









News at a Glance

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1. IGCP-IUGS-UNESCO Project proposal call

The Council of the International Geoscience Programme (IGCP) agreed, during the 6th Council session in March 2021, to launch new call for project proposals to promote collaborative projects under UNESCO umbrella with a special emphasis on the benefit to society, capacity-building, and the advancement and sharing of knowledge between scientists. The call emphasizes and prioritizes proposals addressing the Vision Themes and annually defined topic of the IGCP detailed below. We also welcome proposals that include Artificial Intelligence (AI), big data and cloud computing methodologies for application in the Geosciences. Women, young and early career scientists from developing countries are especially encouraged to apply. Proposals will be ranked taking into account gender equality, geographic distribution of the leaders, project beneficiaries. The top multidisciplinary project will receive a Council Award and special funding. Successful projects will be sponsored for up to five years jointly by UNESCO, the International Union of Geological Sciences (IUGS), the Jeju Province Development Corporation (JPDC) of the Republic of Korea and the UNESCO National Commission for the People's Republic of China. For the year 2021, only one special topic has been agreed on during the 6th council meeting held in March 2021. "Enhancing Societal Acceptance of the Sustainable Development of Earth's Geological Resources" Deadline for project proposals: 15 September 2021

To know more open, the link below:

https://en.unesco.org/international-geoscience-programme/how-to-apply

<u>Project proposal form</u> (.pdf) Call for application (.pdf)











2. News from Subcommission on Cryogenian Stratigraphy A template for an improved rock-based subdivision of the pre-Cryogenian timescale

June this year, an open access paper in the Journal of the Geological Society (https://doi.org/10.1144/jgs2020-222) was published. This paper shows the consensus understanding of many Precambrian stratigraphers who make up the ICS working group on pre-Cryogenian subdivision, chaired by Prof. Graham Shields at UCL, UK. The working group involves ~35 Precambrian researchers globally who worked out how the first 85% of Earth history can best be subdivided so that the names and ages of periods, eras and eons match known tectonic, environmental and paleobiological events recorded in the rock record.

To know more open the link below:

https://www.cryogenian.org/the-world-of-the-pre-cryogenian.html

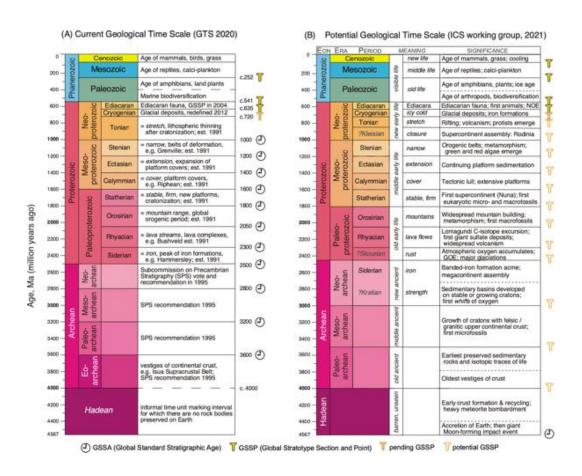


Figure 1. The proposed timescale ready for submission to the International Commission on Stratigraphy for their consideration (Source: https://www.cryogenian.org/the-world-of-the-pre-cryogenian.html)











3. News from the IUGS Initiative on Forensic Geology (IFG) 2nd Brazilian Geoforensic Workshop, 13-17 September 2021

The 2nd Brazilian Geoforensic Workshop will be held on 13-17 September 2021. 20 geoforensic professionals with expertise in public security and criminal procedures. geoforense.com/2wbg](http://geoforense.com/2wbg

22nd World Congress of Soil Science, Session on Forensic Soil Science, 31 July 2022 - 5 August 2022

IUGS-IFG, in collaboration with the British Society of Soil Science and the International Union of Soil Sciences (IUSS), has arranged for a session on forensic soil science in Glasgow, Scotland, in 2022. WCSS22-Call-for-Abstracts-FINAL.pdf (22wcss.org)

Geoethics and Forensic Geology

The IUGS-IFG supported publication on Geoethics, including the paper below, can be found on the link provided.

https://pure.qub.ac.uk/en/publications/a-proposal-for-a-white-paper-on-geoethics-in-forensic-geology

CAFSS, Guidelines for Conducting Criminal and Environmental Soil Forensic Investigations Guidelines for Conducting Criminal and Environmental Soil Forensic Investigations includes the experience gained from conducting over 155 case studies, together with research by the Centre for Australian Forensic Soil Science (CAFSS) available on the link below:

http://www.adelaide.edu.au/directory/robert.fitzpatrick?dsn=directory.file;field=data;id=35757;m=view

Forensic Soil Science and Geology, IUGS and GSL Publication

The introductory paper for the book, Forensic Soil Science and Geology' paper is now available on-line An introduction to forensic soil science and forensic geology: a synthesis | Geological Society, London, Special Publications (lyellcollection.org)

NIST-OSAC Trace Materials

The Trace Materials Subcommittee focuses on standards and guidelines related to examination and interpretation of physical evidence, including geological materials). https://www.nist.gov/osac/trace-materials-subcommittee

The United Nations Environment Programme (UNEP)

UNEP is looking for a technical institution partner to support a responsible and sustainable mining and metals sector to achieve the Paris Agreement and Sustainable Development Goals in the Context of the Green Recovery.

 $\underline{https://www.greengrowthknowledge.org/news/call-proposals-guiding-principles-responsible-and-sustainable-mining-and-metals-sector-context}$

The use of ground penetrating radar (GPR) to locate unmarked graves

A webinar on the use of GRP to help locate unmarked graves took place on 11 August 2021, and is available on the link below:

https://www.sensoft.ca/georadar/webinars/











4. News from the Commission on Global Geochemical Baselines (CGGB)

The IUGS Commission on Global Geochemical Baselines (CGGB) together with the Geochemistry Expert Group (GEG) of EuroGeoSurveys organised a session entitled "Geochemical mapping at all scales for all reasons" under Theme 12 "Environmental Geochemistry and Human Health" at the Goldschmidt 2021 conference, which was held as a virtual conference this year due to the COVID-19 pandemic. The session was chaired by Philippe Négrel (GEG Chair) and Anna Ladenberger (1st Co-Chair of CGGB and GEG Co-chair). The main topic of the session was systematic geochemical mapping and its methodology to document the spatial variation of chemical elements in geomaterials occurring at or below the Earth's surface, i.e., rock, soil, sediment, stream water, groundwater, and vegetation.

The keynote lecture "<u>Geochemical mapping applications to forensics and intelligence</u>" was delivered by Patrice de Caritat (Geoscience Australia), and the invited talk "<u>Assessing the influence of the industrial past on an urban environment - what does the soil geochemistry?</u>" was given by Joanna Wragg (British Geological Survey). In total, the session comprised of 17 oral presentations. The session was attended by about 70 persons.

The keynote lecture retraced Patrice de Caritat's journey from being a resource and environmental geochemist carrying out geochemical surveys at various scales, to his recent forays into soil geochemistry applied to forensic provenancing. Some of this work was published in the Journal of Forensic Sciences in 2019 and 2021. The team is currently extending the provenancing capability to include mineralogical and genomic data of soil and soil-derived dust under a Defence Innovation Partnership (South Australia)-funded research and development project entitled "InFoDust: The Intelligence and Forensic potential of dust traces for counter-terrorism and national security".

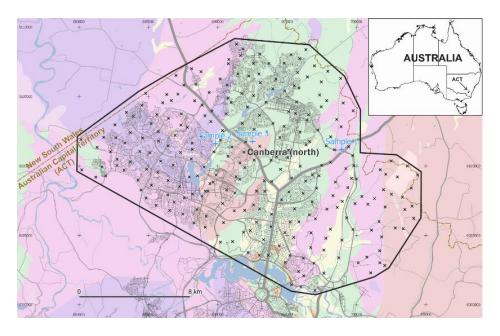


Figure 2. Simplified geological map of north Canberra, showing the location of the soil geochemical survey samples (black crosses) and of three simulated provenancing (blind) samples (blue plusses).











5. News from INHIGEO

Takuji Ogawa (1870–1941): Japanese geographer-geologist - founder of the Geology Department in Kyoto University in 192. From studying earthquakes, Japanese geologist Takuji Ogawa was ahead of his time in recognizing the importance of earth mantle processes in the formation of mountain chains and island arcs.

To Know more open the link below:

http://www.inhigeo.com/anniversaries/INHIGEO_Anniversary_Ogawa.pdf



Figure 3. Takuji Ogawa (1870–1941)











CONTRIBUTING TO THE IUGS E-BULLETIN, WEBSITE AND SOCIAL MEDIA

IUGS wishes to improve the co-ordination of the publication of information on **news**, **events and achievements** arising from IUGS activities (**not science reports or papers**).

All IUGS Commissions, Task Groups, Initiatives and IGCP projects are requested to provide a steady flow of material. Contributions from Adhering Bodies are also welcome.

To aid co-ordination and standardization, IUGS has introduced a preferred format and a monthly timetable.

Format of submitted material:

Contributors should provide:

For the e-Bulletin: A short text with links to IUGS activity website, 1 or 2 illustrations (photographs, diagrams etc. jpg, .gif or png files of good resolution with captions) not exceeding one page. Items that are not in reasonably good English will be returned for improvement. If proposed contributions exceed one page, they will be returned for shortening. All images must, if necessary, be copyright-cleared before submission. The editor of the e-Bulletin reserves the right to make necessary edits to adjust the content to the publication rules, always respecting the meaning of the text submitted.

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)

gurmeet28374@gmail.com (Social Media Manager)

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;

International Union of Geological Sciences IUGS e-Bulletin No. 177 – August 2021



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: <u>giuseppe.dicapua@ingv.it</u>
- 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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