International Union of Geological Sciences
IUGS E-Bulletin No. 171 – October/November 2020

The October and November e-bulletins are here published together. Subsequent e-bulletins will arrive monthly.

News at a Glance

1. Extraordinary Session of the IUGS-IGC Council (28-30 October, 2020)

The postponement of the 36th International Geological Congress (IGC) led also to postponement of the Ordinary Session of the IUGS-IGC Council, which is held every four years at the IGC. In order to conduct their important business, and with international travel greatly constrained by the pandemic, an Extraordinary Session of the Council was organized and held 28-30 October as a Virtual Meeting. 95 delegates from 55 adhering member countries registered for the meeting; 90 non-voting participants registered. The virtual meeting ran very smoothly, albeit at all hours of the day, as delegates from around the world logged on for the 3 to 4 hour sessions at times ranging from very early in the morning (0400 hr, in California) to very late at night (0000 hr, in Auckland, New Zealand). **All meeting information (agenda, minutes, speaker presentations and results of voting) is now posted to the IUGS website:** https://www.iugs.org/extraordinary-session-2020

The virtual meeting began with welcoming messages from Daya Reddy, President of the International Science Council, and Ms. Shamila Nair-Bedouelle, Assistant Director General of Natural Sciences, UNESCO. The meeting, chaired by IUGS President Qiuming Cheng, included reports for the last 4 years from the President, the Secretary General, the Treasurer report, and a report from the Nominations Committee. Video presentations of candidates for President, Vice President, Secretary General, and Treasurer. Biographies, statements and photos of all candidates are posted on the IUGS website. Ballots were sent for voting on candidates, with results announced on Day 2 (see below).

On Day 2, the announcement of elections was followed by release of ballots for votes on candidates for Councilors (2) for 2020-2024 and (2) for 2022-2026 and for members of a new Nominations Committee. The rest of Day 2 was devoted to reports by the IUGS Secretariat and from Commissions, Initiatives, Task Groups and Joint Programs. Leaders of these groups gave short presentations on key activities, accomplishments and future goals of the groups they lead.

Day 3 began with a report on the elections. The Council then discussed, at length, the critical situation of the rescheduled 36th IGC and delay of refunds due since March, as well as five resolutions proposed by adhering members which addressed financial reports, host of the Secretariat, definition and structure of Big Science Programs, diversity and inclusion, and expansion of Statute 37. These discussions were followed by a ballot and survey of the Council. All resolutions were approved as written or amended. The Council members were surveyed on whether or not the rescheduled 36th IGC should be terminated and whether or not there ought to be a virtual Congress. The results of the survey were not in favor of continuing with the 36th IGC.

Voting was managed by the app Election Runner, which was administered by the Secretariat. The meeting used the CSULB license for Zoom Webinar and was administered by Stan Finney.

A. Voting Results of the Extraordinary Session of the IUGS-IGC Council

President (2020-2024) *John Ludden (UK)*

Secretary General (2020-2024) *Stan Finney (US) (2nd term)*

Treasurer (2020-2024) *Hiroshi Kitazato (JP) (2nd term)*

Vice Presidents (2020-2024) *Hassina Mouri (ZA) and Daekyo Cheong*

Councilors (2020-2024) *Jennifer McKinley (UK) and Ludwig Stroink (DE)*

Councilors (2022-2026) *Carlos Cónsole-Gonella (AR) and Dolores Perreira (ES)*

Nominating Committee (2020-2024) *Suzanne Mahlburg Kay (US), Kristine Asch (DE), Tatiana Tolmacheva (RU), Anna Nguno (NA), Jorge Gomez Tapias (CO) and Jose Pedro Calvo Sorando (ES)*

B. Resolutions

1. The proposed resolution on standardizing the content and transparency of financial reports (prop. by UK National Committee) was approved.
2. The proposed resolution to define criteria for the open selection of host sites for the IUGS Secretariat (prop. by US National Committee) was approved.
3. The proposed resolution on criteria and funding guidelines for recognition of Big Science Programs by IUGS (prop. by US National Committee) was approved.
4. The resolution to seek diversity and inclusivity in all IUGS/IGC activities and functions (prop. by the US National Committee) was approved.
5. Proposed resolution on the expansion of Statute 37 (prop. by the Cyprus National Committee) was approved in amended form.

C. Survey on the Rescheduled 36th IGC

a. Should the rescheduled 36th IGC be cancelled now, given status of reimbursements, potential for organizational success and unknown status of pandemic?

Total Votes: 44 Yes: 24 Undecided: 11 No: 9

b. If rescheduled 36th IGC is not cancelled, what is the possibility of one or more members of your national delegation attending?

Total Votes: 44 Not Sure: 15 Unlikely: 12 Likely: 9 None: 5 Definitely: 3

c. Should the Rescheduled 36th IGC be held as a virtual Congress?

Total Votes: 44 Yes: 21 Abstain: 12 No: 11

d. If the Rescheduled 36th IGC is held as a virtual Congress, will you or members of your delegation participate?

Total Votes: 44 Yes: 31 Abstain: 11 No: 2

2. IUGS Commission on Global Geochemical Baselines Special Publications and Updates

The IUGS-CGGB announces a Special Publication on black soil geochemistry, released as an e-book in September, 2020 (Fig. 1):

Demetriades, A., Dai, H., Liu, K., Savin, I., Birke, M., Johnson, C.C., Argyraki, A. (Editors), 2020. *International Union of Geological Sciences Manual of Standard Geochemical Methods for the Global Black Soil Project*. International Union of Geological Sciences, Commission on Global Geochemical Baselines, Special Publication No. 1, Athens, Hellas, ISBN: 978-618-85049-0-5, 107 pages, 49 figures, 4 Tables, and 4 Appendices.

The manual is now available from the CGGB website at:
https://www.globalgeochemicalbaselines.eu/content/162/black-soil-project-manual-/.

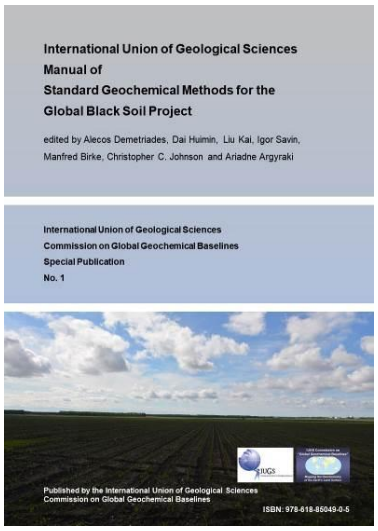


Figure 1. Front cover of International Union of Geological Sciences Manual of Standard Geochemical Methods for the Global Black Soil Project. Designed by Alecos Demetriades

About the book: In the northern hemisphere, there are two major black soil zones, which are located along the mid-latitudes of Eurasia and North America (Fig. 2). In the southern hemisphere, black soil zones are patchy and occur in South America and Africa. These regions contribute greatly to world agriculture, and their sustainable use is extremely important for global food security. Because of intensive cultivation over decades, black soils face serious degradation. Therefore, it is important to systematically map their chemical status, following the principles of the IUGS Commission on Global Geochemical Baselines for producing an internally consistent, high quality geochemical database. The new manual defines requirements for such a database, outlining standardized sampling and sample preparation methods for a consistent suite of determinands and parameters, and analysis of all samples in the same laboratory following a strict quality control protocol. The Global Black

Soil Project is carried out under the auspices of IGCP 665 "*Sustainable Use of Global Black Soil Critical Zone*".

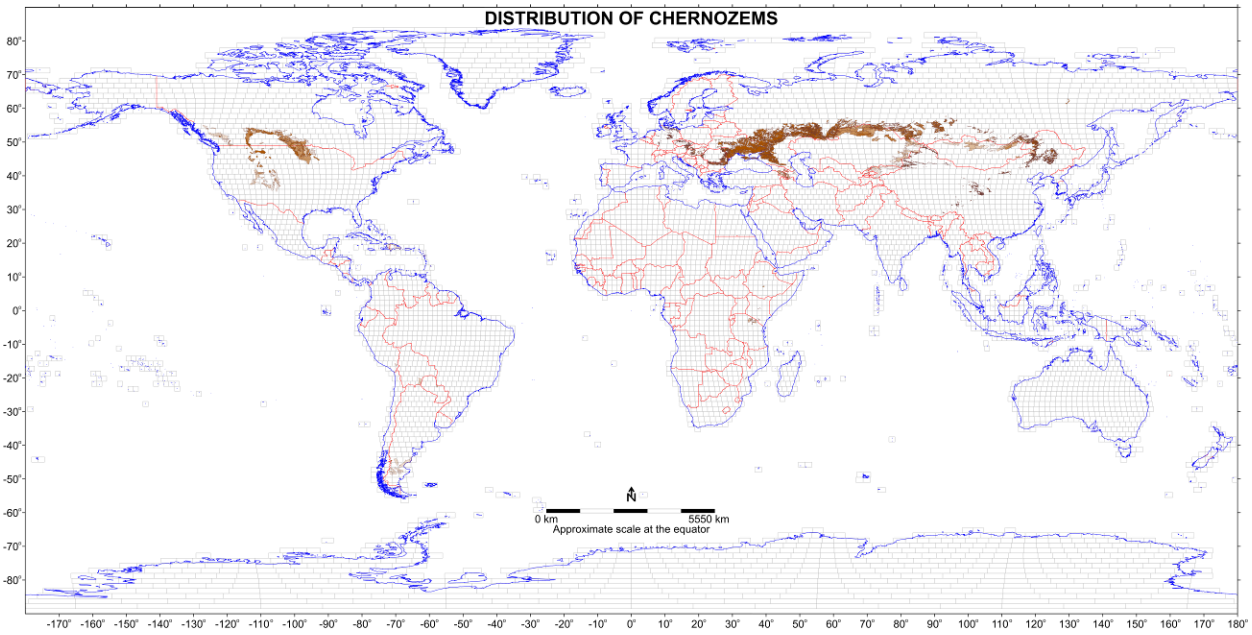


Figure 2. Map showing the global distribution of Chernozems (black soil), superimposed on the Global Terrestrial Network grid cells of 160x160 km. The intensity of the brown colour shades within each polygon corresponds to the proportion of the soil type within the total area, with deeper shading where the proportion of black soils in the polygon area is greater. Plotted by Alecos Demetriades.

In other news, CGGB is continuing its work on the "*Manual of Standard Methods for Establishing the Global Geochemical Reference Network*", in cooperation with many applied geochemists from all over the world. The manual is expected to be published in 2021, following approval by the IUGS Executive Committee.

Other work performed during September 2020:

- providing advice for the regional geochemical mapping of Sudan and Mozambique

- compiling the Global Marine Network (GMN) grid cells of 160x160 km (Fig. 3) for the newly-approved scoping study, “Geoscientific Mapping the Ocean Realm” (GEOMORE). The GMN grid cells are available for downloading from

  https://www.globalgeochemicalbaselines.eu/content/173/gmn-160-x-160-km-/.

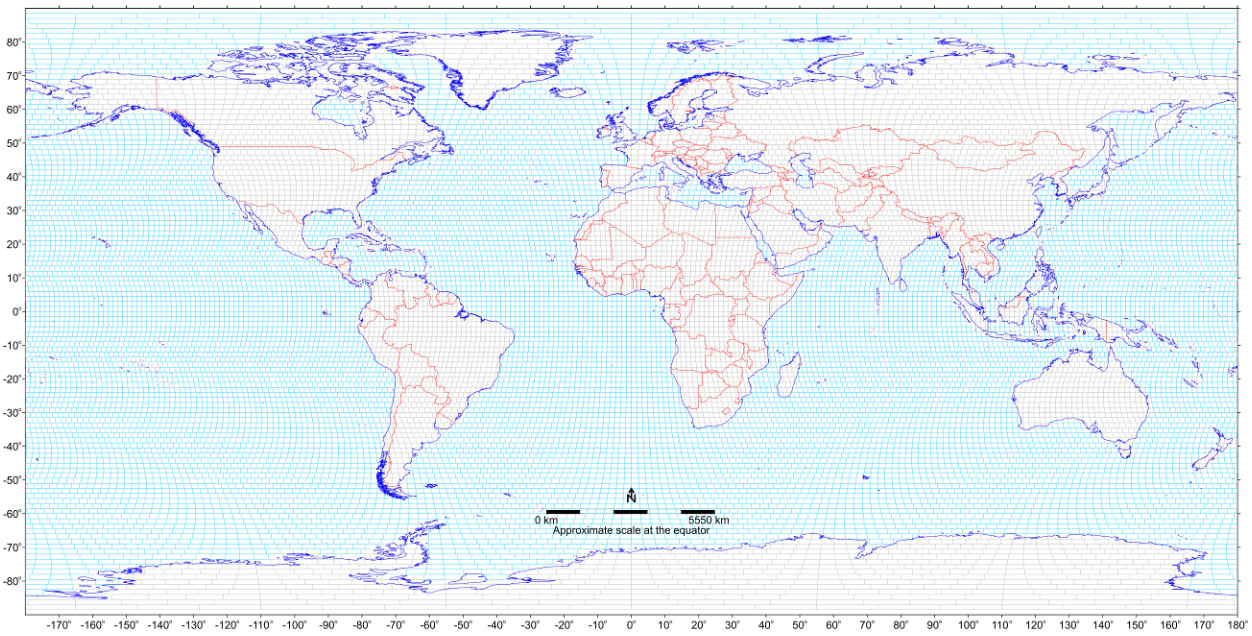


Figure 3. Map showing the Global Reference Network of 160x160 km grid cells, comprising the Global Terrestrial Network of 7356 grid cells (grey colour), and the Global Marine Network of 12,477 grid cells (pale blue colour). Plotted by Alecos Demetriades.

For additional information on CGGB see:

http://www.globalgeochemicalbaselines.eu/
https://www.facebook.com/CGGBIUGS/
https://twitter.com/cggb_iugs

3. Recent Activities of the IUGS Initiative on Forensic Geology (IFG)

A. IUGS-IFG focus on Brazil

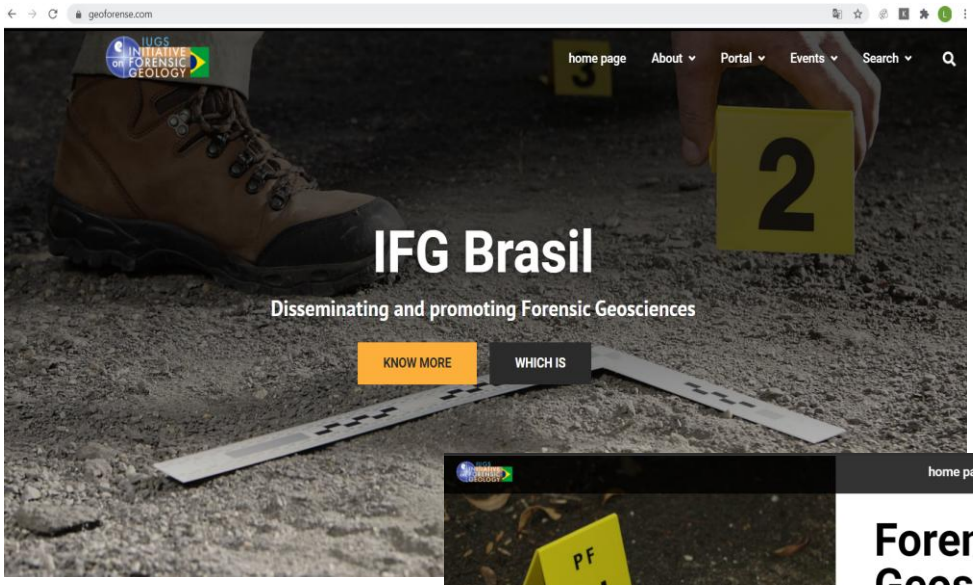
IUGS-IFG has been working in close collaboration with students in Brazil, to help develop and promote forensic geology and to encourage the next generation of forensic geologists. IUGS-IFG recently reported on the establishment of a sub-group on forensic geology (known as the 'Student Chapter'). This E-Bulletin notice is a focus on forensic geology in Brazil (also see Geoforense.com).

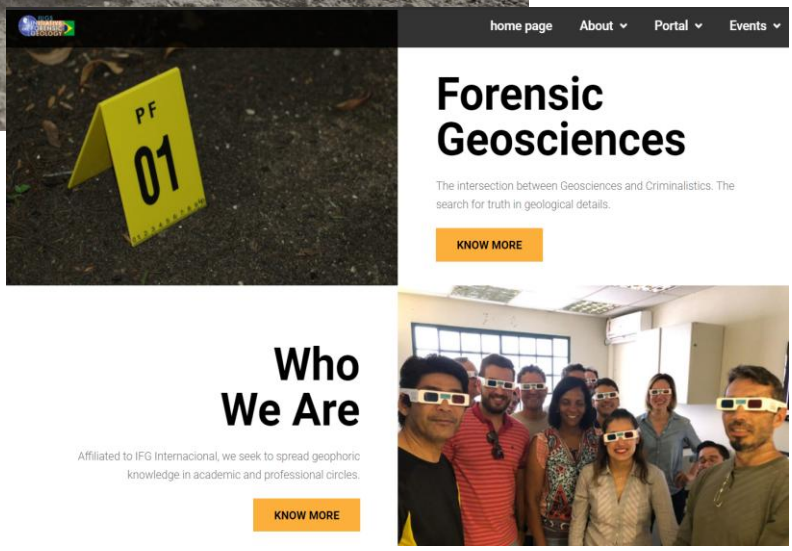
B. 1st Undergraduate Geoforensic Research Workshop, September 2020

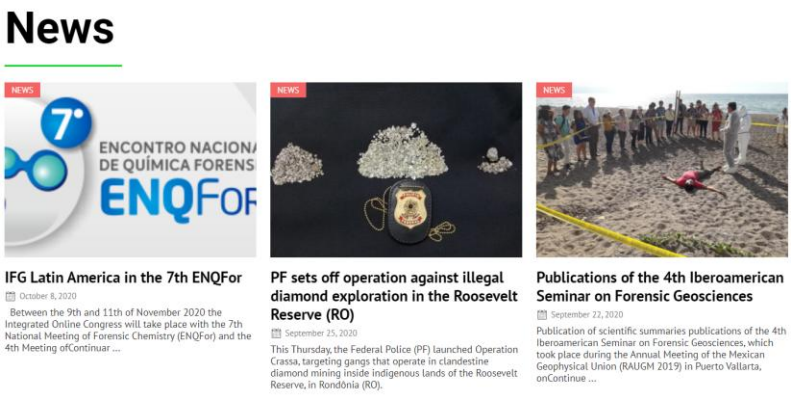
On 21-22 September 2020, the 1st Undergraduate Geoforensic Research Workshop took place in Brazil. This was organized by the Brazilian Student Chapter of the IUGS Initiative on Forensic Geology (IFG). This focused on forensic geology research applied to policing and law enforcement and was developed by undergraduate students in Brazil. The event was opened by IUGS-IFG founder and chair, Laurance Donnelly. He congratulated the president, Marcelo Tortolero, and the students in Brazil for their success in setting up the Student Chapter. He also noted the importance of forensic geology in Brazil, led by Fabio Augusto da Silva Salvador (IUGS-IFG Co-officer for Latin America and the Brazilian Federal Police). Alastair Ruffell (IUGS-IFG Training Officer) also dialled into the event. Laurance noted the importance of the student group and the development of the next generation of forensic geologists in Brazil and Latin America. There were 117 delegates, mainly from Brazil but also Peru and Portugal. Themes included; (a) Forensic applications of sedimentological and palynological analysis of freshwater beaches in the coastal plain of Rio Grande do Sul, (b) Brazil as the main route of international narcotics trafficking: exploring soil evidence from seized cargo, (c) Potential use of palynology in car air conditioning filters as a forensic tool in Brazil and (d) analysis and characterization of soils recovered from offenders of three vehicles with forensic purposes.

C. Academic and Forensic Geology Investigators, Rio de Janeiro, Brazil, October 2020

On 5 to 7 October 2020, The IUGS-IFG Student Chapter organised an event to explore collaboration between academic and forensic geology investigators. This included the Brazilian Federal Police, and IUGS-IFG Officer for Latin America, Fabio Augusto da Silva Salvador, and other forensic geology practitioners and a forensic biologist. The event attracted 234 attendees from sixteen states in Brasil. Selected images from the web site for the IUGS-IFG supported Brazilian Student Chapter on Forensic Geology (Geoforense.com) are shown below.







D. 1st Brazilian Geoforensic Virtual Workshop, November-December 2020

The 1st Brazilian Geoforensic Virtual Workshop, will take on 30 November 2020 to 4 December 2020. This is supported by IUGS-IFG, the Brazilian Federal Police, Brazilian Geological Society (BGS) and the Scientific Police of Paraná. The meeting includes forensic geologists from around the world. The objectives are to discuss advancements on soil forensics, forensic geophysics, environmental forensics, forensic ecology, forensic GIS, and forensic isotopes. A series of lectures and short courses will be provided with simultaneous English-Portuguese and Portuguese-English translations https://geoforense.com/1st-brazil-geofor-virt-workshop/

Advertisements for upcoming geoforensic events in Brazil

E. GSL Forensic Geophysics and Forensic Geoscience meeting

On 2 December 2020, a one-day meeting will be held on Forensic Geophysics and Forensic Geoscience, organised by the Geological Society of London (GSL) Forensic Geoscience Group (FGG) and Near Surface Geophysics Group. This meeting will capture shared interests between the geological, environmental science, engineering, geotechnical, mining and archaeological communities with those working in the fields of serious crime investigation, environmental law and mineral/metal fraud. Presentations involving remote sensing, geophysics, geochemistry, mineralogy are suggested. The authors of the GSL 'Guide to Forensic Geology' will present on topics contained in this soon-to-be published book. See: http://www.nsgg.org.uk/2018/2020/01/01/archaeological-geophysics-environmental-criminal-forensics-2020/

IFG Officers Receive Recognition

Prof Lorna Dawson, IUGS-IFG Treasurer and James Hutton Institute was presented with the 'Team of the Year Award 2019', by the National Police Chief's Council, in recognition of the professionalism in the investigation into the murder of Margaret Fleming, a complex 'no body' inquiry spanning 17 years. Also making news, Prof Jennifer McKinley, IUGS-IFG Office for Communications and Queens University Belfast has been elected onto the IUGS Council as a Councillor (2020-2024).


Figure 4. (Left) Prof. Lorna Dawson, James Hutton Institute and (Right) Prof. Jennifer McKinley, Queen's University, Belfast

4. IUGS EC approves the creation of a new Task Group on Igneous Rocks (2021-2024)

This past month, the IUGS Executive Council approved the establishment of a new Task Group on Igneous Rocks (2021-2024) with the goal of integrating and revising the classification and nomenclature of igneous rocks. The IUGS Subcommission on the Systematics of Igneous Rocks published its first classification guidelines in 1989 (R. Le Maitre, Ed.) and revised and updated the guidelines in 2002. The guidelines have become the reference standard for all geoscientists concerned with magmatic rocks, in particular those working in the field of igneous petrology. Since its publication, the second edition has been cited 6500 times in scientific articles— roughly one citation each day for the last 18 years! After almost 20 years, revision of the IUGS classification of igneous rocks is needed to integrate the results of new field and experimental evidence and improved analytical techniques. While leaving unchanged the overall structure of the original manual, the revision

will clarify basic aspects of the classification and nomenclature scheme, as well as genetic links between different rock types and rock groups.

A summary of some key issues to be addressed by the new Task Group

The fundamental role of the IUGS through this Task Group is to improve the classification and nomenclature of igneous rocks by clarifying and modifying essential topics related to igneous rock classification that have arisen since publication of the 2002 IUGS standards, including:

1) *Plutonic rock classification*— The IUGS must retain oversight of the procedure for the nomenclature and systematics of igneous rocks, taking under consideration new debate on this subject. The Task Group should improve, but not remove, classic approaches.

2) *Ultramafic rocks*—Clarification is needed to indicate that mantle rocks (e.g., lherzolites, dunites, harzburgites, and others) often have textures compatible with sub-solidus modification and may thus be more properly considered as metamorphic rocks rather than igneous rocks.

3) *"Metamorphic rocks"* — Address the possibility of producing a metamorphic rock (eclogite) through a classical igneous process, such as the direct crystallization of a basaltic melt to an eclogite assemblage when crystallized at pressures greater than 1 GPa.

4) *Total Alkali vs. Total Silica (TAS) classification diagram for volcanic rocks*— Address issues arising from use of the TAS classification diagram for; (a) classification of mildly alkaline rocks, such as trachybasalts, basaltic trachyandesites, and trachyandesites; (b) distinguishing trachytes and trachydacites; (c) clarification of the definition of latites; (d) review and revision of the distinction between alkali basalts and tholeiitic basalts, and; (e) discuss the use of the TAS diagram for plutonic rocks.

5) *Silica saturation*—Provide a forum to reach international consensus and develop a definitive scheme for defining saturated (with respect to silica), oversaturated and undersaturated rocks using the CIPW normative classification.

6) *Sodic vs potassic and ultrapotassic compositions*— Standardize the terms *ultrapotassic-intermediate-sodic-ultrasodic* for use in rock classification and to address the effects of analcimization in classification.

7) *Tholeiitic vs calc-alkaline*— Provide a rigorous and unambiguous definition of the terms *tholeiitic* vs *calc-alkaline* that is independent of the geotectonic significance given to such compositions.

8) *Use of the term mafic*— Provide guidance on the basis and use of the terms *mafic* and *ultramafic* in rock classification.

9) *Kimberlites*— Revisit the classification of kimberlites based on extensive petrographic, mineral chemical and geochemical data, including making clear distinctions between kimberlites and ultramafic lamprophyres, such as the presence or absence of melilite.

10) *Lamprophyres*— Update the IUGS classification to include the concept of *lamprophyric "facies"*, to describe their formation from a variety of parental magmas under a particular set of conditions, generally late-stage and volatile-rich (H_2O and CO_2), which are different to the main magmas.

11) *Lamproites vs. lamprophyres*— Establish a clear and practical distinction between lamproites and lamprophyres.

12) *Metaluminous vs. peraluminous melts*— Propose a definitive position on this classification. Currently, the molar alkali + lime content (Al/(Ca+Na+K)) compared to alumina is used to define a non-peralkaline rock as metaluminous or peraluminous, but the threshold value differs between published schemes.

13) *Carbonatites (I)*— Consider adding a comment on the fact that the carbonate present has to be primary in origin, i.e., it is crystallized from a melt, although the source of the CaO and CO_2 may be related to previous digestion of sedimentary carbonates.

14) *Carbonatites (II)*— The IUGS classification of carbonatites should more fully address the variety of conditions under which they form, after the scheme proposed by Mitchell (2005), and recognizing that carbonatites are often polygenetic in formation.

15) *Kalsilite-bearing vs. kamafugitic rocks*— Update the classification of ugandite in response to new studies And to discuss evidence contradicting the simple presence of kalsilite as the most "distinctive and important" parameter to classify a rock as a kamafugite.

16) *MgO-rich alkali-poor volcanic rocks*— The 2002 classification scheme of MgO-rich, alkali-poor volcanic rocks based exclusively on chemical constraints needs updating in order to account for important petrographic information on mineral textures (e.g., the presence of spinifex- or cumulus- olivine; Kerr and Arnd, 2001; Ivanov *et al.,* 2018) and in light of a

newly-proposed classification for boninites and boninitic group rocks (Pearce and Reagan, 2019).

17) *Picrobasalts*— The current IUGS classification does not make any comment on the relationship between picrobasalt and basalt, such as the implied presence of plagioclase.

18) *Meteorites*— In earlier IUGS classification guidelines, no mention was made of extra-terrestrial rocks. A new section dealing with the main mineralogical and petrographic characteristics of stony meteorites will be added.

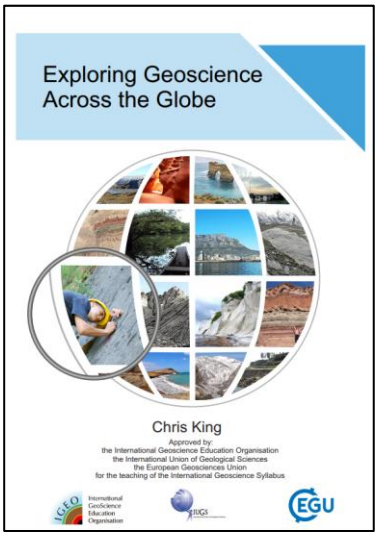
19) *Iconographic section*— Add an electronic appendix to the book, hosted by the IUGS website, where it would be possible to download the most important petrographic characteristics of the various igneous rocks described and discussed in the book. Both macroscopic and thin sections microphotographs will be included and periodically updated, as a helpful reference for future geoscientists.

Task Group members:

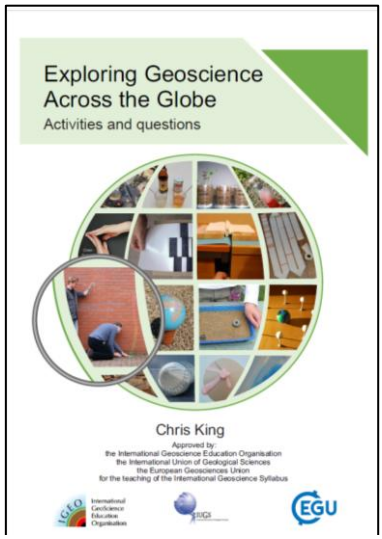
Michele Lustrino	Italy
Roger H. Mitchell	Canada
Marjorie Wilson	UK
Anna Doroshkevich	Russia
James H. Natland	USA
Bernard Bonin	France
Barbara Scott Smith	Canada
Andrew C. Kerr	UK
Georg Zellmer	New Zealand
Tony Irving	USA
Alexei Ivanov	Russia
Zhengfu Guo	China
Sebastian Tappe	South Africa
Julian A. Pearce	UK

5. IGEO: Launch of *Exploring geoscience: Activities and questions* online book

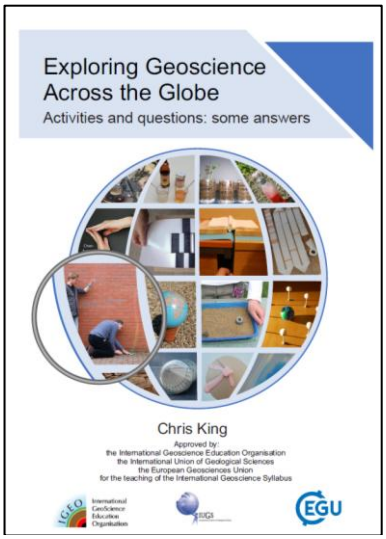
We are pleased to announce the online publication of the new companion book to *Exploring geoscience across the world* – our new *Activities and questions* book.



Exploring geoscience across the globe textbook, available online at: http://www.igeoscied.org/teaching-resources/geoscience-text-books/ or http://www.igeoscied.org/wp-content/uploads/2020/09/Exploring-geoscience-Sept2020.pdf



New *Activities and questions* book, available online at: http://www.igeoscied.org/teaching-resources/geoscience-text-books/ or http://www.igeoscied.org/wp-content/uploads/2020/11/Exploring-geoscience-activities-and-questions.pdf



New *Activities and questions: some answers* book available by emailing chris@earthlearningidea.com

Like *Exploring geoscience,* our *Activities and questions* book is free to download at: http://www.igeoscied.org/teaching-resources/geoscience-text-books/ . It is keyed into the chapter and section headings of the *Exploring geoscience* book and contains online links to more than 300 geoscience teaching activities together with more than 300 questions to consolidate pupil understanding. The questions range from those which can be answered by careful reading of the *Exploring geoscience* textbook to deep questions that require deep and creative thinking.

Also published on a hidden part of the International Geoscience Education Organisation (IGEO) website is the *Activities and questions: some answers* book, with answers to and discussions about the questions. To avoid pupils across the world being able to access these answers, please email chris@earthlearningidea.com to show you are a legitimate teacher, educator or other interested person by sending:

- your CV;

- an email note to say that you will not allow your own or any other pupils have access to the *Some answers* book.

Chris will then be very happy to send you the access details for the *Some answers* book.

With the International Geoscience syllabus published on the IGEO website, the *Exploring geoscience across the world* textbook to support the syllabus, and the new *Activities and questions* book with the accompanying *Some answers* book, teachers and educators across the world have access to world class geoscience knowledge, understanding and teaching materials, approved by the International Geoscience Education Organisation (IGEO), the International Union of Geological Sciences (IUGS) and the European Geoscience Union (EGU). Let us all now use these to educate the world for geoscience!

6. Final report of IGCP-637: Linking Researchers and Heritage Stones from around the World

The IGCP-637 project on Heritage Stone designation was approved by UNESCO and IUGS in 2015 and ended in 2019. The main objective was to facilitate the development of a new International Standard for building and ornamental stones. This was achieved by building an extensive international network of collaborating researchers and publications to extend knowledge on internationally important Heritage Stones. The final report has been published in *Episodes* and can be downloaded through the link:

http://www.episodes.org/journal/view.html?uid=2188&vmd=Full

IGCP-637 participants with UNESCO officers at the EGU annual meeting in 2019, Vienna, Austria.

7. GSL Workshop on Enrolment in crisis: A UK-wide strategy for exciting, engaging and retaining students in the geosciences

Despite the central importance of understanding earth systems and earth resources to develop solutions to critical challenges in the 21st Century, including assuring sustainable supplies of clean water, energy, and raw materials, reducing environmental degradation, building resilience to natural hazards, and adapting to climate change, the UK is experiencing a concerning and accelerating decline in geology graduates. The number of students studying geology at university has declined year-on-year since 2014, a total

decrease of 43%, far outpacing any dip expected purely due to demographics (ca. 9.5% over the same period). The decline poses a serious and economically damaging skills shortage at a critical time of transition for many industries and businesses that rely on geological expertise.

On 24 June 2020, the Geological Society of London convened a summit of 50 representatives from academia, education, informal education and industry to examine the many factors leading to the decline in enrolment to geoscience education. The workshop explored the challenges faced at the primary and secondary school level, as well as social and cultural barriers to entry to the geosciences. As a result of the summit, strategic aims and actions were defined to increase the visibility and uptake of geoscience education in the UK, to restore brand identity and to confirm UK geoscience as world-leading. For a copy of the workshop report, see https://98ca4554-1361-4fb1-a4d8-a1bb16d032e6.filesusr.com/ugd/f1fc07_bac8092441844af3ac950deda4d39ce3.pdf?index=true

8. News from the President

A. President Cheng participates in DDE Panel Discussion at 2020 AAPG Conference

On October 1, 2020, Prof. Qiuming Cheng, IUGS President and Member of the Chinese Academy of Sciences, participated in a Panel Discussion concerning DDE for the International Conference of the American Association of Petroleum Geologists (AAPG) (https://ace.aapg.org/2020). The goal of the Panel Discussion was to introduce the IUGS & DDE to the oil and gas industry, laying out the goals, vision, tactics and capabilities of the DDE Program. The discussion was well-received and will remain online and available to AAPG Conference Participants through the remainder of 2020. Prof. Cheng has been promoting the transformation of traditional earth science research to data-driven earth

science research and championing the IUGS Big Science Program – Deep-time Digital Earth (DDE). He endeavors to establish an extensive and effective cooperative international network, including ISC, UNESCO, academia and industry, to advocate for scientific openness and social sharing with an aim of increasing the contribution of earth sciences. (by David A. Leary)

B. Past President Cheng Attends the Launching Session of the Kyoto Landslide Commitment 2020

IUGS Past President Prof. Qiuming Cheng was invited by the International Consortium on Landslides (ICL) to deliver a greeting message on behalf of IUGS at the Launching Session of Kyoto Landslide Commitment 2020 (KLC2020) on 5 November 2020. At the virtual meeting, participants from 90 signatory organizations unanimously agreed on and declared the launching of the Kyoto Landslide Commitment 2020. Representatives from the United Nations, UNESCO, WMO, FAO, ISC, IUGS, IUGG and other major international organizations were invited for the event. In his greeting message, Prof. Cheng pointed out that the development process of human society is not only the history of learning to use earth resources to meet societal needs, but also the process of understanding and mitigating the devastating human impacts of natural disasters. He noted that landslides, like many other types of natural hazards, have the potential to impact many regions of the world and risk reduction associated with landslides is closely

related to the UN 2030 Sustainable Development Goals. He suggested that we should make full use of relevant earth science and engineering technology, as well as modern digital technologies, to facilitate international scientific cooperation and public participation in reducing landslides risks. IUGS will continue to promote and to be actively engaged in the KLC2020.

The International Consortium on Landslides (ICL) proposed the 'ISDR-ICL Sendai Partnerships 2015-2025 for Global Promotion of Understanding and Reducing Landslide Disaster Risk' during the 3rd World Conference on Disaster Risk Reduction (WCDRR) in Sendai, Japan, 2015. The Sendai Landslide Partnerships 2015-2025 was signed by 22 United Nations, global and national stakeholders. Tangible results and benefits of activities carried out by these stakeholders in 2015-2020 are featured in scientific journals and books, as well as conference proceedings. At their meeting in 2017 in Ljubljana, Slovenia, the partners agreed to expand the global partnerships to 2030 and beyond. Subsequently, the "Kyoto 2020 Commitment for Global Promotion of Understanding and Reducing Landslide Disaster Risk"（KLC2020）was decided and developed. In Paris, in 2019, the Commitment was signed by a first group of 57 participants.

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EDITORS' NOTES:

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

Note: The Editor of the E-Bulletin has changed, and also address for your submissions (see below). *The new Editor is Dr. Claudia Mora, IUGS Councillor for 2018-2022. IUGS extends its heartfelt appreciation to Dr. Silvia Peppoloni for her dedicated and effective service as the outgoing Editor.*

IUGS wishes to improve the coordination of the publication of information on **news, events and achievements** arising from IUGS activities; it doea not publish 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 welcomed.

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

Format of submitted material:

Contributors should provide:

For the E-Bulletin: 2 or 3 sentences with between 1 and 3 illustrations (photographs, diagrams etc.) with captions as separate .jpg, .gif or .png files with a resolution of 150 dpi; optimally accompanied, by:

For the website: a concise text of about 0.5 to 1 A4 page (up to about 600-700 words), if possible providing a web-link (e.g. to an IUGS activity website).

The short text in the E-Bulletin will be hyperlinked to any longer text which will be placed on the IUGS website. Items that are not in reasonably good English will be returned for improvement. Others will be edited for use of English if necessary. If proposed contributions are too long, they will be returned for shortening. All images must, if necessary, be copyright-cleared before submission.

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:

claudia.mora@jsg.utexas.edu	(E-Bulletin Editor-in-Chief)
giuseppe.dicapua@ingv.it	(Webmaster)
gurmeet28374@gmail.com	(Social Media Manager)

Timetable:

The idealized timetable for the E-Bulletin is:

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 the month (**items arriving after that date cannot be included in the next monthly issue**);
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 Team will aim to compile that month's 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;
6. Long versions of material will be posted on the IUGS Website in coordination with the publication of the relevant E-Bulletin.

This timetable will be varied, as necessary, to allow for public holidays that affect the E-Bulletin Team and IUGS Secretariat such as Christmas and Chinese New Year.

NOTES

• If you require notices, information on publications, etc. to be considered for inclusion in forthcoming IUGS e-bulletins, please mail to: silvia.peppoloni@ingv.it.

• Please check the IUGS Calendar of Events for upcoming scientific meetings this coming month. 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 and English review by: *Dr. Claudia Mora (IUGS)*

www.iugs.org