

29th ICSU General Assembly Maputo, Mozambique

Spokespeople Biographies

Press Conference Panellists

Goverdhan Mehta
ICSU President



Professor Mehta PhD (Poona) and DSc (h.c.) is a leading researcher in the area of chemical Sciences and specializes in the area of organic chemistry. He is an author of over 400 research papers and has delivered over 200 lectures in major conferences around the world. He is on the Editorial Boards of over a dozen leading international journals in Chemical Sciences/Organic Chemistry and serves on the advisory boards of many R & D outfits and foundations worldwide.

Presently a CSIR-Bhatnagar Fellow, he has previously held positions as the Director of the Indian Institute of Science (1998-2005) and the President (Vice Chancellor) of the University of Hyderabad (1994-1998), two of India's most prestigious academic institutions besides being Professor of Chemistry (1977-2005). He has been the President of the Indian National Science Academy (INSA, 1999-2001) and founding Co-Chair of the Inter Academy Council (IAC, 2001-2006). He is Fellow of the Royal Society (FRS), Foreign Member of the Russian Academy of Sciences, Fellow of TWAS and recipient of over 30 medals/awards and numerous Honorary Doctorate (D.Sc.) degrees. He has been awarded the civilian honor of 'Padma Sri' (2000) and 'Chevalier de la Legion d'Honneur' 2004 by the Presidents of India and France, respectively. He is deeply interested in issues related to science and policy, science for sustainable development and is passionately committed to promoting and fostering international collaboration in S & T with the object of bridging the knowledge divide.

Catherine Bréchnac
ICSU President Elect



Catherine Bréchnac, member of French national Académie des Sciences, and member of French national Académie des technologies, President of CNRS since January 2006, and President of 'Palais de la Découverte' since 2004. After obtaining her PhD in 1977, she started a new field at the frontier of Atomic and Solid State Physics: the cluster physics as precursors of nano-objects. The study of nanoclusters ranging from a few atoms to several thousand atoms, which is a truly interdisciplinary study, provides a bridge between atomic and molecular and solid state physics. Her scientific achievements gained her a coveted 'Académie des Sciences' prize in 1991, the CNRS Silver Medal in 1994, James Frank

lecturer, Israel Academy of Sciences and Humanities in 2001, the Holweck Medal and prize from British and French Physical Societies in 2003, Doctor Honoris Causa of the 'Freie Universität Berlin' in 2003, of 'Georgia Tech Institute' (USA) in 2006, and of 'Ecole polytechnique fédérale de Lausanne –EPFL' (Suisse) in 2007.

Catherine Bréchnignac has been very influential in many ways in International Sciences and Science Policy: in France, as the founder of Cluster network (1991), as the Director of the Laboratoire Aimé Cotton (1989-1995), as the Scientific Director of the CNRS- Department of Physics and Mathematics (1995-1997), as the Director general of the CNRS (1997-2000), in Europe as chairperson of the European Union Research Organizations Head of Research Councils (1998-2000), President of 'Institut d'Optique Graduate School' (2002-2006), and as member or chairperson of many committees such as Member of the Board of the European Physical Society (1989-1994), member of the International Union of Pure and Applied Physics (IUPAP) (1990-1994), as well as member of editorial board of several scientific journals.

Khotso Mokhele,

ICSU Vice-President for Scientific Planning and Review



Not available at this time.

Hernan Chaimovich

ICSU Vice-President for External Relations



Hernan Chaimovich, born in Santiago de Chile in 1939, received an undergraduate degree in Biochemistry from the Universidad de Chile in 1962. After two years working with Osvaldo Cori in apyrase enzymology, he spent two and a half years in USA working in Physical Organic Chemistry under the supervision of C.A. Bunton (UCSB) and F.H. Westheimer (Harvard University). Returning to Chile as an Assistant Professor of Biochemistry he developed kinetic and mechanistic work studying acid phosphatase and aminoacyl-tRNA synthase, the latter in collaboration with Jorge and Catherine Allende. He moved to Brazil in

1969, as a FAPESP fellow in the Department of Physiology at the Faculty of Medicine, Universidade de São Paulo (USP) and was later hired in the Department of Biochemistry of the Institute of Chemistry, USP (IQUSP), where he became a Full Professor in 1985.

Professor Chaimovich developed a research line in interfacial effects on chemical and biological reactivity using micelles and vesicles as models. Together with his students and collaborators he has contributed to the understanding of kinetic and mechanistic effects of supramolecular aggregates in Chemistry and Biology. His description of vesicle formation using synthetic amphiphiles, and the study of their physical properties, contributed for the increasing applications of these systems as well as for the understanding of the relationships between monomer structure and aggregate architecture. The pseudophase theory with explicit consideration of ion exchange, extended in his group, has been applied for the quantitative analysis of the effects of several supramolecular aggregates on chemical reactions. The contributions of his group, including theoretical and experimental studies of the effect of micelles and vesicles on a number of chemical reactions, have contributed to

dissect the effect of these aggregates on chemical reactivity. Graduate students from his group are presently Professors in several Brazilian Universities.

During his career Professor Chaimovich has also been actively involved in science and university policy as well as in administration. He participated in the formulation of the Bioq-FAPESP project in the early 70'ties and was part of the Management Group of the project. He participated in the Graduate Committee of the IQUSP and has been twice Chairperson of the Biochemistry Department (IQUSP).

Professor Chaimovich participated in the establishment of an interdisciplinary graduate course in Biotechnology and an undergraduate Course in Molecular Sciences, coordinated by him for four years. He was a Director of the Teachers Association of the Universidade de São Paulo (ADUSP). Active Member of the Brazilian Society of Biochemistry and Molecular Biology, he was elected President of the Society in 1994. In recognition of his academic contributions he was elected Fellow of the American Association for the Advancement of Science and Member of the Ordem Nacional do Mérito Científico e Tecnológico.

Antonio Leao

National Director, Technology for Research, Innovation and Technology Development, Mozambique

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Ecosystem Change and Human Well-Being

Bob Scholes



Dr Bob Scholes is a systems ecologist, employed by the Council for Scientific and Industrial Research (CSIR), South Africa since 1992. Before that, he was manager of the South African Savanna Biome Programme, and did his PhD, through the University of the Witwatersrand, on tree-grass interactions in savannas. He studies the effects of human activities on the global ecosystem, and in particular on woodlands and savannas in Africa. He has over twenty years of field experience in many parts of Africa, and has published widely in the fields of savanna ecology and global change, including popular and scientific books. He has been involved in several high-profile environmental assessments and contributes to the formulation of national environmental policy.

He is or has been a member of several steering committees of international research programmes, such as the International Geosphere-Biosphere Programme (IGBP) and the Global Climate Observing System (GCOS), and serves as a convening lead author for Intergovernmental Panel on Climate Change (IPCC). He was Chairman of the Global Terrestrial Observing System (GTOS) 2001–04 and is a Board Member of International Centre for Research In Agroforestry. He was a co-chair of the Conditions Working Group of the Millennium Ecosystem Assessment and also a principal investigator in the Southern African Millennium Assessment at regional scale. As a CSIR Fellow, his role is to help the CSIR maintain its technical excellence. He is a Fellow of the South African Academy and the Royal Society of South Africa, and a member of the South African Institute of Ecologists and several other professional societies, and serves on the editorial board of several journals.

Harold A. Mooney



Harold A. Mooney holds the Paul S. Achilles Professorship in Environmental Biology at Stanford University. He is currently engaged in research on the impacts of global change on terrestrial ecosystems, especially on productivity and biodiversity, and is also examining those factors that promote the invasions of non-indigenous plant species as well as on the global environmental and social impacts of animal production systems, both extensive and intensive.

Mooney served as a Scientific Panel co-Chair for the Millennium Ecosystem Assessment and has chaired a number of other international environmental programs. Mooney is past-President of the Ecological Society of America and the American Institute of Biological Sciences. At present he chairs the Scientific Committee for DIVERSITAS, an international program for biodiversity research. Mooney is a member of the U.S. National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society. He has received the Eminent Ecologist Award and the Mercer Award of the Ecological Society of America, Honorary Member of the British Ecological Society, Humboldt Senior Distinguished U.S. Scientist Award, the Max Planck Research Award, the Ecology Institute Prize for Terrestrial Ecology, the Nevada Medal Award, the Blue Planet Prize, the American Institute of Biological Science Distinguished Scientist Award, the Centennial Award from the Botanical Society of America, the Ramon Margalef Prize in Ecology, the BBVA Foundation Prize for Biodiversity Conservation and the Tyler Prize for Environmental Achievement.

Data and Information

Ray Harris



Ray Harris is an Emeritus Professor of Geography at University College London (UCL). He was until recently the Executive Dean of the Faculty of Social and Historical Sciences at UCL as well as being Professor of Remote Sensing. He was at UCL 1995-2008 and before this worked for Logica UK plc, Software Sciences and the University of Durham. His research and teaching interests are in satellite Earth observation and in the Middle East. He has worked extensively with the European Space Agency, the European Commission, NASA, NOAA, JAXA and other space organisations on the applications of Earth observation data and on the development of data policy.

He was a member of the International Council for Science (ICSU) panel on data and information policy and chaired the ICSU Strategic Committee on Information and Data (SCID). For over 30 years he has worked on remote sensing applications in the UK, Kuwait, Oman, Jordan, Tunisia and Iran, focusing on agriculture, land degradation and land cover change. He is the author of four books on remote sensing, one book on Tunisia and many journal articles, book chapters and reports. His web site is at www.geog.ucl.ac.uk/~rharris/

Dave Carlson



Dr. David Carlson directs the International Programme Office for the International Polar Year, hosted by the UK National Environmental Research Council at the British Antarctic Survey. IPY, with more than 50,000 participants from 60 nations, will cover a wide range of geophysical, biological and social science topics at a critical time for polar regions. Dr. Carlson has devoted more than 15 years to guiding and managing large international science programmes, starting from the very large Tropical Ocean Global Atmosphere programme in 1992 and 1993 and continuing through a decade of complex programmes focused on many aspects of weather, atmospheric chemistry, and climate. Dr. Carlson holds a PhD in Oceanography and led successful research teams focused on upper ocean physics and chemistry, oceanic microbiology and carbon cycling, and marine chemical ecology.

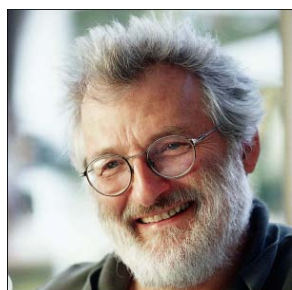
Freedom, Responsibility and Universality of Science

Bengt Gustafsson

Bengt Gustafsson is professor of theoretical astrophysics at Uppsala university. His main interests as an astronomer are stellar physics, evolution of galaxies and the synthesis of the chemical elements.

He has served as a member of the Swedish Research Council, of the Swedish Nobel Committee of Physics and is a member of the Swedish Royal Academy of Science, and several other academies, as well as the International Astronomical Union. In addition to his astrophysics publications he has also worked and published on research ethics issues, global problems and challenges, science and arts interface, and made efforts in popularizing science.

John Sulston



John Sulston, FRS, graduated from the University of Cambridge in 1963, took a PhD in 1966, and was then a postdoctoral researcher at the Salk Institute for Biological Studies. In 1969 he moved to Sydney Brenner's group at the MRC Laboratory of Molecular Biology. There he worked on the biology of the nematode, *Caenorhabditis elegans*, studying particularly its cell lineage and its genome. A collaboration between his group and that of Bob Waterston (Washington University, St Louis) produced one of the earliest genome maps, and in 1990 they went on to sequence it, completing the task in 1998 - the first animal genome to be sequenced.

Concurrently he became involved in the Human Genome Project, as founder director of the Wellcome Trust Sanger Institute from 1992 to 2000. In 2002 he co-authored with Georgina Ferry *The Common Thread*, an account of the science, politics and ethics of this enterprise. He shared the Nobel Prize in Physiology or Medicine in 2002. He is currently acting chair of the UK Human Genetics Commission, and is chair of the institute for Science Ethics and Innovation at the University of Manchester.

Integrated Research on Disaster Risk (IRDR)

Gordon McBean



Gordon McBean is Chair, ICSU International Planning Group on Natural and Human-Induced Environmental Hazards and Disasters and is Director of Policy Studies for the Institute for Catastrophic Loss Reduction and Professor in the Departments of Geography and Political Science at the University of Western Ontario. He is also: a member of the UN ISDR Science and Technology Advisory Committee; Co-Chair, Global Environmental Change START (regional research networks and capacity development) Scientific Committee Board; Chair of the Canadian Foundation for Climate and Atmospheric Sciences; Board member, International Institute for Sustainable Development; and member of other committees.

From 1994 to 2000, he was the Assistant Deputy Minister, Meteorological Service of Environment Canada. He was a lead author for the IPCC First and Second Assessments and a Review Editor for the Fourth Assessment and shares in the IPCC Nobel Peace Prize. He formerly was: Chair, Joint Scientific Committee for the World Climate Research Programme (1988-94) and Professor of atmospheric and oceanographic sciences at the University of British Columbia. He is a Fellow of the Royal Society of Canada and the Canadian Meteorological and Oceanographic Society and recipient of the Patterson Medal for distinguished contributions to meteorology.

Filipe Domingos Freires Lúcio



Before joining the WMO in 2007, Filipe was Director-General of the National Institute of Meteorology of Mozambique for 9 years. Then, the major challenges were associated with:

- the need for strengthening the capacity for implementing an effective early warning system that could inform people at risk and decision makers of impending hazards in a timely fashion, and above all induce appropriate action;
- need for the development of methodologies and tools for data analysis, risk assessment and mapping;
- need for understanding and quantifying risk;
- the need to further research for better understanding of hazards and their changing patterns;
- capacity building to ensure high standard of services provided.

Filipe is currently the Senior Scientific Officer for the Disaster Risk Reduction Programme of the World Meteorological Organization in Geneva. His role is to facilitate the strengthening of the capacities of WMO Members in multi-hazard early warning systems through development of concrete national projects in a set of countries, particularly in Africa. These projects are aimed at developing technical capacities of the National Meteorological and Hydrological Services and linking them to stakeholders such as disaster management agencies, emergency relief and operation agencies, development agencies and various agencies at national level so that meteorological and hydrological information and forecasts contribute to appropriate decision processes that lead to preparedness, prevention, and response measures with a view to safeguarding lives and property and thus, minimizing the impact of hazards.

Enhancing the involvement of Social Sciences

Roberta Balstad



Roberta Balstad is Senior Fellow, CIESIN, and Co-Director, Center for Research on Environmental Decisions, at Columbia University in New York City. She is a member of ICSU's Committee on Scientific Planning and Review (CSPR). She also serves as Chair of the U.S. National Committee on Science and Technology Data, National Research Council, and as Editor-in-Chief of *Weather, Climate, and Society*, a journal of the American Meteorological Society. Dr. Balstad has published extensively on the role of the social sciences in understanding global environmental change, science and data policy, information technology and scientific research, and social applications of remote sensing data. She was awarded the Ph.D. from the University of Minnesota in 1974. She was previously the Director of the Division of Social and Economic Sciences at the National Science Foundation, the founder and first Executive Director of the Consortium of Social Science Associations (COSSA), and President/CEO of CIESIN prior to becoming director of the organization when it joined Columbia University.

She has lectured widely, both in the United States and abroad. From 1992 to 1994, she was Vice President of the International Social Science Council and has served as chair of the NRC Steering Committee on Space Applications and Commercialization, the NATO Advisory Panel on Advanced Scientific Workshops/Advanced Research Institutes, the assessment of Scientific Data and Information for the International Council of Science (ICSU), the AAAS Committee on Science, Engineering and Public Policy, and the Advisory Committee of the Luxembourg Income Study. Dr. Balstad was a senior fellow at Oxford University in 1991-1992 and Guest Scholar at the Woodrow Wilson International Center for Scholars in 1994.

Anne Whyte

Dr. Anne Whyte is a former Professor in Environmental Studies at the University of Toronto and a former Director General for Environment and Natural Resources of the International Development Research Centre (IDRC), Canada. She is currently the President of Mestor Associates, a consulting company specializing in international development and is a member of the Committee on Scientific Planning and Review (CSPR) of ICSU. She has also worked to integrate natural and social sciences in the Man and the Biosphere Programme of UNESCO.

Dr. Whyte is trained in both the natural sciences and social sciences receiving a BA and MA in Geography from the University of Cambridge, England and a PhD in Geography and Environmental Engineering from the Johns Hopkins University, USA followed by post-doctoral research in social psychology at the University of Bristol, England. Her main research has been in human response to natural and technological hazards, decision-making under risk, and international development.

She has published more than 60 books and articles and written more than 150 unpublished reports and papers. Her recent work has included evaluations of development programmes and organizations in different parts of the world, including IUCN, ICRISAT, AERC, IDRC and the World Bank.