

Guest Editorial

The Swiss Polar Institute

The growing interest in the Polar Regions is sparking new initiatives in a range of countries. In the past year the Antarctic Treaty has seen the accession of Mongolia, Kazakhstan and Iceland whilst SCAR has Kazakhstan, Colombia, Austria and Turkey as possible new members. Joining the organisations is a major step but even more important in the long run is establishing a national framework for the science. In the past some countries have had their science well organised by the time they applied - like Germany - whilst others have joined and then done little or nothing for many years.

Different countries also have different systems of funding their Antarctic research. In most cases the funds are direct from government but in these times of austerity new approaches are developing. Antarctica New Zealand is now being sponsored by companies like Air New Zealand, reducing its logistics costs. British Antarctic Survey is chartering its ships and aircraft to provide extra income. And now we have another approach pioneered in Switzerland.

Although Switzerland joined SCAR as an Associate Member in 1987 it was not until 2004 that it became a full member. In the meantime, Switzerland had acceded to the Antarctic Treaty in 1991 and began attending the annual Consultative meetings. Although Swiss scientists were visiting the Antarctic with other national expeditions this was largely due to their own initiatives as there was no scientific focus for the Polar Regions.

All this has now changed and since 18 April 2016 Switzerland has a new centre for polar research and coordination - the Swiss Polar Institute (SPI). This new interdisciplinary centre will be devoted to researching the Earth's poles and other extreme environments. The SPI, based at the Swiss Federal Institute of Technology in Lausanne (EPFL), is a consortium of Swiss universities - EPFL, the Swiss Federal Institute for Forest, Snow and Landscape Research WSL, ETH Zurich and the University of Bern - and was co-founded with Editions Paulsen. Officially supported by the State Secretariat for Education, Research and Innovation (SERI), the SPI is a Swiss initiative with a decidedly international mission and a mixture of public and private support.

Indeed, as mark of a different regime, the SPI is organizing a major project this coming field season funded largely from private foundation funds. The Antarctic Circumnavigation Expedition (ACE) will be the first international scientific expedition to sail around the southernmost continent visiting all the sub-Antarctic islands. The purpose of this expedition, with key support from Ferring Pharmaceuticals, will be to measure and quantify the various impacts of climate change and pollution in the Southern Ocean. The 22 international projects are addressing important and topical science fields, many a key part of climate change, from oceanography to aerosol chemistry, and from biogeography to the carbon cycle.

Exactly how the Swiss intend to develop their polar initiative remains to be seen but their enormous expertise in cold climates will be a welcome addition to the pool of Antarctic expertise. Can this mixture of charitable funds, business support and state funding be made to work on a longer time scale? How will the SPI develop - as a virtual centre like the New Zealand Antarctic Research Institute or with its own research staff like the more traditional institutes in Germany and the UK? Will polar research become an important funding priority for the Swiss National Science Foundation? And at a political level will Switzerland begin to take a more active part in the Antarctic Treaty Meetings? These will be interesting times.

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