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1. New year Greetings from IUGS
IUGS wishes Happy New Year 2024 to all.

Figure 1. New Year Greetings.
2. News from International Geological Congress 2024

Figure 2. IGC 2024 Newsletter

To know more open the link
https://www.igc2024korea.org/

3. Hutchison Young Scientists Foundation travel awards
IUGS Secretary General has issued a call for applications for Hutchison Young Scientists Foundation travel awards for young scientists to attend the 37th International Geological Congress in Busan, Korea, 25-31 August 2024. To know more open the link below:
https://www.iugs.org/
https://www.iugs.org/_files/ugd/f1fc07_3ad62184e2be4321ad7b2a59b5180964.pdf?index=true
4. **News from Episodes**

December issue of Episodes (Vol. 46, No.4) has been published and uploaded at Homepage([https://www.episodes.org/main.html](https://www.episodes.org/main.html)).

This issue carries 8 Articles, 1 Communication of IUGS Geological Standards, 2 Report, 2 History of Geology, 1 Obituary and 1 Editorial.

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**Figure 3.** December issue of Episodes.
CiteScore
According to the latest data from Elsevier's CiteScore Tracker (Last updated on November 8, 2023), the CiteScore increased from 5.3 to 5.6, and the percentile maintained Q1 (Fig. 1). Additionally, in the field of Earth and Planetary Sciences (General Earth and Planetary Sciences), the journal ranks 38th out of 192 academic journals.

![CiteScore Increase](image)

**Figure 4. CiteScore (As of November 8, 2023).**

Special issues of next year
Next year, we have prepared two special issues for Volume 47 (no. 3 and 4) to enhance the scholarly value of our journal. For the September issue (Vol.47, no. 3), in conjunction with the 37th International Geological Congress (IGC 2024) to be held in Korea, we plan to publish a special issue titled "Recent Advances in Korean Geosciences". This issue will showcase the latest research conducted by Korean geologists, fostering significant academic exchange between Korea and other countries. The Guest Editors-in-Chief for this issue are Jinho Ahn and Jin-Yong Lee, while the Guest Editors include Seong-Pil Kim, Chungwan Lim, Kideok Kwon, and Sung Kyung Hong.

In the December issue (Vol.47, no. 4), we will release a special issue on "International Geoscience Education Strategies: Innovations, Collaborations, and Future Directions." The Guest Editor for this issue is Susana Alaniz, with Guest Editors Sandra Villacorta and Antoni Camprubi. This special issue aims to bring together international perspectives, fostering collaboration and sharing of best practices in geoscience education, ultimately contributing to the advancement of the field.

To know more, open the link below
https://www.episodes.org/content/about/special_issues.html#n
5. News from the IUGS Initiative on Forensic Geology (IFG)

Call for Abstracts, 37th IGC, South Korea
The ‘37th International Geological Congress’, 25-31 August 2024, Busan, South Korea includes an IUGS-IFG session on forensic geology. The deadline for abstract submission is 15 February 2024. Potential attendees are encouraged to contact IUGS-IFG (Dr Laurance Donnelly, Prof Duncan Pirrie, Prof Robert Fitzpatrick and Dr Alastair Ruffell).

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https://www.igc2024korea.org/
https://www.igc2024korea.org/auth/login

Federal Forensic Magazine, Clean Gold Programme Brazil
Issue 52 of ‘Federal Forensics’ magazine features a special report on the Clean Gold Programme. The includes the work of federal forensic experts in tracing the origin of gold from seizures and mines, and including the National Association of Federal Forensic Experts of Brazil. Antonio Velho talks about the career of federal criminal expert Fábio Augusto da Silva Salvador, former Technical Scientific Director of the Brazilian Federal Police and IUGS-IFG Co-officer for Latin America.

https://apcf.org.br/cat/revistas/

Forensic Geology in Sweden
On 15 December 2023, IUGS-IFG Secretary, Prof Duncan Pirrie, gave a presentation on forensic geology to the Geological Survey of Sweden.

https://geoforense.com/2024/01/the-iugs-initiative-on-forensic-geology-visits-sweden/

Forensic Geology in Chile
Kristian Agurto-Velásquez (IUGS-IFG, Geoforensic International Network), forensic geology PhD student, attended the 16th Chilean Geological Congress and gave a paper on forensic geology, to assist with the development of forensic geology in Chile.

Questionnaires on Geophysical Methods Applied in Criminal Investigation
The FBI Laboratory conducted a web-based questionnaire to gather information on the use of metal detectors and advanced geophysical methods (such as ground penetrating radar and electrical resistivity) to search for hidden or buried targets (clandestine
Graves, weapons, etc.) in criminal investigations. The intent of these questionnaires was to better understand how geophysical methods are deployed for law enforcement investigations and how effective the method was under case specific conditions. The questionnaires are anonymized and providing personal information is optional.

Geophysical Service Providers in Support of Law Enforcement:
https://govsurvey.us/survey/808748715106959361

Law Enforcement use of Geophysical Methods:
https://govsurvey.us/survey/806500985499025409

Metal Detectors use in Crime Scene Investigations:
https://govsurvey.us/survey/809910645015576577

INTEPOL
IUGS-IFG Chair (Dr Laurance Donnelly), with support from Ricardo Moraes (IUGS-IFG Illegal Mining Adviser), was invited to INTERPOL’s headquarters, in Lyon, France to discuss crimes associated with illegal mining, and the minerals and metals industries and the role of forensic geology.

European Commission, Critical Raw Materials Week, 13-17 November 2023, Brussels, Belgium
IUGS-IFG Chair, (Dr Laurance Donnelly) co-organised a workshop at the European Commission, Critical Raw Materials Week, on 14 November 2023, in Brussels, Belgium, in conjunction with the International Raw Materials Observatory (Intraw) and European Federation of Geologists (EFG). This workshop focused on, ‘Responsible Sourcing and Traceability of Critical Raw Materials (CRM)’. The IUGS-IFG presentations provided an overview of how geologists, working together with international law enforcement, have an increasing role to help detect and deter crimes such as falsified documents of origin, theft, extortion, fakery, substitution, adulteration, and other fraud. He also presented on methods for provenance determination (predictive geolocation) and traceability are also presented to verify that such critical raw materials are responsibly sourced. Presentations were also provided by the Responsible Minerals Initiative (RMI), Mine Spider, AfricaMaVal, America Geosciences Institute (AGI) and International peace Information Service (IPS).

Workshop: Responsible Sourcing and Traceability of CRM - 14 November 2023 - Intraw.

Preliminary Collaboration with OCED
IUGS-IFG initiated preliminary discussions with the Organisation for Economic Co-operation and Development (OECD) regarding collaboration in illegal mining and conflict minerals.
https://www.oecd.org/daf/inv/mne/oecdstandardstakingupinfightagainstconflictmineral-s.htm

23rd Triennial Meeting of the International Association of Forensic Sciences (IAFS), 20-24 November 2023
The 23rd triennial meeting of the IAFS will be held at the International Convention Centre in Sydney, Australia, 20-24 November 2023. Many of the world’s leading investigators in the field of forensic science participated to inspire over 1,500 attendees from across the world.


**Brazilian Air Force and Information on Mining Crime**
The Brazilian Air Force (FAB) is reported to have reported to hold information on illegal flights associated with illegal gold mining and other crimes, but not shared with the Federal Police and Federal Public Ministry.


**Forensic Geology in Germany**
IUGS-IFG was invited to Kiel University, Germany, to provide an introductory presentation on forensic geology and to initiate forensic geology in Germany, including crime scene examination, geological trace evidence, ground searches for burials, and mining, minerals and metals crime.

**ASTM International and Forensic Geology**
A standard by ASTM, on forensic geology, provides information on the solving of crime using geological materials. Further information can be accessed on the link below called, 'It's Sedimentary: How Forensic Geology is Helping to Break the Case.'


![Figure 6. ASTM International Standardisation and Forensic Geology (source: ASTM).](image)

**Joint Event, IUGS-IFG and the Geological Society of London, Forensic Geoscience Group (GSL-FFG)**
On 4-5 December 2023, IUGS-IFG and GSL-FFG held a joint event at the headquarters of the Geological Society of London, called, ‘New Horizons in Forensic Geoscience: The Bedrock of
International Security in Minerals, Mining, Metals, Murders and the Missing’. Approximately 70 delegates attended in person, from 14 countries. The principal themes included: search operations; minerals, metals and mining crime; human taphonomy and burials; and forensic geology contributing to the criminal justice system. Key note presentations were given by Murray Haynes (UK Police National Search Adviser), Fabio Salvador (Brazilian Federal Police and Clean Gold Program) and Roelof-Jan Oostra (Netherland Taphonomic Facility). An evening public lecture was given by Jodi Webb (Federal Bureau of Investigation) on, ‘Ground Search and Geological Trace Evidence in the US System’. 


Figure 7. (Top left) Joint IUGS-IFG and GSL-FGG event on forensic geology, Geological Society of London. (Top right) Laurance Donnelly (IUGS-IFG, Chair), presenting Fabio Salvador (IUGS-IFG Co-officer for Latin America, Brazilian Federal Police and Clean Gold Program) with the Raymond Murray Award. (Bottom left), the Raymond Murray Award. (Bottom right), selected members of the IUGS-IFG committee, at the Annual General Meeting, held on 5 December at the headquarters of the Geological Society of London.
**Prof Lorna Dawson Awarded the RSE James Hutton Medal**

In November 2023, Prof Lorna Dawson, IUGS-IFG Treasurer was awarded the, 'RSE James Hutton Medal in Earth and Environmental Sciences'. This medal recognises exceptional achievements in the earth and environmental sciences by a senior career researcher. This award meets with the Society's strategic objectives of recognising and rewarding excellence in, and increasing public understanding of, the earth and environmental sciences.

[https://rse.org.uk/outstanding-achievement-recognised-by-2023-rse-medals/](https://rse.org.uk/outstanding-achievement-recognised-by-2023-rse-medals/)

**Figure 8.** Photo from ceremony in November. Credit Stewart Atwood photography.

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6. **New from INHIGEO**

**INHIGEO Anniversary contributions**

**Occasion: Betim Paes Leme – Born 140 years ago**  
**Title:** Researching the Earth from Brazil: Alberto Betim Paes Leme (1883-1938)  
**Author:** Silvia Figueirôa (BRAZIL)  
The Brazilian geoscientist Alberto Betim Paes Leme was a prominent figure during his lifetime, both at national and international levels and dedicated himself to research in the field of spectral analysis applied to mineralogy. The spectrographic technique traditionally used, known as the ‘total energy technique,’ was modified and described in detail by him in 1918. To know more open the link below: [http://www.inhigeo.com/anniversaries.html](http://www.inhigeo.com/anniversaries.html)

**Occasion: Published 200 years ago**  
**Title:** Alexandre Brongniart’s mémoire sur les terrains de sédiment supérieurs calcaréo-trappéens du Vicentin (1823)  
**Author:** Kennard B. Bork (USA)  
Brongniart’s 1823 Mémoire on the correlative relations between the Tertiary rocks of the low-lying Paris Basin and the alpine heights of Northern Italy advanced appreciation of fossils as time markers, negated a number of then-prevalent ideas about how the Earth works and demonstrated the power of field observations to lead to noteworthy large-scale theories.

Please open the link to know more: [http://www.inhigeo.com/anniversaries.html](http://www.inhigeo.com/anniversaries.html)

**Occasion: Herschel observes geology 200 years ago**  
**Title:** John Herschel and his geologist's hammer: 1824 European Tour  
**Author:** Gregory A. Good (USA)
Two hundred years ago, in the 1820s, geology was taking off. In France, Italy, Britain, and elsewhere, researchers mapped mineral types, described fossils, and considered Earth’s history as revealed by the rocks. John Herschel, one of England’s foremost mathematicians since university had plunged into the chemistry of minerals and paid special attention to the interaction of polarized light with crystals. When he set his sights on the Alps, the collection, description, and analysis of minerals and crystals was high on his list of desiderata.

Please open the link to know more: http://www.inhigeo.com/anniversaries.html

Award to INHIGEO member
Geological Society of America – October 2023

Mary C. Rabbitt History and Philosophy of Geology Annual Award
INHIGEO member Claudine Cohen (L’école des Hautes Études en Sciences, Paris, France) was the recipient for her contribution to the History of Geology of the 2023 Mary C. Rabbitt History and Philosophy Award of the Geological Society of America, at the annual meeting held in Pittsburgh in October. The Award is presented annually by the Geological Society of America’s History and Philosophy of Geology Division to an individual for exceptional scholarly contributions of fundamental importance to our understanding of the history of the geological sciences and candidates are from a worldwide pool.

See:https://www.geosociety.org/GSA/About/awards/Division_Awards/GSA/Awards/Division.aspx

Figure 9. Claudine receiving the award from David Spanagel at the recent GSA meeting held in Pittsburgh (USA).
6th Argentinian Congress and 1st Latin American Congress of History of Geology / VI Congreso Argentino y I Congreso Latinoamericano de Historia de la Geología

The 6th Argentinian Congress and 1st Latin American Congress of History of Geology, sponsored by IUGS INHIGEO, took place on 5–6 October 2023 in San Miguel de Tucumán, Argentina. The conference themes included events, personalities and institutions related to the history of the Earth sciences in Latin America, from the pre-Hispanic and colonial periods until recent times. The aim of the meeting was to reinforce mutual knowledge and collaboration between geosciences and humanities. **27 presentations** highlighted research covering a broad geographical range from Argentina, Bolivia, Brazil, Chile, Mexico and Peru.

![Participants at the congress venue Centro Cultural Alberto Rougés in San Miguel de Tucumán (Argentina) and the cover of the extended abstracts volume.](image)

**Figure 10.** Participants at the congress venue Centro Cultural Alberto Rougés in San Miguel de Tucumán (Argentina) and the cover of the extended abstracts volume.

7. **Task Group on Igneous rocks workshop in Rome**

Last September 22-28, the Task Group on Igneous Rocks (TGIR) met in Rome for a workshop. The activities were split in a three-day fieldwork activity and two-day workshop at Sapienza University of Rome.
The field activity was organized essentially to touch with hands the difficulties related to name and classify igneous rocks, by investigating central-southern Italy Quaternary volcanoes, including very famous (e.g., Mt. Vesuvius, Phlegraean Fields, Alban Hills, Vulsini Mts.) and poorly known (e.g., San Venanzo and Polino) cases. Only considering the field relations with country rocks, as well as the size and the variations in the petrography and volcanological facies of the many investigated outcrops it has been possible to organize the activities held in the last two days in Sapienza University and planning future actions to improve the existing IUGS classification on igneous rocks.

After the three-day fieldwork, the TGIR members spent two days at Sapienza University in carefully reading page by page and word by word the 2002 edition of the IUGS book on the classification and nomenclature of igneous rocks (Le Maitre ed.). The most important changes, only drafted during the two-day activities, saw the definition of alkalinity of igneous rocks, with the urgent need in proposing a precise statement for sodic/potassic/ultrapotassic terms, as well as the distinction between tholeiitic and calc-alkaline concepts, never affronted by the past IUGS commissions. The necessity to revise the classification of high-MgO volcanic rock compositions, as well as the very puzzling field of ultrabasic and/or ultra-alkaline compositions (e.g., kimberlites, lamproites, lamprophyres, kamafugites, and so on) were other major subjects of discussion. In addition, a new classification and definition of carbonatitic rock will certainly be one of key change in the third edition of the book. Last, the addition of a new section devoted on extraterrestrial rocks will certainly help reinforcing the collaboration between the communities of petrologists working on meteorites and terrestrial samples.

Figure 11. Some of the TGIR member visiting the monumental hall of the Royal Mineralogical Museum of Federico II University in Naples (Italy)
8. News from the IUGS Commission on Geoscience Education (COGE):
The IUGS Commission on Geoscience Education (COGE) has been working hard “behind the scenes” this November, planning for 2024 and beyond. We are currently drafting the 2024 Working Plan Strategy as a part of our 4-Year Plan (2022-2025), that includes a report of membership, programs, budgets, and more.

Welcome to a new GEFO, Nestor Salinas!
We are excited to announce the acceptance of a new Geoscience Education Field Officer (GEFO), Nestor Damian Salinas Franco (Paraguay). Nestor is a geoscience education researcher pursuing a PhD in Higher Education Management at the University of Asunción. In addition to geoscience education, Nestor has published several scientific articles and presentations on urban sedimentation and environment, petrology, geomorphology, and geoparks. He is also a Logistics Coordinator for the Latin American Chapter of IGEO.
Welcome, Nestor! For more information about the GEFO Program, visit: https://iugscoge.org/geoscience-education-field-officer-program/

Social Media and Website Updates!
COGE’s Social Media Team is publishing more content every week, with interviews with COGE members and excerpts from our exclusive interview with Dr. Hector Lacreu, the inaugural Chris King Medal winner! We’re also asking fun questions like, “What Book Got You into Geoscience?”. As always, please Like, Follow, and Share our social media accounts so that we can collectively grow global geoscience education! Facebook Page, Facebook Profile, Instagram Profile, LinkedIn Account, X (Twitter) Account, YouTube Account. We’ve also updated our Education Resources page on our website to include four Geoscience Education categories: Organizations, Journals, English Resources, and Non-English Resources. The Resources lists include websites, YouTube channels, and free online textbooks to serve all your geoscience education needs as an educator or student!

COGE at AGU23
COGE Chair Sandra Villacorta and esteemed commissioner Sharon Locke (International Relations Committee) attended the American Geophysical Union 2023 Fall Meeting. They showcased their research at a Scientific Session and drafted ideas for improved global geoscience education collaboration at a Town Hall, co-sponsored by COGE and the International Geoscience Education Organisation (IGEO).
Welcome to a new Regular Member, Agogo Abraham!

We are delighted to welcome our newest Regular Member, Agogo Abraham from Nigeria! Agogo is a graduate of the Nasarawa State University, Keffi, Nigeria. He currently leads as the Executive Director at Grow Earth Science Interest In Nigeria and Africa and serves as Regional Manager at Geologize LTD, mentoring students and fostering career development in geoscience. A member of various professional geoscience organizations, Agogo’s expertise spans mining, medical geology, and engineering. His ambition with COGE is to elevate geoscience education cross Africa. Let’s give Agogo a warm welcome! For more information about COGE’s members, visit: [https://iugscoge.org/coge-board-and-members/](https://iugscoge.org/coge-board-and-members/).

Figure 13. Photo of Agogo Abraham.
New Publication on Geoscience Education

COGE and UNAM's Geosciences Center are proud to announce the publication of the December 2023 edition of "Enseñanza y Comunicación de las Geociencias," a Spanish-language journal for educators. This edition features articles on innovative geoscience teaching in Latin America, including an educational excursion to geological parks and UNESCO's strategies for addressing inequality in geography. Accessible as an open-source, it's a valuable resource for anyone interested in Geosciences education. We extend our thanks to our contributors and invite readers to explore this inspiring issue at: http://encomunicacionct.geociencias.unam.mx/vol-2-num-2-diciembre-2023/

Happy 2024 from the IUGS Commission on Geoscience Education (COGE)! While 2023 was a year of growth and productivity for us, we were happy to take a well-deserved break in December and early January. Even with the rest, we have been working on our 2024 Working Plan Strategy, our 2023 Annual Report, and our contribution to the 2023 IUGS Annual Report. Our first quarterly meeting (virtual) in 2024 was on January 12, where we discussed plans for the year. Stay tuned next month for updates from the GEFO Program, International Relations Committee, Publications Committee, Chris King Medal Committee, and the Social Media Committee. Ciao!

Figure 14. New year greetings from COGE
9. IUGS set up booth at the exhibition of the AGU 2023

The 2023 Annual Meeting of American Geophysical Union (AGU 2023) was held in San Francisco, CA on December 11-15, 2023. IUGS Secretariat set up a booth at the exhibition of the Meeting to promote the scientific achievements of IUGS and enhance the international influence of the Union. IUGS publications, including The First 100 IUGS Geological Heritage Sites and Manual of Standard Methods for Establishing the Global Geochemical Reference Network, IGCP projects, IUGS big science program Deep-time Digital Earth, and the latest version of the ICS Chronostratigraphic Chart attracted a number of meeting participants. The 37th International Geological Congress was also promoted at the booth. IUGS Councillor Prof. Jennifer McKinley also visited the IUGS booth and promoted IUGS activities at the booth.

Figure 15. (Left) Director of IUGS Secretariat Ma Yongzheng talked with meeting participants at the IUGS booth; (Right) IUGS Councillor Prof. Jennifer McKinley (Middle) visited the IUGS booth
10. News from the IUGS-Commission on Geoethics

The call for abstracts is open for the sessions on geoethics co-sponsored by the IUGS Commission on Geoethics and the IAPG – International Association for Promoting Geoethics at the scientific congresses listed below.

**International Geological Congress (IGC 2024)**

Busan (Republic of Korea), 25-31 August 2024

Theme T39 "Geoethics and Societal Relevance of Geosciences"

**Session 1 "Geoethics at the heart of all geoscience: serving the public good"** (Convener: Silvia Peppoloni)

Session descriptions and links to abstract submission at: https://www.geoethics.org/post/geoethics-37th-igc-2024

Deadline for abstract submission: 16 February 2024, 24:00 (KST, UTC/GMT+09)

**Geoethics at the XVI Chilean Geological Congress 2023**

Silvia Peppoloni, Chair of the IUGS Commission on Geoethics, delivered the inaugural plenary lecture at the XVI Chilean Geological Congress in Santiago, Chile, on November 26, 2023 (fig. 1). This momentous occasion provided a significant platform to discuss geoethics and provoke reflections on the future of geosciences through a geoethical lens, reaching a wide and engaged audience.

![Figure 16. A moment from the inaugural plenary lecture delivered by Silvia Peppoloni at the XVI Chilean Geological Congress.](image)
At the same congress, Silvia Peppoloni and Giuseppe Di Capua were speakers at the workshop titled 'What is Geoethics,' held on November 26, 2023 (fig. 2). This workshop was organized by the Geoethics Group/IAPG-Chile of the Chilean Geological Society (SGCh).

![Participants to the workshop on geoethics at the XVI Chilean Geological Congress.](image)

**Figure 17.** – Participants to the workshop on geoethics at the XVI Chilean Geological Congress.

**I Latin American Symposium on Geoethics 2024**

The Latin American network of sections of the International Association for Promoting Geoethics (IAPG) cordially invites the scientific community to participate in the I Latin American Symposium on Geoethics (fig. 3). The symposium will focus on research and reflections concerning behaviors and practices related to the interaction between human activities and the Earth system, aligning with the principles and values advocated by geoethics. This event aims to attract professionals and researchers from Earth Sciences, related disciplines, as well as Social and Human Sciences. The official language of the symposium is Spanish. Considering the regional context of the event, contributions in Portuguese and English are also welcome.

**Venue:** Auditorio del Colegio de Ingenieros del Perú - CD Lima, San Isidro.

**Type of presentations:** onsite and virtual.

More information in the following circular: [https://www.geoethics.org/_files/ugd/5195a5_d631153ba5f14e8199c5b43f4e1ef3f7.pdf](https://www.geoethics.org/_files/ugd/5195a5_d631153ba5f14e8199c5b43f4e1ef3f7.pdf)
11. News from the Commission on Global Geochemical Baslines

Initiative on Forensic Geology invited by CGGB to Sweden

Anna Ladenberger (CGGB 1st Co-chair) invited the Secretary of the IUGS Initiative on Forensic Geology (IFG), Prof. Duncan Pirrie, to visit the Geological Survey of Sweden (SGU) in Uppsala, Sweden, and to give a lecture on the 15th December 2023 about the applications of geological methods in crime investigations. Prof. Pirrie showed real cases to illustrate the various methods used in investigations, such as using soil as trace evidence, geolocation technologies, and provenance of rocks (Fig. 1). He also presented the current Special Project about mining crime, which the IFG is carrying out in collaboration with the Finnish Geological Survey and other partners. The topic involves among others mineral theft, mineral exploration frauds, mineral substitutions, trade of fake gemstones and fossils. The main goal of the project is to evaluate the current global scale of mining crime and assess geological methodologies and strategies, which may aid and assist law enforcement agencies in the detection, prevention,
management and mitigation of mining crime. The lecture was very well attended, both in person and online by more than 30 participants, including forensic doctors and researchers as well as the chair of the International Medical Geology Association Prof. Chaosheng Zhang from the University of Galway (Fig. 2). The lecture was followed by a discussion on how to establish the Swedish network for the forensic geology initiative, and how to connect with other IUGS Commissions.

**Figure 19.** Duncan Pirrie explains the principles of forensic geolocation. Photograph by Chaosheng Zhang (Left); Lecture on forensic geology delivered at SGU in Uppsala. Photograph by Chaosheng Zhang (Right)

Over 100 participants from Latin America, the Caribbean, Europe, and Africa participated in the webinar "Geochemical Mapping in Latin America and the Caribbean - Geochemical Knowledge for Societal Use", which was organised by the IUGS Commission on Global Geochemical Baselines (IUGS-CGGB) and the ASGMI (Asociación de Servicios de Geología y Minería Iberoamericanos) Geochemistry Expert Group (ASGMI-GE GEOQ) on the 8th of November 2023.

**Figure 20.** Global Geochemistry webinar
The webinar was opened by Professor John Ludden (IUGS President), with short introductory talks by Flor de Maria Harper (ASGMI President), Anna Ladenberger (IUGS-CGGB 1st Co-chair), Philippe Négrel (Chair of the EuroGeoSurveys Geochemistry Expert Group), Maria João Batista (ASGMI-GE GEOQ Coordinator), and Ozlem Adiyaman Lopez (UNESCO – IGCP- Earth Sciences and Geoparks Section).

Gloria Prieto (IUGS-CGGB 1st Deputy-chair) presented an overview of the recently published "Manual of Standard Methods for Establishing the Global Geochemical Reference Network", which contains standardised methods and procedures that should be employed across the land surface of the Earth to map the distribution of chemical elements in various sample types.

Maria Joao Batista (ASGMI-GE GEOQ Coordinator) presented the "Manual of Geochemical Methodologies of Ibero-American Countries - Geochemical Information for Society", which summarises the current state of progress of geochemical mapping programmes in Ibero-America and provides details of the methodologies used to produce geochemical data in Ibero-American countries.

Representatives of the Geological Surveys of Argentina (Angel Sebastian Jara), Brazil (João Larizzatti), Chile (Juan Pablo Lacassie), Ecuador (Fernanda Andrade/Pablo Cabacango), Peru (Cesar de La Cruz Poma), and Spain (Ivan Martin) presented the progress of geochemical mapping in their countries.

It was the first time in Latin America that two important geochemistry groups have come together to promote and encourage geochemical mapping of the Earth’s land surface as an imperative social need. The webinar emphasised the importance of using standardised methodologies to increase geochemical knowledge of the Earth on a global, continental, national and local scale to satisfy the urgent need for information to plan the use of each territory in harmony with the natural environment and for the well-being of society, also to monitor the continuous changes that occur on planet Earth.

Attendees expressed interest in continuing this series of webinars, holding in-person events, and expanding discussions on geochemical mapping at different scales.

12. News from the International Commission on Geoheritage


The III International Stone Workshop in India was an extension of the earlier two international stone workshops held in Salamanca, Spain, in 2018 and Torino, Italy, in 2021. The six-day workshop organised under the aegis of IUGS-ICG-HSS, UNESCO-IGCP and Panjab University witnessed delegates engaged in scientific deliberations on heritage stones from across the globe. The meeting started with an opening message from Prof. Stanley Finney, Secretary General of the IUGS. The workshop was attended by a sizeable number of heritage stone group members from 12 countries (Portugal, Germany, Spain, Finland, Belgium, India, Italy, Ireland, New Zealand,
Slovenia, Romania, and the UK). The Chair of ICG, Dr. Asier Hilario, and Vice-Chair, Dr. Angela Ehling, were the keynote speakers at the workshop in India. The meeting was attended by IUGS Councillor Dr. Yamirka Rojas and INHIGEO Chair Dr. Ezio Viccari. During the planned visits to forts, palaces, temples of Jaipur, historical and contemporary quarries of Makrana, and heritage monuments of Abhaneri, Fatehpur Sikri, and Agra, the delegates witnessed some of the stunning heritage stones and the architectural wonders crafted in these stones. The presence of all the delegates and guests at the III International Heritage Stone Workshop amplified the essence of the workshop. The meeting was partially funded by UNESCO-IGCP 637, IUGS, and many mining companies from India. The RTDC and the Archaeological Survey of India coordinated all the necessary arrangements for visits to various monuments.

To know the details of the workshop open the links below: 
(https://www.3rdinternationalstoneworkshop.com/)

Figure 21. III International Stone Workshop, Jaipur, India
International Geological Congress (IGC 2024), Busan (Republic of Korea), 25-31 August 2024

Themes

Session 1 - *Heritage Stone: safeguarding the cultural and social legacy of rocks* (Convenor: Víctor Cárdenes Van den Eynde / University of Oviedo)

Session 2 - *Stone Heritage from the emerging world: A step forward for IUGS Heritage Stone designation* (Convenor: Gurmeet Kaur / Panjab University)

Session 8 - *The Second 100 IUGS Geological Heritage Sites* (Convenor: Asier Hilario / International Commission on Geoheritage (IUGS))

Session 9 - *Global Geopark Network (GGN)/Geoparks and Society* (Convener: Asier Hilario (IUGS - International Commission on Geoheritage Basque Coast UNESCO Global Geopark))

13. IUGS Young Reporters news

Meet our reporters:

![Figure 22. Photo of Oluyara Emmanuel](image)

Emmanuel is a fourth-year Geology student at the University of Lagos, Nigeria. He is a dedicated and passionate individual with a deep love for geosciences and a strong commitment to promoting awareness of Nigeria's captivating geology while shedding light on the natural disasters that the country may face. He is also passionate about using research and education to positively influence the community and to contribute meaningfully to environmental preservation and disaster mitigation efforts in Nigeria. He is also an avid sports lover and enjoys coding in his spare time. Twitter: https://twitter.com/D_Olufast

![Figure 23. Photo of Parminder Kaur](image)
Parinder Kaur, Ph.D. student (CSIR-SRF) at Department of Geology, Panjab University, Chandigarh is currently pursuing her research in the field of igneous petrology. She is working on the mineralogy and petrographic studies of potassic alkaline intrusions in Jharia basin, Jharkhand, India. She is also interested in the natural stones utilized in the heritage monuments of India. She is keen to work as a young geoscience reporter to raise awareness about geoscience amongst the society.

Mr. Mukhtiar Ghani, is a dynamic Pakistani Geologist with a Bachelor and Master's degree in Geology from the University of Peshawar, Pakistan. He is currently pursuing a Ph.D. in Structural Geology and Tectonics at the University of Göttingen, Germany, focusing on the “Spatio-temporal evolution of the western Indian plate boundary region”.

Mr. Ghani has a wealth of experience in Geology, having held positions such as Assistant Director and Assistant Geophysicist at the Geological Survey of Pakistan (GSP). His background also includes roles as Trainee Geologist at Oil and Gas development Company, Islamabad and Research Associate at NCE Geology, University of Peshawar. As Assistant Director (Planning and Information) at GSP, Mr. Ghani actively participated in inter-ministerial coordination related to natural resources and fostered international collaborations with RCD countries. In particular, he co-organized two international webinars on water and climate change issues in the South Asia region. Mr. Ghani has numerous publications in prestigious journals and is reviewer for several academic journals. His notable webinar series include "Indus River Water System" and "Siwalik Stratigraphy".

Figure 24. Photo of Mukhtiar Ghani

For the IUGS website: A one-page concise text (up to about 500 words), if possible providing a web-link (e.g. to an IUGS activity website). Each contribution to the IUGS e-Bulletin, website and/or social media should be marked as to which target medium or media it should be published in. Each contribution should be sent, at the same time, to the following addresses:
gurmeet28374@gmail.com (e-Bulletin Editor-in-Chief)
giuseppe_dicapua@ingv.it (Webmaster)
yamirka.rojas@ifg.uni-kiel.de (Editor, Social Media)
mdaniela.munozg@gmail.com (Social Media)
Time Frame for submissions to the e-Bulletin:

1. IUGS sends a reminder to leaders of activities in the last week of each month.
2. Contributions should be provided by the 16th day of every month.
3. IUGS will evaluate all submitted items in terms of urgency and will allocate these to the next monthly issue or a later issue and will also check that these comply with IUGS policy for publications and ethics;
4. The IUGS Publications Committee Team will aim to compile monthly e-Bulletin by the 25th day of the month and send it to the IUGS Secretariat;
5. The IUGS Secretariat will dispatch the e-Bulletin to the IUGS Community on, or before, the last day of each month;

This time frame may vary due to public holidays that affect the e-Bulletin Team and IUGS Secretariat such as Christmas and Chinese New Year.

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NOTES

- Please check the IUGS Calendar of Events for upcoming scientific meetings. If you require information on international conferences, meetings, etc. to be considered for inclusion in this Calendar please mail to: giuseppe.dicapua@ingv.it

- To be added to or removed from the IUGS e-Bulletin distribution list, please mail to: iugs.beijing@gmail.com or secretariat@iugs.org

- Follow the IUGS on Social Media! We are on Facebook, Twitter, and LinkedIn.

- Check the IUGS website: http://www.iugs.org/

Edited by: Dr. Gurmeet Kaur, Panjab University, Chandigarh, India

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