

5.0 CAPACITY-BUILDING ACTIVITIES

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5.0 CAPACITY-BUILDING ACTIVITIES

5.1 SCOR Committee on Capacity Building

The 2006 SCOR meeting approved terms of reference for a SCOR Committee on Capacity Building, whose primary purposes are to oversee all of SCOR's capacity-building activities and to help the SCOR Secretariat manage these activities. The approved terms of reference follow:

- Provide direction for all of SCOR's existing capacity-building activities: participation of scientists from developing countries and countries with economies in transition in SCOR activities, POGO-SCOR Fellowship Program, travel grants, and provision of reports to libraries in developing countries.
- Guide and assist SCOR Executive Director in development of new capacity-building activities, particularly the Regional Graduate Schools of Oceanography activity.
- Assist SCOR-sponsored projects in developing their capacity-building activities.
- Help SCOR arrange funding for existing and new capacity-building activities.
- Assist SCOR in interacting with regional and international groups related to capacity building in ocean sciences, such as the ICSU regional centers, START, IOC regional programs, etc.

The SCOR Executive Committee approved an initial committee membership in July 2007:

Venu Ittekkot (Germany), Chair
Alfonse Dubi (Tanzania)
John Farrington (USA)
Vivian Lutz (Argentina)
Shubha Sathyendranath (Canada)
Jilan Su (China-Beijing)
Tatsuki Toda (Japan)

Ex-officio: Chair of the IMBER Capacity Building Task Team—This was originally Wajih Naqvi (India), but he has been replaced by Jing Zhang (China-Beijing)

The committee held its first meeting on 17-18 October 2008 in Woods Hole. Some committee members will meet with some invited participants on 17-18 October 2009, in Shanghai, China. This meeting will review all SCOR capacity-building activities, as well as holding a focused discussion on how SCOR can pursue capacity building in Asia and Africa.

5.1.1 SCOR Visiting Scholars

The SCOR Visiting Scholars program was approved at the 2008 SCOR General Meeting and a limited call for proposals (to the SCOR Nominated Members list) was made for 2009 Scholars. A few applications were received and Paulo Relvas of the University of the Algarve (Portugal) was selected as the first SCOR Visiting Scholar. His assignment was to teach a course in physical oceanography in Guatemala (see below). SCOR paid the airfare for Relvas and the host institution paid the local costs. SCOR also received expressions of interest from individuals available to serve as SCOR Visiting Scholars in 2010 and will do another call for applications soon, to the entire SCOR email list.



Guatemala, Marzo 19, 2009.

Señor Profesor
Paulo Relvas
Área de Oceanografía Física
Universidad de Algarve, Portugal
Presente.


Estimado Profesor Relvas:

Reciba un cordial saludo del personal que integramos el Centro de Estudios del Mar y Acuicultura de la Universidad de San Carlos de Guatemala.

En atención al convenio marco suscrito en el año 2008 entre las Universidades de Algarve y nuestra Universidad de San Carlos de Guatemala y su buena intención de participar en un curso teórico-práctico sobre Oceanografía Física brindado a estudiantes del área de Acuicultura y a profesionales del área adscritos el Colegio de Médicos Veterinarios de Guatemala, por este medio hacemos la Invitación Formal a su persona como Profesor Invitado en el entendido que CEMA en Guatemala cubrirá los gastos por apoyo logístico interno, alojamiento y alimentación.

Las fecha tentativa propuesta es del 3 al 15 de Julio 2009, realizándose las clases teóricas en el Salón de Conferencias de CEMA, Campus Central, Ciudad Universitaria y las prácticas conjuntamente a la Escuela Naval y OBIMAR, instituciones ubicadas en el Pacífico de Guatemala.

Esperando poder saludarle y atender sus buenas intenciones de participación en el curso taller de Oceanografía Física, nos suscribimos, respetuosamente,


M Sc Luis Francisco Franco
Profesor Investigador


Vo. Bo. M.C. Pedro Julio García Chacón
Director



c.c. Consejo Directivo.

**Short Report of the visit of Paulo Relvas to the
Centro de Estudios del Mar y Acuicultura (CEMA),
at Universidad San Carlos de Guatemala (USAC)
2-16 July 2009**

The main purpose of the visit was educational. A course titled "Procesos Oceanográficos y Clima" (Oceanographic Processes and Climate) was conducted in CEMA, a center of the USAC in Guatemala City dedicated to the instruction, research and development of marine sciences and aquaculture. The course had a total duration of 25 hours and did cover the basic aspects of the physical oceanography, from the large scale circulation and its relation with the climate to the regional oceanography. It did include also a session about oceanographic instrumentation and sampling strategies (the program overview is provided in the end of this report). The course was delivered in Spanish and had 50 attendees, most of them students and staff (instructors) of CEMA, but a considerable number of attendees came from other schools and/or faculties, in particular biology students interested in marine biology. The conveners of the course were Lic. Pedro Julio García, Director of CEMA and MSc Luis Franco, Professor Investigador at CEMA.

Complementary activities were accomplished with the objective of develop and build capacities in oceanography in Guatemala. Individual conversations with some instructors, in particular with those that will lecture the discipline of "Oceanography" to the degree in "Aquaculture", took place during my stay at CEMA. Updated bibliography about the regional oceanography was downloaded and reviewed. A talk (approx. one hour) about the national efforts to observe the coastal ocean of Guatemala (Pacific and Atlantic) and the achieved results was offered by Lic. Manuel Ixquiac from CEMA. Along with some instructors from CEMA, we did visit OBIMAR - Departamento de Observación e Investigación Marítima of the Empresa Portuaria Quetzal, at Puerto Quetzal, the main commercial port of Guatemala in the Pacific coast. The visit included a short talk about the observational activities developed by OBIMAR offered by the Lic. Nicolás Solares, Director of OBIMAR, and a ship trip to check the location of a coastal buoy where some oceanographic parameters are sampled. Some not so long time series of oceanographic parameters do exist at OBIMAR (they contributed to the Tropical Ocean and Global Atmosphere (TOGA) Project). Some time series are rather incomplete and collected with basic instruments, but others may have reasonable quality for scientific purposes.

Due to the determination of CEMA in developing the marine component of their activity, future collaboration between the University of Algarve (UAlg) and CEMA-Universidad de San Carlos (USAC) was discussed and a firm intention to look for funding to support the collaboration was agreed (e.g. to support CEMA students to carry out their master degree in Oceanography at UAlg). Future visits were discussed and a tentative date in April next year was considered for a course in Oceanography.

CEMA is the national institution committed by the Government to deal with all the issues related with the Ocean (presently CEMA monitors the harmful algae blooms (HABs) - Guatemala leads the number of fatal accidents in a single HAB event).

“Oceanographic Processes and Climate” - Program Overview

- Introduction: the ocean as a physical system and its role in the hydrological cycle.
- Physical properties of the sea water: temperature, salinity and density.
- The atmosphere and the ocean: solar radiation; the heat budget of the ocean; the mass budget of the ocean; surface fields of temperature and salinity in the ocean. Vertical structure of the ocean. Stratification and stability in the ocean. Mixing in the ocean: molecular and turbulent diffusion; water masses; TS diagrams; thermohaline analysis.
- Acoustic properties of the seawater. Optical properties of seawater.
- Ocean dynamics: main mechanisms that generate motion in the ocean (thermohaline circulation; circulation induced by the wind; Coriolis effect); the different scales of circulation in the ocean; thermohaline circulation; hydrostatic equilibrium; barotropic and baroclinic conditions; geostrophic currents; Wind-induced circulation: Ekman solutions for an infinite and finite depth ocean; convergence and divergence regions in the ocean; upwelling; dynamics of the coastal regions; coastal upwelling
- Waves in the ocean; tides; internal waves and tides.
- Complementary items:
 - The Oceans of the Planet
 - Observation in oceanography: strategies, methods and instruments
 - Representation of oceanographic fields

Paulo Relvas, 31 July 2009.

5.1.2 Regional Graduate Schools of Oceanography and Marine Environmental Sciences (RGSO)

This activity has not progressed since the 2008 SCOR meeting, due to a lack of funding and a lack of information on regional interests. The 2009 meeting of the committee will consider the needs and opportunities for RGSOs in Africa and Asia.

5.1.3 POGO-SCOR Visiting Fellowships for Oceanographic Observations

This fellowship program continues to attract highly qualified applicants. A report of the results of the 2009 program follows.

Interim Report on the 2009 POGO-SCOR Fellowship Programme

This year the fellowship programme was again implemented using POGO funds with supplementary financial support from SCOR. January's announcement opened the competition for three months. This year saw a total of 25 applications received with applicants from Abu Dhabi, Argentina, Brazil, Cape Verde, Chile, China, India, Indonesia, Mexico, Mozambique, Pakistan, Romania, South Africa, Trinidad & Tobago and Turkey.

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
- evidence that the training will lead to improved sustained observations in the region, or improved applications of such data;
- evidence that the training would lead to capacity-building with potential lasting impact on regional observations
- relevance to ongoing or planned programmes at the parent institution and links to GOOS initiatives

This year, thirteen visiting fellowships were initially offered to oceanographers from developing countries and economies in transition. The host institutions were in Australia, France, Germany, Portugal, the UK, and the USA. Unfortunately, one of the fellows was sadly lost in the Air France tragedy in May 2009 and the decision was taken not to replace him, making the final total of twelve 2009 fellowships. 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.

As in 2008 a Special POGO-SCOR visiting fellowship for on-board training on an Atlantic Meridional Transect (AMT) Cruise was also offered with the selected candidate having the opportunity to visit Plymouth Marine Laboratory (PML) in the UK for one month prior to the cruise to participate in cruise preparation and planning, to go on the cruise and after the cruise spend up to two additional months at PML, learning to analyse the results statistically and interpret them.

All the people involved in each fellowship (the fellowship holder, the supervisor at the parent institute and the supervisor at the host institute) will be requested to submit short reports at the end of the training period. Thus far (September 2009), one fellowship has been completed and the reports received have been enthusiastic. Three fellows have arrived at their host institution and have written eagerly of the forthcoming period of training.

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 visiting fellowships

Parent Institutions of Successful Candidates:

Brazil	Federal University of Rio Grande
India	Physical Research Laboratory
Chile	Pontificia Universidad Catolica de Chile
Chile	University of Concepción
South Africa	CSIR
India	National Institute of Oceanography
Cape Verde	TENATSO - Instituto Nacional de Desenvolvimento das Pescas
China	South China Sea Institute of Oceanology, Chinese Academy of Science
Pakistan	National Institute of Oceanography
Mexico	The National Commission for the Knowledge and Use of Biodiversity (CONABIO)
Mozambique	National Institute for Hydrograph and Navigation - INAHINA
Mexico	CICESE

Host Institutions:

Australia	CSIRO Marine and Atmospheric Research
France	Laboratoire d'Océanologie et de Géosciences (LOG) IFREMER
Germany	Max Planck Institute for Marine Microbiology Alfred Wegener Institute IFM-GEOMAR EOMAP
Portugal	University of Aveiro
UK	SAHFOS, Plymouth Sheffield Centre for Earth Observation Science, University of Sheffield
USA	College of Oceanic and Atmospheric Sciences, Oregon State University University of Rhode Island, Graduate School of Oceanography Virginia Institute of Marine Science, College of William and Mary

Gender distribution

Female: 3

Male: 9

POGO-SCOR JOINT FELLOWSHIP PROGRAMME

SUCCESSFUL VISITING FELLOWSHIP CANDIDATES - 2009

Christopher Aiken - Chile

Dr Aiken is a research associate with the Pontificia Universidad Catolica de Chile where he is developing an innovative coastal observing network in the Chilean fjords using ferries as ships of opportunity, known as FOCA (Ferries Observando los Canales Australes). By visiting CSIRO Dr Aiken will receive specific training in various aspects of Australia's Integrated Marine Observing System (IMOS) Ship of Opportunity (SOOP) facility that are of relevant to the Chilean project. He will be supervised by Mr Ken Ridgeway, Leader of the IMOS Ship of Opportunity Facility with assistance from Prof. Gary Meyers, Director of IMOS at the University of Tasmania.

Sinibaldo Canhanga - Mozambique

Mr Canhanga is a researcher at the National Institute for Hydrograph and Navigation (INAHINA) in Mozambique where he is responsible, amongst other things, for the tide analyses and tide table production. He is also on a national group designated to establish the numerical models as a tool to support the decision-makers on the best decision for sustainable coastal development. At the University of Aveiro in Portugal under the supervision of Prof. J Dias, the time will be devoted to improving his knowledge about morphodynamic modelling system being used by the Estuarine Group, its potentials and limitations.

Sergio Cerdeira Estrada - Mexico

Dr Cerdeira is an expert analyst in remote sensing with The National Commission for the Knowledge and Use of Biodiversity (CONABIO) in Mexico. The fellowship period with Dr Thomas Heege at Earth Observation and Mapping (EOMAP) in Germany will be used to train Dr Cerdeira in the use of hyperspectral data to derive standardised products such as suspended matter, phytoplankton and coloured organic material from both deep inland and coastal waters. EOMAP and CONABIO see the fellowship leading to future joint developments in ocean monitoring, such as geophysical parameters and maritime ecosystems such as Mexican coral reefs.

Amábile Ferreira - Brazil

Ms Ferreira has been a PhD student at the Federal University of Rio Grande in the Laboratory of Ocean and Climate Studies, Institute of Oceanography since March 2006. Since that time she has been involved in the project PATgonia EXperiment (PATEX) and has conducted much of the bio-optical measurements in six of the seven cruises in the Patagonian shelfbreak region. She is leading a scientific article on the absorption of the Patagonian surface waters which is expected to be published in Deep Sea Research sometime this year. She will be joining the team in the Laboratoire d'Océanologie et de Géosciences (LOG) in France to improve her knowledge in the assessment of water biogeochemical characterisation from optical measurements which is closely related to her research. Dr Alvain is particularly interested in collaborating with Ms Ferreira to develop bio-optical and remote sensing observation from ocean color satellite sensors in order to study optical properties and dominant phytoplankton groups in Patagonian shelf-break waters.

Sanober Kahkashan - Pakistan

Ms Kahkashan is a marine chemist research scientist in the Chemical Oceanography Section at the National Institute of Oceanography (NIO) in Pakistan. Her fields of interest are marine pollution monitoring (organic pollutants) and their impact on the marine environment including Polycyclic Aromatic Hydrocarbons (PAHs). She is currently responsible for carrying out extraction, cleanup and fractionation of organic pollutants in marine environmental samples for a project entitled 'Establishment of PAK-EPA Marine Water Pollution Monitoring Center at NIO'. During her time at the University of Rhode Island's Graduate School of Oceanography under the supervision of Dr Rainer Lomann she will be trained in preparing, deploying, analysing and interpreting the result from using passive polyethylene samplers in coastal waters. Polyethylene samplers are very cost-effective and versatile and will provide Ms Kahkashan and NIO an efficient tool to start their own coastal observation programme.

Keerthi MG - India

Ms Keerthi is a project assistant in the project 'Dynamics and thermodynamic of the equatorial Indian Ocean: An Argo perspective' at National Institute of Oceanography (NIO), India and has been working on ARGO profiles to understand the ocean dynamics and its response to atmospheric forcing. She is now aiming to pursue a PhD programme using ARGO profiles. Her fellowship period will be spent at IFREMER working under the supervision of Clément de Boyer Montégut who met Ms Keerthi during a research visit to NIO and was impressed with her great knowledge of analyses of observed barrier layer in the tropical Indian Ocean.

Ravi Kumar MS - China

Mr Kumar is currently pursuing his PhD at the South China Sea Institute of Oceanology in the area of Biological and Remote Sensing Marine Ecology under the guidance of Prof. D Tang. He is due to spend the fellowship period at the Virginia Institute of Marine Science under the supervision of Dr K Tang where he will receive training on the ecophysiology of *Phaeocystis* and trained to use state-of-the-art instrumentation such as PAM, gas chromatograph and epifluorescence microscopy to conduct hypothesis-driven research aiming to understand the biology and ecology of that algal group.

Arvind Singh - India

Mr Singh is a Senior Research Fellow at the Physical Research Laboratory, Goa, India, where he was offered a Graduate Student Fellowship two years ago working with Prof. Ramesh addressing oceanographic problems. Mr Singh will spend three months training in the new subject of 'The role of anaerobic ammonium oxidation (anammox) in nitrogen-loss from Indian coastal waters' under the supervision of Dr Marcel Kuypers at the Max Planck Institute for Marine Microbiology. Both Mr Singh's parent and host institutions see this opportunity as initiating new collaborations between marine scientists in India and institutions in northern Germany.

Vladimir-Giovanni Valencia - Mexico

Mr Valencia is currently enrolled in the Physical Oceanography PhD programme at the Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE). He is a member of the Waves Group and has been involved in a project where two High Frequency (HF) radars were installed in the Gulf of Mexico during January-April 2005. One of the interests of the group is to study the processes of generation and propagation of waves and Mr Valencia's training on the Estimation of Directional Wave Spectrum from HF Radar Data under the supervision of Prof. L Wyatt, Sheffield Centre of Earth Observation Science at the University of Sheffield, UK, is seen as benefiting both CICESE and the Waves Group to enable further study of ocean surface wave processes and acquire a broader view with long term measurements and statistics.

Johan van der Molen – South Africa

Dr van der Molen is a Post Doctoral Fellow within the African Coelacanth Ecosystem Programme (ACEP) funded by the National Research Foundation (NRF) based at the Council for Scientific and Industrial Research (CSIR) in South Africa. Within ACEP a multi-disciplinary team of researchers will study several aspects of the Natal Bight Ecosystem between 2009 and 2011 and Dr van der Molen's task will be to study the temporal and spatial distribution of the phytoplankton. The fellowship was granted to enable Dr van der Molen to attend a two-week Taxonomy Workshop co-organised by the Sir Alister Hardy Foundation for Ocean Science (SAHFOS)-Marine Biological Association (MBA) Marine Phytoplankton in Plymouth, UK, in July 2009 and thereafter visit the Alfred Wegener Institute for Polar and Marine Research in Germany for two weeks to be trained in molecular techniques under the supervision of Dr Kerstin Töbe. This has been successfully completed with all those involved expressing the wish to maintain contact and investigate future collaborations.

Nuno Roberto Vieira – Cape Verde

Mr Vieira is Assistant to the Site Manager of the Tropical Eastern North Atlantic Time-Series Observatory (TENATSO), Instituto Nacional de Desenvolvimento das Pescas, Cape Verde. TENATSO is a unique fixed-point ocean time series, presently implemented as a collaboration between Germany (IFM-GEOMAR), the UK (National Oceanography Centre, Southampton) and Cape Verde. During the fellowship period of three months, Mr Vieira will receive CTD training on maintenance, calibration and data processing at IFM-GEOMAR under the supervision of Dr Gerd Krahnmann. This will provide the Institute with local capacity for ongoing works through the monthly samples and enable both the Institute and TENATSO to respond to enquiries from foreign scientists and programmes.

Gonzalo Saldías Yau - Chile

Mr Saldías is pursuing a MS degree at the University of Concepción with the thesis research of river plume dynamics off central Chile. He is hoping to be able to combine the in-situ hydrographic data collected during the past three years over the continental shelf with remote sensing observations. His fellowship will be spent with a research group led by Prof. Ricardo Letelier at the College of Oceanic and Atmospheric Sciences, Oregon State University, USA. Prof. Letelier's group has been monitoring and studying the dynamics of the particular region over several years using satellite data and will train Mr Saldías in the analysis of remote sensing images and share their protocols and analytical tools with him.

SUCCESSFUL AMT FELLOWSHIP CANDIDATE – 2009

Charissa Ferrera – The Philippines

Ms Ferrera is a graduate student of the Marine Science Institute of the University of the Philippines and studying carbonate chemistry and organic matter decomposition in the Sulu Sea for her Master's thesis. She is due to arrive at PML during September and begin preparations for the cruise which is due to commence on 13 October.

5.1.4 NSF Travel Support for Developing Country Scientists

SCOR has received support from the U.S. National Science Foundation (NSF) since 1984 to provide funding for an important SCOR activity in the area of capacity building. Travel grants are awarded to ocean scientists from developing countries and the former Soviet Union, Eastern Europe, and other countries with economies in transition, to enable them to attend international scientific meetings. The most recent three-year grant began on 1 July 2008, running until 30 June 2011.

The amount of the award from NSF is now \$75,000 per year. Of this, a small amount (\$5,000 per year) is used to offset SCOR Secretariat expenses for contacting meeting organizers and recipients of travel funds, and for making travel arrangements. Recipients of SCOR travel awards are always chosen in consultation with the organizers of meetings that SCOR has agreed to cosponsor; direct applications from individuals are not accepted by the SCOR Secretariat. Priority is given to applicants who are presenting a paper or poster at the meeting or to those who have some special expertise or regional knowledge to bring to a workshop or working group. Preference is also given to younger scientists. In general, care is taken to ensure that the recipients of SCOR/NSF funds are *active* scientists, and that they have not received similar support from SCOR in the previous two years. All travel grant recipients are informed that their support comes from SCOR and that it is made possible through NSF funding.

Since 2001, a portion of total funding has been provided for longer-term courses or fellowships, such as the POGO-IOC-SCOR Visiting Fellowships for Oceanographic Observations.

2010 Requests for Travel Grants

Some of the requests listed below are for meetings in which SCOR is directly involved in planning, so there is no formal written request. A\$37,500 can be committed for each 6-month period. Requests come in throughout the year and the Executive Committee considers new requests between meetings. We had fewer requests than usual this year, so the total suggested allocation is \$45,500.

Meeting	Dates	Suggested Allocation
January-June		
#1 SCOR Office Overhead for 2010		\$5000
#2 38 th COSPAR Scientific Assembly	18-25 July 2010	\$3000
#3 Megacities and the coastal zone: air-sea interactions	February 2010	\$7500
#4 PICES Symposium on Climate Change Effects on Fish and Fisheries	April 2010	\$5000

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#5 POGO/SCOR Fellowships	2010	\$10000
#6 DMS(P) Symposium	October 2010	\$5000
#7 GEOHAB OSM on Benthic HABs	2010	\$5000
#8 SCOR-Relevant Sessions at PICES Annual Meeting	October 2010	\$5000
	Total	\$45,500

Request #1

SCOR is allowed \$5000 of the NSF Travel Grant to apply toward SCOR Secretariat expenses related to the grant. We apply these funds to offset the salaries of Lora Carter and Ed Urban, and fees paid to Elizabeth Gross.

Request #2

COSPAR
COMMITTEE ON SPACE RESEARCH

ESTABLISHED BY ICSU:
THE INTERNATIONAL
COUNCIL FOR SCIENCE



President: Prof. R-M. Bonnet
Executive Director Dr. J.-L. Fellous

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Dr. E. Urban
Executive Director
Scientific Committee on Oceanic Research
(SCOR)
University of Delaware
College of Marine & Earth Studies
Robinson Hall
Newark, DE 19716, USA

8 June 2009

19.70

Dear Dr. Urban,

The 38th COSPAR Scientific Assembly and Associated Events will be held in Bremen, Germany, 18 - 25 July 2010. Attached you will find a list of meetings to be organized in the context of the Assembly, many of which will be of interest to **SCOR**. Your organization has sponsored the scientific program of the COSPAR Assembly in previous years, and it is my pleasure to invite **SCOR** to become one of the many organizations sponsoring this major event in 2010.

Furthermore, COSPAR will receive many requests for support from scientists hoping to participate in the Assembly, especially from young researchers and scientists in countries with limited resources. Our community would be most grateful if **SCOR** would consider making a contribution toward meeting these requests. Given the limited funds currently at the Committee's disposal, I would like to stress that even a modest sum would be appreciated. In order to allocate funds as equitably and efficiently as possible, we prefer that financial contributions be without specific constraints. We plan to allocate at least 50% of available funds to young scientists but will, of course, respect wishes of sponsors providing financial support. Please do make clear in your response any restrictions which may apply to the allocation of funds offered.

All sponsors of the scientific program will be listed in Assembly documentation and reports. Sponsoring organizations which provide financial support will be specially acknowledged.

In order to assist the greatest number of scientists possible, I request that you please send the responses, positive or negative, concerning sponsorship and available support to the COSPAR Secretariat at your earliest convenience and by 18 December 2009 at the latest.

Your consideration of involvement in the scientific program of COSPAR is appreciated. For greater visibility and involvement in the Assembly, please do not hesitate to contact us about general sponsorship possibilities.

Yours sincerely,

Prof. R-M. Bonnet
COSPAR President

scientific event list

cospar 10

38th COSPAR Scientific Assembly and Associated Events:
18 - 25 July 2010, Bremen, Germany
www.cospar-assembly.org
Chair, COSPAR Scientific Program Committee:
Prof. T. Spohn (tilman.spohn@dlr.de)

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Request #3

Dr Ed Urban
Executive Officer
Scientific Committee on Oceanic Research
College of Earth, Ocean, and Environment
Robinson Hall
University of Delaware
Newark, DE 19716 USA
24 July 2009

Dear Ed,

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In June 2009, IGBP approved the Fast Track Initiative on '**Megacities and the coastal zone: air-sea interactions**' proposed by the IGBP core projects LOICZ (Land Ocean Interactions in the Coastal Zone), IGAC (International Global Atmospheric Chemistry) and SOLAS (Surface Ocean- Lower Atmosphere Study).

This fast track initiative aims to address the key issue of whether the juxtaposition of large scale urban emissions adjacent to a coastal environment results in specific, significant, complex and interlinked environmental problems both in terms of urban air quality and sustainability of the coastal environment. Understanding these affects will be important for informing air and water pollutant mitigation strategies at local and regional scales.

The initiative will bring together a group of experts to consider the scientific issues involved, leading to one or more scientific high profile peer-reviewed publication(s) which will be designed to inform and set the research agenda for the broad scientific community and also to assist environmental managers working in and around megacities.

To reach this goal, plans are underway to hold a 3-day workshop in February 2010 in an appropriate location, still to be determined. Fifteen scientists with specific expertise will be invited. This group will include two UN members expert in megacities environmental management to ensure that the output of the meeting will be of use to policy makers. Plans are also to invite five to ten young scientists with relevant interests from developed and developing countries to be full participants in the meeting.

With this in mind, SOLAS kindly requests support from SCOR for the Fast Track Initiative on '**Megacities and the coastal zone: air-sea interactions**', \$5k to cover fully or partially the travel costs for developing country/Russian/Eastern European scientists and/or students.

I thank SCOR for their continued support of SOLAS and for your consideration in this matter.

Yours sincerely



Dr.Emily Brévière
Executive Officer, SOLAS
International Project Office

Request #4

From 2009 report from PICES for SCOR Meeting—Travel support at the level of US\$5,000–7,500 is requested for early career scientists from countries with “economies in transition” to attend the international symposium on “*Climate Change Effects on Fish and Fisheries: Forecasting Impacts, Assessing Ecosystem Responses, and Evaluating Management Strategies*” to be held April 26–29, 2010, in Sendai, Japan (<http://www.pices.int/climatechange2010.aspx>). This symposium will provide a forum for scientists and policymakers to discuss the potential impacts of climate change on marine ecosystems and our uses of these ecosystems, and to consider the strategies that society can take to be prepared for anticipated impacts. An important product of the symposium will be a special issue of a peer-reviewed journal scheduled for publication in 2011, within the time-frames required for consideration by the Fifth Assessment of the Intergovernmental Panel on Climate Change (IPCC).

Request #5

SCOR has been providing support for this joint program with POGO since 2001. Its purpose is to build capacity for ocean observations in developing countries and countries with economies in transition by giving the opportunity for scientists from these countries to receive training outside of their countries.

Request #6

From: dileep [mailto:dileep@nio.org]
Sent: Friday, April 24, 2009 2:26 AM
To: 'Ed Urban'
Subject: 5th International DMS(P) Symposium

Dear Ed,

I am glad to invite you to participate in the 5th International DMS(P) Symposium to be held at our Institute in Goa in October 2010. I will appreciate marking your calendar to be with us for the meeting. Will it be possible for SCOR to support international scientists/students participation? We will be grateful for your consideration as it will facilitate young scientists from abroad to participate.

Best regards

dileep

Dear DMS(P) students,

Please do not frown at my addressing (y)ourselves as ‘students’ as it appears that we are still far from unravelling or understanding the DMS(P) dynamics in our earth system. Intensified DMS(P) research in the last few decades has led our small community, hailing from the global village, come together to organize several meetings, including the series of ‘International DMS(P) Symposia’ held once in roughly four years, around the world. We thank the DMS(P) community for having agreed to continue our discussions at our laboratory, National Institute of Oceanography, Goa, India, during the 5th International DMS(P) Symposium, 19-22 October

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2010. These dates were fixed after considering the weather, accommodation availability and official logistics. Through this First Announcement we invite your participation in the Symposium and request to mark your 2010 calendar to be in Goa, India. Also please plan to tap funding for your participation.

We are working with hotels around for accommodation at reasonable costs and will get back to you with more information in our Second Announcement in a month's time.

Looking forward to see you all in Goa

Best regards

dileep

Request #7

The GEOHAB SSC has approved an open science meeting on HABs in Benthic Environments. It will be convened by Paul Bienfang (USA) in Hawaii between May and September 2010. The purpose of the meeting is to develop a science plan for research on how HABs in benthic environments are affected by the oceanographic factors of the system and the ecology of the causative species, such as the algae that cause ciguatera. SCOR provided funding for the other four GEOHAB OSMs.

Request #8

From 2009 report from PICES for SCOR Meeting—Travel support at the level of US\$5,000–7,500 is requested for scientists from countries with “economies in transition” from the Pacific Rim to attend SCOR-relevant sessions/workshops at the 2010 PICES Annual Meeting to be held October 22–31, 2010, in Portland, U.S.A., under the theme “*North Pacific Ecosystems Today, and Challenges in Understanding and Forecasting Change*”. The scientific program for this event will be finalized in October 2009 at PICES-2009.

5.1.5 SCOR Reports to Developing Country Libraries

One report was sent to developing country libraries since the 2008 General Meeting:

- *Carbon and Nutrient Fluxes in Continental Margins: A Global Synthesis*

Reports

Argentina	Universidad Nacional del Sur Bahía Blanca, Argentina
Bangladesh	Library SPARSO Dhaka, Bangladesh
Brazil	FURG Departamento de Oceanografia Rio Grande, Brazil Instituto Oceanográfico Universidade de São Paulo São Paulo, Brazil Dept. of Oceanography and Hydrology University of the State of Rio de Janeiro
Bulgaria	State Fisheries Inspectorate (SFI) Fisheries and Aquaculture Department Sofia, Bulgaria
Chile	Departamento de Oceanografia Universidad de Concepción Concepción, Chile Servicio Hidrografico y Oceanografico Valparaiso, Chile
China-Beijing	Library of Ocean University of Qingdao Qingdao, China Institute of Oceanology Chinese Academy of Sciences Qingdao, China Second Institute of Oceanography State Oceanic Administration Hangzhou, China
Croatia	Rudjer Boskovic Institute

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	Zagreb, Croatia
Cote d'Ivoire	Centre de Recherches Oceanologiques (CRO) Abidjan, Côte d'Ivoire
Cuba	Centro de Investigaciones Pesqueras (CIP) Ministerio de la Industria Pesquera (MIP) Habana, Cuba
Egypt	National Institute of Oceanography and Fisheries Cairo, Egypt
Estonia	Estonian Marine Institute (MEI) Tallinn, Estonia
Fiji	Pacific Islands Marine Resources Information System (PIMRIS) The University of the South Pacific Suva, Fiji Islands
Ghana	Institute of Aquatic Biology Achimota, Ghana
India	National Institute of Oceanography Goa, India Physical Research Laboratory Ahmedabad, India
Indonesia	Centre for Oceanology Indonesian Institute of Sciences Jakarta, Indonesia
Kenya	Kenya Marine and Fisheries Research Institute (KMFRI) Mombasa, Kenya
Korea	Korea Ocean Research and Development Institute (KORDI) Seoul, Korea
Lithuania	Ichthyobank Vilnius, Lithuania
Malaysia	ICLARM - The World Fish Center Penang, Malaysia
Mexico	Universidad Nacional Autónoma de México (UNAM) México, D.F., México Biblioteca CICESE Ensenada, Mexico
Morocco	Institut National de Recherche Halieutique (INRH) Casablanca, Morocco
Pakistan	National Institute of Oceanography Karachi, Pakistan
Peru	Instituto del Mar del Perú (IMARPE) Callao, Peru

Poland	Institute of Oceanology Polish Academy of Sciences Sopot, Poland
Philippines	College of Science, University of the Philippines Quezon City, Philippines
Romania	Romanian Marine Research Institute Constanta, Romania
Russia	P.P. Shirshov Inst. of Oceanology Russian Academy of Sciences Moscow, Russia All Union Research Inst. of Fisheries and Oceanography V Moscow, Russia
South Africa	University of Cape Town Cape Town, South Africa
Thailand	Dept. of Marine Sciences Chulalongkorn University Bangkok, Thailand
Tunisia	Institut National des Sciences et Technologies de la Mer (INSTM) Salammbô, Tunisia
Turkey	Institute of Marine Sciences Middle East Technical University Icel, Turkey
Ukraine	Southern Scientific Research Institute of Marine Fisheries and Oceanography (YugNIRO) Laboratory of Pacific and Indian Oceans Fish Resources and Fishery Statistics Crimea, Ukraine Marine Hydrophysical Institute Ukrainian Academy of Sciences Sevastopol, Ukraine
Vietnam	National Institute of Oceanography Nha Trang, Vietnam