



Regional Office for Asia and the Pacific

Annual Report 2008

Strengthening international science
for the benefit of society

ICSU ROAP Vision

The long-term ICSU vision is for a world where science is used for the benefit of all, excellence in science is valued and scientific knowledge is effectively linked to policy-making. In such a world, universal and equitable access to high quality scientific data and information is a reality and all countries have the scientific capacity to use these and to contribute to generating the new knowledge that is necessary to establish their own development pathways in a sustainable manner.

About ICSU ROAP

The Regional Office for Asia and the Pacific was inaugurated on the 19 September 2006 by the Deputy Prime Minister of Malaysia, Y.A.B. Dato' Seri Najib Tun Abdul Razak. The Office will promote the development of science throughout Asia and the Pacific and help strengthen the participation of developing country scientist in international research in the region. It will also strive to ensure that Asia Pacific scientists become involved in those aspects of the ICSU 2006-2011 Strategic Plan that are especially relevant for Asia and the Pacific.





Mission Statement

ICSU mobilizes the knowledge and resources of the international science community for the benefit of society to:

- Identify and address major issues of importance to science and society
- Facilitate interaction amongst scientists across all disciplines and from all countries
- Promote the participation of all scientists in the international scientific endeavour, regardless of race, citizenship, language, political stance or gender
- Provide independent, authoritative advice to stimulate constructive dialogue between the scientific community and governments, civil society, and the private sector

Message from the Director

The year saw the publication of the first science plans to be produced by ICSU Regional Office for Asia and the Pacific (ROAP) in its priority area of hazards and disasters. The first plan focuses on the science needed to understand earthquakes, floods and landslides better in order to reduce the risk of loss of lives and property in a rapidly developing Asia Pacific, and the second deals with the special vulnerability of islands, with special emphasis on the small island developing countries of the Pacific. At the same time the Science Planning Group on Sustainable Energy in Asia and the Pacific, completed its series of meetings to prepare the science plan on sustainable energy, the second area of priority of ROAP. The plan will be published in mid-2009. Planning for work in its third priority area, ecosystems, will dovetail the action plans of the newly launched international research programme on humans, ecosystem and wellbeing. These plans form the basis upon which ROAP will conduct its activities in the next three to six years.

Several high level meetings were held to enhance ROAP's work in planning and coordinating research at the regional and global levels. Much effort was put into the initiative to revive interest in the sub-global follow-up programme of the Millennium Assessment (MA), and in linking science to policy using the MA framework. ROAP has also been active in establishing stronger links with regional programmes such as those run by the Asia Pacific Network (APN). Links with ICSU National Members and Scientific Unions are being strengthened to better achieve the goals of establishing the Regional Office. Lao PDR became the latest member of ICSU from Asia.

The ICSU Regional Committee for Asia and the Pacific met twice during the year. It noted the significant progress made by ROAP over the year and laid out a road-map to guide further development of the priority areas of ICSU ROAP. It noted with satisfaction that the income for the year exceeded the budgeted income and thanked everybody for their effort.

I join the Regional Committee in thanking everyone for their contribution to the development of ROAP. It has indeed been an exciting year for ROAP.

Mohd Nordin Hasan
Director



Message from the Chair



The ICSU Regional Office for Asia and the Pacific (ROAP) continues to strive to achieve ICSU's vision of universal and equitable access to scientific development and capacity to use and generate new scientific knowledge. Asia and the Pacific Region, home for over 50% of the world's population, faces enormous challenges of harnessing new knowledge for mitigating the problems related to dwindling natural resources, shortage of potable water, fast increasing demand for energy, food and feed, human health, environmental degradation, natural and human-induced hazards and the global warming. Finding solutions to these problems through the active interaction of scientists across disciplines, is the primary goal of ROAP.

To address some of the issues of priority, ROAP has published Science Plans on Natural and Human Induced Hazards and Disasters, related to earthquakes, floods and landslides, and special vulnerability of islands. These plans make valuable suggestions for research on prevention and mitigation of hazards and disasters, and have identified crucial capacity building needs. The Science Plan on sustainable energy is being finalized; it will provide useful framework for meeting the energy requirements for sustainable development of the region. Work on ROAP's third priority area – ecosystems – will complement the activities of the new international research programme on Humans, Ecosystems and Wellbeing, launched at the 29th General Assembly of ICSU at Maputo.

Active partnerships and linkages developed with the UNESCO Jakarta Office, the United Nations University, Institute of Advanced Studies (UNU IAS), the International Union on Theoretical and Applied Mechanics (IUTAM), the World Meteorological Organization and the Global Change System for Analysis, Research and Training (START), and national member organizations will greatly help in strengthening the programmes of ROAP.

I wish ROAP grand success in the years to come.

Anupam Varma
Chair

Key Events 2008

January 14 – 15	Co-host (with Academy of Sciences Malaysia) Pacific Science Association (PSA) Extraordinary Executive Board Meeting, Kuala Lumpur, Malaysia
March 10 – 11	Editorial Meeting of ICSU ROAP Science Planning Group on Hazards and Disasters, Kuala Lumpur, Malaysia
March 11	Co-host (with Academy of Sciences Malaysia and Universiti Kebangsaan Malaysia Institute for Environment and Development LESTARI) Round Table Dialogue: Linking Ecosystem Knowledge and Development, Bangi, Malaysia
April 10 – 13	Local Organizer for the United Nations University, Institute for Advanced Studies (UNU-IAS) 1 st International Workshop on Millennium Ecosystem Assessment (MA) Sub-global Assessments Follow-up Programme, Kuala Lumpur, Malaysia
April 14 – 15	Co-organizer (with Academy of Sciences Malaysia and Universiti Kebangsaan Malaysia Institute for Environment and Development LESTARI) Malaysian Sub-Global Assessment: Scoping and Design Workshop, Kuala Lumpur, Malaysia
April 23 – 24	1 st Meeting of ICSU ROAP Science Planning Group on Sustainable Energy, Kuala Lumpur, Malaysia
June 12 – 13	5 th Meeting of ICSU Regional Committee for Asia and the Pacific, Colombo, Sri Lanka
July 10	ICSU ROAP - UNESCO Jakarta Office Liaison Meeting, Jakarta, Indonesia
July 11	ICSU ROAP – Indonesian Institute of Science (LIPI) Liaison Meeting, Jakarta, Indonesia
August 12 – 13	2 nd Meeting of ICSU ROAP Science Planning Group on Sustainable Energy, Kuala Lumpur, Malaysia
October 19	ICSU ROAP - National Research Council of Philippines (NRCP) Liaison Meeting, Manila, Philippines
October 20 – 24	29 th ICSU General Assembly, Maputo, Mozambique
November 10 – 12	UNEP ad hoc intergovernmental and multi-stakeholder meeting on an intergovernmental science-policy platform on biodiversity and ecosystem services (IPBES), Putrajaya, Malaysia
November 14 – 15	3 rd Meeting of ICSU ROAP Science Planning Group on Sustainable Energy, Kuala Lumpur, Malaysia
November 26 – 27	6 th Meeting of ICSU Regional Committee for Asia and the Pacific, Guilin, China
December 10	Collaboration Meeting with Centre of Earth Observation and Digital Earth (CEOED), Chinese Academy of Sciences, Beijing, China

Planning and Coordinating Research

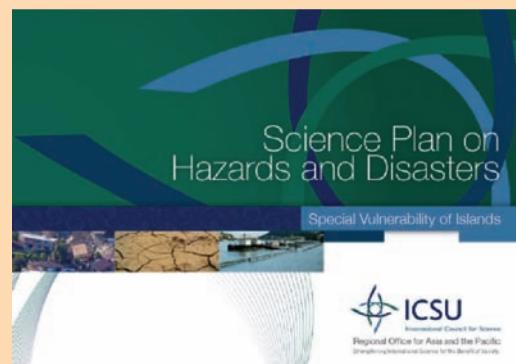
Planning and coordinating research is a major role of ICSU, and ROAP provides scientists from developing countries the opportunity to participate in meetings that determine the agenda for research in the three priorities areas of ROAP in the region. These are in Natural and Human Induced Environmental Hazards and Disasters, Sustainable Energy, and Humans, Ecosystems and Wellbeing.

Science for Environmental Hazards and Disasters Risk Reduction

The impacts of natural and human induced environmental hazards and disasters vary around the world but nowhere are they more devastating than in Asia and the Pacific. The ICSU ROAP science plans on natural and human induced hazards and disasters in Asia and the Pacific focus on earthquakes, floods and landslides as these are the main causes of disasters in the region. The vulnerability of small islands to hazards and disasters is given special emphasis.

These plans, ICSU ROAP Science Plan on Hazards and Disasters: [Earthquakes, Floods and Landslides](#) and ICSU ROAP Science Plan on Hazards and Disasters: [Special Vulnerability of Islands](#) are now available online.

(<http://www.icsu-asia-pacific.org/img/Earthquake,%20Floods%20&%20Landslides.pdf> and
<http://www.icsu-asia-pacific.org/img/Special%20Vulnerability%20of%20Islands.pdf>)

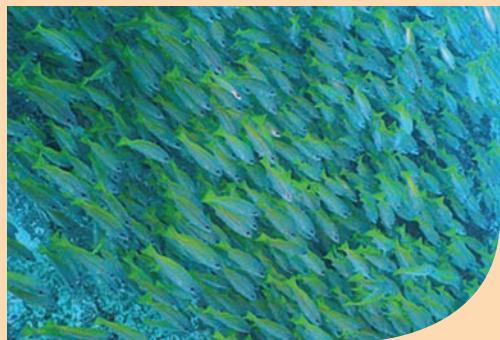


Humans, Ecosystems and Wellbeing

1st International Workshop Millennium Ecosystem Assessment (MA) Sub-global Follow-up Programme

ICSU ROAP co-hosted two meetings related to the Millennium Ecosystem Assessment Sub-Global Follow-up Programme, as part of the activation of its work on humans, ecosystems and wellbeing. The first was a four-day UNU Institute of Advanced Studies (IAS) meeting that re-established the MA sub-global assessment (SGA) network. The rationale, objectives and scope of the sub-global assessment follow-up programme was presented and debated. The meeting also informed participants of new assessments that were not part of the original set of MA SGAs. It was attended by more than 70 participants from 25 countries.

The second was a two-day United Nations Environment Programme (UNEP) and World Conservation Monitoring Centre (WCMC) meeting that finalized the structure and content of the MA Methodology Manual. At the Workshop, sub-global case study materials proposed for inclusion in the Manual were evaluated for suitability.



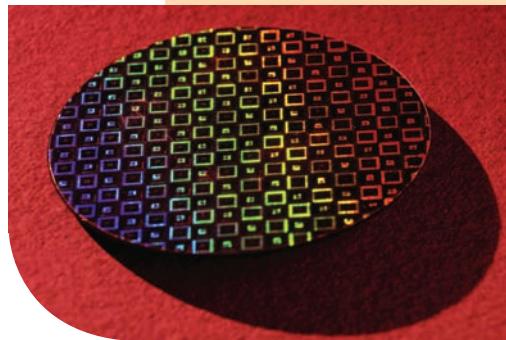
Photos: Norhayati Ahmad

Malaysian Sub-Global Assessment: Scoping and Design Workshop

A Malaysian SGA scoping and design workshop was held back-to-back with the MA SGA follow-up workshop. An outline plan for a Malaysian SGA was prepared. The Workshop was hosted by the UNU-IAS, Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia (UKM), and the Academy of Sciences Malaysia (ASM). Participants shared past experience of the SGA and discussed the latest developments in the MA Follow-up programme including the establishment of the MA Follow-up SGA Secretariat at the UNU IAS. Local researchers made presentations of main areas of research proposed in the Malaysian SGA.

Energy for Sustainable Development in Asia and the Pacific

The ICSU ROAP Science Planning Group on Sustainable Energy held three meetings in Kuala Lumpur and drafted the science plan that the Regional Office will use to promote research on the science and application of sustainable energy in Asia and the Pacific. The Plan focuses on seven energy sources *viz.* wind, solar, geothermal, hydro, biomass, ocean energy and energy from waste. It will take into consideration energy availability in the region, current and emerging technologies and potential applications. An editorial sub-group will meet in early February 2009 and a draft final plan will be published by June 2009. The plan will guide the work of ICSU ROAP towards greater understanding of sustainable energy needs and potential in Asia and the Pacific especially in areas where there are significant gaps in knowledge.



Science for Policy

Round Table Dialogue: Linking Ecosystem Knowledge and Development

ICSU ROAP and its partners the United Nations University Institute of Advanced Studies (UNU IAS), Universiti Kebangsaan Malaysia Institute for Environment and Development (LESTARI) and the Academy of Sciences Malaysia (ASM) convened a Roundtable dialogue to engage key stakeholders on the subject of ecosystem change in Malaysia and their cultural, political and policy implications. Presentations were made by speakers from UNU IAS, and Malaysian stakeholders *viz.* the Economic Planning Unit of the Prime Ministers Department, Ministry of Natural Resources and Environment, Ministry of Agriculture and Agro-based Industry, and the United Nations Development Programme (UNDP) Malaysia Office. One of its key conclusions noted that it was essential to catalogue on-going ecosystems assessments in the region and to enhance understanding of the implications of ecosystem change on human wellbeing in the context of sustainable development.



Dialogue: Effective science governance in developing countries.

ROAP co-hosted a framework setting dialogue on science governance in developing countries conducted by the United Nations University Institute for Advanced Study (UNU-IAS) and the Academy of Sciences for the Developing World (TWAS). This is part of an on-going UNU-IAS initiative on effective science governance in developing countries. The purpose of this dialogue was to explore the conceptual parameters of science governance and examine the thematic approach by gaining input on the substantive issues, and case studies that could be further developed within the initiative. The themes explored were a) foresight analysis, b) change and crisis management, c) the role of ethics, values and religious considerations in decision making, d) governing for sustainability, health, and for prosperity, e) managing autonomy and connectedness: international assistance and international obligations, and f) considerations for investment in knowledge and innovation.

Universality of Science

Joint Inter-Governmental Meeting and Science Planning Group Meeting of the Asia Pacific Network for Global Change Research (APN)

The Director made a presentation at the Thirteenth Meeting of the Joint Inter-Governmental Meeting and Science Planning Group of the Asia Pacific Network for Global Change Research (APN) in Kobe, Japan. The presentation included the current and future activities of the Regional Office, its interests in science-policy linkages and possible ways of enhancing collaboration among partner organizations. This proved to be a prime opportunity for ICSU to contribute towards strengthening future funding priorities on science-policy linkages by the APN.

ICSU ROAP - UNESCO Jakarta Office liaison



A working visit was made to UNESCO Jakarta Office to discuss and prepare a framework for collaboration in the next few years. Disaster preparedness and risk reduction, renewable energy, and water and associated ecosystems were identified as strategic areas for collaboration between UNESCO, ICSU, and the ASEAN Foundation. The UNESCO Jakarta Office presented their current projects and activities in ecology, hydrology and earth sciences, in disaster risk reduction, and in science, education and energy.

Governance and Policies

5th Meeting of ICSU Regional Committee for Asia and the Pacific

The National Sciences Foundation (NSF) of Sri Lanka hosted the 5th Meeting of the ICSU Regional Committee for Asia and the Pacific on 12-13 June 2008 in Colombo, Sri Lanka. The members were informed on the revised documents describing functions of the Regional Offices and their *modus operandi*. The composition of the Regional Committee was also discussed with a view to further assist the Regional Offices to achieve its goals. The focus areas of Regional Office in planning and coordinating research were discussed and updated. A half-day forum on hazards and disasters in Asia and the Pacific was held in conjunction with the meeting. Scientists from Sri Lanka and members of the Regional Committee made presentations at the forum.



6th Meeting of ICSU Regional Committee for Asia and the Pacific

The China Association for Science and Technology (CAST) hosted the 6th Meeting of ICSU Regional Committee for Asia and the Pacific on 26-27 November 2008 in Guilin, China. The meeting agreed on a road-map to develop fully the potential of the Regional Office in the next three years. An action plan matrix for the development of research in natural and human-induced hazards and disasters developed by the Regional Office was endorsed. A half-day forum on sustainable energy in Asia and the Pacific, with a special focus on China (the host country), was held in conjunction with the meeting. Scientists from the Institute of Geographic Sciences and Natural Resources Research, and the Guangzhou Institute of Energy Conversion (both belonging to the Chinese Academy of Sciences), the China Association for Science and Technology, and ICSU ROAP made presentations at the forum.



Servicing ICSU National and Union Members

New National Member – Lao PDR



The National Science Council (NSC) of Lao PDR became a member of ICSU in October 2009. The Council was established in 2002 to promote the development of scientific research in Laos. It was anticipated that research in Laos will be gradually upgraded to include activities at the international level. In December 2007 Laos established the National Authority of Science and Technology (NAST). This is a major boost for the development of science in Laos and ICSU can have a significant role to play, through its Regional Office for Asia and the Pacific, in enhancing the ability of scientists from Laos to participate in research programmes in the region that will benefit Laos.

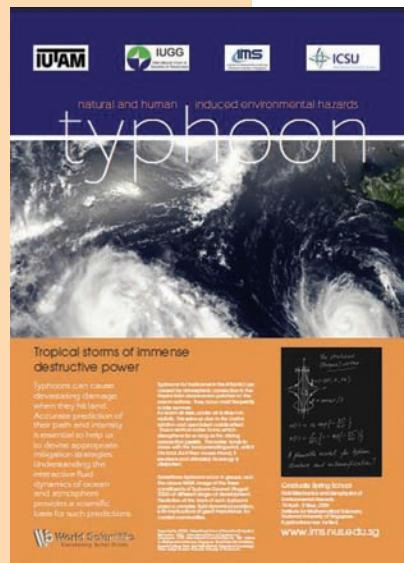
The ICSU Regional Office for Asia and the Pacific (ROAP) held in-depth discussions with the NSC in Vientiane on 5 September 2008 to introduce ICSU to the members and staff of the NSC. Present at the meeting were the Vice President of NSC, Dr Maydom Chantanansinh, the Director General of the National Authority of Science and Technology, the Deputy Director General of Cabinet, the Deputy Director of the Department of Science and Technology (DOST), and all the Directors of the divisions within NAST. Ir. Somphone Phanousith, the Permanent Secretary of the National Science Council who is also the Secretary General of the Lao Union of Science and Engineering (LUSEA) graced the visit by ICSU.

ICSU Small Grant Programme for the International Union of Theoretical and Applied Mechanics (IUTAM)

ROAP was instrumental in supporting the application for ICSU Small Grants for a Spring School on Fluid Mechanics and Geophysics of Environmental Hazards that is being organized jointly by two International Scientific Unions of ICSU i.e. IUTAM (the International Union of Theoretical and Applied Mechanics) and IUGG (the International Union of Geodesy and Geophysics) from April to May of 2009. The School will contribute towards ICSU's priority area on natural and human-induced environmental hazards and disasters, particularly in relation to scientific capacity building in countries of Asia and the Pacific. It will teach the mechanical fundamentals of geophysical fluid dynamics, and on geophysical hazard and risk in the atmosphere and ocean. It will be held at the Institute of Mathematical Science, National University of Singapore and focus on four specific environmental hazards:

1. typhoons and tropical cyclones;
2. monsoons and flooding;
3. tsunamis;
4. pollution of atmosphere, ocean and the urban environment.

The objective of the School is to promote active and collaborative research activity among participants. Its long-term objective is to initiate a network of young scientists in countries of Asia and the Pacific who will be committed to work in this interdisciplinary area, and to launch a program of research addressing these problems. The target group for the School are graduates in mathematics, physics or engineering who wish to undertake research in this broad area.



ICSU Small Grant Programme for WCRP-WMO/START

ROAP provided support for the ICSU Small Grants Programme to part-support to the World Climate Change Research Programme of the World Meteorological Organization (WCRP-WMO) – START (Global Change System for Analysis, Research and Training) workshop on *Cities at Risk: Integrating Science and Policy for Managing Climate Risks in Asia's Coastal Megacities*. The other partners of this workshop are the East-West Centre of the University of Hawaii, The Land Oceans Interactions in the Coastal Zone (LOICZ) project, a core project of the International Geosphere-Biosphere Project (IGBP) and the International Human Dimensions Project (IHDP) Urbanization and Global Environmental Change Project. The workshop will be held in Bangkok in late February 2009. It aims to bring together scientists, urban planners and officials, and representatives of disaster management and development agencies to review scientific findings and projections regarding climate-related risks (e.g., sea level rise, extreme climate events, intensification of storms and storm surges) for Asia's coastal megacities.

Indonesia National Member

Indonesia is one of the oldest ICSU members in Asia and the Pacific and is represented by the Indonesian Institute of Sciences (LIPI). ICSU ROAP held discussions with LIPI in July to further strengthen the ties with the National Member. LIPI was formerly known by Indonesian Council of Sciences (MIPA) and was initially established in 1952.

The discussion between ICSU ROAP and LIPI resulted in possible strengthening of future collaboration in potential research areas on hazards and disasters, sustainable energy, and ecosystems. LIPI will endorse a new Strategic Plan where the priority areas of research overlap with those of ICSU ROAP. Enhanced participation of Indonesia in activities of ICSU and greater participation of Indonesian scientists in international research programmes in Asia and the Pacific are the ultimate goals of the liaison between ICSU ROAP and LIPI.

Philippines National Member

ICSU ROAP visited the National Research Council of Philippines (NRCP <http://www.nrcp.dost.gov.ph/>) in October 2008 to follow-up on earlier discussions with the President of the Council, Dr Jamie C. Montoya on strengthening ties and enhancing collaboration between ICSU ROAP and the NRCP. In conjunction with the visit, a presentation was made to the Governing Board of the NRCP on the future directions of ICSU and potential areas where relations between ICSU ROAP and the NRCP may be strengthened and improved. The NRCP, established in 1933, is the oldest science council in Asia. The Philippines has been a member of ICSU since the establishment of the NRCP.

The discussion identified common areas of interest including research on hazards and disasters, sustainable energy, and ecosystems.

Members of the Governing Board expressed keen interest in interacting with ICSU at all levels. Many of the Divisions of the NRCP are aware of the activities of ICSU and have in the past engaged with various ICSU Unions and Interdisciplinary Bodies. The NRCP is keen to efficiently tap the intellectual resources available under ICSU, have greater access to data and information, achieve wider engagement of NRCP in capacity building activities organized by ICSU and have greater participation in ICSU panels. The Undersecretary for Research and Development of the Department of Science and Technology, Dr Garciano P. Yumul, Jr., that oversees the NRCP, graced the meeting with his presence.



Members of NRCP Governing Board receive Prof Nordin Hasan of ICSU ROAP

Members of the ICSU Regional Committee for Asia and the Pacific in 2008



Motonori HOSHI
The University of the Air
Wakaba 2 - 11,
Mihama-ku
Chiba 261-8586, JAPAN
Voice/Fax : +81-43-298-4184
Email : hoshim@u-air.ac.jp



Jennifer Graves
Research School of Biological Sciences
Australian National University
GPO Box 475
Canberra, ACT 2601
Australia
Tel. : (+61 2) 6125 2492
Fax. : (+61 2) 6125 4891
Email: graves@rsbs.anu.edu.au



Kan Zhang
Institute of Psychology
CAS, 10-A, Da Tun Lu
Beijing, 1001
China
Tel. : (+86 10) 6483 7096
Fax. : (+86 10) 6483 7182
Email : zhangk@psych.ac.cn



M. Shamsher Ali
Southeast University
House No. 64/B,
Road No. 18
Banani
Dhaka 1213
Bangladesh
Tel. : (+880 2) 989 2914
Fax. : (+880 2) 9892914
Email: msali@seu.ac.bd
msali@bol-online.



**Ex Officio
Congbin Fu**
Institute of Atmospheric Physics
Chinese Academy of Sciences
Beijing 100029, China.
Phone : 86-10-82995134
Fax : 86-10-82995135
E-mail : fcb@tea.ac.cn



**Ex Officio
Muhamad Awang**
SEGi College (M) Sdn Bhd
No.9, Jalan Teknologi,
Taman Sains Selangor
Kota Damansara PJU 5
47810 Petaling Jaya, Selangor
Tel. : 03 – 6145 2777
Fax. : 03 – 6145 2622
Email: muhamad@segi.edu.my

**Ali. A Moosavi-Movahedi**

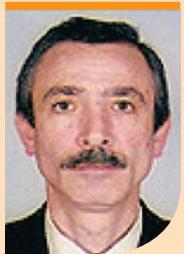
Institute of Biochemistry & Biophysics (IBB),
University of Tehran
Tehran, Iran
Tel. : +9821-66403957
Fax. : +9821-66404680
Email : moosavi@ibb.ut.ac
www.ibb.ut.ac.ir/~moosavi

**Anupam Varma (Chair)**

Advanced Centre for Plant Virology
Division of Plant Pathology
Indian Agricultural Research Institute
New Delhi, India
Tel. : (+91 11) 2584 2134
Fax. : (+91 11) 2584 2134
Email : anupamvarma@vsnl.net

**Mingsarn Kaosa-ard**

Social Research Institute
Chiang Mai University
Chiang Mai,
50200 Thailand
Tel. : (+66 53) 892 353 ; 942 593
Fax. : (+66 53) 892 649, 942 572
Email : mingsam@chiangmai.ac.th

**Mustafa Bagirov**

Azerbaijan National Academy of Science
Istiglaliyyet str. 10
Baku
Azerbaijan
Tel. : (+994 12) 492 3446
Fax. : (+994 12) 492 5699
Email : bagirovmustafa@yahoo.com
mustafa@aas.ab.az

**Derek J. Gardiner**

Faculty of Science and Technology
The University of the South Pacific
Private Bag Laucala Bay
Suva, Fiji
Tel : (679) 323 2445
Fax : (679) 323 1514
Email : gardiner_d@usp.ac.fj
URL : www.usp.ac.fj



Ex Officio

Patricia Ocampo-Thomason Science Officer
(Regional Offices Liaison)
International Council for Science (ICSU)
5, rue Auguste Vacquerie
FR-75016 Paris , France
Tel. : +33 1 45 25 91 04
Fax. : + 33 1 42 88 94 31
Email : patricia@ig



Ex Officio

Mohd Nordin Hasan
International Council for Science (ICSU)
Regional Office for Asia and the Pacific,
902-4 Jalan Tun Ismail,
50480 Kuala Lumpur, MALAYSIA
Tel. : +603 26984192
Fax. : +603 26917961
Email : nordin.hasan@icsu-asia-pacig

Secretariat

Director:

Emeritus Professor Mohd Nordin
Hasan FASc
(nordin.hasan@icsu-asia-pacific.org)

Science Officer (Programme):

Ms. Nor Zaneedarwaty Norman
(zaneeda.norman@icsu-asia-pacific.org)

Administrative Officer:

Mr. Mohd Hizamddin Jaafar
(hizam.jaafar@icsu-asia-pacific.org)

Financial Summary

Income	MYR	EUR
Balance b/f (Balance of funds 2007)	110,406.51	24,001.42
Government of Malaysia	498,000.00	108,260.87
ICSU	165,900.00	36,065.22
Academy of Sciences Malaysia	25,000.00	5,434.78
UNU/IAS	208,524.53	45,331.42
UNESCAP, IUCN etc Travel Support	56,664.56	12,318.38
UNESCO	63,800.00	13,869.57
TOTAL INCOME	1,128,295.60	245,281.65
Expenditure	MYR	EUR
Regional Committee Meetings	99,709.71	21,676.02
Scientific Planning Meetings	252,129.84	54,810.83
Staff Travel	154,829.07	33,658.49
Development of Priority Areas	40,930.03	8,897.83
MA SGA Follow-up Activities	208,359.71	45,295.59
Emoluments	300,791.24	65,389.40
Communications and Utilities	22,694.71	4,933.63
Office Supplies and Materials	28,212.14	6,113.07
Maintenance and Repairs	1,084.00	235.65
Services	124.62	27.09
TOTAL	1,108,865.07	241,037.61
Balance c/f to 2009 (Exchange rate EURO1.00 : MYR4.60)	19,430.53	4,244.04

Benefits of Joining ICSU

The benefits of membership in ICSU are manifold and Members make greater or lesser use of the opportunities available to them as they wish. The main difference between full National membership and that of Associates status is that Members may vote and thus help determine ICSU's future direction.

- All Members receive copies of ICSU publications: the electronic newsletter ICSU Insight, Annual Reports, and any other publications or series of publications produced (e.g. the report produced during the preparation of ICSU's Strategic Plan 2006-2011 or the series produced in connection with the World Summit on Sustainable Development (WSSD)
- Members have access to the Member Zone on the ICSU website and thus to documents not made available to the general public and can search the ICSU database. Members also benefit from access to different committees of ICSU, for example, the Committee on Freedom and Responsibility in the conduct of Science which, *inter alia*, helps solve visa problems for scientist wishing to attend scientific meetings and gives advice to organizers of international meetings. Even more importantly, Members gain access to the world scientific community and the enormous network of scientist comprising the membership of ICSU, and the prestige afforded by the ICSU umbrella.
- ICSU's International Scientific Unions and National Scientific Members (National Academies of Science or National Research Councils for the most part) meet every three years in the ICSU General Assembly. Members get an excellent cross-discipline opportunity for the exchange of ideas and also get access to a wide spectrum of scientific expertise which enables Members to address major international, interdisciplinary issues, which they can not undertake alone.
- The costs of membership are the dues payable. Each Member (National and Union) chooses the category of dues which it wishes to pay, from a scale of EUR1000 and finishing Category 50 at EUR281,642. International and Regional Scientific Associates pay EUR500. For full information on the range of ICSU's activities, see website: www.icsu.org

Membership of ICSU

National Members

ICSU's National Members provide input, from a national, multidisciplinary perspective, on priority areas for future ICSU activities. They also play an important role in facilitating links with national governments and science agencies. The majority of ICSU National Members are scientific academies, although some are national funding agencies or other nationally representative science bodies. The following list includes full Members, Scientific Associates*, and Observers**. The South Pacific includes the Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. The Caribbean includes Antigua and Barbuda, Bahamas, Barbados, Dominica, Grenada, Guyana, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago. Thus, ICSU has 116 National Members covering 136 countries.

The date in brackets is the date the Member (or a predecessor body) was first admitted to ICSU.

Argentina (1931)	Czech Republic (1922)	Jordan* (1980)	Mozambique (1999)	Spain (1922)
Armenia (1992)	Denmark (1922)	Kazakhstan* (1995)	Namibia (2008)	Sri Lanka (1961)
Australia (1919)	Dominican Republic	Kenya (1980)	Nepal (1976)	Sudan (1974)
Austria (1950)	(2008)	Korea (DPR) ** (1961)	Netherlands (1922)	Swaziland (1993)
Azerbaijan** (1999)	Egypt (1925)	Korea, Rep. of (1961)	New Zealand (1919)	Sweden (1922)
Bangladesh (1986)	Estonia (1992)	Lao, PDR (2008)	Nigeria (1963)	Switzerland (1922)
Belarus** (1992)	Ethiopia (2006)	Latvia (1931)	Norway (1922)	Tajikistan** (2002)
Belgium (1919)	Finland (1931)	Lebanon (1974)	Pakistan (1950)	Tanzania (2004)
Bolivia** (1978)	France (1919)	Lesotho (2007)	Panama (1993)	Thailand (1931)
Botswana (2006)	Georgia* (1992)	Lithuania (1992)	Peru (1925)	Togo (1993)
Brazil (1919)	Germany (1952)	Luxembourg (2004)	Philippines (1933)	Tunisia* (1931)
Bulgaria (1931)	Ghana (1961)	Macedonia, Former	Poland (1919)	Turkey (1968)
Burkina Faso (1981)	Greece (1919)	Yugoslav Rep.	Portugal (1919)	Uganda (1995)
Cameroon (1999)	Guatemala* (1986)	of (2002)	Romania (1919)	Ukraine (1992)
Canada (1931)	Hungary (1931)	Madagascar* (1970)	Russia (1955)	United Kingdom (1919)
Caribbean* (1993)	India (1931)	Malawi (2006)	Rwanda (2006)	USA (1919)
Chile (1931)	Indonesia (1931)	Malaysia (1977)	Saudi Arabia (1987)	Uruguay** (1931)
China: CAST (1937)	Iran (1963)	Mauritius (2005)	Senegal (1993)	Uzbekistan** (1992)
China: Taipei (1937)	Iraq (1976)	Mexico (1931)	Serbia (2006)	Vatican City State (1931)
Colombia (1986)	Ireland (1952)	Moldova** (1993)	Seychelles (1983)	Venezuela** (1955)
Costa Rica** (1996)	Israel (1952)	Monaco (1922)	Singapore (1971)	Vietnam** (1963)
Côte d'Ivoire (1992)	Italy (1919)	Mongolia (1981)	Slovak Republic (1922)	Zambia (2006)
Croatia (1993)	Jamaica (1966)	Montenegro (2006)	South Africa (1919)	Zimbabwe (1989)
Cuba (1931)	Japan (1919)	Morocco (1925)	South Pacific (2007)	

Scientific Unions

- International Union for Quaternary Research (NQUA)
- International Union of Anthropological and Ethnological Sciences (UAES)
- International Union of Biochemistry and Molecular Biology (IUBMB)
- International Union of Biological Sciences (IUBS)
- International Union of Crystallography (IUCr)
- International Union of Food Science and Technology (IUFoST)
- International Union of Forest Organisations (IUFRO)
- International Union of Geodesy & Geophysics (IUGG)
- International Union of Geological Sciences (IUGS)
- International Union of the History and Philosophy of Science (IUHPS)
- International Union of Materials Research Societies (IUMRS)
- International Union of Microbiological Societies (IUMS)
- International Union of Nutritional Sciences (IUNS)
- International Union of Pharmacology (IUPHAR)
- International Union of Physiological Sciences (IUPS)
- International Union of Psychological Sciences (IUPsyS)
- International Union of Pure and Applied Chemistry (IUPAC)
- International Union of Pure and Applied Physics (IUPAP)
- International Union of Soil Sciences (IUSS)
- International Union of Theoretical and Applied Mechanics (IUTAM)
- International Union of Toxicology (IUTOX)
- Union Radio Scientifique International (URSI)

Scientific Associates

Academia de Ciencias de América Latina
Federation of Asian Scientific Academies and Societies
Federation Internationale des Geometres
International Association of Hydraulic Engineering and Research
International Arctic Science Committee
International Commission for Acoustics
International Cartographic Association
International Council for Laboratory Animal Science
International Commission for Optics
International Council for Scientific and Technical Information
International Federation for Information Processing
International Federation of Library Associations and Institutions
International Foundation for Science
International Federation of Societies for Microscopy
International Institute for Applied System Analysis
International Union for Vacuum Science, Technique and Applications
International Water Association
Pacific Science Association
The Academy of Sciences for the Developing World

Interdisciplinary Bodies

Assessment Bodies

Scientific Committee on Problems of the Environment (SCOPE)

Thematic Bodies

Committee on Space Research (COSPAR)

International Polar Year (IPY)

Scientific Committee on Antarctic Research (SCAR)

Scientific Committee on Oceanic Research (SCOR)

Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)

Global Environmental Change Programmes

DIVERSITAS: An International Programme of Biodiversity Science

International Geosphere-Biosphere Programme (IGBP)

International Human Dimensions Programme on Global Environmental Change (IHDP)

World Climate Research Programme (WCRP)

Monitoring/Observation Bodies

Global Climate Observing System (GCOS)

Global Ocean Observing System (GOOS)

Global Terrestrial Observing System (GTOS)

Integrated Global Observing Strategy Partnership (IGOS-P)

Data and Information Bodies

Committee on Data for Science and Technology (CODATA)

Federation of Astronomical and Geophysical Data Analysis Services (FAGS)

International Network for the Availability of Scientific Publications (INASP)

Scientific Committee on Frequency Allocations for Radio Astronomy and Space Science (IUCAF)

Panel on World Data Centres (WDC)

The Interdisciplinary Bodies of ICSU bring together different scientific disciplines to address scientific issues of international relevance that are of interest to ICSU Members. Initially established by the General Assembly, these bodies are designed to become selfsustaining in their day-to-day operations and financing. They may also involve sponsors other than ICSU. The roles and structures of the Bodies vary depending on the area of science and the related needs of the international science community but they usually combine research and advisory functions.

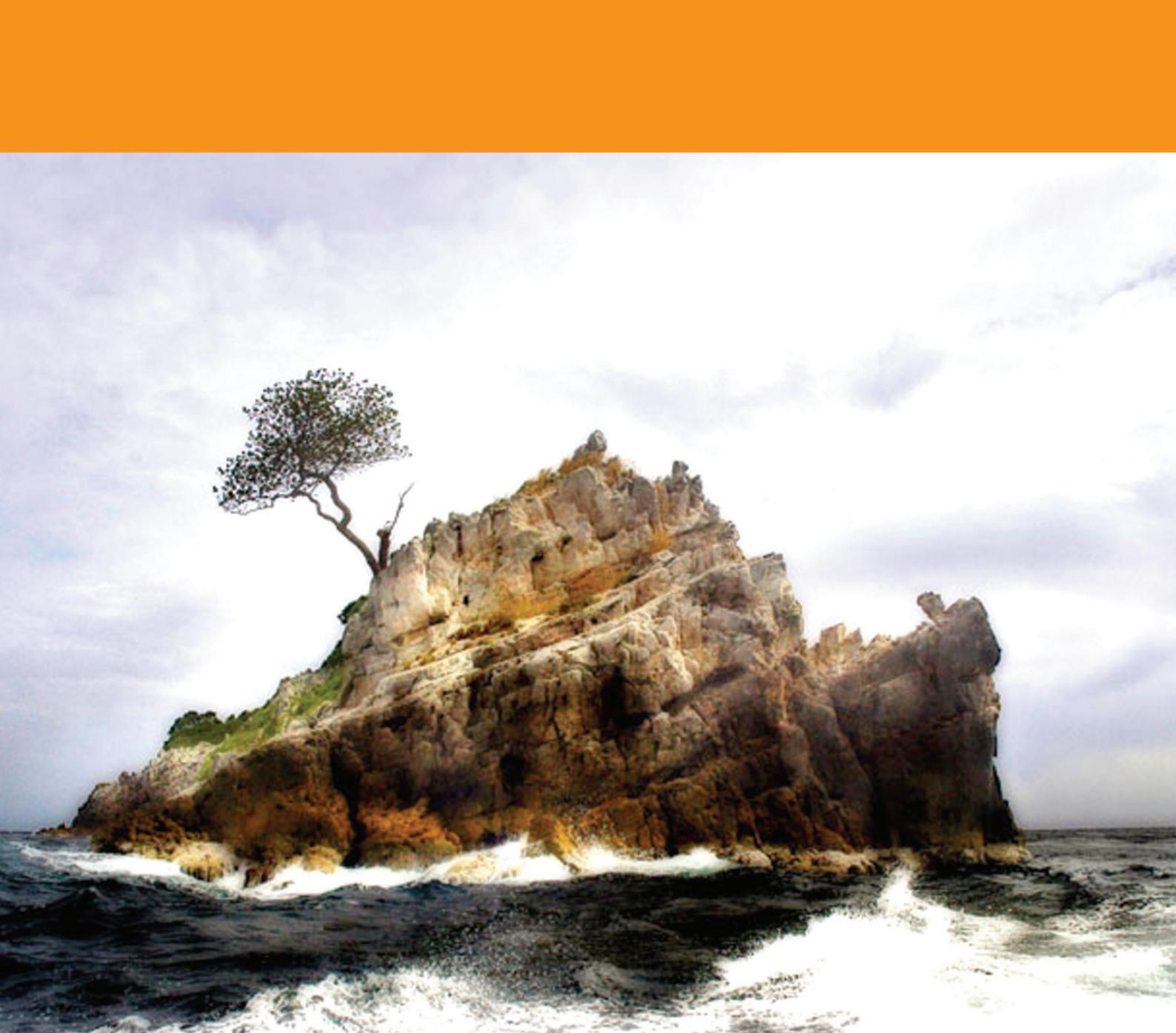


Photo: Norhayati Ahmad



ICSU

International Council for Science

ICSU ROAP OFFICE

**ISCU Regional Office for Asia & Pacific,
902-4, Jalan Tun Ismail
50480 Kuala Lumpur, MALAYSIA**

Tel: +603 26984192
Fax: +603 26917961

Email: secretariat@icsu-asia-pacific.org

www.icsu-asia-pacific.org