

INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

The IUGG Electronic Journal

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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 <u>here</u>. E-Journals may be forwarded to those who will benefit from the information. Your comments are welcome.

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1. IUGG2023 – Editorial

The 28th IUGG General Assembly (IUGG2023), which was held from 11 to 20 July 2023 in Berlin, Germany, was a big success. The IUGG Executive Committee thanks the Local Organising Committee, the Scientific Program Committee, the main organiser and host German Research Centre for Geosciences (GFZ) and its co-organisers: the Helmholtz Association, Geo.X, the Federal Institute for Geosciences and Natural Resources (BGR), the Federal Agency for Cartography and Geodesy (BKG), the GEOMAR Helmholtz Centre for Ocean Research Kiel and the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research (AWI), the professional conference organiser company C-IN, and all others for making the 28th General Assembly, with a record of about 5,000 participants, an outstanding success in the beautiful city of Berlin.

IUGG2023 consisted of three important parts: (i) an open Scientific Assembly, (ii) a meeting of the duly accredited Delegates of the IUGG Member Countries and guests invited in accordance with the By-Laws (referred to as the Council Meeting); and (iii) business meetings of the IUGG, its Associations, and their scientific bodies.

The Scientific Program of the General Assembly consisted of 640 sessions with 3,109 oral and 1,330 poster presentations in total. The program was completed by the Gold Medal Lecture, nine Union Lectures, six special sessions on 'Big Themes'', and four Union Symposia. The Gold Medal and Union Lectures were video recorded and are available <u>here</u>.





Opening Ceremony and Reception





... (second paragraph unchanged). *Comments of the S&BL committee* The Committee warmly welcomes this change and recommends accepting it.

Exhibition Area and Poster Sessions



Early Career Scientists Social Event and Panel Discussion



Valérie Masson-Delmotte, IUGG Gold Medalist



Rakiya A. Babamaaji, IUGG Union Lecturer



Ricarda Winkelmann, IACS Union Lecturer



Max Moorkamp, IAGA Union Lecturer



Ravi Ravishankara, IAMAS Union Lecturer



Philippe Lognonné, IASPEI Union Lecturer



Geoffrey Blewitt, IAG Union Lecturer



Luz Adriana Cuartas, IAHS Union Lecturer



Martin Visbeck, IAPSO Union Lecturer



Robin Matoza, IAVCEI Union Lecturer

Photos: IUGG2023

2. IUGG – National Committee Reports

IUGG CHINA – Quadrennial Report 2019-2023 of the National Committee



This national report was prepared by the Chinese National Committee for IUGG, on the occasion of the 28th IUGG General Assembly which was held in Berlin, Germany, 11 to 20 July 2023.

The report consists of seven parts, which presents the research activities and progress achieved in cryospheric sciences, geodesy, geomagnetism and aeronomy, meteorology and atmospheric sciences, physical ocean

sciences, seismology and Earth's interior physics, volcanology and Earth's interior chemistry during the time period from 2019 to 2023. It is hoped that this national report helps Chinese scientists in exchanging the visions, ideas, and outcomes in the research, development and application of geodesy and geophysics with scientists all over the world.

Sincere thanks goes to all colleagues who contributed to this national report.

The Quadrennial Report 2019-2023 of the Chinese National Committee can be found here.

Jun Xia, President of the Chinese National Committee Yamin Dang, Secretary General of the Chinese National Committee

IUGG HUNGARY – Quadrennial Report 2019-2022 of the National Committee

The Hungarian National Committee for IUGG is pleased to present the Quadrennial Report 2019-2022 to the IUGG community. The report covers the research and development performed by Hungarian universities, research institutes, and government agencies, subdivided by subjects in line with the International Associations of IUGG.



The Quadrennial Report 2019-2022 of the Hungarian National Committee can be found here.

László Bozó, Secretary of the Hungarian National Committee

IUGG INDIA – Quadrennial Report 2019-2023 of the National Committee



This is a report on some of the scientific activities carried out in India in the domains of each of the International Associations, which comprise the IUGG, during the period August 2019 to March 2023. The report is prepared on behalf of the Indian National Science Academy, which is the adhering body for IUGG, and provides a glimpse of some of the work done by Indian scientists on topics related to various aspects of Earth and its space environment, which fall within the domains of the Associations.

The Quadrennial Report 2019-2023 of the Indian National Committee can be found here.

Archana Bhattacharyya, Chairperson of the Indian National Committee

IUGG ROMANIA – Quadrennial Report 2019-2022 of the National Committee

The National Report of the Romanian Committee of Geodesy and Geophysics for the 28th IUGG General Assembly aims to present the main directions and results of newly initiated and/or developed scientific research conducted by Romanian geoscientists. These research efforts are carried out and supported by all International Associations of the Romanian Committee and focus on the interdisciplinary study of the Earth.



The Quadrennial Report 2019-2022 of the Romanian National Committee can be found here.

Constantin Sava, Secretary General of the Romanian National Committee

IUGG RUSSIA – Quadrennial Report 2019-2022 of the National Committee related to IAG and IAMAS



This <u>report</u> of the Geodesy Section of the Russian National Geophysical Committee presents information about results of geodetic research in Russia in 2019-2022.

This <u>report</u> of the Meteorology and Atmospheric Sciences Section of the Russian National Geophysical Committee presents information about results of atmospheric, meteorological and climate research in Russia in

2019-2022. It is based on reports of 10 National Commissions.

Roman Krasnoperov, Secretary of the Russian National Committee

IUGG SLOVAKIA – Quadrennial Report 2019-2022 of the National Committee

On the occasion of the 28th IUGG General Assembly, we have prepared a quadrennial report consisting of separate reports for each of five International Association (IAG, IAGA, IAHS, IAMAS, and IASPEI). This report presents interesting geodetic, gravimetric, geodynamic, geomagnetic, aeronomic, hydrologic and seismic investigations that were carried out in Slovakia between 2019 and 2022. From gravimetry research on volcanoes to ground-based



observations of the geomagnetic field, this report highlights the diverse studies carried out by the Slovak National Committee. In addition, it also includes a list of published papers, defended PhD theses and international research/grant projects.

The Quadrennial Report 2019-2022 of the Slovak National Committee can be found here.

Jozef Kristek, President of the Slovak National Committee

3. IUGG – Symposia Support 2024

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 fraction 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 flavor 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 10,000 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 program 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, by sending a request for IUGG support until **15 October 2023**.

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 ASsG should communicate their recommendation for selection to the IUGG Secretary General before **31 October 2023**.

The allocations will be suggested by the IUGG Secretary General and 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. The decision on IUGG support will be communicated to the ASsG by the IUGG Secretary General in a letter of award as soon as possible but not later than **1 December 2023**. 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 <u>here</u>.

4. IAHS – New International Commission on Human-Water Feedbacks



The IAHS Administrative Plenary decided to establish a new International Commission on Human-Water Feedbacks (ICHWF). The motivation was to create a new IAHS Commission to capitalise on the momentum of the scientific decade Panta Rhei – Change in Hydrology and Society that was closed during the Panta Rhei Symposium in Potsdam, Germany, from 10 to 11 July 2023. Panta Rhei

has created a very active, young and diverse community of natural and social scientists. The new commission will provide a home for this community within IAHS after the end of the scientific decade and will attract new people to IAHS in the field of Human-Water Feedbacks.

The commission will focus on the feedbacks between humans and water over decadal and centennial time scales. The new commission is therefore mainly concerned with changes that involve a two-way coupling between human actions and water quantity and quality. Methods will mainly comprise long-term monitoring in case study areas, use of new data (e.g., text analysis of social media posts) and social sciences approaches (e.g., behavioural experiments) and modelling that explicitly account for feedbacks between water and social processes.

More information is available <u>here</u>.

Jean-Marie Kileshye Onema, IAHS Secretary General

5. IAVCEI/IASPEI – International Conference Paricutin 80: Report

The international conference 'Commemorating the 80th anniversary of Parícutin volcano: Preserving our heritage and preparing for future eruption' took place at Morelia, Michoacán, México, from 19 to 24 February 2023, and was organised by the Universidad Nacional Autónoma de México (UNAM) and la Universidad Michoacana de San Nicolás de Hidalgo (UMSNH).



Photograph of the conference participants, Morelia, 23 February 2023

Parícutin is an iconic volcano that was born on 20 February 1943, in a cornfield in a remote part of the Michoacán State in México. Its eruption lasted nine years and provided insights into monogenetic volcanism that are still of considerable interest today. Nevertheless, this outstanding volcanic heritage is threatened and the preparedness for the next eruption is low.

To contribute to solving these issues, the conference included scientific sessions on: A) New research on monogenetic volcanism, B) Monogenetic volcanism, environment and society, and C) Precursors, monitoring and crisis management. More than 100 participants gathered from Mexico and 12 other countries, including 35 students which received support for their stay expenses. Distinguished researchers from Spain and Iceland, shared lessons of the recent eruptions in Reyjanes Peninsula and La Palma. The Dirección de Literatura (UNAM) and collaborators organised a contest of the best 'birthday letter to Paricutin', among other cultural activities that strongly enriched the event. Pre-, syn-, and post-conference fieldtrips allowed participants to discover the richness of monogenetic volcanic fields in Mexico.

We received overwhelmingly positive feedbacks from this event, and we wish to thank all participants and members of the staff. Check our photo gallery and watch keynote talks <u>here</u>.

The conference was supported through the IUGG Grants Program.

Marie-Noëlle Guilbaud, UNAM, on behalf of the Organising Committee

6. International Decade of Sciences for Sustainable Development (2024-2033)

An <u>International Decade of Sciences for Sustainable Development</u> (2024-2033) has been proclaimed by the United Nations General Assembly on Friday, 25th August 2023, by consensus. The resolution has been proposed by Argentina, Cuba, Equatorial Guinea, Guatemala, Honduras, Hungary, Serbia, South Africa, Spain and Vietnam.

Congratulations to Michel Spiro, Luc Allemmand, and all supporters. As a Founding Union, IUGG has co-organised the International Year of Basic Sciences for Sustainable Development (<u>IYBSSD</u>), which was the precursor of this decade, from its beginning.

7. Editorial Note

Starting this month, the Editorial Board of the IUGG E-Journal consists of the following members: Franz Kuglitsch, Mioara Mandea, Alexander Rudloff (Editor-in-Chief), and Kathy Whaler.

Please welcome our new members Kathy and Mioara on board!

Our heartfelt thanks go to Tom Beer, who has done a great job with the E-Journal for almost 10 years! Chris Rizos, our new President, was on board for the last quadrennium - thank you for that too!

8. Awards and Honours

International Association of Cryospheric Sciences (IACS)

Laura Dietrich (Norway) and Erik Loebel (Germany) are awarded the 2023 Graham Cogley Award.

The award was established in memory of Graham Cogley and recognises excellence in glaciological research by early career scientists. The award is generously sponsored by the Cogley family for a period of 20 years, and is shared between IACS and the International Glaciological Society (IGS).

International Association of Geodesy (IAG)

Georges Balmino (France), IUGG Secretary General (1991-1999), and *Hermann Drewes* (Germany), IAG Secretary General (2007-2019), are awarded the two 2023 IAG Levallois Medals in recognition of distinguished services to IAG and the science of geodesy in general.

Amir Khodabandeh (Australia) is awarded the 2023 Guy Bomford Prize for outstanding contributions to Geodesy.

Radoslaw Zajdel (Poland) and *Matthias Willen* (Germany) are awarded the IAG Young Author's Awards 2021 and 2022.

Jan Martin Brockmann (Germany) is awarded the IAG Best Reviewer Award to recognise the important work of excellent reviewing for the Journal of Geodesy.

International Association of Meteorology and Atmospheric Sciences (IAMAS)

Cheng Sun (China) is awarded the 2023 IAMAS Early Career Medal.

Congratulations!

9. Meeting Calendar

This calendar includes meetings which are planned to be organised in the next three months under the umbrella of IUGG, and major conferences of IUGG's partner organisations. The calendar is updated regularly and is also available <u>online</u>. If you would like to add a meeting, or report changes, please contact the <u>IUGG Secretariat</u>.

September

- 2-7, ISPRS, Cairo, Egypt, ISPRS Geospatial Week 2023
- 3-7, BGR, Berlin, Germany, <u>GeoBerlin 2023. Geosciences Beyond Boundaries Research,</u> <u>Society, Future</u>
- 12-15, IAVCEI, Kiel, Germany, <u>Stronger Together Oceanic Volcanism Workshop</u>
- 20-22, IAG, Yebes, Spain, GGOS Days 2023
- 25-29, IAHS, UNESCO, Dakar, Senegal, <u>Global FRIEND-Water 2023 International</u> <u>Conference</u>

October

- 8-14, AGI, Online, Earth Science Week 2023
- 16-20, IAG, Online, ILRS Technical Workshop
- 16-20, IAG, IAVCEI, Lanzarote, Spain, <u>International Workshop on Geoscience in Active</u> <u>Areas</u>

- 17-19, SCOR, IAPSO, Guayaquil, Ecuador, <u>2023 SCOR Annual Meeting</u>
- 23-26, CODATA, WDS, Salzburg, Austria, International Data Week 2023
- 23-27, WCRP, IUGG, Kigali, Rwanda, WCRP Open Science Conference 2023
- 23-28, IAVCEI, Milos and Santorini, Greece, <u>6th International Workshop of the IAVCEI</u> <u>Commission on Volcano Geology</u>
- 24-27, IAG, IASPEI, Sousse, Tunisia, 20th WEGENER Assembly 2023

November

- 6-10, GEO, Cape Town, South Africa, GEO Week 2023
- 9-10, IAHS, Kathmandu and Dhulikhel, Nepal, <u>International Conference on Mountain</u> <u>Hydrology and Cryosphere</u>
- 9-10, IAHS, Boston MA, USA, <u>13th International Workshop on Statistical Hydrology</u> (STAHY
- 13-17, IAG, PAIGH, Buenos Aires, Argentina, <u>14th International School on "The</u> Determination and Use of the Geoid"
- 14-17, WLF, Florence, Italy, 6th World Landslide Forum
- 20-22, IAG, Jiaozuo, China, <u>International Symposium on Satellite Navigation: Advances</u>, <u>Opportunities and Challenges (ISSN2023)</u>

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