

# Bringing Down Geoscientific Barriers

The European Geosciences Union (EGU) is the world leader in interactive open access publishing and public peer review. We speak exclusively to Dr. Ulrich Pöschl, the EGU Chair of Publication Committee, about the important work being done in the pursuit of knowledge sharing in the geosciences.

## Can you begin by outlining the founding principles of EGU?

The European Geoscientific Union (EGU) is a scientific society dedicated to the pursuit of excellence in the geosciences and the planetary and space sciences for the benefit of humanity.

## In light of the current environmental issues we face, how crucial is it to foster a mobilised scientific community of European researchers in the arena of geosciences, planetary and space sciences?

Mobility and exchange between scientists is essential for efficient and successful mastering of the challenges posed by global environmental change.

## Further to the above, how important are technological developments to strengthening and integrating the knowledge base from which scientists can work?

Technological developments and access to information are essential for efficient exchange and synthesis of knowledge in today's rapidly evolving and highly diverse world of science.

## Beyond Europe, how important is international collaboration and knowledge transfer to EGU members? Do you think that the future of research relies upon cross-border collaboration?

Yes, the success of scientific research, and the rate of scientific and societal progress depends largely on strong global international collaboration.

## Is the majority of your work focused on a strategic level, aimed at changing policy (for example providing data for policy makers responding to climate change), or merely keeping issues surrounding the geosciences in the news?

The strategic work and outreach activities of EGU (position statements, publications and databases, conferences and workshops, press releases, etc.) are aimed at providing relevant information to all sectors of society: policy makers, academic and school teachers and students, as well as the general public.

## Your mission statement emphasises the need for free and universal accessibility of scientific publications – has the lack of access been a limiting factor for scientists to date? Do you think scientists have been unduly protective of their research, and dissemination has been less high up the agenda?

Limited access to scientific publications is a major obstacle for interdisciplinary scientific research and quality assurance. Subscription barriers are hindering not only the general public and less affluent researchers and institutions but also top level research institutions. Individual scientists have limited capacities for inducing structural change in the scientific publishing

business. The removal of subscription barriers and provision of open access to scientific publications are primarily tasks of scientific publishers, institutions, funding agencies, and policy makers.

## Have you noticed the recent global economic situation putting a strain on research budgets in the geosciences? Is there a difficult balance to be struck between technological development and financial viability concerns?

Clearly, the economic situation influences the availability of funds for technological developments, and therefore it is all the more important to realize and fully utilize the opportunities provided by modern information technologies, including the internet, and open access to scientific publications.

## LIMITED ACCESS TO SCIENTIFIC PUBLICATIONS IS A MAJOR OBSTACLE FOR INTERDISCIPLINARY SCIENTIFIC RESEARCH

### What role does the EGU play in drawing young students to further a career in science?

For young students, EGU provides free access to scientific publications, strongly reduced registration rates for scientific conferences, and special award and outreach programmes. Moreover, EGU offers scientific workshops for school and university teachers and raises public awareness and interest for science through press releases.

### Your outreach work includes a consideration of the social impacts of geosciences; can you provide an example of such a topic, and the context in which it might be discussed?

The social impact of global environmental change is inherent to many topics of geoscientific research as fostered by EGU through scientific conferences, publications and outreach activities. Socio-economic effects of climate change and natural hazards are discussed in many of the EGU conferences, workshops and publications (e.g. Alexander von Humboldt International Conference on Climate Change, Natural Hazards and Societies).

### What are the main criteria by which you evaluate the success of your work?

The main criteria for the success of EGU are the number and satisfaction of participants in conferences and workshops; the number, quality and visibility of publications; and the number and effectiveness of outreach

activities. Feedback for quality assurance is gained from questionnaires (participants of conferences/workshops, authors of publications), from international scientific publication and citation indices (ISI-SCIE, SCOPUS, Google Scholar, etc.), and from the response of policy makers, the media and the general public to position statements and press releases. All of the above indicators exhibit positive trends, which is most pronounced for open access publications (exponential growth rates; top quality, visibility and impact factors).

### How far have we come in the past half century in terms of advances in the geosciences? Are there particular areas where you would like to see substantially more investment?

The geosciences have made great progress over the past decades. They have augmented scientific knowledge about our environment and provided relevant information for engineering, economics, policy makers and the general public on topics like air quality, water resources, geological resources, natural hazards, climate change etc. These and related topics will certainly gain importance, and require further research and investments in view of global change, population growth and environmental effects of human activities. Major challenges that are relevant for all topics and fields of science and should receive more attention are efficient communication and quality assurance. Thus, I would like to see more investment in providing open access to scientific publications and data and in the development of improved tools and metrics for scientific evaluation.

### What is your vision for the future of the EGU? What kind of strategies would you like to see implemented over the next decade to safeguard research?

EGU will strive to extend and improve its activities in meetings, publications and outreach for the benefit of scientists, science and society in Europe and worldwide. EGU is the world leader in interactive open access publishing and public peer review, and it will continue to lead the geosciences and other fields of science towards open access and improved quality assurance. The interactive open access journals of EGU demonstrate the financial viability of open access publishing and the effectiveness of transparency and self regulation in scientific exchange. To safeguard scientific research and progress, I hope and expect that scientists, publishers, funding agencies and policy makers will promote and adopt open access and public peer review as the standard of scientific communication and quality assurance in the global information commons.

### FURTHER INFORMATION:

<http://www.egu.eu/home.html>

<http://www.egu.eu/media-outreach/egu-media-outreach-overview.html>

<http://www.egu.eu/media-outreach/alexander-von-humboldt-conferences.html>

[http://www.atmospheric-chemistry-and-physics.net/general\\_information/public\\_relations.html](http://www.atmospheric-chemistry-and-physics.net/general_information/public_relations.html)

