



## Open Science Meeting of the SCOR-POGO International Quiet Ocean Experiment attracts over 70 participants from 15 countries

The IQOE has been under rapid development since the first workshop in Rhode Island in October 2010, culminating in an Open Science Meeting at IOC-UNESCO, Paris, from 30 Aug to 1 Sept 2011, to seek input from the community to the programme's Science Plan. The OSM was followed by a meeting of the Planning Committee and Chairs/Rapporteurs from the Discussion Sessions, who drafted sections of the Science Plan.

### Census of Marine Life wins Cosmos Prize

This year's International Cosmos Prize was awarded to the Scientific Steering Committee of the CoML. The prize is an annual award presented by the Expo' 90 Foundation in recognition of research work that has achieved excellence and contributed to understanding the relationships between all living organisms and the Earth on a global scale.

The OSM was a successful meeting, attended by around 75 participants from 15 countries. There were a number of plenary presentations to provide all participants with background information, but the bulk of the meeting consisted of discussion sessions on themes that will structure the Science Plan (see [www.iqoe-2011.org](http://www.iqoe-2011.org)).

By the end of the meeting, the leaders of the discussion groups had each written a section of the Science Plan, which formed a 78-page draft document. The Planning Committee will be tasked with editing this Science Plan over the next few months. The aim is for the Science Plan to be ready in time for the POGO-13 Meeting, which we hope will be attended by one of the Co-Chairs of IQOE (Prof. Ian Boyd). The IQOE has now been included as a component of the Group on Earth Observations (GEO) new Blue Planet Task coordinated by POGO. A proposal has also been submitted to the ESF Co-Operation in Science and Technology (COST) to obtain funding for future workshops. So far, the Sloan Foundation has been the principal source of funding for the IQOE.

## Meeting of the Chlorophyll Globally Integrated Network (ChloroGIN)

A meeting of ChloroGIN members was convened at the Bedford Institute of Oceanography, Nova Scotia, Canada, from 9 to 11 August 2011. ChloroGIN is a world-scale network of scientists creating time series of chlorophyll and related in situ optical properties. It is organised around regional nodes. ChloroGIN is a Task in GEO that POGO has supported from the outset by advocacy in GEO fora, and is widely seen as a success story within GEO. The project is currently funded by the Canadian Space Agency. ChloroGIN is now an element of the Blue Planet Task that POGO has recently submitted successfully to GEO.

The meeting was attended by some 25 scientists from 14 countries, including current and aspiring ChloroGIN members, the POGO Secretariat, and Douglas Cripe of the GEO Secretariat. Participants decided to submit at least one proposal for funding under the NASA SERVIR initiative. The meeting was brought up to date by Douglas Cripe on the structure of the new GEO Work Plan and on the fate of the major proposal (\$5M) that ChloroGIN has submitted to GEO. This proposal has been approved by GEO and is now listed for possible action by potential donors.



Attendees of the ChloroGIN Meeting. Photo S. Seeyave

Participants discussed the ChloroGIN website and made many suggestions for its improvement, particularly in the sense of providing information on how to use the data provided (examples of case studies). The scope of ChloroGIN was extended to include water quality in lakes and in the coastal zone.

## News from the POGO members: CPR Survey celebrates 80th Anniversary and goes global

The week of 20-25 September 2011 was a busy and festive one for the Sir Alister Hardy Foundation for Ocean Science (SAHFOS) in Plymouth, UK. SAHFOS was celebrating the 80th anniversary of the Continuous Plankton Recorder Survey, the world's longest and most geographically extensive marine biological survey. SAHFOS, a member of the UK POGO consortium, is an international charity established in 1990 to manage the survey, and named after the inventor of the CPR, Alister Hardy.

Over the years, the survey has expanded from the North Atlantic and North Sea to the Pacific, South Atlantic and other areas of the global ocean. To enhance collaboration between the surveys taking place in different parts of the world, and to ensure standardisation of data collection methods and data sharing, a Global Alliance of CPR Surveys (GACS) was formally established during a workshop immediately prior to the Anniversary Symposium.



Participants of the GACS workshop.



Peter Burkill, Director of SAHFOS, gave the opening and closing remarks.

The GACS workshop was convened to discuss the structure and governance of the proposed alliance, its goal, objectives and activities. The group, led by SAHFOS, welcomed the advice and support stakeholder organisations such as POGO, the Intergovernmental Oceanographic Commission (IOC) and the North Pacific Marine Science Organisation (PICES) could provide, and are aiming in the long-term to become an integral part of the global ocean observing system. This inclusion of biological observations would indeed be a very welcome addition.

The participants signed a Memorandum of Understanding (MOU) indicating the intent to work together to help extend the CPR survey to global scale. POGO signed as a stakeholder and witness. The MOU is not a legal document, but a statement of intent. New surveys are already under way off Australia, New Zealand and Southern Africa, a very welcome extension into the Southern Hemisphere. Japan is also a newly-active participant. A steering committee was established, to be chaired by Graham Hosie, Australian Antarctic Division (vice-chair Sonia Batten, SAHFOS-Canada). A website will be set up and various training programmes undertaken. The group will work in consort with other ocean observing initiatives, such as POGO.



The Plankton Symposium held in the magnificent Guildhall in Plymouth.

### Associated Researcher Scheme

SAHFOS has a scheme which allows scientists who wish to use CPR data or work on any aspect of developing the CPR Survey to apply for a bursary. For full details see <http://www.sahfos.ac.uk/research/associated-researcher-scheme.aspx>.

The Plankton 2011 Symposium brought together around 200 participants from around the world. The 2-day programme included sessions on changing phytoplankton communities, drivers of change and their consequences, planktonic communities from algae to larval fish, and looking at the future. Keynote/invited speakers were John Spicer, Chris Reid, Trevor Platt, Stephen Maberly, Boris Worm and David Checkley. The programme included oral presentations, posters and a panel discussion.

The symposium dinner was held at the impressive National Marine Aquarium, where old friends and colleagues were reunited (some of whom had been personally acquainted with Alister Hardy) and several generations of marine scientists got to know one another. The participants were particularly impressed by

the smooth organisation and warm hospitality displayed by SAHFOS Director, Prof. Peter Burkill, and his entire staff who all rallied around to make the event a success. The Symposium also marked the retirement of Prof. Burkill. POGO wishes to thank him for his many contributions to POGO over the years. **Photos R. Camp (SAHFOS)**



## Update on POGO Capacity Building

### Fourth Nippon Foundation-POGO Centre of Excellence in Observational Oceanography underway

The fourth "batch" of Centre of Excellence students, or "Pogonians", as they call themselves, arrived in Bermuda in early August 2011 and are now nearly 3 months into their 10-month intensive training programme. The students are from China, Indonesia, Japan, Ivory Coast, Senegal, Argentina, Brazil, Poland and Russia. Indonesia, Senegal, Argentina and Poland were new nationalities for the CofE, bringing the total number up to 24 in just four years!

So far, the students have attended an introductory course on oceanography, and more detailed modules focussing on physical, chemical and biological oceanography. In addition to these scientific modules, they have attended workshops on core skills, scientific writing and proposal writing.

### Applications for Year 5 now being accepted

Applications for the fifth year of the CofE have now opened, with a deadline of **20 Nov 2011**. See <http://www.bios.edu/education/cofe.html> to find out more.



The 4th CofE students. Left to right: Gerry Salamena, Yuna Zayasu, Anna Rumyantseva, Monika Orchowska, Priscila Lange, Chunli Liu, Ousmane Diankha, Mara Braverman, Arvind Singh, Elisee Toualy. Photo M. Orchowska.

### Centre of Excellence Regional Training in Vietnam (article provided by T.P.H. Son and H.C. Tin)

A regional training course was held at the Institute of Oceanography (IO) in Nha Trang, Vietnam from 19 September to 10 October 2011, as part of the activities of the NF-POGO Center of Excellence in Observational Oceanography (CofE). The title of the course was "The Application of Ocean Colour Remote Sensing for Study of Marine and Coastal Processes and related Bio-Resources". World leading experts in ocean color remote sensing and its applications were invited to the training course. The visiting Professors were Prof. Seiichi Saitoh, Drs. Joji Ishizaka, Sasuki Matsumura and Takafumi Hirata from Japan, and Drs. Joo-Hyung Ryu and Jong Kuk Choi from Korea. Dr. Gerry Plumley, Deputy Director and Education Director of BIOS, responsible for the NF-POGO CofE, supervised the course and provided the trainees with information on the capacity building activities of NF-POGO. Mr. Tong P. H. Son from IO with his assistants from Vietnam also took part in the teaching activities.

The 22 selected trainees included participants from Vietnam, as well as overseas participants from Thailand, Philippines and Indonesia. Compared with previous courses, the remote sensing knowledge and skills of the trainees were of a higher standard. Some of them had attended previous NF-POGO training courses.



The participants in the CofE Regional Training. Photo H.C. Tin.

Participants attended a series of lectures on ocean color remote sensing, satellite oceanography, marine-GIS, and its applications such as marine fisheries, tidal flats, red-tides, phytoplankton community structure, carbon flux and primary productivity. A field trip in Nha Trang Bay was also organised to familiarise trainees with bio-optical instruments and measurements of chlorophyll-a concentration and primary production, as well as temperature, salinity and total suspended matter. The trainees were also introduced to the NF-POGO Alumni Network for Oceans.

The trainees worked on issues immediately relevant to their research, discussed these with their instructors and peers and presented final reports to the group using their new knowledge of satellite oceanography. The presentations indicated remarkable progress. They will be able to apply their new knowledge to their research after they return to their institutes and thus contribute to the development of an ocean colour remote sensing group in SE Asia.

**NF-POGO Alumni Network for Oceans (NANO)**

A NANO meeting was held in Abingdon, UK, to plan and write proposals for joint research projects to be carried out by the alumni. The meeting consisted of round-table discussions over three days, and was attended by selected NF-POGO alumni, by Mr. Ogiue of the Nippon Foundation (and his interpreter), personnel from the Secretariat, Dr. Tony Knap, the Director of the Centre of Excellence, and a couple of senior scientists who are "friends" of NANO (Prof. David Checkley, Scripps Institution of Oceanography and Prof. Howard Roe, former Chairman of POGO).

The group reviewed 16 scientific proposals submitted in advance by Alumni and classified by Region (Africa & Europe, East Asia, Indian Subcontinent and Latin America). The object was, for each region, to propose one joint initiative that might be funded by the NF in 2012. The proposals are currently being finalised before submission to the NF. The meeting also marked the launch of the first issue of NANO News, which can be downloaded from <http://www.nf-pogo-alumni.org/NANO+Newsletter>.



Attendees of the NANO Meeting. Photo L. Krug.

**POGO-SCOR Fellowships and POGO Professorships**

To allow more time for the fellowship applications to be open, and for the fellowships to take place, the POGO Secretariat is planning to open the application period earlier than in previous years. It is anticipated that the announcement will be made in Nov, with a deadline of end Jan 2012, subject to confirmation of funding at the Annual POGO Meeting in Jan 2012. The same will apply to the POGO Visiting Professorships. If you do not normally receive the fellowship announcements but would like to, please e-mail Sophie Seeyave ([ssve@pml.ac.uk](mailto:ssve@pml.ac.uk)). For more information go to <http://ocean-partners.org/training-and-education> and follow the fellowship/professorship links.

**2011 POGO-AMT Visiting Fellowship**



Alaa Younes in the lab at NIOF. Photo A. Younes.

This year's fellow Dr. Alaa Younes (National Institute of Oceanography and Fisheries, Alexandria, Egypt) spent one month at Plymouth Marine Laboratory (PML) preparing for the AMT cruise with Dr Gavin Tilstone, then joined the *RRS Discovery* in Avonmouth, UK, on 26 September.

The 21st Atlantic Meridional Transect ([www.amt-uk.org](http://www.amt-uk.org)) research cruise will spend just over 6 weeks sailing the length of the Atlantic, arriving in Punta Arenas (Chile) in mid-November. On-board, Alaa is measuring primary production using the radioisotope method under the supervision of Dr. Denise Cummings. Dr Gavin Tilstone, who was unable to join the cruise, is mentoring him remotely and will help him to process and analyse the data when he returns to PML after the cruise for another one-month visit.

**Funding opportunity for developing countries (deadline 30 Nov)**  
 The Partnerships for Enhanced Engagement in Research (PEER) program is now accepting proposals from developing country researchers interested in collaborating with their U.S. counterparts. PEER is a new partnership between the U.S. Agency for International Development (USAID) and the National Science Foundation (NSF). This competitive grants program will allow scientists in developing countries to apply for funds to support research and capacity-building activities in partnership with their NSF-funded collaborators. The full program solicitation can be accessed at <http://www.nationalacademies.org/peer>.