









News at a Glance

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1. IUGS EC meeting and IUGS Africa event, Nairobi, Kenya

The IUGS Executive committee met in Nairobi, Kenya on the 19-21 February 2024. The Executive, its affiliate members, and a group of geoscientists representing 13 African countries, met after the executive meeting, and developed ten actions for African Geoscience. The details of these actions will be released shortly. The meeting was very successful and the IUGS executive recommends a similar meeting in Latin America in 2026/27. The meeting was co-organised with the Geological Society of Africa, The Geological society of Kenya and Minerals Africa Development Organisation.



Figure 1. IUGS- Africa event in Nairobi, Kenya.









2. The Anthropocene: IUGS-ICS Statement



20 March 2024

It is with the delegated authority of the IUGS President and Secretary General and on behalf of the International Commission on Stratigraphy (ICS) that the vote by the ICS Subcommission on Quaternary Stratigraphy (SQS) to reject the proposal for an Anthropocene Epoch as a formal unit of the Geologic Time Scale is approved. The voting members of SQS have extensive experience and wide expertise in Quaternary stratigraphy and chronology. Their vote was approved by the ICS executive, and that approval was overwhelmingly supported by the chairs of the ICS subcommissions. Despite its rejection as a formal unit of the Geologic Time Scale, Anthropocene will nevertheless continue to be used not only by Earth and environmental scientists, but also by social scientists, politicians and economists, as well as by the public at large. It will remain an invaluable descriptor of human impact on the Earth system.

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3. News from Episodes

March issue of Episodes (Vol. 47, No.1) has been published and uploaded at Homepage(https://www.episodes.org/main.html).

This issue carries 8 Articles, 1 review, 3 Communication of IUGS Geological Standards.



Figure 2. March issue of Episodes.



4. News from International Geological Congress 2024

Get details of the 37th IGC program, Field trips, workshops etc. from the IGC website https://www.igc2024korea.org/



Figure 3. IGC 2024 website.

5. News from the IUGS Initiative on Forensic Geology (IFG)

Forensic Geology and Forensic Archaeology

On 13 February, Dr Laurance Donnelly (Chair, IUGS-IFG) was invited to University of Bradford, School of Archaeological and Forensic Sciences (SAFS), UK, to deliver a presentation on forensic geology including crime scene examination, geological trace evidence, searches for burials, and geological methods for the mitigation of crimes in the mining, minerals and metals industries. <a href="https://www.ticketsource.co.uk/whats-on/bradford/school-of-archaeological-and-forensic-sciences-university-of-bradford/laurance-donnelly-application-of-forensic-geology-to-police-law-enforcement-criminal-investigations/2024-02-13/17:30/t-krlzvoi

Mining Security Working Group (MSWG), Toronto, Ontario Canada

On 28 February to 1 March 2024, MSWG holds its annual meeting at the Royal Canadian Military Institute, in Toronto, Ontario, Canada. Dr Laurance Donnelly (IUGS-IFG) has been invited to present on mineral provenance determination (predictive geolocation) and traceability in

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international minerals commodities supply chains. MSWG was established, 'for subject matter experts and security practitioners within the extractive industry to collaborate and share insights and learnings of ongoing challenges, technological advances, loss learnings, and further the goals of industry initiatives such as the Voluntary Principles on Security and Human Rights and UN Declaration of Human Rights.'

https://mswg.ca/

https://im-mining.com/2019/03/15/mwsg-issues-advice-security-management-planning-mine-sites/

Body Found in New Zealand

With the help of the Geoforensic Search Strategy a body was discovered in New Zealand, believed to be that of a missing teenager, aged 19, who went missing in Auckland, on 24 April 2023. Two men have been charged with his murder.

https://www.nzherald.co.nz/nz/jayden-mamfredos-nair-body-found-and-murder-charges-laid-police-say/KAUVH3US2BE6RL4RVQD4WWYSCA/https://news.mn/en/786096/

IUGS-IFG Leading on Forensic Palaeontology

On 8 February 2024, IUGS-IFG held the first virtual international meeting aimed at collaboration for the forensic geological investigation of fossil crimes. This was attended by IUGS-IFG committee members (Dr Fabio Salvador, Prof Federico Fanti, Dr Rosa Maria Di Maggio, Dr Laurance Donnelly, Prof Duncan Pirrie) and the Brazilian Federal Police. The purpose was to apply geology to investigate fossil crime and fraud, with a focus on Brazil and South Gobi, Mongolia. The findings will be published as part of the IUGS-IFG 'Special Project' on mining and minerals crime.

https://edition.cnn.com/2021/08/25/world/confiscated-fossil-pterosaur-scn/index.html

 $\frac{https://www.trtworld.com/life/fossil-intercepted-by-brazil-police-turns-out-to-be-amazing-flying-reptile-49604$

Forensic Science Publication

We are pleased to announce the publication of the following issue of, 'Forensic Sciences'. This contains an article by Dr Pier Matteo Barone (IUGS-IFG Crime Scene Advisor) and Dr Rosa Maria Di Maggio (IUGS-IFG Officer for Europe) on 'Exploring the Growing Importance of Forensic Geoarchaeology in Italy'

Forensic Sci. 2023, 3(4), 533-543; DOI: 10.3390/forensicsci3040037 Forensic Sci., Volume 3, Issue 4 (December 2023)











6. News from INHIGEO

INHIGEO Anniversary contributions

Occasion: Darwin published 180 years ago

Title: Charles Darwin's volcanic islands (1844): A view from 180 years after publication

Author: Sandra Herbert (USA)

In 2024 we mark the 180th anniversary of Darwin's book *Geological Observations on the Volcanic Islands, Visited During the Voyage of H.M.S. Beagle.* Chapter 6 of that book is highly theoretical in nature since it treats the genetic relationship between trachyte and basalt, his claim was that trachyte and basalt might be produced from the same volcanic vent. The locus for Darwin's original observations was his geological work on Isla Santiago (James Island) in the Galápagos Archipelago explored in 1835. In 2007 a team of researchers set out to survey the island and find the rocks that Darwin had sampled, in particular evidence of trachyte.

To know more open the link below:

http://www.inhigeo.com/anniversaries.html

Occasion: Lithuanian mineralogist died 200 years ago

Author: Eugenija Rudnickaitė (LITHUANIA)

Title: Ignotas Horodeckis (1776–1824): meteorite studies by a Lithuanian mineralogist

Ignotas Horodeckis (1776–1824) was born in 1776 in Lithuania, became full professor and taught geology and mineralogy at the University of Vilnius. He connected theory with practice in nature and was especially interested in the latest theories about meteorites and taught them to his students. He was also in correspondence with international scientists and sent samples of meteorites to Alexandre Brongniart in France.

To know more open the link below:

http://www.inhigeo.com/anniversaries.html



Figure 4. Brahin meteorite (pallasite) (Museum of Geology Vilnius University, Lithuania)











7. News from the IUGS Commission on Geoscience Education (COGE)

COGE Vice Chair participating of the IUGS EC in Nairobi

COGE Vice Chair Susanna Occhipinti is currently in Nairobi for the 79th IUGS Executive Committee Meeting, coinciding with the celebration of the IUGS "Geosciences for Africa" event. Susanna will provide IUGS with updates on our 2023 activities and present our plans for 2024. IUGS "Geosciences for Africa" explores avenues for IUGS contributions to African Geoscience advancement, reflecting the union's commitment to global outreach and Earth science awareness.

New Members in Subcommittee

Clara Vasconcelos is the latest member of the Publication Subcommittee, while Tiago Ribeiro and Agogo Abraham had joined the GEFO Program Subcommittee. As for the Chris King Award, Roberto Greco joined hands with Ian Clark to contribute to this Subcommittee.

8. News from the Commission on Global Geochemical Baselines

Reporting the 2023 activities at the IUGS EC meeting in Nairobi, Kenya

Gloria Namwi Simubali, Commission's 2nd Deputy Chair and Director of the Geological Survey of Namibia, presented on Monday, 19th of February 2024, the 2023 activities report at the open session of the 79th IUGS Executive Committee (EC) meeting (Figure 1). The report included:

- A short historical introduction:
- Promotion of the Manual of Standard Methods at conferences;
- Organisation of a two-day workshop on the applied geochemical methods described in the Manual of Standard Methods on the occasion of the 38th SEGH conference in Athens (1st and 2nd July 2023), and a keynote presentation about the Manual;
- Oral presentation of the Manual at the Goldschmidt 2023 conference in Lyons;
- Presentation about the work carried out in IGCP Project 665 Sustainable Use of Black Soil Critical Zone at the Academic Seminar of Chinese IGCP projects;
- Reference to the four CGGB publications.

After the EC meeting, the IUGS organised on the 22nd and 23rd of February 2024 the Geoscience Event for Africa at which African Geological Surveys and other Geoscience institutions participated with presentations. Following the breakaway session, the results and requirements were summarised. One of









the requirements was the training of African geoscientists in applied geochemical methods, which shall be undertaken by the CGGB.



Figure 5. Gloria Namwi Simubali delivering the CGGB's report. *Photograph by IUGS Secretariat Office personnel.*

Applied Geochemistry publication for teachers and young researchers

A new publication is available online since the 29th of January 2024:

Demetriades, A., 2024. *Applied Geochemistry - The How and Why*. Chapter 7.1 In: Volume 7, How we Know, A. Shahar (Editor), In: Treatise on Geochemistry, 3rd Edition, Elsevier, 72 pp. https://doi.org/10.1016/B978-0-323-99762-1.00004-8.

David B. Smith (United States Geological Survey, and Commission Steering Committee member) reviewed the chapter, and his expert comments are: "Alecos Demetriades has undertaken a very difficult task. In less than 100 pages, he is outlining principles of applied geochemistry that other authors have used entire textbooks to explain and discuss. The chapter is well-written, well-organized, and well-referenced. The figures are all very good and the captions describe the figures adequately. I think the chapter will be useful, in particular, to early-career applied geochemists who are undertaking geochemical surveys in support of mineral exploration or environmental investigations."

The new publication extensively refers to the chapters of the <u>International Union of Geological Sciences Manual of Standard Methods for Establishing the Global Geochemical Reference Network</u>. These two publications provide teachers and early-career researchers in applied geochemistry with important tools to effectively plan their studies and surveys.









International Union of Geological Sciences Manual of Standard Methods for Establishing the

Global Geochemical Reference Network

edited by

Alecos Demetriades, Christopher C. Johnson, David B. Smith, Anna Ladenberger, Paula Adánez Sanjuan, Ariadne Argyraki, Christina Stouraiti, Patrice de Caritat, Kate V. Knights, Gloria Prieto Rincón and Gloria Namwi Simubali

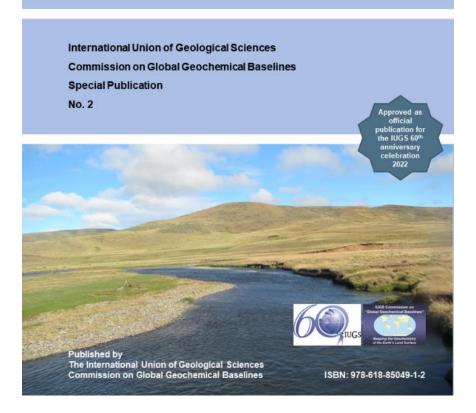


Figure 6. Front cover of the <u>International Union of Geological Sciences Manual of</u> Standard Methods for Establishing the Global Geochemical Reference Network.

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For the IUGS website: A one-page concise text (up to about 500 words), if possible providing a weblink (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 end 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 end 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 in the first week of every 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.

NOTES

- Please check the IUGS <u>Calendar of Events</u> 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 <u>Facebook</u>, <u>Twitter</u>, and <u>LinkedIn</u>.
- Check the IUGS website: http://www.iugs.org/

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