



## Sending GIFT to Africa

### A new collaboration between the EGU, UNESCO and ESA

For the past ten years, the EGU's Geosciences Information For Teachers (GIFT) workshops – spreading first hand scientific research to teachers of primary and secondary school – have been hugely successful in shortening the time that research takes to disseminate from scientist to textbook to teacher and offering usable practical activities for the classroom. GIFT workshops are usually held at the EGU General Assembly in Vienna, adding to the experience of the teachers by immersing them in a world of geoscientific research and discussion. In recent years, workshops have also been held in association with Alexander von Humboldt conferences in Mexico, Malaysia and Peru and are now on the way to Africa.

UNESCO's Earth Science Education Initiative in Africa was set up to support the development of the next generation of Earth scientists in Africa. The initiative aims to provide the necessary tools, networks and perspectives to apply sound science to solving the challenges of sustainable development and in turn gathering opportunities from them. Challenges and opportunities range from evolution in mineral extraction techniques to environmental management

including mitigation of climate change, prevention of natural hazards, and ensuring access to clean drinking water.

Education is key to forging the next generation of 'Earth stewards' and give Earth sciences a status that reflects the importance that this discipline plays in the everyday life of African people. One of the initial actions of the initiative was a focus on Earth science education at primary and secondary level in schools. To achieve this, it was recognised that first providing teachers with the necessary information, conveyed in an engaging way by scientists was essential for inspiring and educating future generations.

Bringing together the expertise of the EGU with UNESCO's Earth Science Education Initiative in Africa, the EGU are proud to announce a new series of annual GIFT workshops to be held around the African continent over the next four years. As international events, the workshops will be held in four different regions of Africa, starting with Southern Africa. They will cover various topics of societal relevance such as climate change, groundwater, geohazards, mineral resources and environmental sustainability. The UNESCO-EGU-ESA African GIFT workshops will take place over the course of three days with 40 teachers from across the region and 8–10 speakers, half of whom will be non-African experts. Applications to participate in the first UNESCO-EGU-ESA African GIFT workshop should be sent to [sa-loc@egu.eu](mailto:sa-loc@egu.eu). See the [EGU website](#) for more information and details on how to apply.

At the EGU, the Committee on Education will be responsible for developing the programme with the help of the new EGU Educational Fellow. Programme specialists from the Division of Ecological and Earth Sciences at UNESCO headquarters, Paris and UNESCO African field offices will be jointly organising the workshops. For the



Africa is a continent with beautiful and rich geoscientific landscapes, from snow covered glaciers near the summit of Mount Kilimanjaro in Tanzania (left) to stunning valleys such as the Suguta in the Great Rift Valley in Kenya (right). (Credit: left: Dalia Kirschbaum; right: Annett Junginger, distributed by EGU via [imadgeo.egu.eu](http://imadgeo.egu.eu) under a Creative Commons licence)

first UNESCO-EGU-ESA GIFT workshop, to be held from 26–28 February 2014 in Port Elizabeth, South Africa, the European Space Agency and the Africa Earth Observatory Network will be offering support and expertise and the Nelson Mandela Metropolitan University will be hosting the workshop. The Local Organizing Committee also includes experts from the University of Free State, the University of Namibia, the University of Witswaterstrand and the International Geoscience Educators Organization of the International Union of Geological Sciences. To reflect on one of the most pressing societal issues and the release of the 5<sup>th</sup> Assessment Report of the IPCC, the first workshop will be on Climate Change and Human Adaptation.

With preparations already underway for this first African workshop, all those involved are looking forward to a successful event that will become a sustainable part of teacher education in Africa.

*Carlo Laj, Sarah Gaines and Jane Robb  
Chair of the EGU Committee on Education, Assistant Program Specialist at UNESCO and EGU Educational Fellow, respectively*

## Taking part in GIFT

A report by teacher Abigail Morton

“After reviewing the numerous applications, your application has been selected to receive the travel award, stipend, and registration for this meeting. Congratulations!”

I had to read it several times before it sank in. A few weeks earlier, I had been sifting through e-mails at work. I scanned through the newsletter from NESTA (the National Earth Sciences Teachers Association in the USA) and something caught my eye just as I went to delete it: the EGU was having its annual General Assembly in Vienna, and one person would be chosen to attend the Geoscience Information For Teachers (GIFT) workshop portion of the conference, paid for by the William Goree Award. In the interest of full disclosure, I spent nine of my formative years in Europe, and have longed to return since I left in 1991. I had to throw my hat in the ring; this felt too good to be true.

In fact, I was in disbelief up until my actual arrival in Vienna. The conference began with a meet-and-greet at the Natural History Museum. I was thrilled to finally meet programme directors Carlo Laj, chairman of the EGU Committee on Education, and Stephen Macko, with whom I'd been corresponding for months. I quickly lost my group when I couldn't tear myself away from the astonishing rock and mineral specimens in the museum's geology rooms. I found the group just in time for a special tour of the museum's roof, which provided stunning views of beautiful Vienna. While chatting with the other teachers in the GIFT programme, I was fortunate to meet with three Einstein Fellows, the “other Americans” in the programme. I was fascinated to learn about their fellowship, which brings educators from around the country to Washington DC to improve national science education policies through the lens of their classroom experience. Each attendee was thrilled to receive a beautiful Dierke Atlas, which has since provided me hours of reading entertainment. (I'm sure I'm not the only one with a map fetish.)

While talking to Carlo, I got a better understanding of the award that allowed me to attend. The award, sponsored in memory of William C. Goree, is designed to give teachers opportunities to expand and broaden their scientific background, which they can then bring back to the classroom. Goree was the co-founder of 2G Enterprises with



Abigail Morton participated in this year's EGU GIFT workshop in Vienna.

Bill Goodman and he had designed and produced superconducting rock magnetometers. Professional accomplishments aside, it was touching to hear so many kind words about Bill Goree, who passed away in 2007. Hearing about what a great person he was made me feel all the more honored to have received the award in his name.

We started bright and early the next morning at the conference centre. Having already attended several NESTA conferences in the US, I don't know why I was so surprised at the sheer size of the conference. There were several thousand attendees. I had spotted countless EGU name tags on the train through the city, and even a few in our tiny hotel across town. I was buzzing with energy and ready to take it all in.

Over the next three days, I was a sponge. The overarching topic of the GIFT workshop was Natural Hazards. The presenters covered every possible angle: types of hazards, from tsunamis to solar disturbances, and the science behind them; the human impact, which dictates the difference between hazards and disasters; what is avoidable, especially given the uncertainty of nature; and our responsibilities as science educators to disseminate this