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1. Secretary General’s Report on IUGS Bureau Meeting in Sendai (Japan)

At its meeting (Sendai, Japan, 12-14 November 2018), the IUGS Bureau discussed important ongoing activities such as publications and news outlets; decided on significant changes to the IUGS awards to be presented at the 36th IGC; discussed activities at the 36th IGC and a call for bids for the 38th IGC; ratified several Heritage Stone Resource proposals; and received reports of the Finance Committee and the Resourcing Future Generations Initiative. Also discussed were plans for the 2019 IUGS EC Meeting to be held in Beijing and a forum for the Deep Time Digital Earth (IUGS-DDE) project, which IUGS will recognize as a Big Science Program.

2. IUGS at China Mining 2018

The China Mining 2018 Conference and Exhibition was held in Tianjin, China on October 18th to 20th. After nineteen years of development since 1999, China Mining is ranking among the top global mining events. This year, China Mining has received more than 11,000 delegates from 69 countries, including 15 Mining Ministers and 20 Geological Survey Directors.

Prof. Cheng Qiuming (President of the IUGS) addressed the opening ceremony of the Conference and attended a series of activities during the Conference. The IUGS Secretariat prepared and provided an IUGS booth at the Exhibition.
Address by President Prof. Cheng Qiuming at the Opening Ceremony

At the Opening Ceremony on October 18th, Prof. Cheng Qiuming emphasized, in his address, the global need to secure new mineral and energy resources for the future, while meeting the environmental and social imperatives for sustainable development. Prof. Cheng referred to Resourcing Future Generations (RFG), a flagship initiative of the IUGS in which a range of new activities related to securing the mineral and energy resources required by future generations have been developed. He highlighted IUGS’s roles in enhancing geoscience capacity building and in promoting international collaboration in terms of geological mapping, data management, exploration models, integration of geophysical and geological data, etc.

Promoting IUGS among African countries

Prof. Cheng Qiuming had a meeting with the delegation of Organization of African Geological Surveys (OAGS) led by Mr. Alex Ndubuisi Nwegbu, President of OAGS. Prof. Cheng gave a comprehensive introduction of the IUGS, especially the benefits of being a member of the IUGS community. As there is still room for the growth of the IUGS membership in Africa, Prof. Cheng encouraged the inactive members in Africa to reactive their membership and those non-member countries to become IUGS members.

Prof. Cheng met with Mr. Aziz Rabbah, the Minister of Energy, Mines, Water and Environment of Morocco, motivating the reactivation of Morocco’s IUGS membership. Mr. Aziz Rabbah invited Prof. Cheng to visit the Ministry of Energy, Mines, Water and Environment of Morocco and to attend a scientific event to be held in Morocco next year.

At the China-Africa Mining Investment Partnership Forum, Prof. Cheng gave a lecture entitled “Big Science Initiatives and International Collaboration of IUGS” to further promote the IUGS and its scientific initiatives to African countries.
Co-Convening the Session “International Geoscience Advancement”

As the convener of the Session “International Geoscience Advancement”, Prof. Cheng Qiuming invited Prof. Roland Oberhansli, the Past President of the IUGS and Prof. Eric Grunsky, the Secretary General of the International Association for Mathematical Geosciences (IAMG), which is an affiliated organization of the IUGS, to respectively give lectures at the Session.

Meeting with leaders from China Geological Survey (CGS) and British Geological Survey (BGS)

Prof. Cheng Qiuming had a meeting with Mr. Wang Yan, Vice President of China Geological Survey (CGS) and Dr. Mike Stephenson, Director of Science and Technology at the British Geological Survey (BGS). Both Mr. Wang and Dr. Stephenson reviewed their successful and long-term cooperation with the IUGS and looked forward more joint endeavors between IUGS, CGS and BGS.

As both CGS and BGS are sponsors of the newly-proposed IUGS “Deep Time Digital Earth” Program (IUGS-DDE), Prof. Cheng had a detailed discussion with Mr. Wang and Dr. Stephenson about the future development of the Program. Aiming to link together the
enormous thematic databases developed by many parts of the IUGS community - IUGS-DDE will provide a dynamically linked and paleo-geologically- and paleo-geographically-referenced (spatially and temporally) digital Earth database. The open platform to be created by IUGS-DDE will guarantee equal accessibility for all individuals, especially for young geoscientists and geoscientists from low-income countries.

**IUGS booth at 2018 China Mining Exhibition**

The IUGS Secretariat prepared a newly-designed IUGS booth at China Mining 2018 Exhibition. Printed copies of the IUGS 2017 Annual Report and other promotional items were handed out at the booth. The IUGS booth hosted also working meetings.

![Fig. 4 - Prof. Cheng had a meeting with leaders from CGS and BGS.](image)

![Fig. 5 - IUGS booth at China Mining 2018 Exhibition.](image)
3. **IUGS-COGE contribution on the EGU Strategy Document**

The European Geosciences Union (EGU) has recently approved and fully funded, for 2019 at least, a strategy document for enhancing geoscience education in Europe and beyond. The strategy recognizes five groups that need support: school teachers with strong geoscience backgrounds; school teachers with weak geoscience backgrounds; university geoscience teachers; providers of informal geoscience education; and geoscience educational researchers - strategies are being developed to support each of these groups. The IUGS Commission on Geoscience Education (IUGS-COGE) and the International Geoscience Education Organisation (IGEO) are devising a strategy to build on the EGU initiative in a global context.

![Figg. 6 and 7: EGU Strategy Document for enhancing Geoscience Education.](image-url)
4. Report by IUGS Task Group on Geohazards (IUGS-TGG)

During the 10th Portuguese National Geologic Congress which took place in Ponta Delgada, São Miguel Island, in the Azores (Portugal, July 11th, 2018), Antonio Correia, Vice-chair of the IUGS Task Group on Geohazards (IUGS-TGG), visited the Institute for Volcanology and Risk Assessment (IVAR) and the Centre for Information and Seismovolcanic Surveillance of the Azores (CIVISA) in the Azores Archipelago, which is an autonomous region of Portugal. The Azores are a group of nine volcanic islands in the east of the Atlantic Ocean close to the area where the Euroasian, African, and North American plates come together to form the Azores triple junction.

The CIVISA is a consortium resulting from a partnership between IVAR and the Regional Service for Civil Protection and Fire of the Azores (SRPCBA) and works on the prevention and mitigation of natural disasters and in crisis management. CIVISA is also responsible for running permanent monitoring networks in the Azores islands which are composed by geophysical, geodetic, geochemical, and hydro-meteorological stations.

The IVAR Booklet reports that data collected in those stations “is integrated in IVAR geodatabases for research, civil protection advisory and land use planning, among other purposes”. IVAR and CIVISA share people, technical expertise and facilities; the former is focused in natural hazards research, and provides methodologies and models to improve CIVISA monitoring strategies; the later operates the monitoring networks and collects data which are used to produce and validate (or not) IVAR models and algorithms.

During the visit Antonio Correia had the opportunity to talk to the director of IVAR, Dr. José Pacheco, and to the director of CIVISA, Dr. Rui Marques. The possibility of organizing an international meeting in Azores in 2020 about geohazards was discussed and welcomed; however, before any decision can be made, funding has to be sought for and allocated to the event.
5. Publication of the ratified proposal for the new Holocene subdivisions

The newly ratified Proposal for new Holocene Subdivisions has been published in Episodes and is freely available online at http://www.episodes.org/onlineFirstPublication.do.

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<th>System</th>
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This article describes the GSSPs (Global Stratotype Section and Point) that define the boundaries of the three formalized subdivisions of the Holocene Series/Epoch: the Greenlandian, NorthGrippian, and Megalayan Stages/Ages and the corresponding Lower Holocene, Middle Holocene, and Upper Holocene Subseries/Subepochs. Approval by the International Commission on Stratigraphy and ratification by a vote of the IUGS Executive Committee were completed in 2018.

6. Exploration and Mining in the 21st Century: call for papers

The IUGS, the Geological Society of London (GSL), and Geology in the Public Interest (GPI) invite authors to submit abstracts for papers to include in a forthcoming Geological Society Special Publication on Exploration and Mining in the 21st Century. This publication follows the success of the Resources for Future Generations 2018 conference. It will address progressive trends in the industry and describe the role mining will play in the future as part of a resilient and sustainable economy. For general information and to express an interest in participating contact Greg Wessel at gwessel@publicgeology.org.
7. News from the Initiative on Forensic Geology (IUGS-IFG)

House of Lords, Select Committee on Science & Technology, Forensic Science Inquiry

The UK House of Lords’ Science and Technology Committee has held an inquiry into forensic science. The IUGS-IFG provided written evidence. The evidence is now available, provided from a variety of organizations and individuals, and can be found at the link: https://www.parliament.uk/business/committees/committees-a-z/lords-select/science-and-technology-committee/inquiries/parliament-2017/forensic-science/forensic-science-publications/

Forensic Geology in Japan

The Geological Society of Japan (JGS) has agreed to produce a special issue publication on forensic geology. This will be freely available in electronic format in both Japanese and English. The publication is expected to progress in 2019, and further details will be provided as it progresses. Those interested to submit a paper should contact the Initiative on Forensic Geology (geologisist@hotmail.co.uk or sugita@nrips.go.jp).

Forensic Geology and Forensic Taphonomy

The IUGS-IFG was represented at an interdisciplinary symposium on taphonomic research in archaeology, forensic science and paleontology. This took place at the University of Central Lancashire, in the United Kingdom, on November 2nd-4th 2018. This event focused on post-mortem processes and provided a more detailed understanding of decomposition and preservation of remains associated with burials. This is important to evaluate during police and law enforcement ground searches for burials. More details are at: https://taphonomyuclan.wordpress.com/

Professor Lorna Dawson, CBE

The IUGS-IFG is delighted to announce that Prof. Lorna Dawson, IFG Treasurer, has been awarded the Honour of Commander of the British Empire (CBE) from the Queen of the UK for services to Soil and Forensic Science. As part of the award ceremony in November
2018, Prof. Dawson has also been invited to speak at an Evensong ceremony in St Paul's Cathedral, in London

8. TROP ICSU: Climate Change Education Across the Curriculum

The goal of the TROP ICSU project, of which the IUGS is a key partner, is not to introduce Climate Education as a stand-alone topic but, rather, to integrate it with the core curriculum of Science, Mathematics, Social Sciences, and other disciplines. From Glaciers in Earth Science to Isotopes in Chemistry, from Introductory Calculus in Mathematics to Sea-Level Rise in Geography, a range of topics in existing curriculum can be taught using a climate-related examples or activities. Teachers and educators will be able to choose a lesson plan from the TROP ICSU project website to teach a topic in any discipline or subject with the help of examples, case studies, and exercises related to climate change.
9. STRATI 2019 in Milan (Italy)

The 3\textsuperscript{rd} International Congress on Stratigraphy (STRATI 2019), will be held in Milano (July 2\textsuperscript{nd}-5\textsuperscript{th}, 2019), on behalf of the International Commission on Stratigraphy (IUGS-ICS). This event will be the most important meeting on Stratigraphy since STRATI 2015 (Graz, Austria) and it will provide the opportunity to present and discuss the up-to-date results in all the fields of Stratigraphy. The scientific program includes 32 sessions. Fifteen pre- and post-Congress field trips are scheduled in some of the most important and classic localities of Italy.

Read more: http://www.strati2019.it

10. New policy for promoting IUGS/UNESCO IGCP projects

Most IGCP projects are funded jointly by IUGS and UNESCO and need to be reported to both funding organizations. Also, leaders of IGCP projects are obliged to do as much dissemination as possible of their projects. From now on, the protocol for promoting the IGCP projects is as follows:

- As soon as an IGCP project has planned or held an activity/event, the project leader (or co-leaders) should send a short note for use in the IUGS e-Bulletin, with a link to the IGCP web page where fuller information can be found. One or two pictures to illustrate the activity/event should be included. This activity/event and its dissemination through the IUGS
The e-Bulletin should be included in the annual IGCP project report for the UNESCO. The Editor of the IUGS e-Bulletin is: Silvia Peppoloni (silvia.peppoloni@ingv.it).

- During and/or after the IGCP activity/event, the leader (or co-leaders) should also send a very short note and pictures to the IUGS Social Media Manager, Gurmeet Kaur (gurmeet28374@gmail.com). This should also be reported in the annual IGCP project report to UNESCO.

- A detailed IGCP project report should be prepared at the end of the IGCP project and sent to Episodes, on time to be reviewed, accepted and published in the December issue. Format and deadlines are available on the Episodes website: www.episodes.org.
EDITORS’ NOTES:
CONTRIBUTING TO THE IUGS E-BULLETIN, WEBSITE AND SOCIAL MEDIA

IUGS wishes to better co-ordinate public cation 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 separate .jpg, .gif or .png files with a resolution of 150 dpi; optimally accompanied, by:

For the web site: 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 (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 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 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 mailto:iugs.beijing@gmail.com or secretariat@iugs.org.

• Follow the IUGS on Social Media! We are on Facebook, Twitter, LinkedIn and Google+.

• Check the IUGS web site: http://www.iugs.org/

Edited by:

Dr. Silvia Peppoloni (IUGS, INGV), and Dr. Brian Marker (IUGS)

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