







## **News at a Glance**

- 1. IUGS celebrates the 100<sup>th</sup> Anniversary of the International Union of Geodesy and Geophysics
- 2. Hutchison Young Scientists Foundation: support for young scientists to attend the 36<sup>th</sup> International Geological Congress, Delhi, India, 2-8 March 2020
- 3. Call for IGCP project proposals. Deadline 15 October 2019
- 4. News from the IUGS Initiative on Forensic Geology
- 5. New Achievement of the IUGS Heritage Stones Subcommission

# 1. IUGS celebrates the 100<sup>th</sup> Anniversary of the International Union of Geodesy and Geophysics

The International Union of Geodesy and Geophysics (IUGG) celebrated its 100<sup>th</sup> anniversary at UNESCO headquarters on 29 July 2019. President Prof. Cheng Qiuming was invited to attend the ceremony on behalf of IUGS and received a commemorative plaque presented by IUGG President Prof. Kathryn Waler in recognition of IUGS' long term cooperation with IUGG over the past years.

The anniversary was celebrated with a conference promoting international cooperation in earth and space sciences, bringing together leading international scientific organizations. The conference was opened by IUGG President Prof. Kathryn Waler, together with Dr. Shamila Nair-Bedouelle, UNESCO Assistant Director-General for the Natural Sciences. Leaders from the International Science Council (ISC), GeoUnions, the World Meteorological Organization (WMO), the United Nations Office for Disaster Risk Reduction (UNDRR) and the other related international organizations participated in the conference, the programme of which explored how science can respond to societal needs and address critical challenges, such as climate change, disaster risk reduction etc.

Over the past years, IUGS and IUGG have been collaborating closely with each other in promoting Earth sciences worldwide. The two Unions have jointly initiated and supported the









successful implementation of the International Lithosphere Program (ILP) to elucidate the nature, dynamics, origin and evolution of the lithosphere through international, multidisciplinary geoscience research projects and coordinating committees. In recent years, the two Unions have been supporting each other in promoting big science programs under the support of ISC, including the Deep-time Digital Earth (DDE) - the new IUGS-recognized big science programme.

Established in 1919, IUGG is a non-governmental international scientific organization dedicated to advancing, promoting, and communicating knowledge of the Earth system, its space environment, and the dynamic processes causing change.



Fig. 1 - IUGS President Prof. Cheng Qiuming receiving a commemorative plaque from IUGG











Fig. 2 - The Commemorative Plaque

# 2. Hutchison Young Scientists Foundation: support for young scientists to attend the 36<sup>th</sup> International Geological Congress, Delhi, India, 2-8 March 2020

Through the vision and inspiration of William W. Hutchison, IUGS Secretary General (1976-1980) and IUGS President (1984-1987), the Hutchison Young Scientists Foundation was established by the International Union of Geological Scientists to promote the professional growth of deserving, meritorious young scientists from around the world by supporting their participation in important IUGS-sponsored conferences, particularly the International Geological Congress. With funds from the Hutchison Foundation, the IUGS intends to support the participation of as many as 15 young scientists at the 36<sup>th</sup> IGC. This is a call for applications. Deadline: 15 October 2019.

Qualifications and requirements for applications are available on the IUGS website under Hutchison Young Scientist Foundation.

Deadline for submission of abstracts to 36<sup>th</sup> IGC: 15 October 2019

More details at:

http://iugs.org/uploads/Calls/Hutchinson Announcement Call for Applications IUGS.pdf









# 3. Call for IGCP project proposals. Deadline 15 October 2019

UNESCO is the only United Nations organization with a mandate to support research and capacity in geology and geophysics, and IGCP, the <u>International Geoscience Programme</u>, is its flagship.

The IGCP mission includes promoting sustainable use of natural resources, advancing new initiatives related to geo-diversity and geo-heritage and geohazards risk mitigation. IGCP facilitate international scientific cooperation in the geosciences.

The programme emphasizes women and young and early career scientists who are especially encouraged to submit project proposals.

## IGCP 2019 Special Topics defined by the Council:

- 1. Mining geosciences and sustainability.
- 2. Efficient and sustainable extractive industry technologies and stimulation methods.
- 3. Geology for the sustainable and safe scale-up of renewable energy production.
- 4. Big data, Cloud Computing and Artificial Intelligence in Geosciences.
- 5. Geohazards nearby metropolitan areas.
- 6. Global warming CO2 emission mitigation using new methods (such Carbon Storage and Sequestration).
- 7. Sustainable small volcanic islands: water, energy, resource management.
- 8. Geoheritage for sustainable development.

The website for the International Geoscience Programme provides information on 30 active projects currently supported by UNESCO and IUGS.









# 4. News from the IUGS Initiative on Forensic Geology

Countering Fraud and Corruption in Minerals and Mining

IUGS-IFG is considering methods to manage and mitigate criminal activities associated with mineral, mining and meals. This includes conflict minerals, sample adulteration, substitution and the theft of metals and refinery products. These will form part of upcoming conferences including the 4<sup>th</sup> IberoAmerican Congress on Forensic Geology, Puerto Vallarta, Mexico, October 2019 and at the forensic geology session, 36<sup>th</sup> IGC, Delhi, India, March 2019.

Forensic Geology & Forensic Archaeology Collaboration

IUGS-IFG was represented at the 8<sup>th</sup> European Meeting on Forensic Archaeology European Meeting on Forensic Archaeology, 22-23 August 2019, Moesgaard Museum, 8270 Højbjerg, Denmark. This event was arranged with the support of the Danish National Police and the European Network of Forensic Science Institutes (ENFSI).





Fig. 3 and 4 - Fake 'sapphires' made using glass, blue dye and micaceous material mixed with glue coating the exterior, in an attempt to imitate blue sapphires in the rough. The objects are approximately 40 mm in diameter (Photos: Roger R Dixon, In: Donnelly, L. J., Pirrie, D., Harrison, H., Ruffell, A., Dawson, L. (Eds) (2020). A Guide to Forensic Geology. International Union of Geological Sciences (IUGS), Initiative on Forensic Geology (IFG).

Geological Society of London Publication (in prep).











Fig. 5 - Stolen converter matte disguised as potatoes, on route from South Africa to a refinery in Europe (After In Dixon, R. & Schouwstra, R. 2017. "The role of forensic geology in the illicit precious metals trade". In: Donnelly, L. J. (ed) Episodes Journal of International Geoscience. Special Issue on Forensic Geology, International Union of Geological Sciences, June 2017, 40(2), 132-140).

# European Network of Forensic Science Institutes (ENFSI)

IUGS-IFG is linking with the European Network of Forensic Science Institutes (ENFSI), through the treasurer of IUGS IFG (Prof Lorna Dawson). She is a member of the Animal Plant Soil Trace (APST) working group and is currently contributing to writing a European Best Practice Manual. Further opportunities for synergy will be discussed at a meeting in The Hague, in the Netherlands, in September 2019. This is a widening of our lineages with other established networks such as those established with OSAC-NIST in the USA. These associations assist in promoting, developing and standardising forensic geology around the world.

# Forensic Geology Training Video, USA

IUGS-IFG has endorsed and agreed to support the production of a professionally produced training video on the forensic collection of soil samples. This is aimed at raising skills levels and the standardisation of soil collection at crime scenes.









# 5. New Achievement of the IUGS Heritage Stones Subcommission

Seven new heritage stones have been designated as GHSRs by the IUGS EC: Alpedrete Granite (Spain), Bath Stone (UK), Macael Marble (Spain), Makrana Marble (India), Pietra Serena (Italy), Rosa Beta Granite (Italy), and Tennessee "Marble". With this last set, twenty two stones from all over the world have been recognized so far, promoting geology, stones and World Heritage in the scientific community.

For more information: <a href="http://globalheritagestone.com/igcp-637/igcp-achievements/">http://globalheritagestone.com/igcp-637/igcp-achievements/</a>



Fig. 6 - Estremoz marble at Vienna airport (Picture: Lola Pereira)









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### **EDITORS' NOTES:**

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

IUGS wishes to better co-ordinate 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 will also be welcomed.

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**: 2 or 3 sentences with between 1 and 3 illustrations (photographs, diagrams etc.) with captions as <u>separate</u> .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:

silvia.peppoloni@ingv.it giuseppe.dicapua@ingv.it gurmeet28374@gmail.com (E-Bulletin Editor-in-Chief) (Webmaster) (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 16<sup>th</sup> day of that 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 25<sup>th</sup> 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: <a href="mailto:silvia.peppoloni@ingv.it">silvia.peppoloni@ingv.it</a>.
- Please check the IUGS <u>Calendar of Events</u> 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: <a href="mailto:giuseppe.dicapua@ingv.it">giuseppe.dicapua@ingv.it</a>
- To be added to or removed from the IUGS e-bulletin distribution list, please mail to: <a href="mailto:iugs.beijing@gmail.com">iugs.beijing@gmail.com</a> or <a href="mailto:secretariat@iugs.org">secretariat@iugs.org</a>.
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- Check the IUGS website: http://www.iugs.org/

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