



POGO and Oceans United at Beijing Ministerial Summit of the Group on Earth Observations



The POGO delegation enjoyed the wonderful hospitality of its Chinese hosts, Prof. Sun Song and colleagues from IOCAS. Left to right: Trevor Platt, Shubha Sathyendranath, Xiao-Xia Sun, Yin Hong, Gao Li, Li Tiegang, Jesse Ausubel, Sun Song and Kiyoshi Suyehiro.

The 7th GEO Plenary Session and 2010 Ministerial Summit took place at the China National Convention Centre in Beijing, from 3 to 5 November 2010. The event was attended by a POGO delegation, consisting of the Chairman of POGO Kiyoshi Suyehiro, members of the POGO Secretariat (Trevor Platt, Shubha Sathyendranath and Sophie Seeyave), Sun Song, Director of the Institute of Oceanology, Chinese Academy of Sciences (IOCAS, a member of POGO), Yin Hong, Head of the International Office of IOCAS, and Jesse Ausubel, Programme Director for the Alfred P. Sloan Foundation and one of the founders of POGO.

GEO was founded in 2005 in response to calls for action by the 2002 World Summit on Sustainable Development and by the Group of Eight leading industrialized countries (G8). These high-level meetings recognized that international collaboration is essential for

exploiting the growing potential of Earth observations to support decision making in an increasingly complex and environmentally-stressed world.

GEO is a voluntary partnership of governments and international organisations. It provides a framework within which these partners can develop new projects and coordinate their strategies and investments. POGO is one of the 61 organizations with a mandate in Earth observation that have been recognized as Participating Organizations. Plenary Sessions take place at least once a year at the level of senior officials, and periodically at a ministerial level. The first Ministerial Summit, also attended by POGO, took place in Cape Town in November 2007.

The remit of GEO is to build a Global Earth Observation System of Systems (GEOSS): POGO, GOOS (the Global Ocean Observing System), and other organisations under the umbrella of Oceans United, are striving for the continued development of the Ocean component of GEOSS.



The main exhibition hall.



POGO-Oceans United stand.

In preparation for the Summit, POGO issued a press release that highlighted the importance of ocean observations for societal benefit and the urgent need to complete the ocean observing system. The press release was picked up by reporters around the world and there were over 200 on-line articles published in 30 different countries. A press conference was also organised on-site, at which the press release (translated into Chinese) was distributed to the local press. POGO also made a statement at the Ministerial Summit, which can be accessed at: <http://ocean-partners.org/ocean-observations/geo/605-beijing-summit-documents>.

A POGO-Oceans United stand was developed for the Exhibition, which took place alongside the Plenary Session and Ministerial Summit (see left). The stand was visited by both scientists and members of the public, with an interest in oceans.

NF-POGO Alumni Planning Meeting, London, 20-22 October 2010

The Nippon Foundation wants to maximize the return on its joint programme of capacity building with POGO by establishing a network of former scholars. The world-scale network will maintain active contact and will conduct joint research activities on themes relating to the training the scholars have received. As a first (public) step in this direction, an NF-POGO Alumni meeting will be held in Tokyo in 2011.

To plan this Alumni Meeting, a preliminary meeting was held at the Royal Society in London, and attended by representatives of the Nippon Foundation (Kentaro Ogiue and Makoto Wada), the Director and Deputy Director of the Bermuda Institute of Ocean Sciences, which hosts the NF-POGO Centre of Excellence (Tony Knap and Gerry Plumley), the POGO Chairman (Kiyoshi Suyehiro), selected professors and scholars from various NF-POGO training programmes, and members of the POGO Secretariat.



The group outside the Royal Society.

The main objectives of the meeting were (1) to establish a structure for the network, (2) to discuss particular research topics that might be developed for execution by the network, and (3) to plan the Alumni meeting for 2011, including structure and speakers.

The emerging vision for the Network of Alumni was a structure that would be held together by a common interest in, and commitment to, ocean science, and by the common will to communicate the results of their work to the general public, so that they can be applied for the benefit of society. The theme of the Network would be "Integrated Observations of a Changing Ocean".

Whereas the NF-POGO Alumni Association would be limited to Scholars from the BIOS Centre of Excellence and the Visiting Professorship Programme, the network would, over time, be expanded to include related initiatives such as the POGO-SCOR Visiting Fellowship Programme, and scientists trained through new initiatives.



Plenary session in one of the impressive and inspiring Royal Society meeting rooms.

In addition, there would be a series of Regional Coalitions, each fully-coupled to the Global Network, and each managed by a Regional Coordinator. The activities of the Regional Coalitions would include workshops, information exchange and assistance with placement for prospective graduate students. The Regional Coalitions would be eligible to apply to funding bodies for support of initiatives, including research projects.

It is expected that:

- There will be a free and vigorous exchange of information between the Regional Coalitions;
- There will be meetings of the Regional Coalitions when possible;
- There will be occasional meetings of the Global Network;
- Regional proposals for research (which may require use of national infrastructure) would be written with due regard for local culture and customs, engaging senior managers in the Region from the outset.

The Alumni Meeting will be a scientific symposium, on a defined topic, open also to the Japanese marine science community and to the Media. The theme of the meeting will be "Ocean Observations for the Benefit of Society". It will also include a session (in Japanese) open to the public and to the Media on a related topic of general interest. The meeting will also provide a forum for planning research projects and networking activities to be carried out by the Network of Alumni. This will build on the discussions that were held during the preliminary meeting in London.

A Planning Committee Meeting will take place at the Nippon Foundation on 31 January 2011 to organise the Alumni Meeting to be held on 27-30 September 2011.

International Quiet Ocean Experiment (IQOE) Workshop, Rhode Island, 27-29 October 2010

The IQOE is being developed by the Scientific Committee on Oceanic Research (SCOR) and POGO as a potential joint project, with funding from the Alfred P. Sloan Foundation. Through this cooperation, IQOE aims to engage with the global oceanographic community, with the intention of combining the talents of physical oceanographers, acousticians, behavioral biologists, ecosystem modelers and population biologists. This first workshop brought together scientists from these different fields to discuss the IQOE idea, its feasibility and scientific merit.

The idea of shutting down anthropogenic sound sources for one day and observing the effects was a central driver for the development of the IQOE. During the workshop, however, the IQOE concept grew beyond this idea to something more complex and multi-faceted. It was decided that the 'one quiet day' concept might have advantages as part of a more broadly based acoustic observation programme, where it could be used to explain and draw public attention to the importance of the subject and the work underway in different ocean basins.

A wider programme of focused acoustic observations, a Global Acoustical Ocean Observing System, with observations conducted over a longer period to include seasonal changes, would have considerable value. It would require the establishment of specific observation sites, either new or based on existing facilities, including both quiet sites, noise-affected sites, and sites which were about to become affected by noise. It would be especially important to make observations before any changes took place in an area and to determine in advance what measurements would be necessary to measure both the noise and its impact.

In describing the soundscape in an area, whether it was noisy or quiet, it might be helpful to prepare noise budgets, which apportioned the noise to different sources. It was recognised that the concept of a noise budget required further work. Shutting down selected anthropogenic activities might help to determine the relative contributions from different sources.

There would be great advantages in mounting a series of long-term experiments at specific locations. In particular, observations could be made at quiet locations which were likely to become more noisy. Use might be made of existing plans for seismic surveys or pile driving for wind farms to perform before, during and after observations. The effects of movement of shipping lanes might also be observed in a similar way. Again, the importance of collecting baseline data first was emphasised.



The participants of the first IQOE workshop at the University of Rhode Island, USA.

There was also support for the idea of defining an International Year of the Quiet Ocean, in which a single day might be set aside for publicity and education about the longer period of observation. Data from one day might be presented as an example of the dominance of noise in the ocean and its likely effects.

The objectives of the IQOE need to be defined very carefully, as well as the effects of sound to be measured. These will determine the baseline information that would need to be collected; for example, measuring animal behaviour would require long-term baseline information.

Next steps:

Another meeting is planned to take place in Fort Lauderdale, Florida, on 10-11 February 2011. The meeting will review progress since October (e.g. article to be submitted to *Oceanography*, literature review) and plan an Open Science Conference to take place in September or October 2011. POGO will be represented by Sophie Seeyave at the February meeting.

POGO Capacity Building

Successful POGO-AMT Fellowship on-board RRS James Cook

Barbora Hoskova, from the Institute of Microbiology of the Academy of Sciences of the Czech Republic, was awarded this year's POGO-AMT fellowship to participate in the AMT-20 cruise under the supervision of Dr. Gavin Tilstone (Plymouth Marine Laboratory). After a 10-day visit to PML in September 2010 to prepare the equipment and familiarize herself with the laboratory techniques that would be involved during the cruise, she joined the ship in Southampton on 9 October. During the 6-week cruise from Southampton to Punta Arenas (Chile), Barbora made physiological and bio-optical measurements on phytoplankton populations, including measuring the effect of high CO₂ concentrations on diazotrophic cyanobacteria (*Trichodesmium*). She brought two instruments for measuring phytoplankton photophysiology from her lab on the cruise, one of which had not been previously tested in the marine environment.



Gavin Tilstone and Barbora Hoskova setting up their experiments on the aft deck of RRS James Cook.

2011 POGO-SCOR Visiting Fellowships

A call for the 2011 POGO-SCOR Visiting Fellowships will be made shortly. Go to <http://ocean-partners.org/training-and-education/pogo-scor-fellowship> for more information about the programme.

Austral Summer Institute XI

The 11th Austral Summer Institute 'From Tsunamis to Water Pathogens: Understanding Ocean Hazards in the XXI Century' is currently underway at the University of Concepcion, from 3 to 28 January 2011. The programme involves lectures on themes such as understanding and coping with tsunamis, tectonics and recurrence of great subduction earthquakes, marine hazards to human health, ocean acidification and oil spills.

A total of 70 participants are expected to attend. They come from Brasil, Peru, Ecuador, Colombia, Venezuela, Trinidad & Tobago, USA and Chile. See http://ocean-partners.org/attachments/634_Program_ASI-XI.pdf for more information.

.....

Other Capacity Building

SCOR Visiting Scholars 2011 Call for Applications

SCOR began a program in 2009 to enlist the services of ocean scientists from the SCOR community, from both developed and developing countries, both recently retired and active, to teach short courses and to provide more extended on-site education and mentorship at developing country institutions.

The program is a partnership, with the host institution providing local accommodation and SCOR finding resources to pay for airfares and other local expenses, as necessary. The participating scientists donate their time. The SCOR program is complementary with the POGO Visiting Professorship program.

The closing date for applications is **31 January 2011**. See http://ocean-partners.org/attachments/612_SCOR_Visiting_Scholars_2011.pdf for further details.

.....

POGO Secretariat
Plymouth Marine Laboratory
Prospect Place
Plymouth PL1 3DH, UK

Tel. +44 (0)1752 633424

E-mail pogoadmin@pml.ac.uk

<http://ocean-partners.org>