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UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

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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 (XXIX)

Roberto Sulpizio, Secretary General of the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI), 2015-2023



Roberto Sulpizio, IAVCEI Secretary General (2015-2023)

Roberto Sulpizio has spent most of his research career in Italy, first at the University of Pisa and, since 2001, at the University of Bari. He is Associate Fellow of the Istituto Nazionale di Geofisica e Vulcanologia (INGV) and Consiglio Nazionale delle Ricerche (CNR) of Italy. He obtained his PhD in Material Sciences in 2016 at the Universidad Autonoma de San Luis Potosí (UALSP, Mexico). Since 2019 he is full Professor of Geochemistry and Volcanology at the Dipartimento di Scienze della Terra e Geoambientali, University of Bari, Italy.

“I want to be a scientist!”

I was born in Viareggio, Tuscany, the city of the carnival. My father was employed by the telephone company of Italy, while my mother was a housewife occasionally working as tailor (a family tradition!). They had low scholastic levels (no one in my family had previously received a high school diploma), but ever

since I was at elementary school they always encouraged me to study. They told me they had seen something special in my study attitude, but I really do not know how and why! The only thing I know is that I was a curious child, and I loved to stay on my father's knee when he was telling me stories about dinosaurs and volcanoes. One day a thought came to my mind: I want to be a scientist, and study dinosaurs and volcanoes! (Today I have realised the second part of my wish, but who knows, maybe before my retirement I will be able to put together dinosaurs and volcanoes.)

The (gravel) road to research

I got my high school diploma on 12 July 1982. In that summer Italy won the football world championship after 44 years and, on the same day, I enjoyed my first Rolling Stones concert in Turin. Thus, 11 and 12 July 1982 were special days in my life. After serving in the Italian navy for 18 months, I started my studies at the University of Pisa in 1985. At that time the Volcanology group in Pisa was flourishing under the guidance of Franco Barberi, who was my professor for the course on Volcanology. This reinforced my wish to study volcanoes, and I obtained my degree in volcanology in early 1994 under the guidance of Roberto Santacroce, presenting a study on the stratigraphy and eruptive dynamics of the Avellino eruption from Mt. Somma-Vesuvius. I was immediately engaged in the new geological mapping of Somma-Vesuvius, with a 3-year fellowship granted by CNR of Italy, collaborating with Alessandro Sbrana and Raffaello Cioni. Between 1997 and 2001 I spent 1 year at CNRS of Gif sur Yvette, France, with a project on tephrostratigraphy of the central Mediterranean Sea (collaborating with Martine Paterne). In 1998, I was almost out of the research world, being unemployed for some months.



At Vesuvius in the late 1990s. Standing from right to left: Alessandro Sbrana, Roberto Santacroce, Giovanni Zanchetta and 3 students

As occasionally happens in life, my fate as a scientist changed due to an eruption. This was a tragedy for so many people: the Sarno catastrophe in May 1998. More than 150 people died and several villages in the mountain piedmont around Vesuvius were buried and destroyed by volcaniclastic flows triggered by an exceptional period of rain, which affected the volcanic cover of carbonate reliefs downwind of the Vesuvius and Campi Flegrei volcanoes. I was contracted to study the phenomena and to contribute to the hazard assessment and risk evaluation in the area. In 2001, I received a phone call from Piero Dellino and Luigi La Volpe from Bari, who were looking for an expert in Vesuvius and Campi Flegrei stratigraphy. I have not moved out of Bari since. Some years later in 2005, I won a competition for a permanent position as researcher in Volcanology at the University of Bari. The wish of the child was finally granted! After 2005 the story became easier. I became Associate Professor in Volcanology in 2015, and then full Professor in 2019.

The year 2015 was another turning point in my life, because in July I was elected Secretary General of IAVCEI for the 2015-2023 term.

The beloved volcanoes

At the beginning there was Somma-Vesuvius. I spent so many days in studying its stratigraphy, trying to figure out the eruptions that followed one another. I know each single pathway crossing its slopes. It was my training ground, which prepared the path to study other volcanoes in Italy (Campi Flegrei, Aeolian islands) and worldwide (Colima, Popocatepetl, El Chichon, Mexico; Doña Juana, Colombia; Milos, Nisyros and Santorini, Greece; among many others). To study active volcanoes is always

something special, because you are approaching a living thing, and you have to apply all the knowledge of Earth Sciences to a natural system. I was helped in this by my different research experiences. They taught me not to focus only on the single pumice or lava sample but always to insert them in the big picture that each volcano represents in nature. I did geological mapping, stratigraphy, sedimentology, physical volcanology, tephrostratigraphy, hazard mapping, geochemistry, and petrography. I collaborated with paleoclimatologists and Quaternary researchers, following the invaluable rule: if you want to progress in science you have to be involved in all relevant aspects. Some call it the multidisciplinary approach, but I do not like to split the science into disciplines or sectors. You must use your knowledge to add another piece to the puzzle. In recent years, I also used physics-based numerical codes in order to better understand physical processes in volcanoes. Quantification of natural processes is essential in modern Earth Sciences, because it allows the interpretation of natural phenomena from data, making it available for the scientific community and society. This is also what I try to teach to my students.

IAVCEI and IUGG

I discovered IAVCEI and IUGG in the 1990s, when I took my first steps in the research world. I was always fascinated by meetings in which people talked about studies of volcanic systems, because it represented to me a wonderful occasion to see what international research was being carried on. I participated in as many IAVCEI Scientific Assemblies and IUGG General Assemblies as I could. One day Joan Martí, the previous IAVCEI Secretary General, asked me: do you want to be nominated as next IAVCEI Secretary General? I was surprised and honoured by this suggestion, and I am still grateful to him for giving me this opportunity. I served as Secretary General under the presidencies of Don Dingwell and Patrick Allard, and I thank them for all the work we did together. We took an association that was born at the beginning of 20th century, and we transformed it into the modern and vibrant association it is now. The work is not ended, but we will certainly pass on to the next Executive Committee a healthy association with a brilliant future.

I think the series of essays “People on the forefront” serves also to motivate young people to do research. If my story will help some of them, I will drink good wine to celebrate it! It may be a difficult road to follow, but it is the cost to pay to have the privilege to study nature.

2. IUGG – Grants Program 2022-2023: Special Call

On 2 December 2021, the United Nations General Assembly proclaimed the year 2022 as the International Year of Basic Sciences for Sustainable Development ([IYBSSD2022](#)). The IYBSSD 2022 will focus on the links between basic sciences and the UN Sustainable Development Goals ([SDGs](#)). It was proposed by a consortium of international scientific unions and scientific organisations including IUGG, led by the International Union of Pure and Applied Physics ([IUPAP](#)).

The IUGG Bureau has decided to issue a [call for proposals](#) to be dedicated to IYBSSD2022. All proposals should address international cooperation in Earth and space sciences and highlight the importance of basic science for sustainable development. Key scientific priority areas for this call are (i) creation of new knowledge in Earth and space sciences; (ii) dissemination of knowledge, data and information on geoscience topics; (iii) geoscience for sustainable development; (iv) geoscience and policy interface; (v) geoscience education and outreach in developing countries; and (vi) networking of early-career scientists in geoscience.

Typical proposals¹ related to at least one of the priority areas and dedicated to IYBSSD2022 may be for an interdisciplinary conference/ workshop/ symposium addressing the importance of international cooperation in the geosciences, an enhancement of geoscientific research and Earth science education

in member countries as well as less developed countries. Although the range of activities supported is broad, the project proposals should be clearly focussed on fundamental science, its societal importance, and how it can be used to address the SDGs, and their results are expected to provide clear recommendations to politicians and other decision makers at national and regional levels, and to the general public in terms of the urgent and long-term actions to be undertaken. The deliverables of the projects should bring increased visibility of IUGG, its Associations, and any Commissions involved. The proposed activity should be organised before **30 June 2023**.

Proposals should be submitted by IUGG Associations and/or Union Commissions. Any grant application must involve at least two IUGG bodies (Associations and/or Union Commissions). Preference will be given to proposals that are interdisciplinary, especially those involving more than two of the IUGG Associations and Union Commissions as well as regions of Africa, Asia/Oceania, Latin America, and the Middle East. Proposals should be international in scope and involve female scientists, early-career scientists, and scientists from developing countries. The involvement of further [IYBSSD partners](#) is encouraged.

The number of proposals to be funded is not fixed, but depends upon relevance, quality, proposal budget requests, and the total amount of funds available for the Grants Program, which for this call is USD 65,000. A ceiling of USD 20,000 is imposed on all applications. Co-sponsorship from other sources is encouraged. **The deadline for the project proposal submission is 31 July 2022.** Following the call, all proposals are peer-reviewed in open competition by the IUGG Bureau. If necessary, experts may be invited to participate in the review process. Successful applicants will be notified by 1 September 2022, and announced on the IYBSSD2022 website. For funded projects, a report is to be sent to the IUGG Secretariat by 31 October 2023.

Applicants are encouraged to submit their applications electronically. The application form can be obtained from the [IUGG Secretariat](#) by request from Secretaries General of IUGG Associations and Union Commissions.

¹ Note that proposals should be aligned with the [2019 IUGG Resolution #1](#), that seeks to reduce the Carbon Footprint of IUGG activities. This implies that air travel should be kept to a minimum, and priority assigned to travel grants within continental areas that can be serviced by modes of transport other than by air.

3. IAHS – Scientific Assembly 2022: Report

The XIth IAHS Scientific Assembly (IAHS2022) was held in Montpellier, France from 29 May to 3 June 2022 with a very rich [scientific programme](#).

The Scientific Assembly was the opportunity to celebrate the 100-year anniversary of the association, to look forward to the end of the [Panta Rhei](#) decade which will close in 2023, to envisage progress on the 23 UPHs - [Unsolved Problems in Hydrology](#), and to screen developments of [Open Science](#) and support to [Agenda 2030](#) in water-related fields.

There were 600 attendees from 65 countries at this in-person meeting locally organised by a team of scientists from diverse institutions federated by the UNESCO Cat2 Centre ICIREWARD. COVID-19 travel restrictions continued to cause problems for some attendees with about 80 cancellations.

In 2021, the local organising committee decided not to hold the meeting in hybrid mode so as to encourage attendance and better collaboration. This was generally thought to be a good decision especially for the networking opportunity availed to younger members. Members were delighted to meet again and have the opportunity for discussion and interaction.



Participants of IAHS2022 in Montpellier, France



Left to right: Christophe Cudennec (Secretary General IAHS), Abou Amani (Director, Division of Water Sciences UNESCO), Hubert Savenije (2020 Dooge medallist), Francis Chiew (2022 Volker medallist), Eleni Maria Michailidi (2020 Tison awardee), Taikan Oki (2021 Dooge medallist), María José Polo Gómez (2022 Dooge medallist), Berit Arheimer (President IAHS), Günter Blöschl (Past President IAHS), Svenja Fischer (2021 Tison awardee), Johannes Cullmann (Director, Climate and Water Department, WMO – receiving award for Harry Lins 2021 Volker medallist), Alexander Ross (2022 Tison awardee), Attilio Castellarin (Editor in Chief HSJ), Salvatore Grimaldi (Vice President IAHS), Bruno Merz (2020 Volker medallist)

IAHS2022 was the first in-person assembly since the IUGG General Assembly in Montréal, Canada in July 2019. The plenary therefore provided an opportunity to celebrate [IHP IAHS-UNESCO-WMO medallists and Tison award](#) winners for three years (2020-2022). Our congratulations go to them all. Of the [33 SYSTA awards](#) granted to attend the assembly 25 were able to participate. Seven were unable to attend due to visa issues and one withdrew. IAHS organised their flights, accommodation and registrations as well as refunding local expenses up to a maximum total of EUR 2,500. They all spoke highly of the opportunity afforded to them to meet and interact with their peers.

The [Early Career Committee](#) representatives took up their roles during the assembly. IAHS international commissions and working groups, the Editorial Board of Hydrological Sciences Journal and the IAHS Bureau had strategic and operational meetings. WMO and UNESCO took the opportunity to reach out to the scientific community on their latest developments and on science-operational-policy interactions.

Christophe Cudennec, IAHS Secretary General

4. IAVCEI – Scientific Assembly 2023: Announcement



The [IAVCEI Scientific Assembly](#), Rotorua, New Zealand, originally scheduled for 2021, has been postponed to 30 January - 3 February 2023. The impact of COVID-19 and the associated uncertainty of international travel restrictions to New Zealand in the near future have made it impractical and unfeasible to plan for and hold the assembly on the original dates. The local organising committee regret having to reschedule the assembly but are delighted to welcome the international volcanological community to New Zealand in early 2023. We will build upon the progress already made on the scientific and general programme and anticipate that this assembly may be unique in being the first, hopefully, in a post-COVID world.

The Local Organising Committee, on behalf of the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI), invite the global volcanological community to convene in New Zealand for the IAVCEI 2023 Scientific Assembly. The Scientific Assembly will be held within the Rotorua caldera amongst some of New Zealand's iconic volcanic landforms and deposits, and in the heart of one of New Zealand's cultural and touristic centres. We are developing a diverse and inclusive scientific programme involving high profile plenary speakers and a broad suite of symposia themes. Particular attention will be given towards assisting early career researchers to participate in contributing to the conference. A range of exciting and informative scientific field trips will be offered before and after the conference that will show case the world-class volcanic landscapes and deposits that New Zealand and surrounds have to offer. Mid-conference field trips will highlight the volcanic and geothermal geology of the central Taupo Volcanic Zone. The conference will also feature a selection of pre- and post-conference scientific workshops.

Delegates will enjoy the idyllic volcanic setting by Lake Rotorua of the fully integrated conference facilities of the Rotorua Energy Events Centre within the central business area of Rotorua. The venue offers enough space and room configurations to accommodate large plenaries, multiple concurrent technical sessions, poster displays, exhibitions, workshops and meetings. A range of accommodation options to suit all budgets are located within easy access to the events centre. We also welcome delegate families and accompanying persons to participate in the activities on offer.

Put a visit to New Zealand on your travel plans! We are working towards providing a unique and memorable New Zealand experience for all attendees and we are looking forward to being your hosts.

[Registration](#) and the [call for abstracts](#) are now open. The scientific program can be found [here](#).

Abstract submission deadline: **2 September 2022**

Adrian Pittari and Graham Leonard, on behalf of the Local Organising Committee

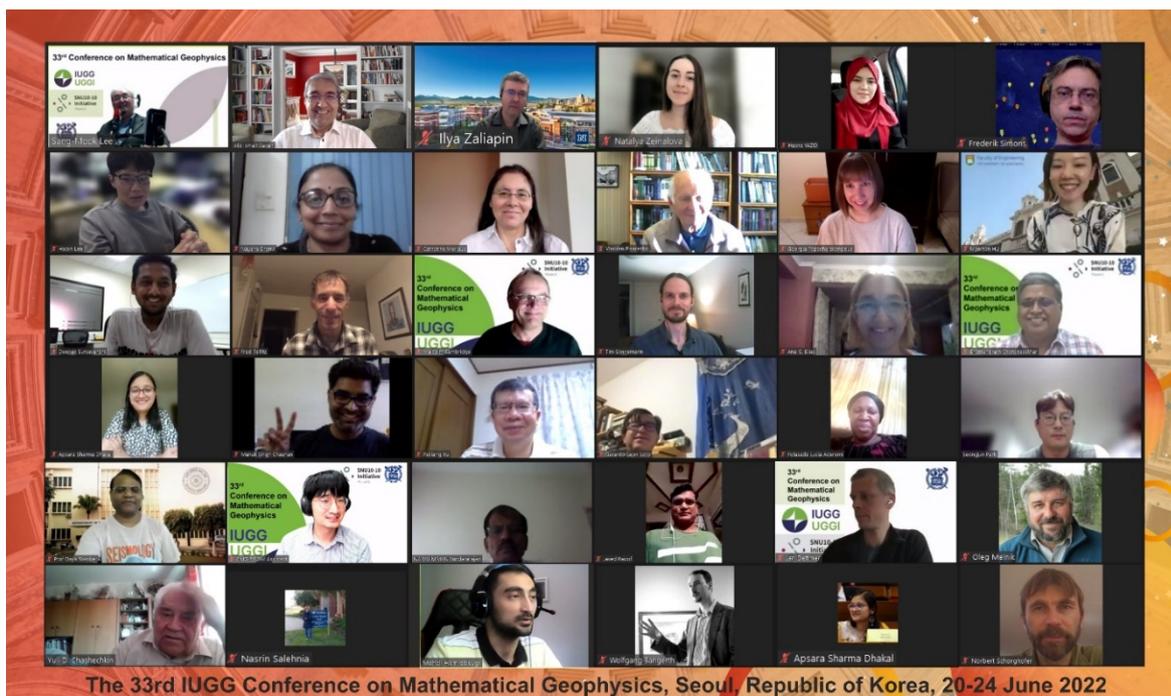
5. CMG – 33rd IUGG Conference on Mathematical Geophysics: Report

The 33rd IUGG Conference on Mathematical Geophysics ([CMG2022](#)) was held in Seoul, Republic of Korea, from 20 to 24 June 2022 in a hybrid format. The conference was organised by the Union Commission on Mathematical Geophysics (CMG) and hosted by the Seoul National University. The theme of the conference was “Geophysics in the World of Modern Mathematics and Artificial Intelligence”. The CMG2022 [Program](#) covered several important topics related to data sciences, AI, machine learning, geophysical fluid dynamics, mathematics for natural hazards and climate science, and geophysical inversions. More than 140 people from 33 countries attended the conference.

Two keynote lectures were delivered by Frederik J. Simons of Princeton University, who received the 2022 Keilis-Borok Medal for his outstanding contributions to mathematical geophysics and development of cutting-edge mathematical methods in geoscience data analysis, and Kwang-Yul Kim of Seoul National University. A [panel](#) of eminent experts in geosciences, physics, and mathematics discussed how basic science, mathematics, science education and policymaking should be integrated so as to contribute to solving fundamental problems of nature and society as well as challenging issues of sustainability. The panel raised awareness about *the 2022 United Nations International Year of Basic Science for Sustainable Development* in promoting the basic sciences.



The crystal Vladimir Keilis-Borok Medal 2022



Conference group photo

Over five days 14 invited speakers from Czech Republic, France, Hungary, Oman, Russia, Rwanda, Saudi Arabia, Switzerland, UK, and USA presented cutting-edge mathematical applications to geosciences. In addition, participants enjoyed more than 40 contributed presentations and discussed challenging issues in mathematical geophysics. The conference was preceded by a two-day workshop “Geodynamic Modeling with the Advanced Solver for Problems in Earth Convection (ASPECT)”. The conference was highlighted in [local media](#). More information on the conference can be found [here](#).

Alik Ismail-Zadeh, Sang-Mook Lee and Ilya Zaliapin, CMG2022 organisers

6. IYBSSD2022 – Opening Ceremony



The Opening Ceremony of the International Year of Basic Sciences for Sustainable Development ([IYBSSD2022](#)), will be held at the UNESCO Headquarters in Paris, France on 8 July 2022.

[On-site](#) and [online](#) participation is free of charge and everyone is welcome to attend. The program is available [here](#).

7. ISC – Call for Nominations: Scientific Committee of the Urban Health and Wellbeing Programme

The International Science Council ([ISC](#)) and its Affiliated Body, Urban Health and Wellbeing ([UHWB](#)), call for nominations to serve on the [Scientific Committee of the Urban Health and Wellbeing Programme](#).



**International
Science Council**

The Scientific Committee will define the strategic and thematic priorities of the UHWB programme within the frame of its new science plan 2021-2025, as it continues its work in advancing new urban sciences and systems approaches for a better understanding of cities as complex systems and of how urban environments impact health and wellbeing.

Members, including the IUGG, are invited to submit the nomination [form](#) by 29 July 2022. If you are interested in being nominated, please contact the [IUGG Secretariat](#) by **22 July 2022**.

8. Awards and Honours

International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

The 2022 IAVCEI Award for Volcanic Surveillance and Crisis Management (VSCM) was awarded to the Seismic Research Centre of the University of the West Indies (SRC-UWI). The award was presented to the Director of SRC, Dr. Erouscilla Joseph, during the closing ceremony of the 11th conference “Cities on Volcanoes” which was organised in Heraklion, Greece from 12 to 17 June 2022. The SRC-UWI, whose headquarters are located in Trinidad and Tobago, received the award “for its remarkable overall contributions in monitoring and responding to volcano-seismic crises in the Caribbean island arc system over the past 70 years, in a context of limited available resources, noticeably during the Soufriere Hills eruption in Monserrat (1995-2013) then the 2020-2021 eruptive crisis at La Soufriere of St Vincent.” Congratulations from the international volcano community!

International Science Council (ISC)

The ISC announced the creation of a [Fellowship](#) and appointment of [66 Foundation Fellows](#) who are recognised for their outstanding contributions to promoting science as a global public good. The Fellowship is the highest honour that can be conferred on an individual by the ISC.

Among the Foundation Fellows are the following scientists who have been active in IUGG: **Alik Ismail-Zadeh** (Germany), IUGG Secretary General (2007-2019), and **Gordon McBean** (Canada), IUGG Bureau Member (1987-1995).

Congratulations!

9. Important IUGG Deadlines

- 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.](#)
-

10. 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](#).

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](#)
- 8, IYBSSD2022, UNESCO, Paris, France, [Opening Ceremony of the International Year of Basic Sciences for Sustainable Development](#)
- 11-15, IAGA, ICMA, IUGG, SCOSTEP, Sopron, Hungary, [8th Workshop on Vertical Coupling in the Atmosphere-Ionosphere System \(VCAIS\)](#)
- 11-15, SEDI, Zurich, Switzerland, [17th Symposium of the Study of the Earth's Deep Interior](#)
- 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 \(IAMG2022\)](#)

September

- 4-9, IASPEI, IUGG, Bucharest, Romania, [3rd European Conference on Earthquake Engineering and Seismology](#). A joint event of the 17th European Conference on Earthquake

- Engineering and the 38th General Assembly of the European Seismological Commission (ESC)
- 5-8, IAG, IAGA, GFZ, Potsdam, Germany, [2nd International Symposium of Commission 4: Positioning and Applications](#)
 - 11-15, IACS, IUGG, IGU, Innsbruck, Austria, [International Mountain Conference 2022](#)
 - 11-17, IAGA, Cesme, Turkey, [25th International Electromagnetic Induction Workshops of IAGA Division VI \(EMIW2022\)](#)
 - 12-16, IAG, Austin TX, USA, [Gravity, Geoid, and Height Systems 2022 \(GGHS2022\)](#)
 - 17-20, IAHS, Chia, Sardinia, Italy, [12th International Workshop on Statistical Hydrology \(STAHY2022\)](#)
 - 19-25, IUGG, Berlin and other cities, Germany, [100th Anniversary of German Geophysical Society \(DGG\)](#)
 - 20-21, IUGG, Berlin, Germany, IUGG Bureau Meeting
 - 25-29, IUGG, IAMAS, SCOR, WCRP, Cape Town, South Africa, [SOLAS Open Science Conference 2022](#)
 - 26-30, IUGG, IAGA, L'Aquila, Italy, [International School of Space Science – Course on Radiation belt dynamics and remote sensing of the Earth’s plasmasphere](#)

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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Editors: Tom Beer, Franz Kuglitsch, Chris Rizos, and Alexander Rudloff (Editor-in-Chief).

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