



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

The IUGG Electronic Journal

Volume 20 No. 10 (1 October 2020)

This monthly newsletter is intended to keep IUGG Members and individual scientists informed about the activities of the Union, its Associations and interdisciplinary bodies, and the actions of the IUGG Secretariat, Bureau, and Executive Committee. Past issues are posted on the IUGG [website](#). E-Journals may be forwarded to those who will benefit from the information. Your comments are welcome.

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1. IUGG – The People at the Forefront (XII)

Michael G. Sideris, Immediate Past President 2019-2023

I was born in Athens, Greece, and studied and lived there until I finished my undergraduate university degree in 1981. This was a five-year Dipl.-Eng. (honours) degree in Rural and Surveying Engineering at the National Technical University of Athens. I had the good fortune and privilege to study under one of the pioneers of satellite geodesy, Prof. George Veis, who instilled in me the love of geodesy and research. It then became clear to me that I wanted to specialise in geodesy and explore the exciting research possibilities it offered. After agonising about whether I should pursue graduate studies in the USA, Canada or the UK, I ended up in Canada at the then newly established Department of Surveying Engineering (now called Geomatics Engineering) of the University of Calgary (UofC). Not that I knew where Calgary was! The only thing I knew was that they offered very significant graduate teaching assistantships and scholarships, and that two world-renown geodesists - Professors Edward Krakiwsky and Klaus-Peter Schwarz - were teaching there. The latter became my MSc and then PhD supervisor and mentor, and the former hired me as an Assistant Professor in the Department upon completion of my PhD degree.

K.-P. Schwarz's research group was highly respected and very diverse, and attracted graduate students, postdoctoral fellows, and visiting scientists from all over the world. The environment was very collaborative and very collegial, and not only individual leadership abilities but also teamwork

were nurtured and flourished. I got my first exposure to the International Association of Geodesy (IAG) and eventually to IUGG through my supervisor's IAG involvement (Prof. Schwarz became IAG President during 1995-1999). My study area was the application of fast Fourier transform methods in physical geodesy, a topic at the forefront of geodetic research at that time. Hence, as I was completing my MSc degree in 1984, I was asked to teach at IAG's International Summer School on Local Gravity Field Approximation, in Beijing, China. This introduced me to experts in the field from many countries, expanded my research interests, formed life-long friendships and, more importantly, prompted me to pursue a PhD degree in geodesy, which I completed in 1988.

I attended my first IUGG General Assembly (GA) in 1987 in Vancouver while I was still a PhD student, where I was asked by IAG to chair one of its newly established Special Study Groups (SSGs). Although I participated in many other national and international conferences and scientific bodies since then, the Vancouver IUGG GA marked my long-term involvement with IAG and IUGG, as well as the beginning of my path to the IUGG presidency. The individual steps, which I list here to also urge and encourage graduate students and young scientists to get involved early with the IUGG and its Associations, were as follows:

- 1987–1991: President, IAG SSG 3.113: "Spectral Gravity Field Modelling Methods"
- 1991–1995: President, IAG SSG 3.135: "Optimisation of Spectral Gravimetric Techniques"
- 1995–1999: Secretary of IAG Section III: "Determination of the Gravity Field"
Canadian National Delegate to the IAG/IUGG
- 1999–2003: President of IAG Section III: "Determination of the Gravity Field"
- 2003–2007: Vice-President of IAG
- 2007–2011: President of IAG
- 2011–2015: Vice-President of IUGG
- 2015–2019: President of IUGG



At UNESCO in Paris, for IUGG's Centennial Celebration Event, July 2019.

This career path offered many rewarding academic, research, service and administrative experiences. At the international level some of the highlights were: meeting and collaborating with many colleagues from around the world, in particular with students and early career scientists; teaching at international summer schools on the determination and use of the geoid; having sabbatical leaves at universities in Australia, Europe, and North America; receiving an Alexander von Humboldt international research fellowship, hosted by Prof. Eric Grafarend at the University of Stuttgart, Germany; chairing and participating in working groups, Commissions, Services, Bureaus and Executive Committees of IAG, IUGG and GGOS (Global Geodetic Observing System); being involved with the International Science Council (ISC) and the Group on Earth Observations (GEO); receiving an Honorary Doctorate (Dr. honoris causa) in geodesy from University of Architecture, Civil Engineering and Geodesy, in Sofia, Bulgaria; serving on Boards of Directors of several foundations, institutes and universities in Canada and abroad; and, of course, my presidency of IUGG, including its centennial GA in Montreal and centennial anniversary celebrations last year. University teaching and serving as Associate Dean in UofC's Faculties of Graduate Studies and Engineering, and as Associate Head for

Research and Graduate Studies in UofC's Department of Geomatics Engineering were equally enriching experiences.

Trying to balance administrative and service work with teaching and research has not been an easy task. Nevertheless, with careful time management, I was able to do it well, I believe. My research work covered areas such as satellite Earth observation (e.g., monitoring the temporal changes in the gravity field, oceans, land water and ice masses by means of integrated satellite data), gravity field approximation, spatial and temporal geoid modelling, geoscience applications of dedicated gravity satellite missions (GOCE and GRACE primarily), satellite altimetry, terrestrial and airborne gravimetry, height systems and vertical datums. It was funded by research councils, government agencies, industry, and space agencies, and it resulted in the publication of over 200 articles in books, encyclopedias, scientific journals and refereed conference proceedings. I am particularly proud of the over 40 MSc and PhD students who graduated under my supervision; several of them are now faculty members at universities around the world.

As I near retirement age and reflect back on a successful and rewarding career, I need to acknowledge that this would not have been possible without the dedicated work of my university teachers, graduate students, and the scientists and colleagues who collaborated with me and supported me in my research endeavours and administrative positions at the university and in IAG and IUGG for the last four decades. I thank them all from the bottom of my heart.



At El Colegio Nacional in Mexico City, with IUGG's "heart and soul" for 12 years (2007-2019), past Secretary-General Alik Ismail-Zadeh, October 2018.

2. IUGG – Symposia Support 2021

The program of IUGG support for scientific meetings (e.g. workshops, advanced schools, symposia) is one of the most important means by which the Union and its Associations pursue a goal of promoting geophysics and geodesy through international collaboration. A portion of the IUGG's budget is devoted to the support of these scientific meetings. The IUGG Executive Committee places great emphasis on maintaining high scientific standards, coverage of a balanced spectrum of topics, and an appropriately broad and international flavour for the scientific program of the meetings. In that respect, the ISC rules on non-discrimination in the access of qualified scientists from all parts of the world to any IUGG-sponsored meeting apply.

The number of co-sponsored meetings ranges from 10 to 15 (up to USD 2,000 each). Accordingly, not all meeting proposals worthy of support can be awarded IUGG sponsorship. The following guidelines for obtaining IUGG sponsorship should be observed by prospective proposers:

- IUGG-sponsored scientific meetings should have a well-defined and scientifically relevant theme, should be scheduled at a propitious time for significant progress in the field, and should be of interest to young researchers as well as senior experts.
- While the IUGG embraces all fields in geophysics and geodesy, a proposed programme should maintain a balanced scope relevant to IUGG Associations. Each proposal will be judged on its own scientific merits.

- Given the international nature of the Union, meetings are by definition internationally oriented. This requires a well-balanced geographical distribution.

Normally, the initiative to propose a scientific meeting for IUGG sponsorship originates from a group of scientists in a certain field. Prospective meeting organisers should contact the respective Association Secretary-General (ASG) well in advance of their intended proposal submission, and then send their request for IUGG support to the ASG by **15 October 2020**.

The scientific merit of each scientific meeting's proposal will be evaluated by the respective ASG, taking into consideration comments and advice received from the Association Executive Committee. The ASGs should communicate their recommendation for selection to the [IUGG Secretariat](#) by **31 October 2020**.

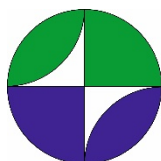
The tentative allocations will be made by the IUGG Secretary-General and then reviewed by the Members of the IUGG Bureau to assure impartiality. The Bureau will decide on the final selection of the meetings to be supported. Their decision will be communicated to the ASGs by the IUGG Secretary-General in a letter of award not later than **1 December 2020**. The IUGG support should be acknowledged in all documents related to a sponsored meeting (e.g. in the scientific program, on the website, brochures, publications of proceedings etc.)

More information is available [here](#).

3. UN-GGIM/IAG – Global Geodetic Centre of Excellence



UN-GGIM
UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT



IUGG



IAG AIG
International Association
of Geodesy

The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), at its meeting on 4 September 2020, approved the establishment of a Global Geodetic

Centre of Excellence (GGCE) at the UN Campus in Bonn, Germany. The GGCE will develop a globally coordinated public geodetic infrastructure enabling all UN member states to work together in a coordinated manner. This will allow a continuous and standardised observation of our Earth to better understand natural hazards and to protect people as well as cultural treasures and natural resources. It is one way that UN member states and aid organisations can act efficiently and effectively in disaster situations without falling short due to different government jurisdictions, heterogenous data sources or differences in calculation methods. The Federal Agency for Cartography and Geodesy (BGK), which is an executive agency of the Federal Ministry of Interior, Building and Community, will help to shape the tasks worldwide on behalf of Germany within the scope of the UN, working within a network of coordinating partners. The international services that have been developed under the umbrella of the International Association of Geodesy (IAG), will contribute to create a globally harmonised geodetic infrastructure, and to implement GGCE. IAG together with the Fédération Internationale des Géomètres (FIG), space agencies (incl. ESA, NASA) will be represented in the advisory body of GGCE. The new centre will be inaugurated in 2021.

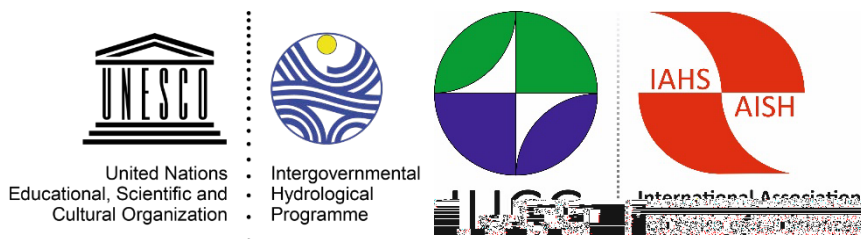
Further information can be found [here](#).

Harald Schuh, IUGG Liaison Officer to UN-GGIM

4. UNESCO-IHP/IAHS – 8th Global UNESCO FRIEND Water Conference

The papers from the [8th Global UNESCO FRIEND Water Conference “Hydrological Processes and Water Security in a Changing World”](#), which was organized from 6 to 9 November 2018 in Beijing,

China, are now available open access in the Proceedings of the International Association of Hydrological Sciences ([PIAHS, Volume 383](#)).

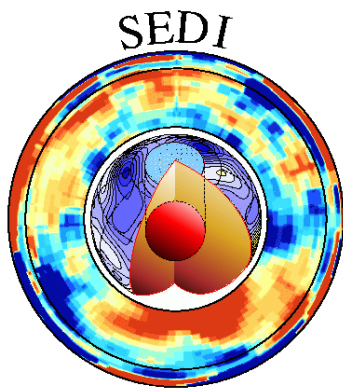


The 8th Global FRIEND conference was co-organised by UNESCO and the Government of China, with the focus on the theme of hydrological processes and water security in a changing world.

The conference explored how society, water systems and the environment interact under changing conditions. It highlighted the advance in hydrological science and innovation in water management, as well as the solutions to improve this relationship, particularly in view of contributing to the 2030 Agenda and the Paris Agreement. For the first time the two IHP programs FRIEND and Ecohydrology jointly organized a side event about the importance to bring ecological solutions to hydrological problems.

Christophe Cudennec, IUGG Liaison Officer to UNESCO-IHP

5. SEDI – Online Streaming Platform



Due to the COVID-19 pandemic, the 2020 meeting of the Union Commission on the Study of the Earth’s Deep Interior (SEDI), has been postponed to 2022. From 1 to 15 October 2020, you can however join us to share the latest results in deep Earth science on our Online Streaming Platform.

This platform offers an opportunity for SEDI researchers to present their work without waiting another two years for the next SEDI meeting. We particularly encourage early career investigators - PhD students and postdocs - to submit a poster on this platform, and all SEDI researchers to register and visit it, even if they do not plan to display posters. The SEDI 2020 streaming platform is not a real-time meeting (mainly due to difficulties to organise discussions across many different time zones), but it will include discussion in the form of online forums. It is divided into eight pages, corresponding to each session of the original meeting. Each page includes two video presentations (~ 20-30 minutes each) given by research speakers planned in the original program, plus general posters or pdf presentation, and a discussion forum. Because it is not a real-time meeting, we decided not to display keynote presentations.

All registered participants are free to upload a poster or a pdf presentation (meaning a few slides) on their recent work. This poster/pdf presentation may be introduced with a micro video presentation (2-3 minutes), also uploaded on the website. There is no registration fee, but we ask participants to register to avoid fake or junk posters/discussions. [Registration](#) and poster/presentation uploads started

on 15 September 2020. Presentations, posters, and the discussion forum will be accessible to all registered participants.

Further information can be found [here](#).

The SEDI Officers and the SEDI 2020 Meeting Organizing Committee

6. IUGS – America’s Geoheritage II: Distinguished Speaker Webinar Series

The National
Academies of

SCIENCES
ENGINEERING
MEDICINE



The U.S. National Committee for the International Union of Geological Sciences (IUGS) is presenting the *America’s Geoheritage II: Identifying, Developing, and Preserving America’s Natural Legacy Distinguished Speaker Webinar Series* throughout fall 2020, many Tuesdays at 11:00 am EDT. These presentations will introduce the underlying rationale and concepts of the Geoheritage initiative, and the contributions being made by stakeholders in the geoscience community. These presentations are free and open to everyone interested in using Geoheritage sites to promote research, education, public outreach, community planning, and geotourism. These presentations will set the stage for the virtual writing part of the workshop that will be convened the week of 10 January 2021 to further explore opportunities to develop and promote Geoheritage sites across the United States.

The inaugural webinar took place on 8 September 2020 with Tim Badman (IUCN) and Patty Limerick (University of Colorado, Boulder) as our keynote speakers. More details about this first presentation can be found [here](#). A complete list of webinar dates, topics, and speakers in the series and to register for each individual webinar can be found [here](#).

David Mogk, Chair US National Committee for IUGS
Ester Sztein, Assistant Director, Board on International Scientific Organizations,
The National Academies of Sciences, Engineering, and Medicine

7. ISC – Awards Programme



**International
Science Council**

The International Science Council (ISC) Awards Programme was established in 2020 by the ISC Governing Board to recognise individuals, groups, and initiatives launched by the ISC and its members that serve to advance science as a global public good, by, for example, promoting international,

interdisciplinary scientific research cooperation, striving to bring scientific knowledge into the public domain, innovating in science education and outreach, or promoting the free and responsible practice of science.

The ISC Awards are conferred every three years during the ISC General Assembly in the following categories:

1. ***Science for Sustainability Award*** for outstanding scientific contribution to the achievement of the Sustainable Development Goals using an interdisciplinary approach (one award)
2. ***Science-for-Policy Award*** for outstanding contribution to, stimulation of, support for or communication of the findings of international scientific research and scholarship relevant to international policy challenges (one award)
3. ***Policy-for-Science Award*** for outstanding contribution to developments in the science system that enable science to contribute more effectively to major debates in the international domain (one award)
4. ***Scientific Freedom and Responsibility Award*** for outstanding contribution to defending and promoting the free and responsible practice of science (one award)
5. ***Early Career Scientist Award*** for exceptional contribution to science and international scientific collaboration by early career researchers (six awards: one award to a scientist from each of (i) Africa, (ii) Asia, (iii) Australia and Oceania, (iv) Europe, (v) North America, and (vi) South America and the Caribbean)

ISC members, affiliated bodies and partners are eligible to nominate candidates for the Awards. These will be conferred every three years, on the occasion of the ISC General Assembly.

Nominations are open now, and will close on **1 February 2021**. Details of the nomination and selection process can be found [here](#). Please address any questions regarding the Awards Programme to [Anne Thieme](#).

8. Awards and Honours

Valérie Masson-Delmotte (France), Head of IACS Division IV (2008-2019), was awarded the ISC Scientific Committee on Antarctic Research (SCAR) President's Medal for Outstanding Achievement in Antarctic Science.

Congratulations Valérie!

9. Obituaries

With great sadness IUGG informs about the decease of

Jerzy Jankowski (1933-2020), Head of the Institute of Geophysics, Polish Academy of Sciences (1974-2005) and IAGA National Correspondent for Poland (2003-2007)

Günter Stangl (1952-2020), Director of IAG GGOS Coordinating Office (2016-2017)

An obituary written by Basara Miyahara (GGOS President) and Martin Sehnal (Director GGOS CO) can be found [here](#).

10. Meetings affected by COVID-19

IAG

The IAG sponsored [22nd International Workshop on Laser Ranging](#) planned to be held in Kunming, China, from 2 to 6 November 2020, has been postponed to 2021, to be held in the same place. Further information should be announced soon.

IASPEI

The IASPEI sponsored [3rd General Assembly of the African Seismological Commission](#) planned to be held in Kasane, Botswana, from 13 to 19 December 2020, has been postponed to 6 to 10 September 2021, to be held in the same place.

ICTP/IUGG

The IUGG sponsored [African Workshop on GNSS and Space Weather](#) planned to be held in Rabat, Morocco, from 5 to 16 October 2020, will be held online from 5 to 6 October 2020.

WMO

The WMO sponsored [WMO Data Conference – Earth System Data Exchange in the 21st century](#) planned to be held in Geneva, Switzerland, from 16 to 18 November 2020, will be held online from 16 to 19 November 2020.

11. Meeting calendar

Meetings are subject to change due to the COVID-19 pandemic.

October

- 1-15, SEDI, Online, [SEDI 2020 Online Streaming Platform](#)
- 5-9, IAG, GFZ, Online, [International Autumn School 'NEROGRAV'](#)
- 5-6, ICTP, IUGG, Online, [African Workshop on GNSS and Space Weather](#)
- 7-9, IACS, Concepción, Chile, [Third Annual Meeting of the Chilean Cryosphere Society \(SOChiCri\)](#)
- 11-17, AGI, [Earth Science Week](#)
- 19-21, IAG, Shanghai, China, [International Workshop on GNSS Ionosphere \(IWGI2020\)](#)
- 19-21, IAG, Online, [International DORIS Service Workshop](#)
- 19-22, SCOR, Online, [2020 SCOR Annual Meeting](#)
- 21-24, IAG, Nanjing, China, [International Symposium on Satellite Navigation \(ISSN 2020\)](#)
- 26-30, IAHS, Bydgoszcz, Poland, [IAHS/ICCE International Symposium River Sediment Quality and Quantity: Environmental, Geochemical and Ecological Perspectives](#)
- 26-30, CCTF, Online, [22nd Meeting of the Consultative Committee for Time and Frequency](#)
- 26-6 November, ICTP, Addis Ababa, Ethiopia, [Integrating Climate Data, Predictions and Projections Into Health Planning](#)

November

- 2-6, GEO, Online, [GEO Week 2020](#)
- 9-13, ICTP, IUGG, Trieste, Italy, [Impact and Risk Relevant Climate Information from Global Scale Projections to Local Scale Climate Hazards](#)
- 16-19, WMO, Online, [WMO Data Conference – Earth System Data Exchange in the 21st century](#)
- 16-20, IAGA, URSI, Online, [9th VERSIM Workshop – VLF/ELF Remote Sensing of Ionospheres & Magnetospheres](#)

- 17-19, ICTP, IUGG, Buenos Aires, Argentina, [Conference on Regional Climate Modeling and Extreme Events over South America: results from the CORDEX-Flagship Pilot Study](#)
- 24-28, IAHS, Cotonou, Benin, [Hydrology of the Major African Basins](#)
- 30 - 4 December, CODATA, Online, [International FAIR Convergence Symposium and CODATA General Assembly](#)
- 30 - 4 December, ISPRS, Sydney, Australia, and Online, [Climate Change and Disaster Management - Technology and Resilience in a Troubled World](#)

December

- 1-17, AGU, Online, [AGU Fall Meeting 2020](#)

Association Scientific Assemblies 2021-2022

- 28 June – 2 July 2021, Montpellier, France, [IAHS Scientific Assembly](#)
- 28 June – 5 July 2021, Beijing, China, IAG Scientific Assembly
- 18-23 July 2021, Possibly Online, [IACS-IAMAS-IAPSO Joint Scientific Assembly](#)
- 22-27 August 2021, Hyderabad, India, [IAGA-IASPEI Joint Scientific Assembly](#)
- 20-24 January 2022, Rotorua, New Zealand, [IAVCEI Scientific Assembly](#)

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