, and opening remarks by the IASPEI President Wu Zhongliang, ended the formal part of the Opening ceremony. At the evening cocktail function, the Provincial Minister of Community Safety Patrick McKenzie gave his welcome speech followed by the speech of the Board member of the Council of Graduate Schools Jay Barton. A local Choir entertained the participants with Zulu songs and dances and a Marimba band played during the cocktail; a very enjoyable experience.

Three keynote lectures were delivered at the Assembly: "Earthquake Forecasting and Prediction: Progress in Model Development and Evaluation" by Tom Jordan (University of South California, Los Angeles, USA); "Earthquake Dynamics: from source to radiation" by Raoul Madariaga (Ecole Normale Supérieure, Paris, France); and "Seismic tomography and the dilemma of the Earth's heat budget" by Guust Nolet (Université de Nice, France). The 32 symposia of the programme covered the spectrum of research related to IASPEI Commissions and current "hot" topics in seismology, in a total of 335 oral and 106 poster presentations. These included, a session on "Capacity building and capturing undergraduate students to Geophysics/Seismology", and two well-attended Panel discussions convened by R. Musson on: "Seismic Hazard: Living with Uncertainty" and "Earthquake Prediction: What the Future Holds". Several IASPEI commission and working group meetings were organized during the Assembly.

The Assembly was conducted at the Cape Town International Convention Centre, which proved to be a perfect environment for delegates. The Local Organizing Committee, with the determined support of the South-African Council for Geoscience, did a great job ensuring a smooth management and enjoyable social moments. Several pre- and post-conference field-trips were also organized. A Summer school was organized in conjunction with the IASPEI Scientific Assembly and held during the week after the conference ended, attended by 27 fully sponsored, mostly African participants. Lecturers at the school were Aldo Zollo (Real-time processing and seismic alert with examples of their implementation), Yehuda Ben Zion (Introduction to physics of earthquakes and faults), Martin Mai (Source modeling for near-fault ground motion simulations), John Douglas (Seismic hazard assessment and empirical ground-motion prediction), Artur Cichowicz (Introduction to mining seismology), and Colin Reeves (African Geodynamics). The products of IASPEI Scientific Assembly in South Africa, including adopted resolutions, abstract volumes, keynote lectures, and useful meeting data will be soon available at <http://www.iaspei.org/>

Received from Peter Suhadolc, IASPEI Secretary General

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#### **4. Report on the business meeting of the German National Committee for IUGG**

The NKGG, German National Committee for the IUGG, held its annual meeting in the GFZ German Research Centre for Geosciences in Potsdam on 5 December 2008. The business meeting was preceded by a Conference highlighting recent developments of German scientists in studies related to natural hazards. Prof. J. Zschau, co-chair of the Global Earthquake Model (GEM), introduced the GEM project, an international project on seismic risk assessment initiated by the Global Science Forum of the Organization for Economic Co-operation and Development (OECD), and told about research activities. Prof. U. Ulbrich, Director of the Institute of Meteorology, Free University of Berlin, presented results on the estimation of the storm risk over Europe and the effects of greenhouse gases on climate. Dr. J. Dr. Lauterjung and Dr. W. Hanka of GFZ discussed the development in the new tsunami warning system and global earthquake monitoring.

The newly implemented Tsunami Early Warning System for the Indian Ocean went into operation in November 2008, and the system entered its final phase of optimization. The system was officially handed over to the BMKG (Meteorological, Climatology and Geophysical Agency of Indonesia) by the President of Indonesia, Susilo Bambang Yudhoyono, in the Indonesian capital Jakarta, slightly less than four years after the tsunami catastrophe of 2004. Earthquakes in the Indian Ocean off the coast of Indonesia occur along a subduction zone, the Sunda Arc, which extends in the form of an arch from the north western corner of Sumatra to Flores in the east of Indonesia. If a tsunami generating earthquake occurs here, the tsunami will reach the coast within 20 minutes, so that only very little time remains to warn the areas at risk. Development of the entire system was based on this prevailing situation.

Prof. H. Drewes, IAG Secretary General, represented IUGG at the NKGG meeting. Members of the Committee reported on their activities in the IUGG Associations, commissions, and working groups. Prof. H.-J. Kämpel, President of the Federal Institute for Geosciences and Natural Resources (BGR), IUGG Adhering Organization, informed the NKGG members about negotiations with IUGG on possibly establishing a permanent secretariat of IUGG at BGR in Hannover.

Received from Rainer Kind, NKGG President

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#### **5. News from the International Council for Science**

##### ***New Executive Director of ICSU***

The International Council for Science (ICSU) welcomed Professor Deliang Chen as Executive Director from 1 February 2009. Professor Chen will provide critical leadership as ICSU moves into the exciting second stage of its Strategic Plan 2006–2011. “This appointment reflects ICSU’s commitment to strengthening international science for the benefit of society. Professor Chen brings with him a wealth of expertise, as a leader and an academic, at a key point in ICSU’s evolution.”- said Professor Catherine Bréchnignac, ICSU President, welcoming this appointment.

Professor Chen is an internationally renowned climate researcher and is currently Professor of Physical Meteorology and August Röhss Professor of Physical Geography at the University of Gothenburg in Sweden. He completed his PhD under the guidance of Nobel Prize winner, Paul Crutzen, before joining the University of Gothenburg in 1993, where he became a full professor in 2000 - while still only 38 years of age. His research interests include regional climate change and variability in Sweden and China, climate dynamics, air pollution and geostatistics. One of his current projects is investigating the role of human activities in past and future extreme climates in relation to atmospheric circulation over Europe. While living in Europe for over 20 years, he has maintained strong links with his native China, including: through the coordination of research projects; and as Science Director of the Beijing Climate Center of the World Meteorological Organization during 2002-2007. He is a prolific author with more than 100 peer-reviewed scientific publications, including contributions to the Assessment Report of the Intergovernmental Panel on Climate Change, and has served as an editor on many leading journals.

Professor Chen replaces Professor Thomas Rosswall who is retiring after seven years at the helm. Professor Bréchnac expressed her sincere thanks to Professor Rosswall, stating: "His wisdom and guidance have been tremendous assets and we have been fortunate to have had the benefit of his experience during a time of great change at ICSU. We wish him all the best in the future."

Based on the ICSU Press Release, 4 February 2009

### ***ICSU Grant Award***

The project proposal "The Polar Information Commons (PIC): Establishing the Framework for Long-term Stewardship of Polar Data and Information", submitted by the ICSU Committee on Data for Science and Technology (CODATA) and supported by IUGG as well as several others organizations, has been awarded EUR 30,000. The IUGG Commission for Data and Information (UCDI) and International Association of Cryospheric Sciences (IACS) will contribute to this project. IUGG/UCDI believes that the International Polar Year (IPY) is ICSU's big opportunity to respond pre-emptively to adhere to its grand visions of being a leader in data science and stewardship. The interdisciplinary breadth of IPY has thoroughly tested the limits of current national and international data systems and scientific cultures. A Polar Information Commons could be a significant step in truly enabling interdisciplinary science and could provide a framework that could extend to other ICSU initiatives.

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## **6. News from the International Polar Year**

Two years on from the official launch of the International Polar Year 2007-2008 (IPY), ICSU and the World Meteorological Organization (WMO) have hosted a celebration in Geneva, Switzerland, on 25 February 2009.

The IPY, a joint initiative of ICSU and WMO, has been an intensive burst of interdisciplinary, scientific research and observations focused on the polar regions. Thousands of scientists from around the world have been involved in more than 160 research projects, which have significantly advanced our understanding of the nature and behaviour of the polar regions and their role in the functioning of the planet. To celebrate the success of the IPY and release the *State of Polar Research*, an eight-page report outlining the preliminary findings of the IPY, a special ceremony was held at WMO headquarters in Geneva on 25 February. This was preceded

by a press conference at the Palais des Nations. *Our Polar heritage*, a photographic exhibition of scientists at work in the polar regions, was also officially opened on 24 February at the Palais de Nations.

Dr. Ian Allison, President-elect of the International Association of Cryospheric Sciences and co-Chair of the IPY Joint Committee, represented IUGG at this event.

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## **7. News from the International Year of Planet Earth (IYPE)**

The IYPE Board of Directors met on 26 January at the Burlington House of the Geological Society in London. The Board discussed its composition, evaluated the work of the IYPE Secretariat for last two quarters of 2008, estimated the financial condition of the Corporation and expectations for 2009-2010, discussed and accepted reports by the chairs of the Development, Outreach and Science programs. The Board discussed in depth the IYPE future development; particularly, the importance of bringing together geosciences families; future of the National Committee for IYPE; global international geoscience program; new generation of Earth scientists; outreach activities. The IYPE legacy Book series will be published by Springer in 2009-2010. The Board discussed several IYPE events foreseen for 2009 (in conjunction with the GSA Annual Meeting in Portland, Oregon, USA in October; Young Earth Scientists Congress in Beijing, China, October; the Planet Earth Conference in Lisbon, Portugal in November, and the AGU Fall Meeting in San Francisco, California USA in December).

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## **8. Honors**

The American Geophysical Union (AGU) elected new Union's Fellows. To be elected a Fellow of AGU is a special tribute for those who have made exceptional scientific contributions. This honor may be bestowed on only 0.1% of the membership in any given year. Among this year's Fellows are the following IUGG officers:

***Ian Campbell*** (Australia), co-Chair of the IAVCEI Commission on Large Igneous Provinces;

***Eigil Friis-Christensen*** (Denmark), President of the International Association of Geomagnetism and Aeronomy (IAGA); and

***Robert Vincent*** (Australia), IUGG Representative to the ICSU Scientific Committee on Solar-Terrestrial Physics (SCOSTEP).

Congratulations to Ian, Eigil, and Bob!

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## **9. IUGG-related meetings occurring during March – May 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](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.

- March 23-25, IAMAS, London, UK, Clouds and Turbulence Workshop.
- March 26-28, IAHS, Odessa, Ukraine, International Workshop "Genetic and probabilistic methods in hydrology : problems of development and interrelation".
- March 30 – April 2, IAHS, Goslar-Hahnenklee, Germany, International Workshop on Status and Perspectives of Hydrology in Small Basins.
- April 13-17, IAHS, Puebla Cholula, Puebla, Mexico, International Conference on Water, Environment and Health Sciences: The Challenges of the Climate Change (ICWEHS).
- April 14-17, IAVCEI, Malargue, Argentina, 3rd International Maar Conference.
- April 19-24, EGU, Vienna, Austria, European Geosciences Union General Assembly.
- April 19 - May 2, IUTAM/IUGG, Singapore, Republic of Singapore, International Spring School "Fluid Mechanics and Geophysics of Environmental Hazards.
- April 20-23, IAHS, Vienna, Austria, HydroEco'2009: 2nd International Multidisciplinary Conference on Hydrology and Ecology : Ecosystems Interfacing with Groundwater and Surface Water.
- April 20-23, IAHS, Vienna, Austria, HydroEco'2009: 2nd International Multidisciplinary Conference on Hydrology and Ecology: Ecosystems Interfacing with Groundwater and Surface Water.
- April 23-24, IASPEI, Lisbon, Portugal, Second International Seminar on Prediction of Earthquakes.
- May 4-8, ISPRS, Stresa, Lago Maggiore, 33rd International Symposium on Remote Sensing of Environment (ISRSE-33).
- May 16-21, JGU, Chiba City, Japan, Japan Geoscience Union Meeting.
- May 24-27, AGU, Toronto, Canada, Joint Spring Meeting.
- May 31 - June 4, CMOS, Halifax, Nova Scotia, Canada, 43rd Annual Canadian Meteorological and Oceanographic Society (CMOS) Congress.

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End of IUGG Electronic Journal Volume 9 Number 3 (1 March 2009)

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