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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 website (<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. Invitations to host the 27th IUGG General Assembly in 2019

By the deadline of 22 December 2014, two invitations were received to hold the 27th General Assembly of IUGG in 2019 in:

- **Montréal, CANADA**, from the Canadian National Committee for Geodesy and Geophysics supported by the Government of Canada;
- **New Delhi, INDIA**, from the Indian National Science Academy supported by the Government of India.

The bids were sent to the members of the IUGG Site Comparison Committee: Setsuya Nakada, Chair (Japan), Ian Allison (Australia), Peter Suhadolc (Italy), Kathryn Whaler (UK), and Alik Ismail-Zadeh (Germany/Russia). The Committee was asked to evaluate both invitations against the criteria published (<http://www.iugg.org/assemblies/>). Based on the evaluation of the written invitations as well as planned visits to the proposed venues of the general assembly, a report will be prepared and presented at the Council meeting in Prague, Czech Republic, to assist the Council in its voting on the venue for the IUGG2019.

2. IUGG Honorary Members (Fellows) announced

Fellowship of the International Union of Geodesy and Geophysics is a tribute, awarded by the IUGG Bureau to individuals who have made exceptional contributions to international cooperation in geodesy or geophysics and attained eminence in the field of Earth and space sciences (IUGG By-Law 22). On 10 January 2015, on behalf of the IUGG Fellows Selection Committee, the IUGG Bureau announced six elected Union Fellows: John Burrows (Germany/UK), Chen Xiaofei (China), Andrea Flossmann (France/Germany), Sophie Godin-Beekmann (France), Gerald Jones (Canada), and Li, Jianping (China/USA). Elected Fellows will be bestowed a certificate of IUGG Fellowship, a Silver Medal, and a pin to be presented by the IUGG President at the Opening Ceremony of the XXVI IUGG General Assembly on 23 June 2015 in Prague, Czech Republic.

The IUGG Bureau announced also the names of the conferred Union Fellows, who served for IUGG as Members of the Executive Committee, the Finance Committee, or as Association Secretaries General, contributed exceptionally to international cooperation in geosciences, and attained eminence in the field of Earth and space sciences:

IUGG: A. A. Ashour (Egypt), G. Balmino (France), O. B. Andersen (Denmark), J. Chen (China), Y. T. Chen (China), V. K. Gaur (India), S. Gregersen (Denmark), E. Groten (Germany), M. J. Hamlin (UK), D. D. Jackson (USA), J. A. Joselyn (USA), B. L. N. Kennett (Australia), M. Kono (Japan), G. McBean (Canada), H. Moritz (Austria), P. Pinet (France), U. Shamir (Israel), J. Somogyi (Hungary), A. F. Spilhaus (USA), K. Suyehiro (Japan), A. A. A. Tealeb (Egypt), J. F. Vilas (Argentina), S. Uyeda (Japan), P. J. Wyllie (USA);

IACS: I. Allison (Australia), G. Kaser (Austria), M. Lange (Germany/Cyprus);

IAG: G. Beutler (Switzerland), C. Boucher (France), M. Louis (France), I. Mueller (USA), F. Sansó (Italy), W. Torge (Germany);

IAGA: C. Barton (Australia), E. Friis-Christensen (Denmark), B. Hultqvist (Sweden), D. J. Kerridge (UK), H. W. Kroehl (USA), J. G. Roederer (USA);

IAHS: A. Askew (Switzerland/Australia), H. Colenbrander (The Netherlands), J. C. Rodda (UK), K. Takeuchi (Japan), G. Young (Canada);

IAMAS: H. C. Davies (Switzerland), R. A. Duce (USA), B. J. Hoskins (UK), M. Kuhn (Austria), R. List (Canada), M. C. MacCracken (USA), G. Wu (China);

IAPSO: F. E. Camfield (USA), S. Imawaki (Japan), P. Malanotte-Rizzoli (USA/Italy), R. D. Muench (USA), L. Mysak (Canada), J.-J. O'Brien (USA), L. V. Shannon (South Africa);

IASPEI: R. Adams (UK), E. R. Engdahl (USA), C. Froidevaux (France), A. V. Nikolaev (Russia), Z. Wu (China);

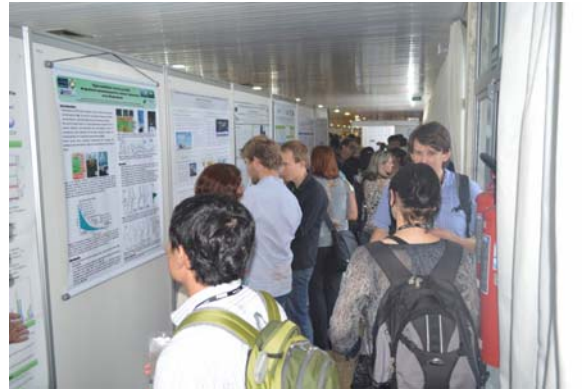
IAVCEI: S. Aramaki (Japan), P. Gasparini (Italy), S. A. Fedotov (Russia), G. Heiken (USA), R. W. Johnson, S. R. McNutt (USA), S. Nakada (Japan), O. Navon (Israel), H.-U. Schmincke (Germany), S. J. Sparks (UK).

The conferred Fellows will be bestowed a certificate of IUGG Fellowship and a pin to be presented by the IUGG President at the Closing Ceremony of the XXVI IUGG General Assembly on 1 July 2015 in Prague, Czech Republic.

Please join us in congratulating the IUGG Fellows!



During oral presentation



At the poster session



Conference banquet



Young Scientists Excursion to sand dunes

Several events were specially designed for Young Scientists (YS). A workshop was held during the conference, where invited speakers introduced each scientific session topic of the conference providing a general overview of what was going to be presented at the conference. Another event was a luncheon with two invited speakers: Mark Lawrence and Melita Keywood, who each gave a speech about time management and how to give a good presentation, respectively. At the Lunch Visioning Meeting young scientists discussed and came up with their own view on the future of the Young Scientist Program. The outcome of this meeting was presented during the Closing Ceremony. All YS posters and oral presentations were evaluated by a specific jury composed of a number of selected senior scientists who chose a winner for each of the six thematic poster sessions as well as a winner of the YS contributions to the conference's oral program.



Young Scientists Workshop



Young Scientists Poster Awardees

The support of Young Scientists is one of the main goals of iCACGP Symposia and IGAC Science Conferences. The following institutions (in alphabetical order) provided support for 70 Young Scientists from all over the world, for travel costs, accommodation and registration fees or per diems (partial and full support): IAMAS/IUGG, GAW/WMO, Atmospheric Composition Change – The European Network (ACCENT Plus), Brazilian Ministry for Education (CAPES), European Space Agency (ESA), the Regional Office South America of the International Geosphere-Biosphere Program (IGBP), National Aeronautics and Space Administration (NASA, USA), National Oceanic and Atmospheric Administration (NOAA, USA), National Science Foundation (NSF, USA), Federal University of Rio Grande do Norte (UFRN Brazil). More information: <http://igac-icacgp2014.org>

Judith J. Hoelzemann, LOC Coordinator of iCACGP/IGAC-2014

4. Report on the SIRGAS School on Reference Systems and the Symposium SIRGAS 2014

The Geocentric Reference System for the Americas (SIRGAS) is the fundamental layer for all kind of positioning and geo-information in science and praxis in Latin America from Mexico to Tierra de Fuego. Nearly all South and Central American countries have adopted it as their official reference system for scientific and practical applications. Besides the establishment and maintenance of the geocentric reference frame for the region, SIRGAS is responsible for the definition and realisation of a gravity-field related vertical reference system that guarantees consistency and reliability continent-wide (heights with the same accuracy everywhere) and a long-term stability (heights with the same order of accuracy at any time).

The current activities, advances, and new challenges of SIRGAS are reported, discussed, and re-oriented (if required) in the annual SIRGAS Meetings, which have been held since 1993. In this series, the Symposium SIRGAS 2014 took place in La Paz, Bolivia from 24 to 26 November 2014. In the days prior to the Symposium (from 20 to 22 November), a SIRGAS School on Vertical Reference Systems was held. Both events were hosted by the Instituto Geográfico Militar of Bolivia.



Attendees of the SIRGAS School on Vertical Reference Systems. La Paz, Bolivia, 20-22 November

The SIRGAS School was attended by 34 participants from 13 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Panama, Paraguay, Peru, Uruguay, and Venezuela. The thematic of the school concentrated on the continental adjustment of the first order national vertical networks based on geopotential numbers. This included a capacitation on height systems, least squares adjustment, and processing of gravity and vertical networks. Attendees were

provided with computation software, so the theory lectures were complemented by practical exercises.



Welcome Symposium banner

The Symposium SIRGAS 2014 was attended by 260 participants from 19 countries (in addition to the School participants, Dominican Republic, Germany, Honduras, Mexico, Puerto Rico, and USA). In 39 oral presentations and 24 posters, the following topics were presented: Gravity and geoid modelling in the SIRGAS region, developments related to vertical reference systems and frames, geodetic estimation of geophysical parameters, report of the SIRGAS reference frame analysis centres, national reference frames and related applications, geodetic modelling of the Earth's crust deformations (in particular in the Andean orogeny), and practical usability of the SIRGAS reference frame. Presentations and extended abstracts of the contributions are available at the SIRGAS web site (www.sirgas.org).



Attendees of the Symposium SIRGAS2014. La Paz, Bolivia, 24-26 November

Thanks to the support of the International Union of Geodesy and Geophysics (IUGG), the International Association of Geodesy (IAG) and the Pan-American Institute of Geography and

History (PAIGH), it was possible to provide 19 SIRGAS colleagues from eight countries with partial travel grants. SIRGAS deeply acknowledges this support.

Claudio Brunini, SIRGAS President; Laura Sánchez, SIRGAS Vice President

5. Report on the CODATA General Assembly and the WDS Members' Forum

Research data are essential to all scientific endeavors. The emerging cultures of data sharing and publication, open access to, and reuse of data are the positive signs of an evolving research environment. Nevertheless, several cultural and technological challenges are still preventing the research community from realizing the full benefits of these tendencies. *The Committee on Data for Science and Technology (CODATA)* and *the World Data System (WDS)*, interdisciplinary committees of the International Council for Science (ICSU) are together advancing this agenda by actively promoting effective data policies and good data management practices in the research community, to produce better science, which ultimately benefits society. As a major contribution to this effort, the two organizations co-sponsored and organized a high profile international biennial conference “Data Sharing and Integration for Global Sustainability” (SciDataCon 2014), 2-5 November 2014, in New Delhi, India, which examined, in an integrated way, the data issues at the heart of the global research questions.

SciDataCon 2014 was held in the Convention Centre of the Jawaharlal Nehru University on 2–5 November. This year the Conference brought together over 100 leading data scientists. Many Indian young researchers from Jawaharlal Nehru University took part in the conference activities. Unfortunately, due to visa problems, the President of CODATA Guo Huadong (China) was not able to participate in the conference. The same way, over 20 Chinese data specialists had no opportunity to deliver their talks in India. This issue was extensively discussed during the conference and the appropriate resolution was made during the 29th General Assembly of CODATA. Addressing the theme of Data Sharing and Integration for Global Sustainability, SciDataCon 2014 featured four main tracks: (A) Dynamic Planet, (B) Global Development, (C) Transformations Towards Sustainability, and (D) Data Science and Services. One of the main foci of the conference was to bridge cross-cutting data themes and research themes of Future Earth, an international research program on global sustainability, coordinated by ICSU and its partners, which will be launched in 2015. By focusing on the intersection of data issues and scientific research challenges – and by advancing data science and developing international data services – SciDataCon amplified the message of like-minded global data initiatives promoting data sharing and interoperability, such as the Group on Earth Observations (GEO) and the recently established Research Data Alliance (RDA). The Conference keynote speakers were Paul Berkman (oceanographer, polar explorer, entrepreneur, Global Thought leader); Wu, Guoxiong (Chinese Academy of Sciences, former member of the ICSU Executive Board and the IUGG Executive Committee); Bina Agarwal (Future Earth Science Committee member); and Theodora Bloom (British Medical Journal). On the scientific session “Development of Earth and Space Science Data Networks” I made a presentation on the development of INTERMAGNET Russian segment that is also consistent with IUGG interests. The CODATA Prize 2014 was awarded to Sydney Hall (University of Western Australia in Perth, Australia).

The 29th General Assembly of CODATA was held in the Indian National Science Academy (INSA). Guo Huadong (China), President of CODATA, was not able to travel to India due to visa problems, and had to give his final speech as the CODATA President by a conference call. The assembly started with the election. In my talk I proposed to promote young scientists to the CODATA Executive Committee. During the Assembly, the new President and Vice-President of

CODATA were elected. Geoffrey Boulton (UK) was elected new CODATA President, Niv Ahituv (Israel) and Takashi Gojobori (Japan) Vice Presidents. The new Executive Committee elected consists mostly of the same members as in the previous term. In addition two new young scientists Alena Rybkina (Russia) and Paul Laughton (South Africa) were elected.

New members joined CODATA: The Netherlands, Kenya and RDA (Research Data Alliance). They made presentations about their view of future national and international CODATA activities. The main focus was on the promotion of CODATA activities among data and research communities and involving young scientists in CODATA working groups. Short reports on their data-related activities and requirements were prepared by CODATA Task Groups. The result of the voting procedure was that the following task groups were re-elected: Advancing Informatics for Microbiology; Anthropometric Data and Engineering; Data at Risk; Data Citation Standards and Practices; Earth and Space Science Data Interoperability; Linked Open Data for Global Disaster Risk Research; Global Roads Data Development; Preservation of and Access to Scientific and Technical Data in/for/with Developing Countries (PASTD). Two new CODATA Task Groups were elected: Interoperable Data Publications, and Science and the Management of Physical Objects in the Digital Era. One of the resolutions of the 29th General Assembly of CODATA was devoted to visa problems with the suggestion to apply for a tourist visa instead of a scientific one. This will be reported to ICSU by CODATA officers.

WDS Member's Forum was held in the Convention Centre of the Jawaharlal Nehru University (JNU) on 2 November. Representatives of all WDS Regular and Network Members were taking part in the Forum and gave poster presentations updating their organizations' activities over the previous two years. During the Scientific Session WDS Members reported on their activities and gave oral presentations on topics of interest. After the Scientific Session the Plenary Session took place, where membership issues were discussed. The forum was chaired by Bernard Minster, Chair of the WDS Scientific Committee. Important results of the Forum are follows:

- Reorganization of WDC and FAGS into WDS was a good move of ICSU and participating unions. As a result of this reorganization, major World Data Centers and Data Services were reinforced by numerous scientific discipline oriented data collections of national and international research institutes, laboratories and services.
- It was the first time that the WDS forum and biennial CODATA international conference were run together in successful collaboration. The alignment with CODATA demonstrated a holistic approach to data acquisition, management, processing, and studies.
- World Data Centers were well represented at the Forum. Unfortunately Chinese World Data Centers could not attend due to visa problems.

The IUGG interest in developing WDS is linked to the fact that the data flow in Earth sciences is one of the largest (if not the largest), and the Union supports geodetic and geophysical data services.

Alexei Gvishiani, IUGG Liaison officer to CODATA

6. Awards and Honors

Toshio Yamagata, Emeritus Professor of the University of Tokyo and Director of Application Laboratory, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), is the Prince Albert I Medal recipient 2015. The Medal is bestowed on Prof. Yamagata for "his ground-breaking work and exceptional contribution to our understanding of El Niño/Southern Oscillation and the

newly discovered Indian Ocean Dipole”. The Award ceremony will take place on 29 June 2015 during the IUGG General Assembly 2015 in Prague, Czech Republic. It will be followed by the Memorial Lecture by the Awardee.

Johan Rodhe, IAPSO Secretary General

7. News from the International Council for Science

Tokyo Conference on Disaster Risk Reduction and Resilience concludes

The Tokyo Conference on International Study for Disaster Risk Reduction and Resilience, which took place on 14-16 January 2015 was co-organized by the Integrated Research on Disaster Risk (IRDR) Scientific Committee, the Science Council of Japan (SCJ), the United Nations International Strategy for Disaster Reduction (UNISDR), and the University of Tokyo. His Imperial Highness, the Crown Prince of Japan, attended the opening ceremony of the three-day conference, which brought together nearly 400 delegates from 37 countries. In his keynote speech, ICSU President Gordon McBean outlined ICSU’s role coordinating the global Science and Technology community through its programme IRDR, and highlighted the need to strengthen coordination and cooperation across scientific and research organizations, and institutions and networks currently delivering scientific information on disaster risk reduction (DRR), and to connect them to policy-makers and practitioners. This approach, called the Science and Technology Partnership for DRR, was proposed by the Science & Technology Major Group led by ICSU/IRDR during the preparatory process for the U.N. Third World Conference on Disaster Risk Reduction (3WCDRR), which will be held in Sendai, Japan, 14-18 March 2015. It is a four-part strategy which includes synthesis of the knowledge, assessment, monitoring and review. Gordon McBean also informed the audience about the recent efforts of the ad-hoc group on disaster risk assessment, which is working on a synthesis paper on science-driven disaster risk reduction to be presented at the 3WCDRR. Presentations and discussions during the conference provided input into the revision of the Tokyo Statement and draft Tokyo Action Agenda (<http://monsoon.t.u-tokyo.ac.jp/AWCI/TokyoConf/en/pdf/Tokyo.Statement.Action.Agenda.pdf>)

International Year of Light and Light-based Technologies

The United Nations General Assembly 68th Session proclaimed 2015 as the International Year of Light and Light-based Technologies (IYL 2015). This International Year has been the initiative of a large consortium of scientific bodies together with UNESCO, and will bring together many different stakeholders including scientific societies and unions, educational institutions, technology platforms, non-profit organizations and private sector partners. In proclaiming an International Year focusing on the topic of light science and its applications, the United Nations has recognized the importance of raising global awareness about how light-based technologies promote sustainable development and provide solutions to global challenges in energy, education, agriculture and health. Light plays a vital role in our daily lives and is an imperative cross-cutting discipline of science in the 21st century. It has revolutionized medicine, opened up international communication via the Internet, and continues to be central to linking cultural, economic and political aspects of the global society. The Year is endorsed by the International Council for Science (ICSU) and the International Social Science Council (ISSC), as well as by a number of international scientific unions.

International Year of Soils

The 68th UN General Assembly declared 2015 the International Year of Soils (IYS). The Food and Agriculture Organization of the United Nations (FAO) has been nominated to implement the IYS 2015, within the framework of the Global Soil Partnership and in collaboration with Governments and the secretariat of the United Nations Convention to Combat Desertification. The IYS 2015 aims to increase awareness and understanding of the importance of soil for food security and essential ecosystem functions. The specific objectives of the IYS 2015 are to: (i) raise full awareness among civil society and decision makers about the profound importance of soil for human life; (ii) educate the public about the crucial role soil plays in food security, climate change adaptation and mitigation, essential ecosystem services, poverty alleviation and sustainable development; (iii) support effective policies and actions for the sustainable management and protection of soil resources; (iv) promote investment in sustainable soil management activities to develop and maintain healthy soils for different land users and population groups; (v) strengthen initiatives in connection with the SDG process (Sustainable Development Goals) and Post-2015 agenda; and (vi) advocate for rapid capacity enhancement for soil information collection and monitoring at all levels (global, regional and national).

Future Earth Strategic Research Agenda published

The *Strategic Research Agenda 2014* calls for a step-change in research to address serious environmental, social and economic challenges. The report is the outcome of a year-long global consultation on the priorities for global change research, and focuses on three themes: firstly, on understanding how the planet is changing; secondly, on addressing urgent sustainable development needs; and thirdly, on transforming development pathways to be more sustainable in the long term. The document sets out priorities to transform the science agenda by taking a systems view of global environmental challenges, integrating social and natural sciences. It is the result of a consultation process with global environmental change research communities and stakeholders from business, government and civil society, as well as an open online survey, which received contributions from people in 74 countries worldwide. More information can be found at the Future Earth webpage: <http://www.futureearth.org/news/future-earth-strategic-research-agenda-2014-published>.

Source: ICSU webpage, IYL webpage, IYS webpage

8. Meeting calendar

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

February

- 25-27, ISPRS, Avila, Spain, 3D-ARCH: International Workshop on 3D Virtual Reconstruction and Visualization of Complex Architectures. Web: <http://www.3d-arch.org>

March

- 1-6, IACS, IGS, ICIMOD, Kathmandu, Nepal, International Symposium on Glaciology in High-Mountain Asia. Web: <http://www.icimod.org/igs2015/>
- 14-18, UNISDR, Sendai, Japan, 3rd World Conference on Disaster Risk Reduction 2015. Web: <http://www.wcdrr.org/>

- 16-19, IAMAS , Kiel, Germany, SCC2015. Conference on Sun-Climate Connections. Web: <http://scc.geomar.de>
- 23-27, IUGG, IACS, IAMAS, Rosendal, Norway, Dynamics of Atmosphere-Ice-Ocean Interactions in the High-Latitudes Workshop. Web: <http://highlatdynamics.b.uib.no>
- 23-27, WCRP, Rottach-Egern, Germany, WCRP Grand Challenge Workshop: Clouds, Circulation and Climate Sensitivity. Web: <http://www.mpimet.mpg.de/en/science/the-atmosphere-in-the-earth-system/ringberg-workshop/ringberg-2014.html>
- 25-27, ISPRS, Munich, Germany, Photogrammetric Image Analysis & HRIGI High resolution earth imaging for geospatial information. Web: <http://www.pf.bgu.tum.de/isprs/pia15/index.html>
- 30 March - 2 April, EMSEV, the University of Athens, Athens, Greece, EMSEV - Bishkek RAS Workshop on fundamental problems on the earthquake generation processes and the way to monitor them for hazard mitigation. Contact: N. Sarlis <nsarlis@phys.uoa.gr>

April

- 12-17, EGU, Vienna, Austria, EGU General Assembly 2015. Web: <http://www.egu2015.eu>
- 13-16, IAHS, Vienna, Austria, HydroEco2015: 5th International Multidisciplinary Conference on Hydrology and Ecology. Web: <http://web.natur.cuni.cz/hydroeco2015/>
- 21-23, IASPEI, SSA, Pasadena, CA, USA, SSA Annual Meeting. Web: <http://www.seismosoc.org/meetings/2015/>

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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.