



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

## **The IUGG Electronic Journal**

**Volume 13 No. 3 (1 March 2013)**

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. IUGG GRC Conference on Extreme Natural Hazards and Their Impacts**

The Union Commission on Geophysical Risk and Sustainability (GRC) of IUGG is dedicated to promoting scientific studies applied to the reduction of risk from natural hazards. The Commission discusses various aspects of natural hazards, disaster risks and sustainable development and organizes scientific meetings highlighting information and impacts of all kinds of natural hazards occurring around the world. At the GRC business meeting held in Melbourne, Australia, in 2011 it was decided to host the First GRC Conference on Extreme Natural Hazards and Their Impacts on the Chapman University campus, Orange, California, USA.



*Conference participants (photo: R. Singh)*

The conference was held from 8 to 11 December 2012, attended by 77 participants from 20 countries. Representatives from numerous international and national agencies (ESA, GEO-GEOSS, IRDR, NASA, NOAA, USGS, UNEP and academic institutions) attended this Conference. 58 papers were presented in 12 technical sessions. The presentations covered different natural hazards (earthquakes, volcanoes, landslides, tsunami, floods, droughts, dust events). The topics covered were physical processes, impacts, hazards evaluations, damage assessment and mitigation to early warning aspects. An account of loss of life and property due to historical and recent natural disasters were presented. The impacts of natural hazards are a serious concern in developing countries e.g., in Asia and South Africa. A special session on FORIN dealing with the integration of methods and approaches for a quantitative evaluation and a deep understanding of disasters was the main attraction of the four-day conference.

The Discussion panel on “Disaster Risks: Communication between Science and Society” was organized on 10 December, and moderated by Alik Ismail-Zadeh (Secretary General, IUGG and Chair of AGU Focus Group). Four distinguished experts were invited for the panel: hydrologist Prof. Kuni Takeuchi, Director of the International Centre for Water Hazards and Risk management under the auspices of UNESCO; social scientist Dr. Sálvano Briceño, Chair of the Science Committee of the Integrated Research on Disaster Risk (IRDR), a scientific program of ICSU/ISSC/ISDR and former Director of the Secretariat of the UN International Strategy for Disaster Reduction (UNISDR); seismologist Dr. Susan Hough at the United States Geological Survey in Pasadena, CA, USA; and volcanologist Prof. Gezahegn Yirgu of the Addis Ababa University, Addis Ababa, Ethiopia.



*During the panel discussion (from the left to the right): K. Takeuchi, S. Briceño, A. Ismail-Zadeh, S. Hough, and G. Yirgu (photo: R. Singh)*

The panel discussed the problem of disaster risk communication between scientists and policy makers, scientists and media, scientists and society. The following questions were addressed: How should scientists communicate a topic if they do not know the exact answer? How to bridge stakeholders in disaster risk reduction with the end-users? How do geographical and national characteristics influence risk communication? What are the best practices in disaster risk communications? How to enhance the communication of disaster risk to policy makers and the public? The conference was sponsored by IUGG, AGU Natural Hazards Focus Group, IRDR, NASA, IAHS, GEO and Chapman University. For more detail on the conference (e.g., the detailed agenda, presentation materials, photos) please visit the Conference website <http://www1.chapman.edu/~rsingh/GeoRisk2012/>

Received from Ramesh P. Singh, Conference Organizer

## 2. Workshop on Mathematics of Climate Change, Related Natural Hazards and Risks

Applications for the Workshop on “Mathematics of Climate Change, Related Natural Hazards and Risks” to be organized at CIMAT in Guanajuato, Mexico, 29 July - 2 August 2013 can be submitted now. The workshop will bring together about 40 young researchers, mainly from Latin America and the Caribbean and a dozen distinguished scientists, each of which will give several lectures on a chosen topic. The workshop is part of the world initiative “Mathematics of Planet Earth 2013” ([www.mpe2013.org](http://www.mpe2013.org)). It is jointly organized by the International Mathematical Union (IMU), the International Union of Theoretical and Applied Mechanics (IUTAM), and IUGG. It is sponsored by the International Council of Industrial and Applied Mathematics (ICIAM). It is supported by the ICSU Regional Office for Latin America and the Caribbean (ROLAC), the Integrated Research on Disaster Risk (IRDR), the World Climate Research Program (WCRP), the U.S. National Academy of Sciences, and the Academia Mexicana de Ciencias, and CIMAT (Centro de Investigación en Matemáticas). IMU submitted a request for a grant from the International Council for Science (ICSU). The members of the Scientific Committee are Susan Friedlander (IMU), Ilya Zaliapin (IUGG) and Paul F. Linden (IUTAM). More details are available on the following website: <http://mpe2013.us2.list-manage1.com/track/click?u=f59ce33759e67baa06b045721&id=e9e9cebb45&e=a1a4dc9a5b>

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

### *Expert Group Meeting on «Science and Sustainable Development Goals»*

The United Nations Department of Social and Economic Affairs (UN-DESA), ICSU and the International Social Science Council (ISSC) will jointly organize an Expert Group Meeting on “Science and Sustainable Development Goals” at the U.N. Headquarters in New York, USA, 20-21 March 2013. The meeting will bring together about 30 scientists from different disciplines, including natural, social and economic sciences, and humanities, with research experience in areas related to Sustainable Development Goals (SDGs) and Millennium Development Goals (MDGs), as well as science-policy experts.

### *ICSU co-sponsors 3rd World Conference on Research Integrity*

The 3rd World Conference on Research Integrity will be held in Montréal, Canada, 5-8 May 2013. It will focus on research integrity, responsible conduct of research, and publication of research. Attendees will have opportunities to learn the current state of worldwide progress on research integrity, discuss new challenges and emerging topics, and help shape national and international responses. For more information please visit: <http://www.icsu.org>

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## 4. Awards and honors

### *Prince Albert I Medal recipient 2013 - Arnold L. Gordon*



Prof. Arnold L. Gordon, Lamont Associate Director, Division of Ocean and Climate Physics, Lamont-Doherty Earth Observatory, Columbia University, USA, was awarded the 2013 Prince Albert I Medal for “his outstanding contribution in observational oceanography and in particular for his work in defining the physical processes in the Southern Ocean and Indonesian Throughflow”.

Arnold L. Gordon epitomizes the golden age of physical oceanography as a fundamentally observational science. Almost alone, he drove the observational program in the Southern Ocean (SO) in succession to the explorers of the early 20<sup>th</sup> century. The recent emergence of the SO as a critical component of the climate system is testimony to Arnold's foresight extending back nearly 50 years. The Eltanin observations, in particular, will be his monument. We owe most of our knowledge of the important oceanography of the Indonesian Archipelago to Arnold's tenacity in overcoming scientific, logistical, and political obstacles. He pioneered studies of Agulhas eddies, in which his early use of satellite altimetry excited wider interest in this new technology.

The Award ceremony will take place during the Joint IAHS-IAPSO-IASPEI Scientific Assembly in Gothenburg, Sweden, 22-26 July 2013. This will be followed by the Memorial Lecture by the Awardee "Large Scale Impact of the Indonesian Throughflow".

In partnership with the International Association for the Physical Sciences of the Oceans (IAPSO) of IUGG, Prince Rainier of Monaco established the Prince Albert I Medal in the physical and chemical sciences of the oceans. This Medal is named in honor of the late Prince Albert I of Monaco who, in 1919, organized the Oceanography Section of IUGG. Also he served as first President of that section, and Vice President of IUGG. The Medal is awarded biannually by IAPSO at its Assemblies. Recipients of the medal have been: Walter Munk (2001), Klaus Wyrtki (2003), Friedrich Schott (2005), Russ Davis (2007), Harry L. Bryden (2009), and Trevor McDougall (2011).

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## 5. IUGG-related meetings occurring during March – May

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.

### *March*

- 2-5, IAG, Helsinki, Finland, IVS-EGU Training School for the Next Generation Geodetic and Astrometric VLBI. Web: [http://www.evga.org/vlbi\\_school.html](http://www.evga.org/vlbi_school.html)
- 6-8, IAG, Helsinki, Finland, 21st European VLBI for Geodesy and Astrometry (EVGA) Working Meeting. Web: <http://ivscc.gsfc.nasa.gov/pipermail/ivsmail/2012/001311.html>
- 11-15, IAMAS/ICMA, Thessaloniki, Greece, School on Impact of Solar Variability on Climate. Web: <http://sun2climate.sciencesconf.org>

### *April*

- 4-5, SCAR/SCOR, London, United Kingdom, Holocene Climate Change Meeting. Web: <http://www.geolsoc.org.uk/holocene13>
- 7-12, EGU, Vienna, Austria, EGU General Assembly. Web: <http://www.egu2013.eu/>
- 15-19, IAG, Warsaw, Poland, 17<sup>th</sup> International Symposium on Earth Tides. Web: <http://www.cgs.wat.edu.pl/ETS2013>
- 16-17, IAMAS, Beijing, China, Expert Assessment Workshop on Decadal Climate Variability and Cross-Scale Interactions. Web: <http://iccl2013.csp.escience.cn/>
- 21-26, IAHS, Gainesville, Florida, USA, IAHS Groundwater Quality Conference (GQ13). Web: <http://conference.ifas.ufl.edu/GQ13/index.htm>
- 24-28 IAVCEI, Görlitz, Germany, Basalt 2013 – Cenozoic Magmatism in Central Europe. Web: <http://www.senckenberg.de/basalt2013>

- 29 April - 1 May, IAMAS, Exeter, UK, SPARC Reanalysis/Analysis Intercomparison Project (S-RIP) Planning Meeting. Web: <http://www.sparc-climate.org/activities/emerging-activities/>
- 30 April - 2 May, IAG, Tainan, Taiwan, International Symposium on Mobile Mapping Technology 2013 (MMT2013), Web: <http://conf.ncku.edu.tw/mmt2013/wm02.htm>

### **May**

- 6-9, IAG, Westford, MA, USA, Seventh IVS Technical Operations Workshop, Web: <http://ivscc.gsfc.nasa.gov/meetings/tow2013/>
- 13-16, IAHS, Rennes, France, HydroEco2013, 4th International Multidisciplinary Conference on Hydrology and Ecology: Emerging Patterns, Breakthroughs and Challenges. Web: <http://osur.univ-rennes1.fr/HydroEco2013/>
- 13-16, WCRP, Toulouse, France, International workshop on seasonal to decadal prediction. Web: <http://www.meteo.fr/cic/meetings/2013/s2d/>
- 14-17, AGU, Cancun, Mexico, Joint Meeting of the Americas. Web: <http://moa.agu.org/2013>
- 19-23, UNISDR, Geneva, Switzerland, Global Platform for Disaster Risk Reduction, Fourth Session – Invest Today for a Safer Tomorrow
- 23-24, SCAR/SCOR, Shanghai, China, SOOS – Southern Ocean Observing System Asian Workshop. Web: <http://www.soos.aq/index.php/calendar?view=event&cid=42>
- 30 May - 2 June, IAG, Ilulissat, Greenland, International Symposium: Reconciling Observations and Models of Elastic and Viscoelastic Deformation due to Ice Mass Change, Web: <http://www.dtu.dk/subsites/iag.aspx>

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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.**