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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 [here](#). 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 (XXVIII)

Johannes Schweitzer, Secretary General of the International Association of Seismology and Physics of the Earth's Interior (IASPEI), 2019-2023



I was born and raised in the small town of Hadamar, in Western Germany, in 1956. After school and civil service, I started studying geophysics at the Johann Wolfgang Goethe University in Frankfurt/Main, in 1976. The education in geophysics in Frankfurt was very much physics and mathematics oriented, taught in a common institute together with the meteorologists. The leading professor in geophysics was Hans Berckhemer (1926-2014), IASPEI President (1975-1979). So, it is no surprise that during the introductory courses we even learned about international cooperation in geophysics and IUGG and its Associations. My interests within geophysics were wide at the beginning of my studies but focused more and more on seismology, in particular after

*Johannes Schweitzer, IASPEI Secretary General (2019-2023)
during the IUGG General Assembly 2011 in Melbourne, Australia*

Gerhard Müller (1940-2002) came from Karlsruhe to Frankfurt as the new professor of mathematical geophysics in 1979. Under the supervision of Gerhard, I wrote my Diploma thesis (1984) on the seismic velocity structure of the outer core and during this work, I found indications of a local low S-velocity body in the lower mantle of the Southern Pacific between Tonga, Fiji and the Americas. I continued my studies with Gerhard to investigate the structure of this velocity anomaly in more detail and found that the most likely location of the lateral heterogeneities was within an elongated horizontal zone in the lowermost mantle above the Core-Mantle-Boundary (CMB). These results were then also the contents of my PhD thesis (1990).

In 1990, I moved on as postdoc to the Institute of Geophysics at the Ruhr-University Bochum, Germany, where the new, small aperture seismic array GERES was under construction, under the leadership of Hans-Peter Harjes. The GERES array was part of the global research activities preparing for a Test-Ban Treaty (TTB) for nuclear weapons and my work changed focus to the analysis of data from seismic arrays, seismic event detection and location at local, regional and teleseismic distances, seismic signal processing in near-real time, seismic instrumentation and the lithospheric structure in Europe. Bochum cooperated closely with NORSAR, which helped with expertise and software to establish the GERES working group in Bochum. GERES was selected as one of the stations to participate in the GSETT-2 experiment to simulate a global monitoring system for a TBT. NORSAR was one of the key institutions during this experiment and since GERES data were also transmitted to NORSAR in near-real time, this led to my first, more than 6 weeks long, visit at NORSAR, in 1991, to analyse the GERES data. In early 1994, my contract in Bochum was running out and I was invited by NORSAR to come for a one-year stay to Norway as visiting scientist. During that year, I concentrated mostly on improving the automatic data analysis routines for small aperture arrays, as well as investigating systematic biases when measuring apparent velocities and back-azimuths of seismic signals.

After the year in Norway, I moved back to Bochum to work again on lower mantle structure by interpreting steep-angle reflections from the CMB observed by the network of seismic arrays in Europe, as well as the broadband stations of the German Regional Seismic Network (GRSN). In parallel, I continued my TBT and array seismology related work. After the Comprehensive TBT (CTBT) was signed in 1996, NORSAR, as one of the key players, increased its staff by offering me a permanent position within its team, a position I have held since summer 1997.

During the last 25 years at NORSAR, I worked on a wide range of seismology questions, of which I will only mention here the most important ones. During the early years, the further development of the automatic analysis of array data and correcting its biases was one of my main activities. In addition, I developed the first version of my seismic event location program HYPOSAT that was distributed widely. This program package has been further developed over the last decades and is now in use at many academic and non-academic institutions worldwide. My work with seismic event location was also the reason to become involved in the definition of seismic phase-name standards and my engagement in the activities of the International Seismological Centre (ISC).



6 February 2012, after finalising the installation of the seismic broadband station TROLL, Antarctica

During my research visit at NORSAR in 1994/95, I visited Spitsbergen for the first time, the main island of the Svalbard Archipelago, in the European Arctic. Since then, I have been particularly interested in all types of seismic events in this region (tectonic earthquakes, icequakes and human activities) and improving the monitoring capabilities in the area. Finally, since becoming PI for an international project during the International Polar Year 2007-2008, I contributed to the upgrade of seismic stations with modern, broadband sensors and building new seismic arrays in the European Arctic, as well as building a new, broadband seismic station in Antarctica. These activities overlapped with the need to calibrate the seismic network for monitoring the CTBT and I became involved in many studies about the seismic velocity structure of the lithosphere in Northern Europe and the European Arctic. A next step in polar seismology will be a new seismic array and a co-located infrasound array at the Norwegian Polar Research Station Troll in Antarctica, which is being planned within the framework of a larger infrastructure project lead by the Norwegian Polar Institute. First data are expected in 2025.

I was always interested in history and archaeology, and during my time in Frankfurt, I also became very interested in the history of seismology and geophysics. Since then, I occasionally worked on different aspects of the history of seismology, as e.g., a review article about the heritage of seismic bulletins from the earliest instrumental times, which became for many colleagues a starting tool for historical-earthquake studies, or about the roots of IASPEI and the early history of instrumental seismology in Germany.

Since 1986, I regularly participated in IASPEI and IASPEI-related conferences and assemblies and enjoyed being part of this international and intercontinental community. When I was asked in 2012 if I would be interested to become the Assistant Secretary of IASPEI in 2013 and then the Secretary General and Treasurer of IASPEI in 2015, I accepted these offers with the thought that it is now my time to give something back to the community.

2. IUGG – Annual Report 2021



The IUGG Annual Report 2021 provides a comprehensive summary of the activities of the Union including its Associations, Union Commissions, and Programs.



Annual Report 2021

We invite you to [download](#) this impressive summary of last year's activities.

Also, an updated version of the IUGG Yearbook 2022 is now available [here](#). The IUGG Yearbook is a reference document of IUGG members, administrative officers, Association and Union Commission officers.

IUGG thanks everyone who contributed to the Annual Report and all who helped to update the information in the Yearbook.

3. IUGG – Grants Program 2022-2023: Awardees

The [IUGG Grants Program](#) aims to support projects, of importance to the international geophysical and geodetic community, which explore new scientific ideas, develop future international initiatives, and promote geoscience education. For 2022-2023, IUGG awarded grants to the following projects:

- **Implementing IUGG 2015 Resolution #4: Organization of the GNSS Tsunami Early Warning (GTEWS) Consortium** (a joint project between GRC, IAG, IAGA, IAPSO, IASPEI, and IAVCEI);
- **Kyoto Landslide Commitment 2020** (a joint project between GRC, IAGA, IASPEI, and IAVCEI);
- **2nd IAG Commission 4 Symposium “Positioning and Applications”** (a joint project between IAG and IAGA); and
- **Discovering Patascoy, an unknown Holocene volcano** (a joint project between IAVCEI and IASPEI).

4. IUGG – Early Career Scientist Awards 2023: Nominations due on 20 June 2022

The **IUGG Early Career Scientist Awards** (ECSAs) honour early career scientists for their outstanding research in Earth and space sciences and international research cooperation. The deadline for submission of nominations for ECSA is **20 June 2022**. The nominations will be examined by the [IUGG ECSA Committee](#), which is chaired by Katrin Schroeder (Italy). The IUGG ECSAs are given to a maximum of 10 individuals. The awardees will be invited to attend IUGG2023. Details on the IUGG ECSAs, including the procedure for nomination, eligibility criteria, and technical requirements, can be found [here](#).



5. CMG – 33rd IUGG Conference on Mathematical Geophysics: Announcement

The 33rd IUGG Conference on Mathematical Geophysics (CMG2022) organised by the Union Commission on Mathematical Geophysics will be held in Seoul, Republic of Korea, from 20 to 24 June 2022. The online meeting with an onsite participation of local students and invited scientists will be hosted by the Seoul National University. The Conference aims to discuss contemporary topics in mathematical geophysics, such as data analysis, machine learning and artificial intelligence, geophysical fluid dynamics, geophysical inversions, and mathematics for natural hazards science. The detailed CMG2022 program is now available [here](#). It includes two keynote presentations by *Kwang-Yul Kim* (Seoul National University, Republic of Korea) and *Friderick Simons* (Princeton University, USA) – the inaugural recipient of the Vladimir Keilis-Borok Medal; thirteen invited speakers; and contributed oral/poster presentations. [Registration for online participation](#) in the Conference is open until **6 June 2022** for everybody and is free of charge.

CMG2022 is a contribution to the United Nations International Year on Basic Science for Sustainable Development ([IYBSSD](#)), an international program partnered by IUGG. A panel “Basic Science and Mathematics for Sustainable Development” will be held on **21 June 2022** during the Conference. Several distinguished scientists – *Qiuming Cheng* (China), *Motoko Kotani* (Japan), *Michel Spiro* (France), *Kathryn Whaler* (UK), and *Jaejun Yu* (Republic of Korea) – will contribute to a discussion

about integration of basic science, mathematics, science education and policymaking to solve fundamental problems of nature and society and to contribute to the solutions of challenging issues of sustainability.

Welcome to the CMG2022!



The CMG2022 Scientific and Local Organising Committees

6. SEDI – 17th Symposium of the Study of the Earth's Deep Interior: Announcement

The 17th Symposium of the IUGG Union Commission SEDI ([SEDI2022](#)), the Study of the Earth's Deep Interior, an, will be held in Zurich, Switzerland, from 11 to 15 July 2022. The meeting will take place in the Earth Sciences building at ETH Zurich. The Institute of Geophysics, ETH Zurich and The Institute of Earth Sciences, Academia Sinica are co-organisers of SEDI2022.

Deadline for registration: **8 June 2022**.

SEDI is an international scientific organisation dedicated to the Study of the Earth's Deep Interior. The ultimate goal of SEDI is an enhanced understanding of the past evolution and current thermal, dynamical and chemical state of the Earth's deep interior and of the effect that the interior has on the structures and processes observed at the surface of the Earth. The “deep interior” is generally considered to be the core and lower mantle, but interest may extend to the surface, for example, in the study of mantle plumes or dynamics of descending lithospheric slabs.

The scientific questions and problems of interest to SEDI cover all aspects of the evolution of the Earth's deep interior including composition, structure and dynamics of the inner and outer core, the geodynamo and the magnetic field secular variations, core cooling, the core-mantle boundary region, lower mantle structure, composition and dynamics as well as the nature and location of deep geochemical reservoirs.



The SEDI2022 Scientific Steering and Local Organising Committees

7. GFZ – New Scientific Executive Director



Susanne Buijer, new Scientific Executive Director at GFZ (photo: Andreas Schmitter, GFZ)

On 15 May 2022, Prof. Dr. Susanne Buijer took over as Scientific Executive Director of the Helmholtz Centre Potsdam – GFZ German Research Centre for Geosciences. The GFZ Board of Trustees appointed the Dutch geophysicist as the new Scientific Director and Spokesperson of the Board at the end of March. Susanne Buijer holds a professorship in tectonics and geodynamics at RWTH Aachen University. Previously, she led the Team “Solid Earth Geology” at the Norwegian National Geological Survey NGU. Susanne Buijer replaces Niels Hovius, who has led the GFZ as acting Scientific Director since November 2020.

Susanne Buijer is 51 years old and comes from Drenthe, a province of the Netherlands. She studied geophysics in Utrecht and received her PhD with a thesis on surface deformation resulting from tectonic processes ("Surface deformation resulting from subduction and slab detachment"). Stages in her

career have taken her to Bern, Switzerland, Canada, and Trondheim, Norway, where she led various teams at the Norwegian National Geological Survey NGU and taught at the University of Oslo. Since 2020, she has been Professor of Tectonics and Geodynamics at the Rheinisch-Westfälische Technische Hochschule Aachen.

The GFZ has hosted the IUGG Secretariat since 2013.

8. Awards and Honours

Alexander von Humboldt Foundation

On 12 May 2022, the [Alexander von Humboldt Professorships](#) were awarded in Berlin, Germany.

Among the awardees, [Thorsten Wagener](#) (current Chair of the IUGG Capacity Building & Education Committee; current Member of the IUGG Early Career Scientists Award Committee; IAHS Vice-President 2013-2015) will receive EUR 3.5 million to establish a new Potsdam Research Cluster for Water, Environment and Society, as a global hub for research, innovation and teaching to secure water supplies under changing (climatic) conditions.

The Humboldt Professorship is Germany's most valuable research award, financed by the Federal Ministry of Education and Research. It enables the holder to conduct forward-thinking, long-term research at universities and research institutions, and makes a sustainable contribution to Germany's ability to compete internationally as a location for research.

Congratulations!

9. Obituary

Frances Watkins

It is with deep regret that we inform you of the passing of Frances Watkins. After 27 years dedicated contribution to IAHS and its official journal, Hydrological Sciences Journal (HSJ), Frances Watkins retired in 2021.

Frances oversaw the publication of over two-thirds of HSJ pages and tirelessly mentored HSJ Authors, Associate Editors, and Editors. Frances achieved all this with her characteristic warmth and empathy, making the HSJ Editorial Team feel like a welcoming family. All the IAHS staff, HSJ Editors and Associate Editors, IAHS Officers past and present, and HSJ Authors will miss her dearly.

Christophe Cudenneq, IAHS Secretary General on behalf of the IAHS community

10. Important Deadlines

- 20 June 2022:** [Submit nominations for the 2023 Early Career Scientist Awards.](#)
20 September 2022: [Submit nominations for the 2023 Fellowship Awards.](#)
11 October 2022: [Submit nominations for IUGG Bureau and Finance Committee Members \(2023-2027\).](#)
20 October 2022: [Submit nominations for the 2023 Gold Medal.](#)
11 January 2023: [Submit proposals to host the 29th IUGG General Assembly in 2027.](#)
11 January 2023: [Submit proposals for changes to the Statutes and By-Laws.](#)
31 January 2023: [Submit Draft Resolutions for the 28th IUGG General Assembly in 2023.](#)
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11. Meeting Calendar

This calendar includes meetings which are planned to be organised in 2022 under the umbrella of IUGG, and major conferences of IUGG's partner organisations. Meetings are subject to change due to the COVID-19 pandemic. The calendar is updated regularly and is also available [online](#). If you would like to include the mention of a meeting, or report changes, please contact the [IUGG Secretariat](#).

June

- 1-3, IAG, Zagreb, Croatia, [EUREF 2022 Symposium](#)
- 6-11, ISPRS, Nice, France, [International Society for Photogrammetry and Remote Sensing Congress 2022](#)
- 7-17, IACS, McCarthy AK, USA, [International Summer School in Glaciology](#)
- 12-17, IAVCEI, Heraklion, Greece, [Cities on Volcanoes \(COV11\)](#)
- 13-15, IAG, IUGG, Potsdam, Germany, [1st Workshop on Data Science for GNSS Remote Sensing](#)
- 13-15, IAGA, Bergen, Norway, [8th HEPPA-SOLARIS Meeting](#)
- 13-17, IAG, Milan, Italy, [10th Hotine-Marussi Symposium](#)
- 19-24, AGU, San Juan PR, USA, [2022 Frontiers in Hydrology](#)
- 19-24, IACS, Juneau AK, USA, [International Symposium on Maritime Glaciers \(IGS2022\)](#)
- 19-24, IAMAS, Tel Aviv, Israel, [17th International Conference on Atmospheric Electricity \(ICAE\)](#)

- 20-22, IUGG, IASPEI, ILP, GFZ, Potsdam, Germany, [Cermak7 – VII International Meeting on Terrestrial Heat Flow and the Thermal Structure of the Lithosphere](#)
- 20-23, CODATA, WDS, Seoul, Rep. of Korea, [International Data Week 2022. Data to Improve our World](#)
- 20-24, CMG, Seoul, Rep. of Korea, [33rd IUGG Conference on Mathematical Geophysics \(CMG2022\)](#)
- 27-1 July, IAG, Online, [IGS 2022: Science from Earth to Space](#)

July

- 4-8, IAMAS, IUGG, Thessaloniki, Greece, [International Radiation Symposium \(IRS2022\)](#)
- 4-8, IUGS, UNESCO, Dublin, Ireland, [ReSToRE 2 - Researching Social Theories, Resources, and Environment International Summer School](#)
- 11-15, SEDI, Zurich, Switzerland, [17th Symposium of the Study of the Earth's Deep Interior](#)
- 11-15, IAGA, ICMA, IUGG, SCOSTEP, Sopron, Hungary, [8th Workshop on Vertical Coupling in the Atmosphere-Ionosphere System \(VCAIS\)](#)
- 16-24, COSPAR, IUGG, Athens, Greece, [COSPAR 2022. 44th Scientific Assembly](#)
- 18-22, IGU, Paris, France, [International Geographic Union Centennial Congress](#)
- 20-23, UCPS, Changchun, China, 2nd IUGG Symposium on Planetary Science (IUGG-PS 2022): New Observations and Advances in Solar System
- 31-5 August, IUSS, Glasgow, UK, [22nd World Congress of Soil Science](#)

August

- 1-5, AOGS, Online, [AOGS 19th Annual Meeting](#)
- 1-10, SCAR, Online, [Open Science Conference 2022 - Antarctica in a Changing World](#)
- 2-11, IAU, Busan, Rep. of Korea, [31st International Astronomical Union General Assembly](#)
- 21-26, IACS, IAHS, UNESCO-IHP, WMO, Reykjavík, Iceland, [Cryosphere 2022 – International Symposium on Ice, Snow and Water in a Warming World](#)
- 22-26, EMSEV, IUGG, IAGA, IASPEI, IAVCEI, Taipei, Rep. of China, [Electromagnetic Studies of Earthquakes and Volcanoes 2022 \(EMSEV2022\)](#)
- 28-3 September, IAGA, Trakošćan, Croatia, [17th Castle Meeting - New Trends on Paleo, Rock and Environmental Magnetism](#)
- 29-3 September, IAMG, Nancy, France, [21st Annual Conference of the International Association for Mathematical Geosciences \(IAMG2022\)](#)

IAVCEI Scientific Assembly 2023

- 30 January-3 February 2023, IAVCEI, Rotorua, New Zealand, [IAVCEI Scientific Assembly](#)

IUGG General Assembly 2023

- 11-20 July 2023, IUGG, Berlin, Germany, [IUGG General Assembly 2023](#)

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