

## Report on the 2007 POGO-SCOR Fellowship Programme

This year the fellowship programme was implemented using POGO funds with supplementary financial support from SCOR. February's announcement opened the competition for two months. Some 40 applications were received. Applicants wrote from Argentina, Bangladesh, Brazil, Bulgaria, China, Colombia, Egypt, India, Indonesia, Iran, Jordan, Lithuania, Mexico, Morocco, Peru, Philippines, Russia, Tunisia, Turkey and Ukraine. The applications were screened independently by a committee of three, with representation from SCOR and POGO. In making their selection, the committee considered the following factors:

- quality of the application
- relevance of the application to the priority areas identified in the fellowship announcement
- justification that the training would lead to capacity-building with potential lasting impact on regional observations
- the need to maximise regional distribution of the awards

This year, thirteen fellowships were offered to oceanographers from developing countries and economies in transition. The host institutions were in France, Italy, Spain, the UK, and the USA. POGO and SCOR commend the efforts from all the supervisors and colleagues at the various host institutions who agreed to devote time and energy required for the training. The programme would not have been viable without such efforts from prominent scientists and their teams.

All the people involved in each fellowship (the fellowship holder, the supervisor at the parent institute and the supervisor at the host institute) were requested to submit short reports at the end of the training period. So far, the reports received have been enthusiastic. They indicate that these exchanges should lead to effective capacity building in the host institute and facilitate longer-term collaborations between the institutes concerned. All conclude that the programme serves a useful purpose.

There is tremendous interest in the fellowship programme at all levels, both in the oceanographic institutions of the developing nations, as well as among leading scientists who are eager to contribute to this initiative. It is seen to be filling a niche in capacity building through specialised training that is not filled by intensive courses or by participation in scientific meetings. It helps improve the *esprit de corps* among oceanographic institutions around the world, and serves as a stepping stone to building collaborations.

## Demography of fellowships

### Parent Institutions of Successful Candidates:

Brazil:	Federal University Fluminense Oceanographic Institute, Sao Paulo University (IOUSP) Universidade Estadual de Santa Cruz Universidade de Sao Paulo
China:	First Institute of Oceanography, State Oceanic Administration
Egypt:	National Institute of Oceanography & Fisheries (NIOF)
India:	National Institute of Oceanography (2 fellowships)
Indonesia:	Bandung Institute of Technology (ITB)
Mexico:	El Colegio de La Frontera Sur Universidad Autonoma de Baja California
Morocco:	Abdelmalek Essaâdi University
Philippines:	Marine Science Institute

### Host Institutions:

France:	Université de Bordeaux 1
Italy:	Stazione Zoologica "A. Dohrn"
Spain:	Instituto Español de Oceanografía
UK:	Plymouth Marine Laboratory Plymouth University Proudman Oceanographic Laboratory
USA:	Bigelow Laboratory for Ocean Sciences Monterey Bay Aquarium Research Institute Rutgers University Stennis Space Center University of Maine (2 fellowships) University of Maryland

### Gender distribution

Female: 5  
Male: 8

## **POGO-SCOR JOINT FELLOWSHIP PROGRAMME**

### **SUCCESSFUL CANDIDATES - 2007**

#### José Juan Barrera Alba – Brazil

Dr Alba's research interests lie in the ecology of phytoplankton and bacterioplankton and in chemical and biological properties in coastal and estuarine systems. He is interested to study the natural plankton population using flow cytometry methodology as well as the flow cytometer and microscope (FlowCAM) on which he had been trained under the supervision of Dr. Michael

Sieracki at the J.J. MacIsaac Aquatic Cytometry Facility, at Bigelow Laboratory for Ocean Sciences, USA. The duration of the training was three months.

#### Leslie Aveytua-Alcazar – Mexico

Ms Aveytua-Alcazar is studying upwelling events on biogeochemical and physical processes in San Quintin Bay, Mexico. Under the supervision of Dr Alejandro Souza of the Proudman Oceanographic Laboratory, UK, she has been trained for a period of 3 months on coupling the hydrodynamic 3D model POLCOMS with ERSEM. She is the first researcher in Mexico to work with coupled hydrodynamic-ecological models.

#### Olivia Cabrera – Philippines

Ms Cabrera conducts research on primary production and remote sensing of ocean colour. She attended a three-week course entitled “Application of remote and *in situ* ocean optical measurements to ocean biogeochemistry” at the Darling Marine Centre of the University of Maine, under the supervision of Dr Emmanuel Boss. The knowledge acquired during this course will be useful in planning future scientific cruises in selected seas in the Philippines.

#### Tingwei Cui – China

Dr Cui is involved in the Dragon Programme of the First Institute of Oceanography which investigates ocean colour inversion models from MERIS data. He will be trained for a period of 3 months by Dr Steve Groom, at the Plymouth Marine Laboratory on semi-analytic and analytic bio-optical model development for turbid case II waters.

#### Soumaya El Amrani – Morocco

Ms El Amrani is doing her PhD in Oceanography at University Abdelmalek Essaâdi, Morocco. During her three-month training at the Centro Oceanográfico de Málaga, she will be involved in two projects: the project NITROALBORAN, looking at the biogeochemical transformation of nitrogen in Aboran Sea, and the project ECOMALAGA studying physical, chemical and biological variation in the Alboran Sea. She will be supervised by Dr Jesús M. Mercado.

#### Marlos Goes – Brazil

Dr Goes studies large scale features of water masses in the tropical Atlantic. His training was on ARGO floats and assimilation ocean data (SODA) applied to water mass formation rates and subduction characteristics of the Antarctic Intermediate Water. The three-month training was supervised by Dr James Carton at the University of Maryland.

#### R. Madhan – India

Mr Madhan is an electrical engineer involved in remotely operated and autonomous underwater vehicles at the National Institute of Oceanography in Goa, India. The one-month training received at Monterey Bay Aquarium Research Institute, under the supervision of Dr William J. Kirkwood, allowed Madhan to become familiar with the Gimbal design and enhanced his understanding in various aspects of the mechanical design of vertical profilers. He also participated in three cruises for deployment and operation of an AUV, an APEX drifter and a ROV.

#### Wahid Moufaddal – Egypt

Dr Moufaddal is a researcher at the National Institute of Oceanography & Fisheries, Egypt. He has done his Ph.D. in coastal remote sensing and environmental studies. His training is on the utilisation of ocean colour satellite data for the study of variability in phytoplankton and suspended sediments in coastal waters. This three-month training is supervised by Dr Samantha Lavender at Plymouth University, UK.

#### Ravidas Naik – India

Mr Naik is a project assistant at the National Institute of Oceanography in Goa, India. He has participated in many oceanographic cruises for time-series observation. During his three-month stay in Italy he studied the diversity of phytoplankton community and the variability on their morphological features by learning methods of identification of phytoplankton. He has also been trained on methods to culture dinoflagellates. He was supervised by Dr Diana Sarno at the Stazione Zoologica 'A. Dohrn'.

#### Eduardo Negri de Oliveira – Brazil

Mr Negri's research interests lie mainly in remote sensing of coastal environments and ocean circulation. He is currently completing his PhD at the Federal University Fluminense. His training at the Stennis Space Center provided background knowledge in ocean optics and sensor technology. He also implemented different ocean colour algorithms comparing *in situ* measurements and satellite data. The training was supervised by Dr Richard Gould and lasted three months.

#### Ivonne Radjawane – Indonesia

Dr Radjawane's research is related to numerical modeling of hydrodynamic, tides, ecosystem and environment using 1D, 2D and 3D POM models. With her fellowship, Dr Radjawane will travel to the University of Maine, where she will gain knowledge on the application of biogeochemical models using the coupled Regional Ocean Modeling System (ROMS) on the parallel computer facility. Dr Radjawane will be supervised by Dr Fei Chai for a period of two months.

#### Ana Ramirez-Manguilar – Mexico

Ms Ramirez is a research assistant at the El Colegio de La Frontera Sur. She has experiences in field measurements, data analysis and modeling using Regional Ocean Modeling System (ROMS) for the region of Quintana Roo, Mexico. During her training she has expanded her knowledge on ROMS models under the supervision of John Wilkin at Rutgers University. The training lasted three months.

#### Marcelo Landim de Souza – Brazil

Dr de Souza is a professor at the Universidade Estadual de Santa Cruz, where he studies organic carbon metabolism, carbonate chemistry and atmospheric fluxes in estuaries and coastal waters. Dr de Souza undertook a two-month training under the supervision of Dr Gwenaél Abril at the Université Bordeaux, France, where he participated in the design of experiments and measurements of  $p\text{CO}_2$  and  $\text{CO}_2$  fluxes through ocean/atmosphere interface.