December 2023

Newsletter



Photo: Suzhou participants, November 7th

In This Issue

- 1. Medal to François Robida
- 2. Suzhou Meetings
- 3. Invitation to CGI Membership
- 4. New CGI Councilors
- 5. IGC Korea abstract deadline

McHarg Medal to François Robida



François Robida, Past Chair of CGI, has won the 2024 EGU Ian McHarg Medal! This medal was established by the Earth and Space Science Informatics Division in recognition of

the scientific achievements of Ian McHarg. It is awarded for distinguished research in information technology applied to Earth and space sciences. Congratulations, François!



CGI-DDE Future Geoscience Information Standards Meetings



Ensuring that geoscience information will be findable, accessible, interoperable, and reusable requires that we all adopt and contribute to the stewardship of global geoscience information standards. These standards are the role of the International Union of Geological Sciences (IUGS) Commission for the Management and Application of Geoscience Information (CGI).



At present, major progress in this field is being stimulated by the highly successful IUGS Deeptime Digital Earth (DDE) project. To optimize coordination and planning of these geoscience information standards, and to support the success of DDE, a workshop and forum on Future Geoscience Information Standards were cohosted by CGI and DDE on 7-10 November 2023 in the beautiful city of Suzhou, China, with great success. The meetings were chaired by Prof. Harvey Thorleifson, Prof. Natarajan Ishwaran, Prof. Zhang Minghua, Dr Mark Rattenbury and Dr François Robida. After opening remarks from the City of Suzhou, and by IUGS President Prof. John Ludden, by CGI Chair Prof. Harvey Thorleifson, and by DDE Deputy Secretary General Prof. Natarajan Ishwaran, workshop keynotes on the Role of Geoscience Information Standards for international initiatives and programs were presented by CGI Past Chair François Robida and by DDE Science Committee Chair Prof. Hans Thybo.



The DDE geoscience information metadata standard (Edition 1.0–2023) was then formally released by Prof. Zhang Minghua and Dr Steve Richard, after three years work on drafts and revisions among DDE working groups globally. At the initial DDE-focused two-day workshop on 7-8 Nov, ten DDE Science Working Groups presented their progress and plans: geological mapping by Benjamin Sautter and Dr Song Yang, stratigraphy by Dong Shaochun and Fan Junxuan, igneous rock by Tong Ying, marginal seas by Zhang Jinpeng, mineral resource assessment by Yang Jie, DDE-China by Ciu Ning and Liu Rongmei, geological time by Li Yang, paleogeography by Li Haipeng, hydrogeology by Yu Ying, and geomorphology by Li Sijin.





The DDE platform and related major geoscience initiatives were then introduced, with presentations on OneGeology by Matt Harrison, GSEU by Jasna Sinigoj, and the DDE Platform by Hu Linshu.



Progress on the DDE knowledge system was then presented by Wang Shu and Zhu Yuanqiang, construction of knowledge graphs for petroliferous basin evaluation by Tang Xianming, and sedimentology knowledge graph by Xu Yiwei. Prof. Marshall Ma presented a Keynote on Machine-Readable Semantics in Data Science for Geosciences, and following talks were by Dr Mark Rattenbury on geoscience terminology, and Dr Steve Richard on LOOP knowledge management.



Extensive discussions were held after each session on both the progress of DDE work groups and on current geoscience standards needed for DDE and concurrent initiatives. Subsequent sessions covered status, needs and challenges for geoscience standards and planning for DDE success. In addition to the highly capable and accomplished DDE work group leaders and spokespersons, experts attending in person included Benjamin Sautter, Clinton Smyth, Fan Junxuan, Janpieter van Dijk, Jasna Šinigoj, Lesego Polite Peter, Marshall Ma, Matt Harrison, Mickaël Beaufils, Nicholas Car, Simon Cox, and Steve Richard.



Online experts included Edd Lewis, James Passmore, Kazuhiro Miyazaki, Lesley Wyborn, Mauricio Pavan Silva, Mickael Sexton, and Tim Duffy.

At the CGI-focused 9-10 November forum, Michael Sexton spoke on mature data models, Mickael Beaufils on emerging data models, Mark Rattenbury on vocabularies and governance, François Robida on promoting standards, Lesley Wyborn on connecting geoscience domains, and Simon Cox on connecting to other disciplines. At the ensuing session, new and refined geoscience standards were discussed by Clinton Smyth on industry applications, Steve Richard on ontologies, and Nick Car on the semantic web. Talks on Digital Twins, Data Science, AI, and other topics were then presented by Harvey Thorleifson, Marshall Ma, Matt Harrison, and others.

Concluding discussion focused on next steps for global geoscience standards, and valuable suggestions to both CGI and DDE were provided by participating experts and scientists.







The meetings were magnificently arranged and presented by our superbly capable hosts.



Following the successful meetings on the future of global geoscience information standards in Suzhou, China, 7-10 November 2023, CGI Council has undertaken deliberations on a CGI Strategic Plan. This has been tremendously focused by the superb discussions at the Suzhou meetings.



Please visit the CGI web site at <u>https://cgi-iugs.org/</u>, and if you aren't a member, please click the Join Now button!

New CGI Councilors 2023



Mickaël Beaufils BRGM France M.Beaufils@brgm.fr



Lesego P. Peter Botswana Geoscience Institute peterl@bgi.org.bw



Michael Sexton Geoscience Australia michael.sexton@ga.gov.au



Jasna Šinigoj Geological Survey of Slovenia jasna.sinigoj@geo-zs.si

IUGS

The International Geological Congress abstract deadline is February 16th, 2024!