

International GeoScience Education Organisation

JULY 2020

http://www.igeoscied.org/

In this issue:

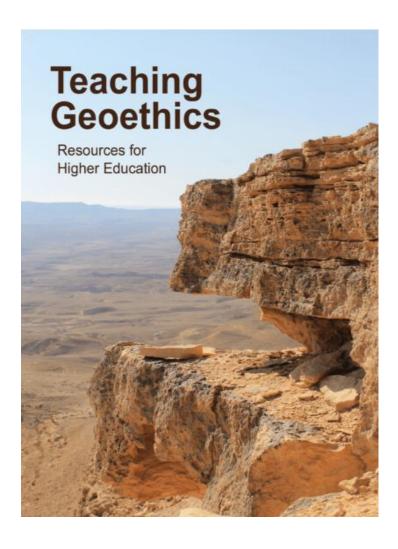
- "Teaching Geoethics" e-book
- IGEO Senior Officers list
- International Geodiversity Day proposal
- 2019 Report on the European Geosciences Union (EGU) field officers
- International Geoscience Exchanges Go Virtual
- LAIGEO: The Latin-American Chapter of IGEO, What we achieved at the moment

To contact newletter editor please write to: senior-officers@igeoscied.org

NEW e-book: Teaching Geoethics

Available for download in the geoscience textbook section of IGEO website:

http://www.igeoscied.org/teaching-resources/geoscience-text-books/



Two senior officers, Clara Vasconcelos and Nir Orion are among the authors

IGEO Senior Officers

Chair	Roberto Greco, Brazil
Vice-Chair (Elected)	Clara Vasconcelos, Portugal
Past Chair	Shankar Rajasekhariah, India
Secretary	Anish Warrier, India
Treasurer	Jean-Luc Berenguer, France
Web Manager	Takashi Sawaguchi, Japan
Newsletter Editor	Michael Passow, USA
Next Conference Convenor	Ichiro Matsumoto, Japan
Co-opted advisor	Chris King, England
Co-opted advisor	Nir Orion, Israel

Contact: senior-officers@igeoscied.org

IGEO supports the implementation of the proposal:

INTERNATIONAL GEODIVERSITY DAY

Proposal arising from the Oxford Geoheritage Virtual Conference (25-29 May 2020)

Geodiversity is defined as the variety of the non-living elements of nature – including its minerals, rocks, fossils, soils, sediments, landforms, topography, processes and hydrological features such as rivers and lakes. Geodiversity underpins biodiversity but has its own values independent of biodiversity. Geodiversity is essential to human well-being and provides the foundations and habitats for all living things. It is the source of materials that build our towns and cities, it provides our energy resources, including renewable energy and the materials mined to manufacture the wind turbines, solar panels, etc; it allows us to bury our waste, provides us with freshwater and attenuates our pollution; it inspires our artists and provides us with incredible landscapes from mountains to coasts. And some sites, known collectively as geoheritage, provide us with the evidence to reconstruct the billions of years of history of our planet and the evolution of life on it. It gives us evidence of past climate and landscape changes and their causes and therefore helps us to understand and plan for the impacts of future environmental changes. Furthermore, geodiversity is fundamental to the implementation of many of the UN's Sustainable Development Goals and is crucial in promoting sustainable use of the Earth's physical resources.

Geodiversity and its significance for humanity are poorly recognised worldwide, and there is an urgent need to increase public understanding. Like biodiversity, many important geoheritage sites and features are at risk from human activities, and yet attempts at geoconservation are limited in many countries. International cooperation is therefore essential to ensure proper recognition and management of the Earth's geodiversity and geoheritage.

Over 600 participants from more than 60 countries came together at the Oxford Geoheritage Virtual Conference, 25-29 May 2020. Appreciating the values of the natural environment and noting the threats from human actions, they shared current research in geodiversity and geoheritage. As four of the conference delegates, we now call for the establishment of an International Geodiversity Day aimed at increasing worldwide understanding and awareness of geodiversity and geoheritage issues. We encourage all geoscientists to engage in international cooperation to promote this aim and we call on geoscience and nature conservation organisations worldwide to work together in the development of this International Geodiversity Day.

Prof José Brilha University of Minho, Portugal

Prof Murray Gray Queen Mary University of London, UK

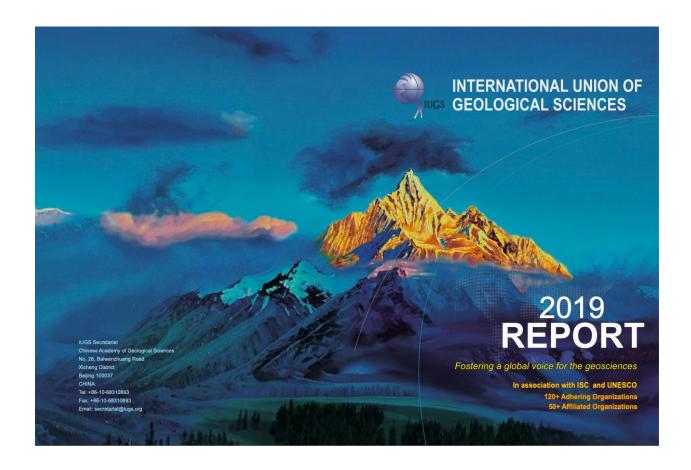
Dr Jack Matthews Oxford University Museum of Natural History, UK

Prof Zbigniew Zwoliński Adam Mickiewicz University in Poznań, Poland

2019 REPORT OF THE IUGS (INTERNATIONAL UNION OF GEOLOGICAL SCIENCES)

Link: https://98ca4554-1361-4fb1-a4d8-

a1bb16d032e6.filesusr.com/ugd/f1fc07_36d0c8e90da341e785d2076e3a8226c2.pdf?index=true



2019 REPORT ON THE EUROPEAN GEOSCIENCES UNION (EGU) FIELD OFFICERS

By Prof. Chris King

The report on the first pilot year of the programme, covering May 2019 to April 2020 has just been published. This shows that the six Field Officers appointed and trained in May 2019 presented workshops to 379 individuals before the coronavirus pandemic curtailed their activities.

The European Geosciences Union (EGU) Field Officers appointed were (https://www.egu.eu/education/field-officers/):

- Guillaume Coupechoux, France: edu-fo-fr@egu.eu
- Giulia Realdon, Italy: edu-fo-it@egu.eu
- Gina Pereira Correia, Portugal: edu-fo-pt@egu.eu
- Xavier Juan, Spain: edu-fo-es@egu.eu

The International Geoscience Education Organisation (IGEO)/ International Union of Geological Sciences (IUGS) Field Officers appointed were:

- R. Baskar, India: bourgeoini@gmail.com
- Yamina Bourgeoini, Morocco: <u>rbaskargjuhisar@yahoo.com</u>

Following training, the Field Officers returned to their own countries. There, assisted by their supporters, they translated the materials into their own languages, adapted them to their own curriculum and prepared workshop kits. They promoted the workshops through their own professional networks, national networks and attending conferences, whist developing a workshop evaluation and data collection procedure using questionnaires.

Over the following year they presented 21 workshops in 15 cities to 379 people of whom 94% were teachers and 6% were trainee (pre-service) teachers. 74% of the teachers were secondary (high school) teachers and 26% were primary (elementary) teachers.

A feedback questionnaire was returned by 274 individuals, indicating mean evaluation scores shown below (where 5 is a high rating):

Criterion	Mean evaluation 'score'
My interest in this workshop was	4.79
My interest in this workshop for my professional activity is	4.64
I am interested in attending other workshops of this kind	4.75

This highly successful outcome was supported by very strong written feedback comments.

Following the success of the pilot year, the EGU provided funding to maintain the current four EGU Field Officers and appoint four more. Meanwhile the IUGS agreed to continue funding the current two Field Officers and appoint three more. EGU adverting received nine applications and four people were invited for training in Vienna in 2020, from Albania, Germany, Hungary and Turkey. IGEO and IUGS advertising received seven applications and invitations for training were offered to people from Chile, Malaysia and Togo. Sadly the training for 2020-2021 had to be postponed due to the COVID-19 pandemic, but will take place as soon as new arrangements can be put in hand.

The six current Field Officers are developing plans for 2020-2021 to be implemented as soon as the COVID-19 pandemic allows. Whilst the pandemic has set back plans for the future, it has provided additional planning time and opportunities for online versions of the workshops to be developed.

The data collected shows that the pilot year of the international Geoscience Education Field Officer Programme was successful. The work of the six initial Field Officers will provide a strong foundation for extending the initiative across Europe and internationally. The creative hard work of the six current Field Officers is particularly to be applauded. They have risen to the challenge of the first year of this new initiative in a very impressive way and give great confidence to the future of this endeavour.

Chris King, chris@earthlearningidea.com





https://www.earthlearningidea.com/home/Photo gallery 7.html Additional images:

https://www.earthlearningidea.com/home/Photo gallery 5.html https://www.earthlearningidea.com/home/Photo gallery 6.html

INTERNATIONAL GEOSCIENCE EXCHANGES GO VIRTUAL

Due to the COVID-19 pandemic, many of the usual in-person conferences were cancelled, postponed, or shifted to virtual formats. Here are selected links to some of these:

2020 EGU General Assembly https://www.egu2020.eu/

2020 IUGS calendar of events: https://www.iugs.org/calendar2020

Geological Society of America 2020 Annual Meeting: https://community.geosociety.org/gsa2020/home

AMERICAN GEOPHYSICAL UNION FALL MEETING: https://www.agu.org/Fall-meeting

EUROPEAN METEOROLOGICAL SOCIETY: https://www.emetsoc.org/ems2020-cancelled-due-to-covid-19/s

LATIN AMERICA IGEO: https://laigeo.cloudaccess.host/

36th IGC (INTERNATIONAL GEOLOGICAL CONGRESS): https://www.36igc.org/

LAIGEO: The Latin-American Chapter of IGEO, What we achieved at the moment

We started 2018 super motivated and we were able to achieve many things thanks to the incessant work of our committee, our collaborators and sponsors. We invite you to find out what we have done to encourage you to join this goal of achieving improvements in Geoscience education at all levels in Latin America and the Caribbean.

Members

- The number of new members from Latin America and Carribean that register on the IGEO website grew considerably (104 members from 17 countries)
- We are already 52 members on LinkedIn.
- On the Facebook page we have 356 followers
- On Instagram 187 followers
- On Twitter 32 followers



LAIGEO platforms

Activities carried out to increase participation and membership

- The LAIGEO logo which was chosen in 2018 carries an Andean blanket that represents the Latin American community. That was our first initiative to promote our representation of Latin America and the Caribbean.
- 7 of our members participated as speakers, lecturers and participants in seminars held in partnership with other institutions at the national level.
- Our professionals were encouraged to make videos where they share their teachings on the internet for the entire public. For example Hector Lacreu (Argentina) in his YouTube channel.
- We manage to hold a series of virtual meetings regularly (at least once a month).
 The discussing actions are carried out by Google Hangouts and continued on Google Groups.

• There are also a group in LinkedIn, a project in the scientific platform ResearchGate and accounts on Twitter, Instagram, Facebook and Quora to foster the exchange of information between the members.



a). Meeting of creation of LAIGEO (GeoSciEd VIII, Brazil, 2018) b) LAIGEO logo

Our Website

- With the launch of the website, we expanded our mission to the region.
- It allows sharing the activities of national delegations, our meeting minutes and how to be a member of the network.
- In the section 'featured' we have published 20 posts. The most visited are about: First Geotour and Workshop about Geosciences Education in Paraguay (one of the network's greatest achievements), National University of La Plata Museum (Argentina), Volcamp (camp for kids, Panama), education on Geosciences videos (such us Quarantine with Geosciences from Colombia), Biobío Litoral Mining (Geopark Project in Chile).and sharing our 'publications section' in contribution to the campaign #stayathome.
- It was recently introduced a new tab to promote the Geoheritage of the region.
- Next posts: Geopark in the Olavarría (Buenos Aires, Argentina) and Project of Geopark in Paraguay.
- On the section 'Publications' is shared interesting articles on Geo-education by members of the networks.



LAIGEO web (tab about Geoheritage)



Some of the most popular posts in our web

IGEO Campaign: "My Earth science educator story"

- The publication of the story of Sandra Villacorta has encouraged other members to write about their own story.
- Ana Castillo, Anete Oliveira and Maria Jesus Bravo are preparing their stories.
- Through this campaign, it is continuing increasing new role models for Geosciences educators.

Historias inspiradoras de educadores en Geociencias de América Latina

Geociencias Mi Historia Profesionales Docentes América Latina



As unexpected disharps in streeties to see all the repetition of the last repetition of the



My career as geoscioned teacher own much to two dear people. In two distins phases of my education. The first woo geography teacher is secondary and to school. Horman Kerr George, of North American descent. This was a time the seath 1070 as when a describble embly



My background
I pushwind in Geology (BSc) is 1674
the Geologicans Institute of the time
of Site Pauls, Stadin-Montili Pin a rerecovered university. I obtained my
Meeters and Declarate in Geology at
series University in 1986. Working on



Without (gee) chemistry the Ear not react ... The choices I have made through prohasional the term strays for trying to understand the dynamics



Teaching in a developing country My letter taught me to read at age 5 and since that time I have been encouraged by my teachers at school to need and research. My mother havefled a lot during

Post to promote "My Earth science educator story" in the region

YouTube channel

- We broaden the horizon with our YouTube channel (link: https://www.youtube.com/channel/UCGsqkzgXVE-mBYKrADdCGQg), thus opening up many more possibilities for Latin American and Caribean educators to learn with audio-visual material.
- The first videos launched were provided by Anete Oliveira.(Brasil): one of them
 related to the proposal of geopark Caminhos Dos Canions Do Suland the other
 one about "Journey to the Center of the Earth" presented at the Science Week
 2019 in Brasil.
- Upcoming videos: on the geological museum of the University of La Plata (Argentina), Volcamp (Panama) and the 1st Geotour Workshop on education in Geosciences (Paraguay).



LAIGEO YouTube channel

Next steps

To grow this participation on the Latin-American and Caribean members in the network we are looking for:

- Alliance with the Geo-Network of Latin American-German Alumni (GOAL): the alliance for the coordination of joint activities in English and Spanish is in process. Professionals from GOAL have been contacted in order to seek a formal alliance. A response was received from GOAL President and letters are being prepared to request a cooperation agreement.
- Increase participation: members are encouraged to be actively involved in t in the network initiatives.
- We are working on the creation of videos about Geoeducation for our audio-visual campaign.
- Production of communication aids (leaflets, brochures, banners, posters, signs) about geoeducation for the LAIGEO website
- More interaction on LinkedIn and collaboration to answer questions from LAIGEO followers in social and professional networks (Quora, Facebook, twitter, Researgate).