

# Monday 28 May 2007, 4.00- 6.00 p.m. University of Trieste

Building H3, Lecture Room 1A (first floor)
Special International Presentation

**HIGHLIGHTS** of the G8-UNESCO World Forum

on 'Education, Research and Innovation: New Partnership for Sustainable Development', held in Trieste, May 2007

(In English) All students, researchers, lecturers are cordially invited

#### Program

- 16,00 Introduction: Education-Research-Innovation Gianrossano GIANNINI (TS/Italy) (10')
- 16,10 Why UNESCO? Why Africa? Why Trieste?- Paolo ALESSI (TS/Italy+UNESCO) (10')
- 16,20 Education in the Knowledge-Based Society Gabriele GARBIN (TS/Italy+UNESCO)(10')
- 16,30 Environment: Global Challenges Gianrossano GIANNINI (TS/Italy) (10')
- 16,40 Innovation and Society Rachel OBED (Nigeria+ICTP) (10')
- 16,50 Sustainable Development and Health Omer A. Ali (Sudan+ICTP) (10')
- 17,00 Sustainable Development and Energy Gabriele GARBIN (TS/Italy+UNESCO) (10')
  - & Anna Maria Novello (TS/Italy) (5')
- 17,15 Research and Innovation: Role of Governments-Patrizia TIBERI VIPRAIO (UD/Italy) )(5') & Rachel OBED (Nigeria+ICTP) )(5')
- 17,25 Knowledge and Sustainable Development Gianrossano GIANNINI (TS/Italy) (10')
- 17,35 Science/Technology/Innovation: Perspectives for Africa-Elie SIMO (Cameroon+ICTP) (15')
- 17,50 Knowledge for Sustainable Development: The future Patrizia TIBERI VIPRAIO(UD/Italy)(1)
- 18,00 End

### Thursday, 10 May

**Environment: Global Challenges** 

How to develop an integrated approach for research, education and innovation to meet global environmental challenges, including impacts of climate change, air and water pollution, acid rain, rain forest destruction, hazardous waste and overpopulation?

## Chair



Professor Walter R. ERDELEN Assistant Director-General for Natural Sciences, UNESCO PARIS

## **Keynote Speakers**



Professor Laura MARCHETTI
Under-Secretary
Ministry of the Environment and
Protection of Land and Sea
Italy



Mr. Michael W. OBORNE
Director of the International
Futures Programme and
the Global Science Forum
Organisation for Economic

Co-operation and Development (OECD)
FRANCE



Lord Julian Hunt
of Chesterton, CB, FRS
Professor of Climate Modelling
Former Director-General and
Chief Executive of the

Meteorological Office U.K.



Mr. Giuseppe MORSILLO
Head of the Director's General
Policy Office
European Space Agency (ESA)
PARIS

## Rapporteur



Professor Sverker SÖRLIN
Professor of Environmental
History
Division of History of
Science and Technology

School of Architecture and the Built Environment Royal Institute of Technology SWEDEN



Professor Walter R. ERDELEN Assistant Director-General for Natural Sciences, UNESCO PARIS



Professor Laura MARCHETTI
Under-Secretary
Ministry of the Environment and
Protection of Land and Sea
Italy



Mr. Michael W. OBORNE
Director of the International
Futures Programme and
the Global Science Forum
Organisation for Economic

Co-operation and Development (OECD)



Lord Julian Hunt of Chesterton, CB, FRS Professor of Climate Modelling Former Director-General and Chief Executive of the

Meteorological Office II K



Mr. Giuseppe MORSILLO
Head of the Director's General
Policy Office
European Space Agency (ESA)
PARIS



Professor Sverker SÖRLIN Professor of Environmental History Division of History of Science and Technology

School of Architecture and the Built Environment Royal Institute of Technology SWEDEN UN multidimensional action for Environment: S&T cooperation, natural resources management, environ.l policies, assistance, climate change, health, contamination, energy, capacity building, financial assistance. Impact of human activities.

A fourth element in the triangle of knowledge – the concept of preservation – preservation of local knowledge, cultural heritage diversity, biodiversity, etc.  $\rightarrow$  3R's: Recover, Recycle, Reuse.

Integrated approach to global challenges through knowledge management. Holistic, interdisciplinary scientific approach to global challenges: climate, energy, population, poverty, health, economic growth, national security. Importance of Ethics.

A distinction should be made between hazard (natural severity) and vulnerability (impact on community). Integrated responses to climate changes must be developed. Start mitigation (~30 y). Risk Warning /Reduction/Adaptation. Network with Insurances.

Connection between Space and the Triangle of Knowledge; space-based science can have many human benefits (see slide).

To invest in Education/Science *is* to invest in the Environment. Urban parks study in Stockholm: best for environment is to be populated by active, well educated citizens, well organized, belonging to civic groups. Worldwide network: Stockholm, Capetown, New York, Delhi, Helsinki, New Orleans, Istambul. Key: Motivated Citizens



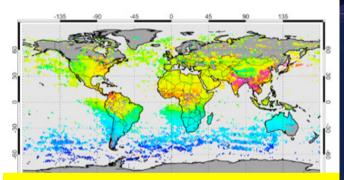
Mr. Giuseppe MORSILLO Head of the Director's General Policy Office European Space Agency (ESA)

## Environment: Global challenges, the role of space (Giuseppe Morsillo)

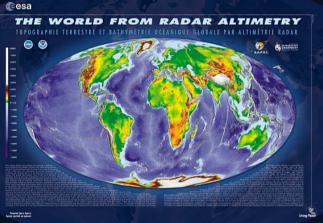
## Space provides global responses to today's environmental challenges

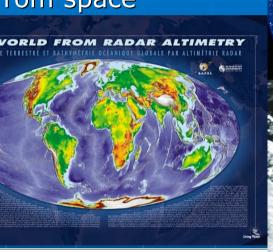
- S&T for environment / climate change
- Space-based Earth observation
- Monitoring climate change from space



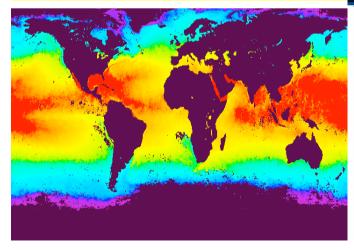


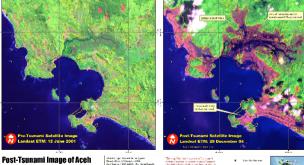
Global Concentration of Methane (Envisat, courtesy KNMI)





















### Friday, 11 May

**Innovation and Society** 

How to strengthen the innovation culture in our society?
What role can the public sector play to accelerate innovation changes in our society and raise the level of citizens' inclusion and participation?
What kind of governance is necessary at national and international level to make innovation policies more effective in our societies?

Chair Keynote Speakers



Ing. Giancarlo MICHELLONE
President
AREA Science Park
Trieste
ITALY



Hon. Mr. Luigi NICOLAIS Minister for Reform and Innovation ITALY



Umberto PAOLUCCI Senior Chairman, Microsoft EMEA Vice President for Corporate and Government Strategy,

Microsoft Corporation



Dr. Mihail C. ROCO
Senior Advisor
for Nanotechnology
The National Science
Foundation U.S.A.



Dr. Robert AYMAR CERN Director General GENEVA

## Rapporteur



Professor
Goolam T. G. MOHAMEDBHAI
President
International Association of
Universities, UNESCO PARIS



Dr. Bruno LANVIN
Advisor
Global Information &
Communication Technologies
World Bank