Report on the POGO-IOC-SCOR Fellowship Programme for 2001

The Fellowship Programme was conceived at the Second POGO Meeting in São Paulo (Brazil) in November – December 2000, and implemented for the first time in 2001. Priority areas were identifiied as:

- Argo Floats
- Fixed-Point Time-Series Observations
- Biological Observations
- Emerging Technologies for Ocean Observations

The fellowship programme was implemented with financial support from IOC and SCOR. The announcement went out in April 2001, and the competition was open for two months. A total of 42 applications were received. There were 10 applications from India, 12 from S. America, 5 from Indonesia. There were no applications from Africa.

The applications were screened independently by a committee of three, with representation from SCOR, IOC and POGO. In making their selection, the committee considered the following factors:

1. Quality of the application;
2. Relevance of the application to the priority areas identified in the Fellowship Announcement;
3. Evidence that the training will lead to capacity-building with potential lasting impact on regional observations; and,
4. 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 North America, Europe and Australia. All have been accepted; some of the visits have been completed.

In some instances, host supervisors felt that the POGO fellowship was insufficient to cover reasonable expenses for food, lodging and transport, and offered to supplement the POGO Fellowship. Such contributions to the programme are gratefully acknowledged. In fact, we acknowledge 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.

The report will not be complete without mentioning two negative responses that were received on the Fellowship programme, at the time of its launch. One scientist suggested that POGO should cover expenses at the host institute: for example, pay for the time of the technicians who may be involved in the training. Another stated that POGO should concentrate more on training courses as being more cost-effective. These are the only two negative responses received so far.

In general, the responses have been overwhelmingly positive. 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. The

reports received have been uniformly positive. In general, 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. To quote a host supervisor from the USA:

"The fellowship program provides an excellent opportunity for young investigators and technicians to be immersed in a professional environment, have contact with experts in the field, and develop stronger links with present or potential colleagues. POGO provides a mechanism to develop technical skills. POGO helps to develop scientific understanding by young foreign students and technical personnel. More importantly, POGO helps develop good will and understanding between different cultures. This is a wonderful program, and all efforts should be made to ensure its continuity."

There is tremendous interest in the 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 participation in scientific meetings. It helps build an *esprit de corps* among oceanographic institutions around the world, and serves as a stepping stone to building collaborations.

The co-sponsors of the programme – IOC and SCOR – have both indicated that they are satisfied with the initial programme, and have already made financial commitments for 2002 at the same level as this year. The Fellowship plan was discussed at the GOOS Steering Committee meeting in Chile in April 2001, and the comments received were very positive.

From the perspective of the Secretariat, this has been one of the more time-consuming activities that were undertaken this year. Learning from the experience of this year, steps have been taken to stream-line the administration of the activity in 2002. The announcement for the 2002 Fellowship is on the POGO web page; the first deadline is 30 April, 2002.

POGO-IOC-SCOR JOINT FELLOWSHIP PROGRAMME

SUCCESSFUL CANDIDATES

Glenda Arias - Venezuela

Mrs. Arias is a staff member of the Margarita Marine Research Station (EDIMAR) and works on the CARIACO (Carbon Retention in a Colored Ocean) Programme. She is in charge of collecting optical data from radiometers onboard ship during their cruises and processing the data.

Her training was on collecting, processing and analyses of optical data at the University of South Florida, under the supervision of Dr. Frank Mueller-Karger.

Duration: One month.
Period: October, 2001

Silvia Blanc - Argentina

Mrs. Blanc is a physicist with the Underwater Sound Division of the Naval Service of Research and Development in Argentina. Over the past four years she has been conducting a multidisciplinary research programme, with the main objective of applying alternative acoustical methods to determine biomass and numerical abundance of phytoplanktonic algae.

Her training was on experimental methodologies based on acoustic scattering theory, to monitor plankton and pollution at the NOAA Atlantic Oceanographic and Meteorological Laboratory in Miami, Florida, under the supervision of Dr. John Proni.

Duration: One month.
Period: February, 2001

Ana Laura Martinez Goicoechea - Uruguay

Ms. Martinez is a researcher at INAPE - Instituto Nacional de Pesca / DINARA - Director Nacional de Recursos Acuáticos - in Montevideo, Uruguay.

Her training was on optical measurements related to phytoplankton monitoring under the supervision of Dr. Allan Cembella (National Research Council, Halifax, Canada) and Professor John Cullen (Dalhousie University, Halifax, Canada).

Duration: Two months.
Period: August – October, 2001

Cesar Hormazábal - Chile

Mr. Hormazábal is at the School of Marine Sciences, Catholic University of Valparaiso, Chile. Over the past four years, he has been working on mooring recovering and maintenance and current meter data processing. He has played an outstanding role in the Chilean mooring program.

His training was on analysis of Acoustic Doppler Current Profiler (ADCP) at the Centre for Coastal Physical Oceanography, Old Dominion University, Norfolk, Virginia, USA. Dr. Arnoldo Valle-Levinson was the supervisor for the training.

Duration: Two Weeks
Period: July – August 2001

Andrei Yu Ivanov - Russia

Dr. Ivanov is a research scientist at the Ocean Remote Sensing Laboratory of the P.P. Shirshov Institute of Oceanology in Moscow, Russia. He is a specialist in the synthetic aperture radar (SAR) remote sensing of the ocean, and has extensive experience in combining *in situ* and spaceborne data.

His training is on phytoplankton measurements related to interpretation of remotely sensed data on ocean colour at the Institute of Ocean Sciences, Sidney, Canada, under the supervision of Dr. Jim Gower.

Duration: Two months.
Period: January – March, 2002

Samina Kidwai - Pakistan

Ms. Kidwai is a research scientist in the Biological Oceanography section of the National Institute of Oceanography in Pakistan. Over the past four years she has been involved with work regarding secondary productivity and zooplankton from the Northwest Arabian Sea. She is also carrying out a multi-disciplinary study in two major Indus delta creeks.

Ms. Kidwai is scheduled to undergo training on measurements of respiration, production and grazing rates of zooplankton at the Danish Institute of Fisheries and Marine Research in Denmark, under the supervision of Dr. Thomas Kiorboe.

Duration: Two months.
Period: March – May, 2002

Beena Kumari - India

Ms. Kumari is Project Manager for the IRS P4 OCM Validation Project, at the Space Applications Centre (ISRO), Ahmedabad, Gujarat, India. Her main responsibility focuses on the co-ordination and organisation of cruises for oceanographic observation, as well as collecting synchronous data on atmospheric properties and various biogeochemical quantities for validation of atmospheric correction procedures and bio-optical algorithms.

Ms. Kumari plans to undergo training in bio-optical techniques at the Bedford Institute of Oceanography, Nova Scotia, Canada, under the supervision of Dr. Trevor Platt and Dr. Venetia Stuart.

Duration: Three months.
Period: August – November, 2001

Guo Ming - China

Mr. Ming graduated from the Ocean University of Qingdao, and is presently an MS student at the Second Institute of Oceanography, Hangzhou, China. His thesis is on the subject of westward migration of meso-eddies and their possible effects on the Kuroshio meander, using altimeter data.

His training is on Argo technology and data processing. His supervisors are Prof. Steve Riser at the University of Washington in Seattle and Dr. Bob Molinari at the Atlantic Oceanographic and Meteorological Laboratory in Miami.

Duration: Two months.
Period: January – March, 2002

V.S.N. Murty - India

Dr. Murty is a scientist at the National Institute of Oceanography (NIO) in Goa, India. He is currently engaged in the Bay of Bengal Monsoon Experiment (BOBMEX) and has collected Lowered Acoustic Doppler Current Profiler (LADCP) data from the Bay of Bengal during the south-west monsoon of 1999 to understand the upper ocean current structure in the northern Bay.

His training was on LADCP data processing and analysis at the University of Hawaii at Manoa, under the supervision of Professor Eric Firing.

Duration: Two months
Period: October – November, 2001-11-04

Luiz V. Nonnato - Brazil

Dr. Nonnato has been working in the Instrumentation Laboratory of Instituto Oceanográfico, Universidade de São Paulo, Brazil since 1982. His main activities include development, maintenance and field operation of oceanographic instruments, specifically ADCPs and CTDs, as well as data pre-processing.

His training is on Lowered Acoustic Doppler Current Profiler (LADCP) operation and data pre-processing and analyses at Columbia University, New York, under the supervision of Dr. Martin Visbeck.

Duration: Two weeks.
Period: March, 2002

Marcel Ramos - Chile

Mr. Ramos is at the Regional Program for Physical Oceanography and Climate, University of Concepción, Chile. Over the past four years, he has been working on mooring recovering and maintenance, and currentmeter data processing. He has played an outstanding role in the Chilean mooring program.

His training was on analysis of Acoustic Doppler Current Profiler (ADCP) at the Centre for Coastal Physical Oceanography, Old Dominion University, Norfolk, Virginia, USA. His supervisor for the training was Dr. Arnoldo Valle-Levinson.

Duration: Two weeks.
Period: July – August, 2001

Liis Sipelgas - Estonia

Dr. Sipelgas has been working in the Remote Sensing and Marine Optics group at the Estonian Marine Institute since 1999. Her responsibilities include spectrophotometrical analysis of water samples necessary for optical and remote sensing investigations and determination of optically active substances in the water.

Her training is on various aspects of optical data collection and analysis related to remote sensing of ocean colour. The host institution is the Remote Sensing Group of CSIRO in Australia, and the supervisor is Dr. Arnold Dekker.

Duration: Two months
Period: February – March, 2002

Liu Zenghong - China

Dr. Zenghong graduated from the Ocean University of Qingdao in 1998, majoring in physical oceanography. He is presently working at the Second Institute of Oceanography in China. Over the past two years he has been involved in the analysis of hydrographic data on Argo-related projects.

His training is on Argo technology at the University of Washington in Seattle, and at the Atlantic Oceanographic and Meteorological Laboratory, under the guidance of Prof. Steve Riser and Dr. Bob Molinari.

Duration: Two months
Period: January – April, 2002

Demography of Fellowships

Parent Institutions of Successful Candidates:

Argentina: Naval Service of Research and Development
Brazil: Universidade de São Paulo
Chile: Catholic University of Valparaiso
Chile: Universidad de Concepción
China: Second Institute of Oceanography
China: Second Institute of Oceanography
Estonia: Estonian Marine Institute
India: National Institute of Oceanography
India: Space Applications Centre
Pakistan: National Institute of Oceanography
Russia: P. P. Shirshov Institute of Oceanology
Uruguay: Instituto Nacional de Pesca / DINARA
Venezuela: Margarita Marine Research Station (EDIMAR)

Host Institutions:

Australia: CSIRO, Canberra
Canada: Bedford Institute of Oceanography
Canada: Dalhousie University
Canada: Institute of Ocean Sciences
Denmark: Danish Institute of Fisheries and Marine Research
USA: Atlantic Oceanographic and Meteorological Laboratory
USA: Atlantic Oceanographic and Meteorological Laboratory
USA: Columbia University
USA: Old Dominion University
USA: Old Dominion University
USA: University of Hawaii
USA: University of South Florida
USA: University of Washington
USA: University of Washington

Males/Females

Female: 6
Male: 7