

---

## News at a Glance

1. **International Commission on Stratigraphy: New Subdivisions of the Holocene**
  2. **IAPG - International Association for Promoting Geoethics**
  3. **Borehole of Songliao Basin Drilling Project completed at a depth of 7,018 Meters**
  4. **Anniversaries: Nicolas Steno, born 380 years ago, bared not his own but fossils' teeth**
  5. **Membership of the IUGS Publications Committee**
- 

### **1. International Commission on Stratigraphy: New Subdivisions of the Holocene**

The IUGS International Commission on Stratigraphy (ICS), which is responsible for standardizing the Geologic Time Scale, ratified the definition of three new stages that comprise the Holocene Series. The ICS Commission forwarded this proposal to its parent body, the IUGS, for consideration, and the Executive Committee of IUGS voted unanimously to ratify them.

This is a key achievement for the International Union of Geological Sciences and particularly for its Commission on Stratigraphy. The proposals were developed by a dedicated, international team of Holocene scientists led by Mike Walker of University of Wales. They were subsequently approved by the International Subcommission of Quaternary Stratigraphy and the International Commission on Stratigraphy before being forwarded to IUGS for ratification. According to Professor David Harper of Durham University in the United Kingdom and Chair of the International Commission on Stratigraphy, the many years of scientific research and international collaboration followed by intense scrutiny of the proposals as they were evaluated at several levels in the IUGS organization give legitimacy to the new units as global standards.

The Holocene is now defined by three stages: the Lower Holocene Greenlandian Stage, the Middle Holocene Northgrippian Stage, and the Upper Holocene Meghalayan Stage. The

lower boundary of each is placed at a carbon isotope excursion that defines the respective climatic event.

### **The IUGS-ratified Holocene Definition:**

#### **1. Greenlandian Stage/Age = Lower/Early Holocene Subseries/Subepoch**

Boundary Stratotype (GSSP): NorthGRIP2 ice core, Greenland (coincident with the Holocene Series/Epoch GSSP, ratified 2008). Age: 11,700 yr b2k (before AD 2000).

#### **2. Northgrippian Stage/Age = Middle Holocene Subseries/Subepoch**

Boundary Stratotype (GSSP): NorthGRIP1 ice core, Greenland. Global Auxiliary Stratotype: Gruta do Padre Cave speleothem, Brazil. Age: 8326 yr b2k

#### **3. Meghalayan Stage/Age = Upper/Late Holocene Subseries/Subepoch**

Boundary stratotype (GSSP): Mawmluh Cave speleothem, Meghalaya, India. Global Auxiliary Stratotype, Mount Logan ice core, Canada. Age: 4250 yr b2k

## **2. IAPG - International Association for Promoting Geoethics**

- The Cape Town Statement on Geoethics is now available in 35 languages:

Peppoloni Silvia (ed.) (2018) spreading geoethics through languages across the world. Translations of the Cape Town Statement on Geoethics. International Association for Promoting Geoethics (IAPG),

Flip Book: <http://fliphtml5.com/ggru/ttwl>

Free download:

[http://docs.wixstatic.com/ugd/5195a5\\_f80fe698039e4f6d9bc8c5e4a5f05898.pdf](http://docs.wixstatic.com/ugd/5195a5_f80fe698039e4f6d9bc8c5e4a5f05898.pdf)

- Geoethics at the 2018 AGU Fall Meeting (Washington, 10-14 December 2018)

Session ID#: 51793 "Geoethics: Taking a Stand for Ethical Geoscience Research, Education, Communication, and Practice"

Convenership: Cindy M Palinkas (IAPG), Vincent S Cronin (IAPG), Silvia Peppoloni (IAPG), Chris Keane (AGI)

Session description: <https://agu.confex.com/agu/fm18/preliminaryview.cgi/Session51793>

Call for abstracts (deadline 1 August 2018): <https://fallmeeting.agu.org/2018/abstract-submissions/>

- New section: IAPG-Lebanon

The section is chaired by Soumaya Ayadi-Maasri

IAPG has 30 national sections: <http://www.geoethics.org/sections.html>

- FORAM 18 pilot event on 2018 on raw materials governance (Nancy, France, 27 June 2018)

The IAPG has been invited to join this event and will be represented by David Ovadia (IAPG-UK coordinator): <http://www.foramproject.net/index.php/pilot-event/>

- Geoethics at the II Symposium of Paleontology of Perù (Lima, Peru, 27-30 November 2018)

César Augusto Chacaltana Budiel (IAPG-Peru) coordinates the "THEMATIC SESSION (ST6): Geoethics in Paleontology, Education and Society. ROUND TABLE: "Geoethics and paleontological practice for sustainable development.

Juan Carlos Gutiérrez-Marco (IAPG Board of Experts) will give a keynote speech in the session ST6 and will represent IAPG in a Round Table discussion.

- More news on the IAPG: <http://www.geoethics.org>

### **3. Borehole of Songliao Basin Drilling Project completed at a depth of 7,018 Meters**

The continental Scientific Drilling Project of the Cretaceous Songliao Basin (SBDP) completed the drilling of its Songke II borehole at a depth of 7,018 meters in Heilongjiang Province of China on May 26, 2018. It is the first continental scientific drilling project to penetrate the whole of a Cretaceous terrestrial formation in the world. Prof. Cheng Qiuming and Prof. Roland Oberhaensli, IUGS President and Past President, were invited to attend the celebration ceremony held at the drilling site in northeastern China.

In the remarks delivered at the celebration ceremony, Prof. Cheng Qiuming said that the successful drilling of the Songke II borehole developed key technologies and equipment for deep earth exploration and experimental research, opened a new space for clean energy prospecting in the Songliao Basin and contributed to the global efforts on Cretaceous terrestrial paleoclimate research. He said the IUGS would continue its attention to and support for the earth exploration and research.

The drilling project started in April 2014 and was jointly funded by the International Continental Scientific Drilling Program (ICDP) and the Chinese government. The project helped to recover a nearly complete Cretaceous terrestrial sedimentary record and the study of the core would provide unique opportunities for the geosciences community to understand the response of terrestrial environment to geological events related to the carbon cycle and greenhouse climate change during the Cretaceous, and will be of help to inform the understanding of modern global warming.





Drilling Site



IUGS President Prof. Cheng Qiuming Delivers an Address

#### 4. Anniversaries: Nicolas Steno, born 380 years ago, bared not his own but fossils' teeth

“The Danish born Nicolas Steno was one of the first scholars to compare the teeth of a shark’s head with a fossil tooth in 1666. The common explanation that tongue stones fall from the sky or moon or grooves in rocks was given a new modern explanation”.

General-Secretary of INHIGEO, Professor Marianne Klemun

Fuller details are available on:

[http://iugs.org/uploads/Anniversaries\\_INHIGEO\\_Nicolas\\_Steno.pdf](http://iugs.org/uploads/Anniversaries_INHIGEO_Nicolas_Steno.pdf)

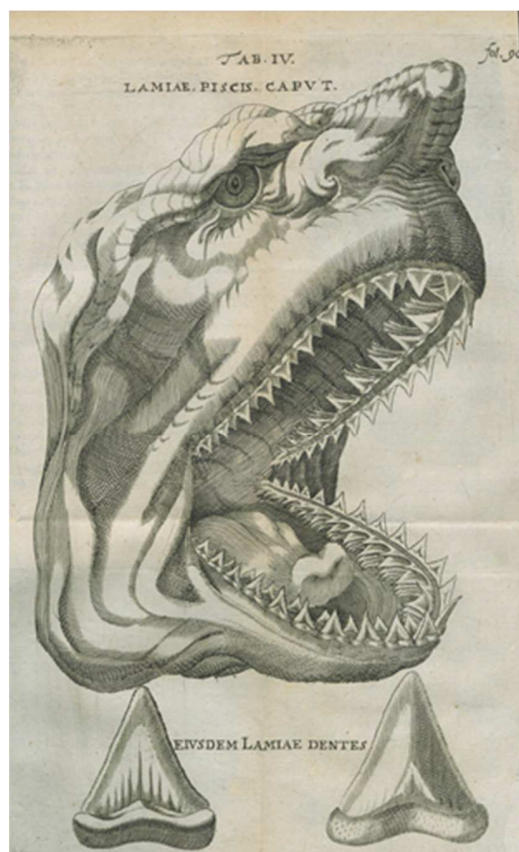


Illustration from a new edition on Steno's 1667 paper comparing a tooth from a shark's head with a fossil tooth, Tab. IV: Elementorum Myologiae, 1669, Amsterdam, Elizeus Weyerstraet, by permission of the Library of the University of Vienna.

## 5. Membership of the IUGS Publications Committee

The IUGS Publications Committee gives advice to the IUGS Bureau and Executive on matters relating to the IUGS Journal “Episodes”, books arising from IUGS activities, the IUGS E-Bulletin and the IUGS Website as well as liaising with others who are responsible for IUGS “Social Media”.

The present Committee was convened in 2012 and would normally have terminated in 2016 but, because of the impending transfer of Editorial responsibility for “Episodes” from the Geological Society of India to the Geological Society of Korea in 2016, it was given an exceptional extension until mid-2018 to secure continuity and a smooth transfer.

The present Publications Committee consists of 5 people of whom 4 are males and three are from Europe. (The IUGS Secretary General who is from the USA also attends). In line with IUGS principles to encourage diversity it would be good if the Committee could gradually achieve a better gender and geographical balance.

There is one **vacant position for the period 2018-2020** (with possible extension for 4 years after that subject to IUGS approval). All candidates must have a good research or applied geology background, a good track record of personal high quality publications, a reasonable level of journal editorial experience, and fairly good use of English.

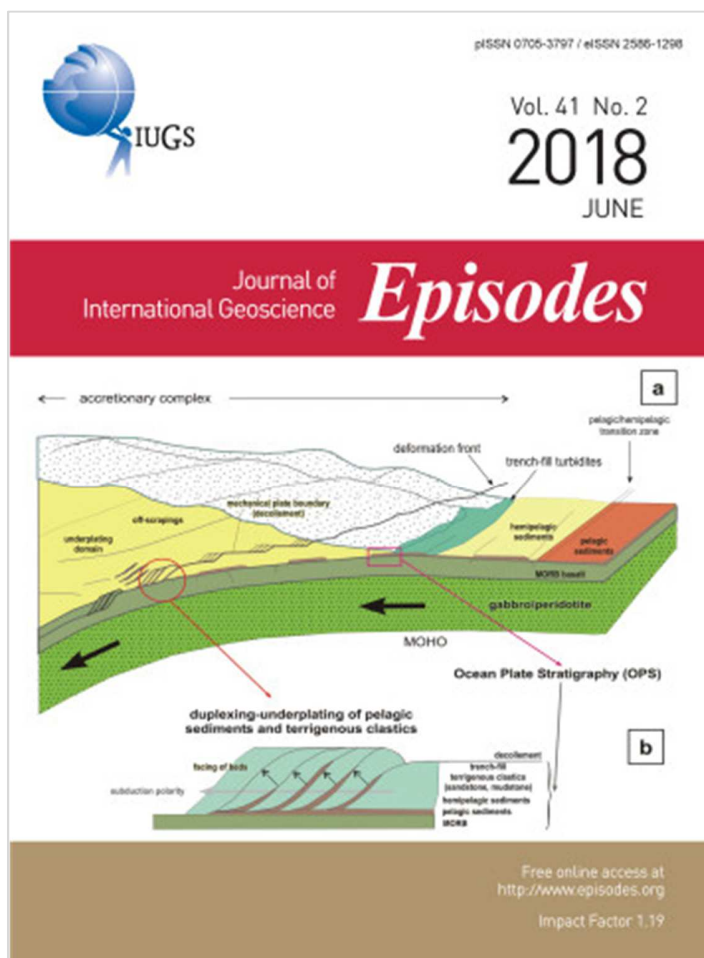
Nominations are invited. Please send each nomination with a CV to [marker.brian1@gmail.com](mailto:marker.brian1@gmail.com) by the 10th July 2018.

### **IUGS Journal EPISODES –Online first publication**

Authors who wish to submit papers through the online submission and management system of the journal at [www.episodes.org](http://www.episodes.org) will be pleased to know that all papers accepted for publication are now published “online first” on the website to minimize delays to publication.



### June 2018 issue of Episodes



The June issue of the journal is diverse containing four research papers which deal respectively with: a new model for the behavior of Pacific-type orogenic belts; hydrogeological models that address both water resources and flood hazard in Benin, Africa; the characteristics of springs in a catchment in the Carpathian Mountains of central Europe; and one focusing on the ethical duty of geoscientists to disseminate information to citizens, the need for training of geoscientist in communication and the development of course materials for use in Italy (or for wider use).

There are three reports from IUGS-sponsored International Geoscience Programme (IGCP) projects:

- IGCP 589 on eastern and western Tethys;
- IGCP 639 on sea-level change in Oman;
- IGCP 655 on the Toarcian oceanic anoxic event -

.....as, well as a report from a symposium on the important Ediacaran-Cambrian Transition.

The issue is rounded off by short profiles of 4 current IUGS Councillors.





\*\*\*\*\*

## 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 and Affiliates 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:**

<a href="mailto:Kristine.Asch@bgr.de">Kristine.Asch@bgr.de</a>	(E-Bulletin editor)
<a href="mailto:Susanna.Koesterke@bgr.de">Susanna.Koesterke@bgr.de</a>	(E-Bulletin secretary)
<a href="mailto:giuseppe.dicapua@ingv.it">giuseppe.dicapua@ingv.it</a>	(webmaster)
<a href="mailto:amel.barich@gmail.com">amel.barich@gmail.com</a>	(social media officer)

## 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 [Kristine.Asch@bgr.de](mailto:Kristine.Asch@bgr.de) and [Susanna.Koesterke@bgr.de](mailto:Susanna.Koesterke@bgr.de).
- 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](mailto: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](mailto:secretariat@iugs.org).
- Follow the IUGS on Social Media! We are on [Facebook](#), [Twitter](#), [LinkedIn](#) and [Google+](#) edited by Amel Barich [amel.barich@gmail.com](mailto:amel.barich@gmail.com) (social media officer)
- Check the IUGS web site: <http://www.iugs.org/>

*Edited by:*

*Kristine Asch (IUGS, BGR), Susanna Kösterke (BGR)  
and Brian Marker (IUGS)*

[www.iugs.org](http://www.iugs.org)