





G8-UNESCO World Forum on 'Education, Research and Innovation: New Partnership for Sustainable Development'

Trieste, Italy, 10-12 May 2007

Under the High Patronage of the President of the Republic of Italy









We will promote the global innovation society by developing and integrating all three elements of the knowledge triangle (education, research and innovation). We will do so by investing fully in people, skills and research, and by supporting the modernization of education systems to become more relevant to the needs of a global knowledge-based society.

(G8 Summit, St. Petersburg – 16 July 2006)

SUPPORTING INSTITUTIONS

























Assindustria Trieste
Assindustria, Udine
Burlo Garofolo Hospital, Trieste
Camera di Commercio di Trieste
Consortium for Biomolecular Medicine
Central European Initiative
International Centre for Mechanical Sciences

Consorzio per l'Incremento degli Studi e delle Ricerche degli Istituti di Fisica dell' Università degli Studi Trieste

Fondazione Internazionale Trieste per il Progresso e la Libertà delle Scienze Istituto Nazionale di Fisica Nucleare, Sezione di Trieste

illycaffè

I.N.A.I.L.

Lloyd Adriatico

Istituto Nazionale di Oceanografia e di Geofisica Sperimentale Istituto Nazionale di Astrofisica-Osservatorio Astronomico di Trieste Scuola Internazionale di Studi Avanzati (SISSA)

> Sincrotrone Trieste Sviluppo Italia Università di Udine S.P.R.I.N.T.



The G8-UNESCO World Forum in Trieste: what it is and what it is not

K.R. Sreenivasan Abdus Salam Research Professor and Director, ICTP

The Forum originated from discussions that took place at the 2006 G8 Summit at St. Petersburg, and intends to focus on the three components of the so-called "Triangle of Knowledge"—education, scientific research and technological innovation—and their mutual dependence, with particular attention paid to developing countries and sustainable development. UNESCO is a partner in the Forum within the framework of the Decade of Education for Sustainable Development (2005-14), for which it is the lead agency within the UN system. Its involvement has expanded the international character of the Forum, and made it truly international in scope.

Trieste is the logical place to hold the event because of the city's unmatched efforts on behalf of science in developing countries—a role that the city has played for more than four decades beginning with the Abdus Salam International Centre for Theoretical Physics and, more recently, through other international institutions such as TWAS—the academy of sciences for the developing world—the International Centre for Genetic Engineering and Biotechnology and the International Centre for Science and High Technology.

The Forum is a platform for expressing diverse viewpoints from representatives of governments, universities, research institutes, UN agencies and other international organizations, industries and the private sector on its main theme; and for developing and presenting initiatives that deserve further support to reduce technological gaps in the world. It is neither a political event nor a scientific conference.

A possible outcome of the meeting will be the identification of existing initiatives deserving support, or the development of new ones, for addressing technological divides among nations, especially in enabling technologies such as information and communication, nanoscience and technology and bioengineering. The Forum might launch a network of Centres of Excellence for Sustainable Development. Such centres will be small in number but possibly located both in industrialized and developing nations; they would enhance the information transfer processes by involving people from knowledge and industry sectors, policy makers and the public at large.

Sub-Saharan Africa will receive particular attention through the special session devoted to science, technology and innovation in Africa. Several ministers of science and technology from the region will speak. The G8 countries may act as the catalyst for generating sustained interest of various bodies, both public and private, and for supporting specific programs and projects of medium and long term relevance to Africa.

THURSDAY, 10 MAY

09:30-10:00 Opening Session

Chair

Katepalli R. SREENIVASAN

Director, Abdus Salam International Centre for Theoretical Physics, Trieste

IN THE HONOURABLE PRESENCE OF

Koïchiro MATSUURA

Director-General, UNESCO, PARIS

Romano PRODI

Prime Minister and President of the Council of Ministers, Italy

10:00-10:20 Welcome Remarks

Giuseppe FIORONI

Minister of Education, Italy

Riccardo ILLY

President, Autonomous Region of Friuli Venezia Giulia, Italy

Hamadoun TOURE'

Secretary General, International Telecommunication Union (ITU), Geneva

Alain Giorgio Maria **ECONOMIDES**

Director General of Cooperation and Development Ministry of Foreign Affairs, Italy

Panitchpakdi SUPACHAI

Secretary General, UNCTAD, Geneva

Lamya Ahmad AL-SAQQAF

Permanent Representative of the State of Kuwait to FAO, Chairperson of the G77, Rome Chapter, Rome



THURSDAY, 10 MAY

10:45-12:15 University, Research Institutions and Industry:
What Partnership to Develop in Global Innovation Society?

Chair

Hans N. WEILER

Professor Emeritus of Education and Political Science, Stanford University, USA

Keynote Speakers

Pasquale PISTORIO

Vice President for Innovation and Research, Confindustria, Italy

Pier Ugo CALZOLARI

Rector, University of Bologna, Italy

Dmitry Viktorovich **LIVANOV**

Rector of State Technological University, Moscow State Institute of Steel and Alloys (MISIS), Russian Federation

Zhang XINSHENG

Chairman, Executive Board, UNESCO, Vice Minister of Education, People's Republic of China

12:15-13:00 Discussion and Report of the Rapporteur

Rapporteur

Carlo RIZZUTO

President, Elettra Laboratory, Sincrotrone Trieste, Italy

13:00-14:30 Lunch



14:30-16:00 Education in the Knowledge-Based Society

Chair

Lynn MEEK

Director, Centre for Higher Education Management and Policy, University of New England, Australia

Keynote Speakers

Mark **BRAY**

Director, International Institute for Educational Planning UNESCO, Paris

Stefano FANTONI

Director, International School for Advanced Studies (SISSA), Italy

Ludger VIEHOFF

Federal Ministry of Education and Research, Basic Policy Issues of International and Multilateral Cooperation, Germany

Furio HONSELL

Rector, University of Udine, Italy

16:00-16:40 Discussion and Report of the Rapporteur

Rapporteur

Hebe **VESSURI**

Senior Researcher and Head of the Department of Science Studies, Venezuelan Institute of Scientific Research (IVIC), Venezuela

16:40-17:00 Coffee Break



THURSDAY, 10 MAY

17:00-18:30 Environment: Global Challenges

Chair

Walter R. ERDELEN

Assistant Director-General, Natural Sciences Sector, UNESCO, Paris

Keynote speakers

Laura MARCHETTI

Under-Secretary, Ministry of Environment and Protection of Land and Sea, Italy

Michael W. OBORNE

Director, OECD Global Science Forum, International Futures Program and Multidisciplinary Issues, Paris

Julian **HUNT**

Professor of Climate Modelling, Former Director-General and Chief Executive of the Meteorological Office, UK

Giuseppe MORSILLO

Head of the Director's General Policy Office, European Space Agency, Paris

18:30-19:00 Discussion and Report from the Rapporteur

Rapporteur

Sverker SÖRLIN

Director, Swedish Institute for Studies in Education and Research, Sweden

20:00 Reception and Gala Dinner



FRIDAY, 11 MAY

09:00-10:45 Innovation and Society

Chair

Giancarlo MICHELLONE

President, AREA Science Park, Italy

Keynote Speakers

Luigi NICOLAIS

Minister for Reform and Innovation, Italy

Umberto PAOLUCCI

Senior Chairman, Microsoft Europe Middle East Africa, Vice President Microsoft Corporation, President Microsoft Italia, Italy

Mihail C. ROCO

Senior Advisor for Nanotechnology, The National Science Foundation, USA

Robert AYMAR

Director General, CERN, Geneva

Bruno **LANVIN**

Advisor, Global Information and Communication Technologies World Bank, Washington, D.C.

10:45-11:15 Discussion and the Report of the Rapporteur

Rapporteur

Goolam T. G. MOHAMEDBHAI

President, International Association of Universities, UNESCO, Paris

11:15-11:45 Coffee Break



FRIDAY, 11 MAY

11:45-12:45 Sustainable Development and Health

Chair

Phyllis **PITT-MILLER**

Dean, Faculty of Medical Sciences University of the West Indies, St. Augustine, Trinidad and Tobago

Keynote speakers

Aristides PATRINOS

President, Synthetic Genomics, Inc., USA

Pratap C. **REDDY**

Founder and Executive Chairman, Apollo Hospitals Group, India

Giorgio TAMBURLINI

Scientific Director, Institute of Child Health IRCCS, Burlo Garofolo, Italy

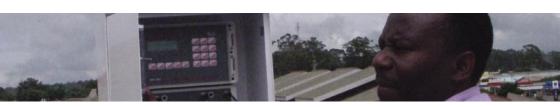
12:45-13:15 Discussion and Report of the Rapporteur

Rapporteur

Nouria LAKHDAR-GHAZAL

Neuroscience Unit and Group of Research on Biological Rhythms, Faculty of Sciences, Morocco

13:15-14:30 Lunch



14:30-15:40 Sustainable Development and Energy

Chair

David LINDLEY

Director, Ocean Power Delivery Ltd., UK

14:30-14:40 Welcome Remarks

Giovanni MANFREDI

Minister Plenipotentiary and Coordinator for Energy Issues, Directorate General for Multilateral Economic and Financial Cooperation, Italy

Keynote speakers

Lawrence L. KAZMERSKI

Director, National Centre for Photovoltaics, USA

Isao YUKAWA

Advisor and Past-President, Kyocera Solar Corporation, Japan

Evgeny Pavlovich VELIKHOV

President of Russian Research Centre, Kurchatov Institute, Russian Federation

15:40-16:10 Discussion and the Report of the Rapporteur

Rapporteur

Ali **Sayigh**

Chairman of WREC, Director General of WREN, Editor-in-chief of Renewable Energy Journal, UK

16:10-16:30 Coffee Break



FRIDAY, 11 MAY

16:30-18:15 Special Session on Research and Innovation:
The Role of the Government (ROUND TABLE)

Chair

Elaine EL-KHAWAS

Graduate School of Education and Human Development, The George Washington University, USA

Keynote Speakers

Fabio MUSSI

Minister of University and Research, Italy

Andrei Aleksandrovich FURSENKO

Minister of Education and Science, Russian Federation

Mosibudi MANGENA

Minister of Science and Technology, South Africa

Janez POTOCNIK

European Commissioner for Science and Research European Commission, Brussels

Carlo RUBBIA

Nobel Laureate, CERN, Geneva

Martin I **PERI**

Nobel Laureate, Stanford Linear Accelerator, USA

18:15-18:45 Discussion and the Report of the Rapporteur

Rapporteur

Miguel NUSSBAUM VOEHL

Computer Science Department, College of Engineering, Catholic University of Chile, Chile

20:30 Ballet "Capriccio Italiano" (P.I. Tchaikovsky), Adriana Borriello (choreography), Ballet Company of the National Academy in Rome, Rossetti Theatre (Trieste) Buffet dinner will follow. Venue: Foyer of Rossetti Theatre

SATURDAY, 12 MAY

09:00-10:00 Knowledge and Sustainable Development

Chair

Jacob PALIS

President, The Academy of Sciences for the Developing World (TWAS), National Institute of Pure and Applied Mathematics, Brazil

Keynote speakers

Hans VAN GINKEL

Rector, United Nations University, Tokio

ATTA-UR-RAHMAN

Adviser to the Prime Minister on Science and Technology, Chairman [Federal Minister] Higher Education Commission, Pakistan

Dimitri **PISKOUNOV**

Deputy Director-General, UNIDO, Vienna

10:00-10:30 Discussion and the Report of the Rapporteur

Rapporteur

Teboho MOJA

Department of Administration, Leadership and Technology, The Steinhardt School of Education, USA

10:30-11:00 Coffee Break



11:00-13:00 Special Session on "Science, Technology and Innovation: Perspectives for Africa"

Coordinator

Mohamed HASSAN

Executive Director, The Academy of Sciences for the Developing World (TWAS), President African Academy of Sciences, Trieste

Welcome remarks

Armando SANGUINI

Personal Representative of the Prime Minister for Africa, Director General for sub-Saharan Africa, Italy

Opening Remarks

Nagia **ESSAYED**

Commissioner for Human Resources, Science and Technology, African Union, Addis Ababa

ROUND TABLE DISCUSSION

Hany Mahfouz **HELAL**

Minister of Higher Education and Scientific Research, Egypt

Noah M. WEKESA

Minister of Science and Technology, Kenya

Romain MURENZI

Minister of Science, Technology and Scientific Research, Rwanda

Yaye Kène GASSAMA DIA

Minister of Scientific Research, Senegal

Closing Remarks

Patrizia SENTINELLI

Deputy Minister of Foreign Affairs, Italy

13:00-14:30 Lunch

14:30 -15:45 Closing Session

Knowledge for Sustainable Development: The Future

Chair

Werner BURKART

Deputy Director General, IAEA, Vienna

Keynote Speakers

Édouard **BRÉZIN**

Former President of French Academy of Sciences, Laboratory of Theoretical Physics of the École Normale Supérieure, France

Roger H. SCHJERVA

Deputy Minister Ministry of Finance, Norway

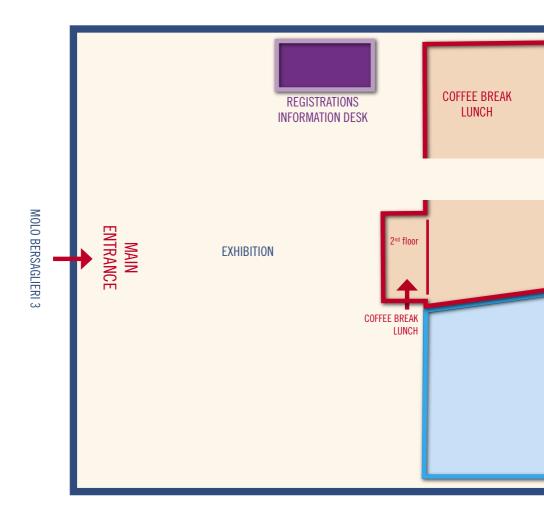
David KING

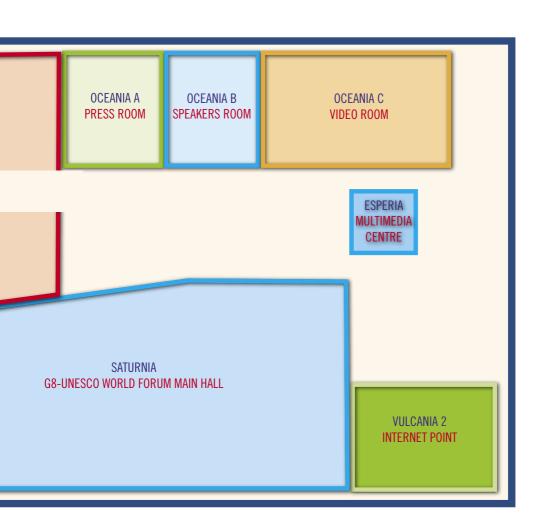
Chief Scientific Advisor to H.M. Government and Head of the Office of Science and Technology, UK

15:45-16:30 Discussion



G8-UNESCO WORLD FORUM, Floor Plan - Congress Centre, 1st floor







LIST OF EXHIBITORS

ARFA Science Park

Consortium for Physics of Trieste University

ELETTRA Synchrotron Light Laboratory

Friuli Venezia Giulia Region

International Centre for Genetic Engineering and Biotechnology (ICGEB)

International Centre for Science and High Technology (ICS – UNIDO)

Istituto Nazionale di Oceaonografia e di Geofisica Sperimentale (OGS)

Knowledge for Sustainable Development. UNESCO — EOLSS Joint Committee

Municipality of Trieste

Osservatorio Euromediterraneo e del Mar Nero - Fondazione IDIS-Città della Scienza

Province of Trieste

The Abdus Salam International Centre for Theoretical Physics (ICTP)

The Academy of Sciences for the Developing World (TWAS)

Trieste International Foundation for the Progress and Freedom of Sciences

UNESCO Centre of Trieste

University of Trieste

University of Udine

Worldwide Grids for Research, Innovation and Development

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