

International Commission on Geoheritage

ANUAL REPORT 2022

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Dr. Rachel Walcott. Chair, Sub-commission on Geo-Collections

IUGS

INTERNATIONAL COMMISSION ON GEOHERITAGE

OUR MANDATE

IUGS International Commission on Geoheritage (IUGS-IGC) was created in 2016 with two sub-commissions: 1) Sub-Commission on Sites and Collections, 2) Sub-Commission on Heritage Stones.

In 2020 the IUGS Executive Committee decided to dissolve and rejuvenate this Commission with the following goals:

- 1) To review the structure, members and operational guidelines of the existing commission and sub-commissions.
- 2) To create a unique commission working under unified criteria, a unique budget and common statutes, with its own webpage.
- 3) To redefine and reactivate the programs of IUGS designation of sites and Global Stone Heritage Resource
- 4) To increase the visibility of the Commission among the Geoheritage community and to strength collaboration with other international organizations, with special emphasis on the UNESCO Global Geoparks.
- 5) To search for the possibility creating a new sub-commission on Geo-collections.

OUR MAIN ACHIEVEMENTS

After two years of strong networking most of our main goals have been achieved:

Internal structure

- The statutes of the International Commission on Geoheritage has approved by the IUGS EC. There is still work to be done to refine it, but the main pillars of the commission and sub-commissions have now been defined.
- The **lists of voting members** and corresponding members of each subcommission have been formally updated.
- The Commission on Geoheritage is now a **unified and strong commission** working under a common strategy and looking for synergies among different subcommissions. The Zumaia event was excellent proof of this new union.
- A new **Sub-commission on Geo-collections** has been defined and approved by the IUGS EC.

Designation programs

- The existing program of Global Heritage Stone Resources has been reformulated and reactivated with new guidelines and a new group of voting members. 10 new IUGS Heritage Stones have been designated in 2022.
- The **IUGS Geological Heritage Sites** program has been successfully established with the announcement of "**The First 100**". This initiative generated global interest and great engagement between the IUGS and its affiliated organization.

Visibility and networking

- The IUGS International Commission on Geoheritage has gained huge visibility and credibility. The IUGS 60th anniversary event and the declaration of Zumaia have increased the profile of the IUGS noticeably.
- A new website has been established <u>www.iugs-geoheritage.org</u>. During the first 3 months this website received **17.727** visitors from **158** different countries.
- Collaboration with other international organizations has been strongly consolidated. The participation of the First 100 with most of the main international Earth Science organizations is a good example of successful **international collaboration**.
- Collaboration with UNESCO and GGN has been also strengthened. The IUGS desktop assessment dossier has been improved and a new working group has been established to create new guidelines.

COMMISSION STRUCTURE IN 2022

https://iugs-geoheritage.org/organization-chart/

IUGS International Commission on Geoheritage			
Chair: Asier Hilario			
Basque Coast UNESCO Global Geopark, Spain			
Vice Chair: Angela Ehling	Vice Chair: Zhang Jianping		
Bundesanstalt für Geowissenschaften und Rohstoffe. Germany	China University of Geoscience. China		
Secretary General: Juana Vegas			
Instituto Geológico y Minero de España. Geological Survey of Spain (IGME-CSIC)			

Sub-commission on Geoheritage Sites			
Chair: Benjamin van Wyk de Vries	Secretary General:		
Clermont Auvergne University. France	vacant		
Sub-commission on Heritage Stones			
Chair: Gurmeet Kaur	Secretary General: Victor Cardenes		
Panjab University. India	Oviedo University. Spain		
Sub-commission on Geo-collections			
Chair: Rachel Walcott	Vice Chair: Marcela Gómez.		
National Museums Scotland	Colombia		
Secretary General: Leslie Hale National Museum of Natural History. Smithsonian Institution. USA			

SUMMARY OF OUR MAIN ACTIONS IN 2022



- Organization of the Zumaia event. IUGS 60th anniversary celebration. This successful event has focused most of our effort in 2022.
 - o 150 participants from 42 countries
 - Announcement of the First 100 IUGS Geological heritage Sites. This project has brought together more than 500 authors and voting members from more than 40 different countries.
 - o Announcement of 10 new IUGS Heritage Stones
 - o Presentation of the IUGS Sub-commission on Geo-collections
 - The IUGS Zumaia declaration. One of the most widely supported declarations ever signed by the geological community.
 - Keynotes by representatives of most of the main Earth Sciences international organizations.
 - o Global media impact and huge international visibility.
 - o IGCP 731
 - Production of the "The First 100" high quality coffee table book

- Evaluation of 17 aspiring UGGp coordinated by Benjamin van Wyk de Vries with a final review from Asier Hilario, who represented IUGS in the UGGp Council. This is an important IUGS contribution to the development of UGGp program.
- The **new Sub-Commission on Geo-collections** has been created thanks to the initial contribution of Angela Ehling. A Chair, vice-chair and Secretary have been elected and several meetings have been held with voting members to discuss and establish the main goals and an action plan for the coming years.
- IUGS International commission on Geoheritage has created a new working group together with GGN and UNESCO representatives with the aim to produce the guidelines and methodology by which IUGS will assess whether the Geological heritage is of international significance for aspiring UGGp. This is a long demanded clarification and is on the way to being solved. It will certainly facilitate the role of the IUGS evaluators and will improve our contributions to the UGGP program,
- New Webpage. <u>https://iugs-geoheritage.org/</u> A new and unified website was launched on October 25th. During the first 3 months this website received more than 16.000 visitors from 121 countries.

"THE FIRST 100"

MAIN NUMBARES O THE IUGS 60TH ANNIVESRARY EVENT



THE FIRST IOGO IUGS IOOO IUGS GEOLOGICAL Beneration Beneration Beneration Save the dates! Image: State S

THE PROGRAM

- ONE YEAR OF NETWORKING.
- IGCP 731
- 42 FOCAL POINTS (NATIONAL REPRESENTATIVES)
- 10 INTERNATIONAL ORGANIZATIONS
- 181 CANDIDATES FROM 56 COUNTRIES
- 36 VOTING MEMBRES
- 550 EVALUATIONS WERE COMPLETED
- 100 SITES FROM 56 COUNTRIES SELECTED
- 485 AUTHORS FROM MORE THAN 50
 COUNTRIES
- THE FIRST 100 BOOK. 500 HARD COPIES.
 SOLD OUT

THE EVENT

- 150 PARTICIPANTS FROM 42 COUNTRIES
- IUGS ZUMAIA DECLARATION. 10 INTERNATIONAL ORGANIZATIONS
- PARARELL EVENT IN CHINA

GLOBAL MEDIA IMPACT

MORE THAN 200 MASS MEDIA AND DIGITAL PUBLICATIONS HAS BEEN
 COMPILED IN MORE THAN 30 DIFFERENT COUNTRIES. SEE ATTACHED MEDIA
 CLIPPING.



- Geoparkea SOCIAL MEDIA #First100Geosites
 - 56.400 impacts in Twitter
 - 6060 impacts / 8452 people reach in Facebook
 - 3082 impacts in Instagram

• IUGS social media

- 70.000 impacts
- Excitement and great engagement from IUGS affiliated organizations and geosciences community

o Official Websites

- www.iugs.org/100sites: 7.762 visits since May
- <u>www.iugs-geoheritage.org</u>: 18.000 visits since October

NOTE: see attached Annexes with clip and social media compilation

THE FIRST 100 EVENT FINAL COST: 138.864 €

CONCEPT	AMMOUNT
Secretariat (Logistic organization of the event)	18.920 €
General design, decorative elements and props for the venues of the event	25.061 €
Technical facilities: screens, projectors, sound, photography and video recording and editing	10.757 €
Press office (Press notes, press release, press conference, interviews management, international promotion)	9.922€
Coffee breaks	3.300€
Final lunch	6.000€
Transfer airport - Hotels - Zumaia	5.000€
Opening ceremony gastronomic – cultural event	2.297 €
Website registration platform	1.364 €
Final event cultural performance	6. 993 €
Boat trips	1.500 €
Travel cost and accommodation for key note lecturers and IUGS – IGC officers	10.000€
Merchandising	3.750 €
The First 100 book	23.000 €
Grants for participants from developing countries	11.000 €
TOTAL	138.864 €

FUNDING	
Basque Government	55.000€
Provincial Council of Gipuzkoa	25.000€
IUGS (extra funds + ICG allocation)	28.000 €
UNESCO IGCP	11.000€
BASQUE COAST UNESCO GLOBAL GEOPARK	11.864€
REGISTRATION FEE	8.000€
TOTAL	138.864 €

SUB-COMMISSION ON GEOHERITAGE SITES REPORT 2022

Notable activities in the past one year.

Summary

UNESCO Global Geopark reviews were accomplished from January to May. Second the IUGS global Geosite project, through the IGCP project was started and put on a solid foundation with the First 100 event in Zumaia in November. The membership and working structure of the commission is fixed, and a dynamic working structure is being put in place with a wider membership incorporating the IGCP Global Geosite groups, and the Global Geoaprks review process, where a system is now in place of an up to 10 person group that coordinates and manages the reviews, and provides a long term stable structure.

IUGS Activities for UNESCO Global Geoparks

The IUGS carries out a key roll, since the creation of UNESCO Global Geoparks in 2015, to provide expert advice, expert reviews and geoscience quality assurance to this prestigious global programme. At Zumaia in November 2021, this was discussed with Stan Finney, and the suggestion that the IUGS would consider amending its statutes to specifically state the role of the commission, and this would also eventually be brought up with UNESCO for the Global Geopark Statutes.

The IUGS duties in providing reviews, consultation and discussion with UNESCO and the global geopark movement is time consuming and requires a global team of dedicated and available geoheritage experts.

The major advance in 2022 is the constition ond first operation of a working group who can manage the IUGS roll in Geoparks. The 2022 advance was to use this structure, and provide at least five balanced reviews for each site. For 2023 this work will continue to consolidate.

Geoheritage Significance Reviews 2020 and 2021

17 new Global Geopark applications were reviewed in 2021. (These reviews were accomplished in May 2022).

As the sub-commission aimed to increase an improve reviewing and aiming to provide five desktop reviews for each site, nearly 80 have been done in 2022).

In order to accommodate such work the sub-commission has created a prototype **Working Group for Global Geoparks** and we shall share the coordination of reviews. The Working group is lead by Benjamin van Wyk de Vries, for the moment. The participants are Dan Tormey (USA), Dan Kelley (USA), Naomi Irapta (Philippines), Marton Pal (Hungary), Karoly Nemeth (New Zealand), Marie-Noelle Guilbaud (Mexico)

The working group carries out the review process, including finding the reviewers, collating reviews and providing summaries. The passes the finding through the subcommission and commission to the IUGS Executive before submission to UNESCO.

The coordinator of the group will advise representative of the IUGS on the Global Geopark Council, and attended the Global Geopark Council Meeting, to support the IUGS effort and represent the review process.

We note that the Working group now has members who are all capable of making comments on they year's reviews and the IUGS position, so we have ample IUGS personnel to attend and comment in UNESCO meetings, when needed.

Assessment Guidelines for Geoheritage Significance

In 2017 a Working Group as set up to provide a set of Guidelines for the Assessment of International Significance of Geoheritge in Global Geoparks. This Working Group was superseded by the new IUGS Geoheritage Commission structure, and with Asier Hilario as coordinator, the sub-commission is working with the commission to reach a final implementation of the Guidelines, with strong cross-part support.

The deployment of these has been very slow, but the final implementation of these guideline may be introduced in 2023, for implementation in the 2024 review process.

Global Geoheritage Sites

IUGS Global Geosites is now fully revived with a UNESCO IGCP project, lead by Asier Hilario that was written a proposed in 2020, and accepted in early 2021. The work on this project has advanced rapidly.

The first 100 sites have been selected and presented in Zumaia in November at the IUGS 60th anniversary event.

International Geosciences Programme projects 692 – Geoheritage for Geohazard Resilience and project 718 - Bringing Geology and Geoheritage to Life (figure 1).

The Geohazards for Resilience project was accepted in 2019 and is the first Geoheritage IGCP project dedicated to geosites and natural hazards. Bringing Geology and Geoheritage to life is a new project proposed in 2020 and accepted in 2021.

Geohazards for Resilience has created a global network of geoheritage site projects that deal with geoheritage aspects of the resilience to natural hazards. A Website, email listserv and global webinars have been set up and the projects started in the following countries. Several papers have been published in 2020 and two in 2022, and many conference presentations.

Over 2022 the project organised webinars connecting geoheritage workers across the globe to be found on <u>www.geopoderes.com</u>. We also worked on connecting IGCP and Global geoparks more with members from both overlapping communities supporting workshops in Nicaragua, Costa Rica, Peru.



Figure 1) IUGS-IGCP 692 – Geoheritage for Resilience and the sub commission have been active in many sites. **A.** April 2022 Permier of Animated film of the origin of the white Sillar rock of Arequipa with INGEMET, Peru. ; **B.** Inauguraton of the Engraving of the geological history of the Sillar in the sillar quarries (April 2022); **C.** Delivery of a picture story book for volcanic resilience in southern Peru with Instituto Geofisico del Peru (Luisa Macedo), May 2022; **D.** Developing a geological exhibition as part of the projects during a aorkshop combining geopark workers and IGCP workers for a vision of the Isla de Ometepe, Nicaragua from an IGCP Geoheritage for Resilience workshop in July 2022. **E.** The Workshop in Costa Rica.

Articles and Productions (outside IGCP 692 webinars)

- Non- Academic journal publications of scientific value (Note these were all reviewed by a committee of experts)
- El Dia que Desperto Huaynaputina / The Day that Hyanaputina Woke Up Macedo L A book created by the 692 project members for distribution to the S. Peru regions.

- La Historia del Sillar / The History of Sillar a stone engraving in the Añashuayco Quarry near Arequipa on the 'Ruta del Sillar'.
- Nina y el Origen del Sillar an animated film charting the history of the Sillar of Arequipa, and talking of hazards. produced in Peru by 692 members.

Academic journal publications

- van Wyk de Vries B, Karatson D, Gouard D, Németh K, Rapprich V, Aydar E (2022) Inverted Relief: its importance in illustrating geological change and its geoheritage potential. International Journal of Geoheritage and Parks 10 : 47-83.
- *Aguilar R, *David A, *Manrique N, van Wyk de Vries B, *Cueva K, Taipe E, Guillou H, Scao V (2022) Quaternary volcanism in the Yura Monogenetic Field near Arequipa city, southern Peru Frontiers in Earth Science 10: DOI=10.3389/feart.2022.904914, ISSN=2296-6463.
- Balangue-Tarriela, M.I.R., Lagmay, A.M.F., Sarmiento, D.M., Vasquez, J., Baldago, M.C., Ybañez, R., Ybañez, A. A., Trinidad, J. R., Thivet, S. Gurioli, L., Van Wyk de Vries, B., Aurelio, M., Rafael, D. J., Bermas, A., Escudero, & J.A. (2022) Analysis of the 2020 Taal Volcano tephra fall deposits from crowdsourced information and field data. Bulletin of Volcanology 84, 35 (2022). https://doi.org/10.1007/s00445-022-01534-y.
- Jacquez WL, Rouquette S, van Wyk de Vries B, Macedo L (2022) What are the best communication channels to inform a local Peruvian population about a volcanic risk? Comparing information approaches at El Misti Peru. Volcanica (Accepted November 2022)
- Lièvre P, Mérour E, Morin J, Macedo Franco L, Ramos Palomino D, Rivera Porras M, Masías Alvarez P, van Wyk de Vries B (2022), Volcanic risk management practice evolution between vulnerability and resilience: The case of Arequipa in Peru. Front. Earth Sci. 10:877161. doi: 10.3389/feart.2022.877161
- Vörös, F.; van Wyk de Vries, B.; Guilbaud, M.-N.; Görüm, T.; Karátson, D. DTM-Based Comparative Geomorphometric Analysis of Four Scoria Cone Areas—Suggestions for Additional Approaches. Remote Sens. 2022, 14, 6152. <u>https://doi.org/10.3390/rs14236152</u>.
- Bernard K, van Wyk de Vries B, Samaniego P, *Valderrama P, *Mariño J (2022) Collisional interactions and the transition between lava dome sector collapse and pyroclastic density currents at Tutupaca volcano (Southern Peru), Journal of Volcanology and Geothermal Research, 2022: 107668, ISSN 0377-0273, Doi.org/10.1016/j.jvolgeores.2022.107668.
- Bonali, F.L. Russo, E. Vitello, F. Antoniou, V. Marchese, F. Fallati, L. Bracchi, V. Corti, N. Savini, A. Whitworth, M. Drymoni K., Pasquaré Mariotto F., Nomenikou P., Sciacca E., Bressan S., Falasperla S., Reitano D., van Wyk de Vries B., Kronos M., Panieri G., Stiller-Reeve MA., Vizzari G., Beccani U, Tibaldi A. (2022). How Academics and the Public Experienced Immersive Virtual Reality for Geo-Education. Geosciences 2022, 12: 9. https://doi.org/10.3390/geosciences 12010009.
- Grosse P, Danišík M, Apaza, F.D, Guzmán SR, Lahitte P, Quidelleur X, Self S, Siebe C, van Wyk de Vries B, Ureta G, Guillong M, De Rosa R, Le Roux P, Wotzlaw J-F, Bachmann O (2022). Holocene collapse of Socompa volcano and pre- and post-collapse growth rates constrained by multi-system geochronology. Bulletin of Volcanology 84, 85. https://doi.org/10.1007/s00445-022-01594-0
- Harknett, J., Whitworth, M., Rust, D., Krokos, M., Kearl, M., Tibaldi, A., Bonali, F.L., van Wyk de Vries, B., Antoniou, V., Nomikou, P., Reitano, D., Falsaperla, S., Vitello, F., Becciani, U., The use of immersive virtual reality for teaching fieldwork skills in complex structural terrains, Journal of Structural Geology (2022), doi: https://doi.org/10.1016/j.jsg.2022.104681.
- Wright PN, Whitworth M, Tibaldi A, Bonali F, Nomikou P, Antoniou V, Vitello F, Becciani U, Krokos M, van Wyk de Vries B. (2022) Student evaluations of using virtual reality to investigate natural hazard field sites, Journal of Geography in Higher Education, DOI: 10.1080/03098265.2022.2045573

HERITAGE STONE SUB-COMMISSION REPORT 2022

Heritage Stones subcommission came into being at the 35th IGC in Cape Town, South Africa, in the year 2016.

The new board of HSS comprises of: Chair: Gurmeet Kaur (India) Secretary General: Victor Cardenes (Spain)

The Voting members: 20 covering experts from different continents.

The primary goal of the sub-commission is to facilitate formal designation of natural stones, as "IUGS Heritage Stone", an internationally recognised heritage stone designation granted by IUGS. Ten new stones have been designated as per the new guidelines and procedure for designation of IUGS-heritage stones in the year 2022. The details of the 10 new stones have been posted on the newly launched ICG website (https://iugs-geoheritage.org/subcomission-on-stones/)

Our new guidelines had been accepted in March 2022 by the IUGS-EC. In this year the HSS plans to revise the terms of reference to streamline and simplify the review process for 2023-24 with the wisdom from the past experience. The work is in progress and soon the guidelines and procedure will be reviewed and revised.

This year we plan to incorporate more voting members in the HSS group covering geographic distribution and designate at least 10 new IUGS Heritage stones. We are also in discussions with Geological Society of London to bring out a book elaborating the first 50 IUGS Heritage stones based on the stds_followed by first IUGS 100 Heritage sites. We will start the book work during our significant meeting in India where we will add at least ten new Heritage Stones. The work on the ten new stones to be announced in December 2023 has already begun.

We expect many Subcommission voting members and correspondents to attend this important meeting in December 2023 in India. The discussion on the formation of the new board and invitation of CVs of the interested candidates shall be called in December in a business meeting scheduled in India. The details of the same shall be forwarded to the ICG for scrutiny. During the IGC scheduled in the year 2024 in Busan we will vote the new board. The new board shall be announced and handed over the activities of the Subcommission once approved by the ICG and IUGS EC by December 2024 or February 2025.

Notable activities and achievements in 2022:

1. First 100 IUGS Heritage Sites event in Zumaia, Spain

At the First 100 IUGS Heritage Sites event in Zumaia, Spain, which took place from 25th to 28th October, at Zumaia, the presence of HSS group was visible. Ten new IUGS-Heritage stones were presented. HSS group presented newly designated stones in a special session during this big event. To know about the stones visit our website (https://iugs-geoheritage.org/designations-stones/)



HSS group in Zumaia (Spain) for the first 100 IUGS sites event held in October 2022.

2. Special Issue in Geoheritage:

Dedicated to heritage stones a special issue 'Global Heritage Stone Resource: The sustainable way forward'ISSN: 1867-2477 (Print) 1867-2485 (Online) was published in Geoheritage in 2022. The issue comprises 12 articles on stones from different countries

(https://link.springer.com/journal/12371/topicalCollection/AC_1c68f99998ae60544e7efc f08ce25647/page/1).

3. Virtual EGU 2022 (vEGU22)

The HSS virtually organised the session ERE4.1 '<u>Heritage Stone Subcommission: A</u> <u>Global Perspective</u>' Convener: Gurmeet Kaur I Co-conveners: Angela Ehling, Eliane Del Lama, Francesca Gambino



Web meetings with HSS voting members for approving the Terms of Reference of the Subcommission held in early 2022.

4. HSS Newsletter

Brought out Heritage Stone Subcommission Newsletter on the activities of the Subcommission and it is circulated amongst all the correspondents and voting members and the ICG executive.

5. Planning for the 3rd International Workshop on Heritage Stones in India from 1st to 6th December 2023.

The planning was carried out since 2021 and finally the first circular was out in 2022. The second circular will be out in February 2023. We expect many of our Subcommission members to take part in this big event.



SUB-COMMISSION ON GEO-COLLECTIONS

REPORT 2022

Context: The IUGS Subcommision on Geo-collections was inaugurated at the ICG virtual meeting in March 2022. The Sub-commission is chaired by Dr Rachel Walcott (National Museums Scotland, UK), with Dr Marcela Gomez (latterly of Servicio Geológico Colombiano, Colombia), and Secretary General Leslie Hale (Smithsonian Institution, USA). There is a team of 15 active voting members from Americas, Africa, Asia, and Europe. We have representatives for the fields of Palaeontology, Petrology, Mineralogy, Meteoritics, Collection Management, and Geoinformatics. Our members work in positions of authority in museums (national or university), in geological surveys, in universities, and research institutes.

Main Goals achieved:

- We assembled an active group which represents most geological subdisciplines, most of the range of institutions, and most continents.
- We developed a draft long-list of geo-collection contenders for the designation scheme.
- We have developed a long Directory of Global Geo-collections.

Main activities carried out.

- We carried out a survey of pre-existing designation schemes in the heritage sector.
- Rachel attended the Geoheritage Commission meeting in Zumaia, where she presented the activities and plans so far, and discussed the subcommission with people Geo-collections in a range of settings (Africa, Pacific Islands, Caribbean etc).
- We produced an extensive list of extant collections "Directory of Global Geo-collections"
- We developed a draft long-list of geo-collection contenders for the designation scheme.
- We then organised a small group to prepare the first draft of the designation scheme.

Voting members include:

Angela Ehling, R. Baskar, Hasna Chennaoui Aoudjehane, Leslie Hale, Lazarus Kgasi, Elena Kotova, Ruslan Kostov, Kerstin Lehnert, Sylvia Menendez, Mike Rumsey, Rachel Walcott, Marcela Gomez Perez, Ester Sztein, MaryAnne Binnie, and Mathias Harzhauser.

IUGS-ICG. 2022 FINANCIAL REPORT

1. Income received in 2022

INCOME 2022	Amount
Annual Budget 2022 allocated to the IUGS - ICG	11.000
Support the IUGS Geoheritage	
Event in Zumaia, Spain	20.000
Remain ICG-2021	4.697
Total 2022	35.697

Total

2. Expenditures in 2022

Concept	total €
Webpage (dosges) www.iugs-geoheritage.com	5.868.50
Book edition 'The First 100 IUGS Geological Heritage Sites' (Dosges)	11.117.60
Event organization 'The First 100 IUGS Geological Heritage Sites' in Zumaia. (Geogarapen)	12.000
Members inscriptions to Zumaia Event	300
Travel cost and hotel: ICG Members to Zumaia-2022 (Angela, Benjamin, Gurmeet, Juana and Rachel)	3.056,69
Administrative and banking fees	426,11
IUGS EC meeting in Belfast	1.300
TOTAL	32.768,9

Total 34.068,9 €

2022 remains.....+ 1.628,1€