

Geoscience Ahead: A European perspective

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Geosciences are as important as ever to society in relation to a broad range of challenges. Our geoscience subjects are central to six of the global top ten challenges to society, including the supply of fresh water to the whole population, stable supply of energy, the climate evolution and severe weather conditions, stable and sufficient food supply where soil sciences is at the centre, geohazards, and ocean acidification. The political solutions to these key challenges require scientific knowledge and insight, and learned societies should assume a key responsibility in defining the challenges. The science advice to the political world will come from a variety of organisations, and it is reassuring that ICSU recently has launched its new flagship programme on "Future Earth". However, the geoscience unions should also play a key role in ensuring that society has the best scientific insight before decisions are made to these grand challenges. The unions with their broad membership, geographically and subject-wise, have the organisation that may foster increased international collaboration on the key challenges across the borders.

The European Geosciences Union (EGU) is Europe's premier geosciences union, dedicated to the pursuit of excellence in the geosciences and the planetary and space sciences for the benefit of humanity, worldwide. It was established in September 2002 as a merger of the European Geophysical Society (EGS) and the European Union of Geosciences (EUG), and has headquarters in Munich, Germany. EGU is a non-profit international union of scientists with over 12,500 members from all over the world. Membership is open to individuals who are professionally engaged in or associated with geosciences and planetary and space sciences and related studies, including students and retired seniors.

The EGU has a current portfolio of 16 diverse scientific journals, which use an innovative open access format, and organises a number of topical meetings, as well as education and outreach activities. Its annual General Assembly is the largest and most prominent European geosciences event, attracting over 13,000 scientists from all over the world. The meeting's sessions cover a wide range of topics, including volcanology, planetary exploration, the Earth's internal structure and atmosphere, climate, as well as energy and resources.

Europe is a diverse continent with many small countries. Although many countries are members, the European Union (EU) has limited influence on the policy making in Europe (e.g. laws require decision in all parliaments in the member countries). Nevertheless, the political system in Europe develops toward integration between the members of the EU. The disciplinary breadth and its large membership provide excellent background for EGU to assume a role in assisting policy makers by providing scientific advice.

EGU is already a premier forum for open debate on the role of geosciences in modern society and development of new relations between scientists and the political system. We are now taking up the challenge and responsibility of promoting geosciences in a wider context to society, including promoting research opportunities for talented early career researchers, and providing links between decision makers, the political system and the scientific community. Outreach in terms of information sharing with the public is already at a high level and the ambition for the coming years is that EGU's voice should be heard among the coming generations of scientists, politicians, economists, and other decision makers throughout Europe. Being the premier geoscience union in Europe, EGU has a commitment to provide reliable scientific information to society, in particular to the main global scientific challenges faced by our societies. On global scale, the geosciences unions should consider joint action in identifying the key questions in relation to the key global challenges.

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