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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. YES Network becomes an IUGG Affiliate Member

On 22 January 2014, the IUGG Secretariat received an application for admission to IUGG as an Affiliate Member from the Young Earth Scientist (YES) Network. The IUGG Executive Committee welcomed this application, and it was placed before the IUGG Adhering Bodies in regular status for a vote by correspondence. The vote is now complete, and the application was accepted. According to the IUGG Statutes and By-Laws, the Affiliate membership of the YES Network is provisional until the next meeting of the IUGG Council in Prague, Czech Republic, in June 2015, when a final vote will be taken.

The YES Network is an international network of early career Earth scientists from more than 120 countries representing all regions of the world. The YES Network was formed as a result of the International Year of Planet Earth (IYPE) in 2007. In 2009, in collaboration with the IYPE and under the patronage of UNESCO, the YES Network organized its first international Congress at the China University of Geosciences in Beijing, China. The Congress focused on climate, environmental and geoscience challenges facing today's society, as well as career and academic pathway challenges faced by early-career geoscientists. The YES Network aims to establish an interdisciplinary global network of individuals committed to solving these challenges, and furthering the IYPE motto of "Earth Sciences for Society". The YES Network promotes the development of the geosciences through the following activities: (i) improving the communication of geosciences between disciplines, spatially around the globe, to policy makers and to the general

public; (ii) providing professional development resources and opportunities for early-career geoscientists; (iii) fostering international collaborations between early-career geoscientists; (iv) raising the public profile of the geosciences through educational outreach and service activities that focus on global scientific and policy issues; (v) promoting scientific, professional, and academic collaborations between early-career and senior geoscientists.

2. IUGG Annual Report 2013

The IUGG Annual Report provides a summary of the activities of the Union and the IUGG Associations as well as of the Union and Inter-Unions Commissions. Thanks to the input from the Union Associations, the Union and Inter-Association Commissions, and the International Lithosphere Program. The IUGG Annual Report 2013 is now completed and posted on the web page: <http://www.iugg.org/publications/reports/report2013.pdf>. We invite you to download this impressive summary of last year's activities. The report will be printed together with the 2014 IUGG Yearbook and will be mailed to the Adhering Organizations, National Committees, International partners, and major libraries in May 2014.

3. IUGG Exhibition Booth

To learn more about the 26th IUGG General Assembly (from 22 June to 2 July 2015 in Prague, Czech Republic) and IUGG in general, there will be an exhibition booth (#11 on the ground floor, yellow level) at the European Geosciences Union (EGU) General Assembly in Vienna, Austria, from 28 April to 1 May 2014. Franz Kuglitsch, the IUGG Executive Secretary, and Pavel Susak, C-IN Prague (the Profession Conference Organizer of the IUGG2015), look forward to meeting you at the exhibition booth.

4. Report on the G@GPS Workshop and Training Course

The 2013 Groundwater @ Global Palaeoclimate Signals (G@GPS) Workshop and Training Course, G@GPS Africa: Long-term recharge of large groundwater basins, was held in Bobole, Mozambique, 14–19 October 2013. The meeting was organized by the International Union for Quaternary Research (INQUA), International Geoscience Program (IGCP), and Groundwater Resources Assessment under the Pressures of Humanity and Climate Change (GRAPHIC) of UNESCO, and co-sponsored by the International Council for Science (ICSU) and IUGG. Set in rural Africa, the workshop revolved around identifying rates and times of recharge, for the dual purposes of seeking information about past climates and determining aquifer vulnerability. Participants from 15 countries on five continents discussed a variety of topics, with particular emphasis on development and water resource management issues in African nations. The topics covered were: (i) groundwater-surface water interaction; (ii) strategies for mapping hydrogeologic basins in developing countries; (iii) sustainability assessments; (iv) distinguishing temperature and amount effects in isotopic data; and (v) identifying variations in recharge in large groundwater basins.

The meeting also served as a training course on use of isotopes in hydrologic studies, determining groundwater recharge rates from isotopic and geochemical studies, and determining groundwater

age. Nearly half of the meeting participants had limited experience of using isotopes as tracers, making this an excellent capacity building opportunity. Basic theory and application examples were followed by hands-on demonstrations and practice sampling in the conference centre. A day-long trip was organized to provide practical experience sampling regional monitoring wells within the critical Maputo groundwater basin. The first well sampled was located in a school yard, much to the amusement of the local children. Combined with additional samples collected after the meeting by meeting participants, these samples will be analysed for a wide range of major and trace elements, and stable and radioactive isotopes to provide one of the first views of groundwater age in a basin that provides water to over 3 million people. To complete the training course, participants were required to develop a proposal to identify recharge locations and rates in a potential water supply aquifer of interest, with the assistance of more experienced mentors.

Finally, the meeting provided the opportunity to assess progress towards identifying changes in climate and recharge on broad spatial and temporal scales. The G@GPS group is working to collect this information from large groundwater basins with long residence times around the world. Efforts in several large basins were updated, followed by discussions that provide a framework for the group to move forward. Possible cross-basin climate correlations were discussed, although several important issues and gaps exist that still prevent definitive identification of regional/global changes in paleoclimate patterns. Issues include needing better control and understanding of the origin of the oxygen isotopic signature, and better understanding of how mixing within different aquifers would affect correlations. Unfortunately, very little information from aquifers in the Middle East or South America was available. Closing this gap will be part of the focus of the next workshop and training course, which will be held in Argentina in 2014. Overall, the organizing committee did an excellent job managing a variety of meeting goals and provided an environment conducive to learning and fostering collaboration.

Received from Randy Stotler, IAHS International Commission on Groundwater

5. Report on the 2014 AAAS Symposium - “Santa’s Revenge: The Impacts of Arctic Warming on the Mid-Latitudes”

This event, which took place on 15 February 2014 at the Chicago AAAS Annual Meeting, was spearheaded by the U.S. National Committee for Geodesy and Geophysics, and co-sponsored by the U.S. National Committees for INQUA, Soil Science, and Geological Sciences. The symposium examined high-latitude changes linked to mid-latitude weather and the effect of these complex phenomena on freshwater resources, food availability, and national security. The symposium was organized by Michael MacCracken (Climate Institute), Ester Szein (National Academy of Sciences), and Robin Muench (Earth & Space Research). Hajo Eicken (University of Alaska) served as the discussant. Speakers included:

- Mark Serreze (National Snow and Ice Data Center, University of Colorado-Boulder): “Impacts on Arctic Pack Ice Predictions of Extreme Weather and Natural Variability”
- James Overland (NOAA/Pacific Marine Environmental Laboratory): “When Will the Summer Arctic be Nearly Sea Ice-Free?”
- Jennifer Francis (Rutgers University): “Evidence Linking Arctic Amplification with Changing Weather Patterns in Mid-Latitudes”
- Jerry Hatfield (Iowa State/USDA-Agricultural Research Service): “Agriculture Impacts and Impacts on International Food Supplies and Prices”

- David Titley (Pennsylvania State University): “Impact of a Warming Arctic on National Security”

This symposium resulted in wide press coverage in the U.S. and around the world, including articles in *The Economist*, *Time*, and *Smithsonian* magazines, BBC, and National Public Radio. The full list of approximately 70 press articles in four languages is available at the NAS/BISO webpage: http://sites.nationalacademies.org/PGA/biso/IUGG/PGA_085951.

Received from Ester Szein, U.S. National Academy of Sciences

6. Special Publications of the IUGG

The first volume of the Special Publication of the IUGG “Extreme Natural Hazards, Disaster Risks and Societal Implications” (eds. Alik Ismail-Zadeh, Jaime Urrutia Fucugauchi, Andrzej Kijko, Kuniyoshi Takeuchi, Ilya Zaliapin) will be published by the Cambridge University Press in April 2014 as an eBook and in May as a Hardback. This book presents a unique, interdisciplinary approach to disaster risk research, combining cutting-edge natural science and social science methodologies. Bringing together leading scientists, policy makers and practitioners from around the world, it presents the risks of global hazards such as volcanoes, seismic events, landslides, hurricanes, precipitation floods and space weather, and provides real-world hazard case studies from Latin America, the Caribbean, Africa, the Middle East, Asia and the Pacific region. Avoiding complex mathematics, the authors provide insight into topics such as the vulnerability of society, disaster risk reduction policy, relations between disaster policy and climate change, adaptation to hazards, and (re)insurance approaches to extreme events. This is a key resource for academic researchers and graduate students in a wide range of disciplines linked to hazard and risk studies, including geophysics, volcanology, hydrology, atmospheric science, geomorphology, oceanography and remote sensing, and for professionals and policy makers working in disaster prevention and mitigation. More information on the volume can be found at: <http://www.cambridge.org/us/academic/subjects/earth-and-environmental-science/earth-science-general-interest/extreme-natural-hazards-disaster-risks-and-societal-implications>

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

Report on Review of CODATA

The report of a review carried out by ICSU on the Committee on Data for Science and Technology (CODATA) and its activities has been published in electronic form and can be viewed at: (<http://www.icsu.org/publications/reports-and-reviews/codata-review-2013/codata-review-2013>). The CODATA review exercise was conducted during the course of 2012-2013 by an expert panel in accordance with the ICSU Strategic Plan II. The report’s recommendations have a direct bearing on the working relationship between CODATA and the World Data System (WDS) and a better integration of the data- and information-related activities and concerns of the ICSU family as a whole.

ICSU to convene major global summit of science advisors in New Zealand

In a landmark event for the international science-policy interface, ICSU is convening a major global summit of leading practitioners of high-level science advice to governments. Dedicated to an

examination of the current and future state of the practice, the two-day meeting will be hosted and chaired by Sir Peter Gluckman, Chief Science Advisor to the Prime Minister of New Zealand.

There is increasing recognition worldwide that the work of Chief Science Advisors and other Science Advisory Committees is of critical importance in the task of improving dialogue and collaboration among science, policy and society. To that end, this meeting will explore and share the best practices with which science advice is operationalised in different countries and in relation to some of the most challenging policy contexts such as science advice in situations of crisis, and provision of collaborative multi-national science advice. The feasibility of setting up an enduring global network of science advisors will be explored. “Nations around the world are facing serious challenges relating to food, water and energy security, health and environmental change, and there are ever increasing demands for science advice. This meeting brings together those at the centre of providing advice to governments on these critical, global issues to share best practices and learn from each other,” said Steven Wilson, Executive Director of ICSU.

The meeting, to be held on 28-29 August, will take place just before the ICSU General Assembly, which will convene in Auckland from 31 August to 3 September. Full details of the meeting are available here: <http://www.globalscienceadvice.org/>

Source: ICSU webpage

8. IUGG Conference on Mathematical Geophysics: Call for abstracts

The 30th IUGG Conference on Mathematical Geophysics will be held in Merida, Yucatan, Mexico, over 2-6 June 2014. Please visit the conference web site <http://eventos.iingen.unam.mx/IUGG2014> that has updated information about registration, abstract submission, lodging, and travel support.

- The updated abstract deadline is **15 April** and an early-bird registration deadline is 2 May: <http://eventos.iingen.unam.mx/IUGG2014/Registration.html>
- Reduced rates are available at Hyatt Hotel before 30 April: <http://eventos.iingen.unam.mx/IUGG2014/HotelBooking.html>
- Travel support is available to scientists having demonstrated funding needs. Applications should be submitted by 15 April: <http://eventos.iingen.unam.mx/IUGG2014/Sponsorship.html>

Please forward to relevant colleagues, postdocs, and students. We look forward to seeing you at the 2014 IUGG Conference on Mathematical Geophysics!

Received from the Organizing Committee and the IUGG CMG
(<http://eventos.iingen.unam.mx/IUGG2014/Committees.html>)

9. IUGG-related meetings occurring during April – June

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.php>). Specific information about these meetings can be found there. Individual Associations also list more meetings on their websites according to their disciplines.

April

- 7-12, SCAR, Helsinki, Finland, Arctic Science Summit Week (ASSW).
Web: <http://www.assw2014.fi/>
- 8-10, IUGG, IAMAS, Laurel, MD, USA, 3rd "Titan through time" ICPAE-workshop.
Web: <https://dnnpro.outr.jhuapl.edu/titanthroughtime3/Home.aspx>
- 11-12, IUGG, CCEC, Beijing, China, CCEC workshop on Adapting to Earth System Change
- 24-25 April, IAHS, Dublin, Ireland, 2014 Dooge-Nash International Symposium. Web: <http://www.dooge-nash.ie/>
- 22-25, UNESCO-IOC, Nha Trang, Vietnam, WESTPAC 9th International Scientific Symposium.
Web: <http://www.vnio.org.vn/Default.aspx?alias=www.vnio.org.vn/9thwestpacsymp>
- 27 - May 2, EGU, Vienna, Austria, European Geosciences Union General Assembly.
Web: <http://www.egu2014.eu/>

May

- 5-9, IUGG, IAGA, IAMAS, WCRP, Baden-Baden, Germany, 5th International High Energy Particle Precipitation in the Atmosphere (HEPPA) Workshop.
Web: <http://www.imk-asf.kit.edu/english/1486.php>
- 12-21, SCAR, Brasilia, Brazil, ATCM XXXVII - CEP XVII.
Web: http://www.ats.aq/index_e.htm
- 12-23, ICTP, IUGG, Trieste, Italy, Seventh ICTP Workshop on the Theory and Use of Regional Climate Models.
Web: http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a13197
- 22-24, IUGG, IACS, SCAR, Grenoble, France, Joint model-data workshop for the Late Pleistocene evolution of the Greenland and Antarctic ice sheets.
Web: <http://www.physics.mun.ca/MOCA/IceSheetModelandData2014>.
- 26-30, IGS, Chamonix, France, International Symposium on Contribution of Glaciers and Ice Sheets to Sea Level Change.
Web: <http://www.igsoc.org/symposia/2014/chamonix/>

June

- 1-2, IACS, Grenoble, France, International Workshop on Calving.
Web: <http://www-lgge.obs.ujf-grenoble.fr/calving2014/index.html>
- 2-6, IUGG, Merida, Yucatan, Mexico, 30th Conference on Mathematical Geophysics.
Web: <http://eventos.iingen.unam.mx/IUGG2014/>
- 3-6, CODATA, Toronto, Canada, IASSIST 40th Anniversary Conference: "Aligning Data and Research Infrastructure". Web: <http://www.library.yorku.ca/cms/iassist/>
- 3-6, UNESCO-IOC, Oostende, Belgium, SG-GTSPP-4: 2013 (Fourth) Meeting of the Joint IODE-JCOMM Steering Group for the Global Temperature-Salinity Profile Programme.
Web: http://ioc-unesco.org/index.php?option=com_oe&task=viewEventRecord&eventID=1388
- 4-6, IAG, Vilnius, Lithuania, IAG Sub-commission 1.3a "European Reference Frame" (EUREF) Symposium. Web: <http://www.nzt.lt/euref2014/>
- 4-6, IUGG, IAHS, EGU, Bologna, Italy, Evolving Water Resources Systems - Understanding, Predicting and Managing Water - Society Interactions. Web: <http://distart119.ing.unibo.it/bo2014>
- 4-7, IUGG, EGU, Bacau, Romania, 2nd International Conference on Natural and Anthropogenic Risks - ICNAR2014. Web: <http://icnar.ub.ro>

- 7-9, IRDR, ICSU, Beijing, China. IRDR Conference 2014. Web: <http://www.irdrinternational.org/2013/07/29/news-irdr-conference-2014--call-for-abstracts/>
- 8-13, IUSS, Jeju, Korea, 20th World Congress of Soil Science. Web: <http://www.20wcss.org/>
- 9-12, IUGG, Baku Azerbaijan, IUGG Bureau Meeting.
- 9-12, UNESCO-IOC, Oostende, Belgium. Ocean Teacher Global Academy: GTSP Training Course. Web: http://ioc-unesco.org/index.php?option=com_oe&task=viewEventRecord&eventID=1389
- 16-17, IAHS, UNESCO-IHP, Paris, France, 11th Kovacs Colloquium - Hydrological Sciences and Water Security: Past, Present and Future. Web: http://iahs.info/news.do?news_id=79#.UzAjPIKs98H
- 16-20, SCOR, Israel, SOLAS Scientific Steering Committee Meeting
- 18-21, SCAR, Evora, Portugal, 4th European Conference on Permafrost (EUCOP4). Web: <http://www.eucop4.org/>
- 22-25, SCAR, Cologne, Germany, 28th International Forum for Research into Ice Shelf Processes (FRISP). Web: <http://folk.uib.no/ngfso/FRISP/index.html>
- 22 - July 5, ICTP, IUGG, Arusha, Tanzania. Workshop on Geophysical Monitoring and Modeling for Sustainable Energy and Geohazard Solutions. Web: http://cdsagenda5.ictp.it/full_display.php?ida=a13244
- 23-27, IAG, Pasadena, California, USA, IGS 20th Anniversary Workshop 2014. Web: <http://www.igs.org/workshop>
- 23-27, SCAR, SCOR, Bergen, Norway. Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) Open Science Conference. Web: <http://www.imber.info/index.php/Meetings/IMBER-OSC-2014>
- 23-29, EMSEV, Bishkek, Kyrgyzstan, 6th International Symposium on Problems of Geodynamics and Geo-Ecology of Intercontinental Orogens. Web: <http://www.gdir.ru/en/>
- 30 - July 3, UNESCO-IOC, Paris, France. IOC/EC-XLVII: 47th Session of IOC Executive Council. Web: http://ioc-unesco.org/index.php?option=com_oe&task=viewEventRecord&eventID=1393
- 30 - July 7, IAG, Shanghai, China, 3rd International Gravity Field Service (IGFS) General Assembly, Web: <http://202.127.29.4/meetings/igfs2014/index.html>

End of IUGG Electronic Journal Volume 14 Number 4 (1 April 2014)

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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.