

# AGENDA

DAY 0 WEDNESDAY 16 Nov	DAY 1 THURSDAY 17 Nov	DAY 2 FRIDAY 18 Nov	DAY 3 SATURDAY 19 Nov
	9:00 – 9:50 OPENING ADDRESSES Ceremonial Hall (Room A) 9:50 – 10:10 UNESCO PRIZE CEREMONY	9:00 – 11:00 PLENARY SESSION IV. Ceremonial Hall (Room A)	9:30 – 11.15 PARLIAMENTARY SESSION
	Ceremonial Hall (Room A)  10:10 – 11:30  PLENARY SESSION I.  Ceremonial Hall (Room A)	11.00 - 11.30 COFFEE BREAK	11:15 – 11:30 PRESENTATION AND ENDORSEMENT OF THE DECLARATION
	11:30 – 12:00 COFFEE BREAK	11:30 – 13:30 THEMATIC SESSIONS II.	11:30 - 12:00 COFFEE BREAK
	12:00 – 13:45 PLENARY SESSION II. Ceremonial Hall (Room A)	AAAS Ceremonial Hall (Room A) HAS Large Lecture Hall (Room H) YOUTH-WAYS Reading Room (Room D)	12:00 – 13:00 CLOSING PLENARY LECTURES
	13:45 - 14:45 LUNCH BREAK	13:30 – 14:30 LUNCH BREAK	
	14:45 - 16:30 PLENARY SESSION III. Ceremonial Hall (Room A)	14:30 – 16:30 FORUM OF GLOBAL FORA Ceremonial Hall (Room A)	
	16:30 – 17:00 COFFEE BREAK	16:30 – 17:00 COFFEE BREAK	
19:00 OPENING CEREMONY Ceremonial Hall (Room A)	17:00 – 19:00 THEMATIC SESSIONS I. UNESCO: Ceremonial Hall (Room A) Leopoldina: Large Lecture Hall (Room H)	17:00 – 19:00 THEMATIC SESSIONS III. Brazil Ceremonial Hall (Room A) ICSU Large Lecture Hall (Room H)	
20:00 RECEPTION	19:30 – RECEPTION Museum of Applied Arts	19:30 – RECEPTION Museum of Fine Arts	

# CONTENTS

4	WELCOME	
6	16 NOVEMBER	
7	17 NOVEMBER	
11	18 NOVEMBER	
15	19 NOVEMBER	
16	SPECIAL SESSIONS	
17	EXHIBITIONS	
18	VENUES OF THE FORUM	
19	GENERAL INFORMATION	
20	WORLD SCIENCE FORUM AT THE HUNGARIAN ACADEMY OF SCIENCES	
21	WORLD SCIENCE FORUM IN BUDAPEST	

# WELCOME

It is my pleasure to welcome you to the fifth World Science Forum in Budapest.

World Science Forum is a unique platform for dialogue with a clear objective to provide a forum for stakeholders of knowledge including my fellow scientists, policy decision makers, leaders of industrial and technological development, academics, science communicators, and also the general public: people who enjoy the benefits of scientific advancements, and whose quality of life must be secured and improved by the means of scientific research and science-based policy-making.

It is much to our honour that this series of events has been initiated and organised by the Hungarian Academy of Sciences with the spirited support of the most influential organisations of international scientific co-operation including the United Nations Educational Scientific and Cultural Organization (UNESCO), the International Council for Science (ICSU), the American Association for the Advancement of Science (AAAS), the Academy of Sciences for the Developing World (TWAS), and the European Academies Science Advisory Council (EASAC).

As the title of the Forum "The Changing Landscape of Science: Challenges and Opportunities" suggests our aim is to present the nature and scope of changes experienced nowadays in an era of global science. In the course of 6 plenary and 10 thematic sessions and over 70 lectures we will present how global challenges create new scientific fields, how new scientific powers arise, and how wide is the scale of the new responsibilities scientists and policy makers need to undertake when addressing the grand challenges of humankind. Our speakers will outline their views on the future of the Earth's human population, new solutions to remedy global diseases, novel ways of sustainable food

production and food security, new material technologies, and the recent advancements in brain research and the cognitive sciences. True to our traditions we will present these themes from the perspectives of both developed and developing countries with the clear intention of giving a balanced view of major global disputes.



It is my pleasure to welcome representatives of the younger generation among the presenters and participants of the Forum with an eye on their growing responsibility in finding solutions to existing and arising challenges facing humankind. My personal experience based on the success of a recent initiative of the Hungarian Academy of Sciences named "Momentum" suggests that by providing scope for their talents we can rely on their ability to take science forward.

The 2011 event marks the beginning of a new era in the history of World Science Forum. In order to widen the achievements of this enterprise and to make it a true world event, the Hungarian Academy of Sciences, with the consent of our partner organisations, has proposed to change the format of WSF so that it is organised in a partner country on every second occasion. With the welcome offer of the Brazilian Academy of Sciences it has been decided that the 2013 World Science Forum will be organised in Rio de Janeiro.

For now, I am inviting you to participate in the ambitious programme of 2011 Forum in the hope that it will be rewarding both academically and socially for all.

József Pálinkás President of World Science Forum President of the Hungarian Academy of Sciences

# 17 NOVEMBER



Venue: Hungarian Academy of Sciences

19:00 - 20:00

### OPENING CEREMONY AND CONCERT

Ceremonial Hall (Room A), HAS

Irina Bokova, Director-General, UNESCO József Pálinkás, President, HAS; President, WSF

Concert by: Kristóf Baráti (violin) and Szilvia Mikó (piano)

Inauguration of the Photograpy Exhibition "Environmental Preservation towards Sustainable Development in Oman"

20:00 - 22:00

### **OPENING RECEPTION**

Academy Club Restaurant and Krúdy Hall, HAS

DAY 1 17 NOVEMBER 2011

Venue: Hungarian Academy of Sciences

### 09:00 - 09:50

### **OPENING ADDRESSES**

Ceremonial Hall (Room A), HAS

József Pálinkás, President, HAS: President, WSF

Viktor Orbán, Prime Minister of Hungary

Ban Ki-moon, Secretary-General, United Nations (video message)

Irina Bokova, Director-General, UNESCO

Yuan Tseh Lee, President, ICSU

Alan I. Leshner, Chief Executive Officer, AAAS

Dominique Ristori, Director-General, Joint Research Centre,

**European Commission** 

Greetings from the International Space Station

### 09:50 - 10:10

### UNESCO PRIZE CEREMONY

Ceremonial Hall (Room A), HAS

Presented by: Irina Bokova, Director-General, UNESCO and

Madiha Ahmed Al Shaibani, Minister of Education, Oman;

Chairperson, The Oman National Commission for Education, Culture and Science

Singer: Márta Sebestyén, UNESCO Artist for Peace Laureate

### 10:10 - 11:30

PLENARY SESSION I: "The Changing Landscape

Of Science: Challenges And Opportunities"

Ceremonial Hall (Room A), HAS

Chaired by: József Pálinkás

Gretchen Kalonji, Assistant Director-General for Natural

Sciences, UNESCO

William Colglazier, Science and Technology Adviser to US Secretary of State Hillary Clinton

Sir Chris Llewellyn Smith FRS, Chair, the Royal Society Advisory Group

Sergio Machado Rezende, Former Minister of Science and Technology, Brazil

Johan Rockström, Executive Director, Stockholm Environment Institute, Stockholm Resilience Centre, Member, ICSU Scientific Overview Committee

### 11:30 - 12:00

### **COFFEE BREAK**

Academy Club Restaurant and Krúdy Hall, HAS

### 12:00 - 13:45

PLENARY SESSION II.: "The changing landscape of science: emerging powerhouses in science and technology"

Ceremonial Hall (Room A), HAS

Chair: Jacob Palis, President, Brazilian Academy of Sciences HRH Princess Sumaya bint El Hassan, President of El Hassan Science City and the Royal Scientific Society, Jordan Vilasrao Deshmukh, Minister of Science and Technology, India Daniel Hershkowitz, Minister of Science and Technology, Israel Mukhtar Ahmed, Deputy Director General, Islamic Educational, Scientific and Cultural Organization (ISESCO)

Gebisa Ejeta, 2009 World Food Prize Laureate, Science Envoy of President Barack Obama

Romain Murenzi, Executive Director, TWAS

Kari Raivio, Vice-President for Scientific Planning and Review, ICSU

### 13:45 - 14:45

### LUNCH BREAK

Academy Club Restaurant and Krúdy Hall, HAS

### 14:45 - 16:30

### PLENARY SESSION III.:

"The changing landscape of science: "emerging fields of science"

Ceremonial Hall (Room A), HAS

Chair: Werner Arber, Nobel Laureate

Sir Brian Hoskins, Director, Grantham Institute at Imperial College London

H. Jeff Kimble, Professor, California Institute of Technology Vijay Chandru, Chairman, CEO Strand Life Sciences Richard A. Mathies, College of Chemistry, University of California, Berkeley

Stanislas Dehaene, Professor, Collège de France Peter A. Singer, CEO, Grand Challenges Canada

### 16:30 - 17:00

### COFFFF BREAK

Academy Club Restaurant and Krúdy Hall, HAS

### 17:00 - 19:00

### PARALLEL THEMATIC SESSIONS I.

UNESCO: "The Changing Landscape of Science: Higher Education's Perspectives, Dynamics and Implications" Ceremonial Hall (Room A), HAS

Chaired by: Lidia Brito

Ellen Hazelkorn, Director, Research and Enterprise; Dean, Graduate Research School, Dublin Institute of Technology; Head, Higher Education Policy Research Unit

Teboho Moja Clinical Professor of Higher Education, School of Education, Department of Administration, Leadership and Technology, New York University, USA

Adnan Badran former Prime Minister of Jordan; President, Petra University, Senator and Chair, Senate Committee on Science, Education and Culture)

Atta-ur-Rahman, Coordinator General, COMSTECH, Pakistan, former Minister of Science and Technology Pakistan; President, Pakistan Academy of Sciences

Francois Taddei, Research Scientist and Founder, Center for Research and Interdisciplinarity, France

Leopoldina: "Emerging and re-emerging infections" Large Lecture Hall (Room H), HAS

Chaired by: Volker ter Meulen

Stefan H.E. Kaufmann, Max-Planck-Institute for Infection Biology,
Department of Immunology

Hans D. Klenk, Institute for Virology, University of Marburg Hans-Georg Kräusslich, Department of Infectious Diseases, Virology, University Hospital Heidelberg

Peter F. Zipfel, Department of Infection Biology, University of Jena

### 19:30 -

### RECEPTION

Museum of Applied Arts

The reception is given by István Tarlós, Mayor of Budapest

Dinner

Introduction to the Lechner Heritage by Imre Takács, Director, Museum of Applied Arts

Performance by Csillagszemű Hungarian Folk Dance Ensemble

Venue: Hungarian Academy of Sciences



09:00 - 11:00

PLENARY SESSION IV.: "The changing landscape of science: policy implications and drivers"

Ceremonial Hall (Room A), HAS

Moderated by: Sir Brian Heap, President of European Academies Science Advisory Council, former Foreign Secretary, Royal Society Ruth Arnon, Wolf Prize Laureate, President, Israel Academy of Sciences

Ricardo Hausmann, Director, Center for International Development, Harvard University

Volker ter Meulen, Former President, Leopoldina

AnnaLee Saxenian, Dean, Berkeley School of Information

Wolfgang Burtscher, Deputy Director-General in charge of Policy and Management, Framework Programme, DG for Research and Innovation, European Commission

Jun Xia, Director, Center for Water Resources Research, Chinese Academy of Sciences; President, International Water Resources Association

11:00 - 11:30

**COFFEE BREAK** 

Academy Club Restaurant and Krúdy Hall, HA

11:30 - 13:30

PARALLEL THEMATIC SESSIONS II.

Hungarian Academy of Sciences: "Networks"

Tamás Vicsek, Eötvös Loránd University Budapest

Large Lecture Hall (Room H), HAS

Chaired by: E. Sylvester Vizi Former President, Hungarian Academy of Sciences

László Acsády, Institute of Experimental Medicine, Hungarian Academy of Sciences

Albert László Barabási, Director, Center for Complex Network Research, Northeastern University

Eörs Szathmáry, Eötvös Loránd University Budapest Kimmo Kaski, Aalto University School of Science Guido Caldarelli, IMT and ISC- CNR, Lucca Italy

### AAAS: "Developing a coherent and compatible science enterprise"

Ceremonial Hall (Room A), HAS

Chaired by: Vaughan Turekian, Chief International Officer, AAAS Alan I. Leshner CEO, AAAS (introductory speaker) Bud Rock, CEO, Association of Science and Technology Centers; Julie Maxton, Executive Director, Royal Society Tateo Arimoto, Director General, RISTEX; Deputy Director General, CRDS Japan Science and Technology Agency Patrick Cunningham, Chief Science Adviser to the Irish Government Cathleen A. Campbell, President and CEO, CRDF Global Tom Wang (reporter to session)

### YOUTH-WAYS: "Scientific collaboration in the changing landscape of science: new generation of science and researchers"

Reading Room (Room D), HAS

Co-Chairs: Henry Roman and Mandë Holford Kevin Govender, Director, Global Office of Astronomy for Development, South Africa

Linda Kamau, Ushahidi, Kenya

Humphrey Oborah, President, African Council of Gifted and Talented, Kenya

Francois Taddei, Research Scientist, INSERM, Paris, France Victor Henning, CEO and founder Mendeley Limited, London, UK Kaitlin Thaney, Manager: External Partnerships, Digital Science, London, UK

Peter Csermely, President, Hungarian National Talent Support Council

### 13:30 - 14:30

### LUNCH BREAK

Academy Club Restaurant and Krúdy Hall, HAS

### 14:30 - 16:30

### PLENARY SESSION V.: "FORUM OF GLOBAL FORA:

Sharing Knowledge for Global Challenges"

Ceremonial Hall (Room A), HAS

Chaired by: Dong-Pil Min, Honorary Chairman, Seoul S&T Forum Alan I. Leshner, CEO, AAAS

Joshua Mandell, World Bank, STI Global Forum

Stefan Michalowski, OECD Global Science Forum

Richard O'Kennedy, President, London International Youth

Science Forum (LIYSF)

Tomihiro Taniguchi, Executive Director, Japan STS Forum

Peter Tindemans and Raphaela Kitson-Pantano, ESOF (European

Science Open Forum)

Won-Hoon Park, President, Association of Academies of Sciences in Asia (AASA)

### 16:30 - 17:00

### COFFFF BREAK

Academy Club Restaurant and Krúdy Hall, HAS

### 17:00 - 19:00

### PARALLEL THEMATIC SESSIONS III.

ICSU: Long term perspectives on international science "Forsight Scenarios: What will international science be like in 2031?"

Large Lecture Hall (Room H), HAS

Chaired by: Yuan Tseh Lee, President of ICSU

Facilitated by: Carthage Smith, Deputy Executive Director, ICSU Presenters:

John Marks, Chair ICSU Taskforce on Foresight

Francoise Caillods, Senior Managing Editor, World Social Science Report ISSC

Nebojsa Nakicenovic, Director, Global Energy Assessment Commentaries:

Alice Abreu, Emeritus Professor, Federal University of Rio de Janeiro, Brazil

Attila Havas, Senior Research Fellow, Hungarian Academy of Sciences

Michael Keenan, Country Studies and Outlook Division, Directorate for Science, Technology and Industry, OECD Yuan T Lee, ICSU President, China: Taipei

Roundtable discussion

### Brazil: "Sustainable Food Production"

Ceremonial Hall (Room A), HAS

Chaired by: Jacob Palis, Elibio Rech

Roger N. Beachy, Wolf Prize Laureate; Former Director, National Institute of Food and Agriculture; President Emeritus, Donald Danforth Plant Science Center

Paul Christou, University of Leida, Spain

Thorsten Stock, Global Project Manager, BASF Plant Science Company, Germany

Dionne Shepherd, Research Officer, University of Cape Town, South Africa

Elibio Rech, EMBRAPA Genetic Resources and Biotechnology, Brazil

John Ingram, Environmental Change Institute, Oxford University, UK Fumiko Kasuga, Vice President, Science Council of Japan

### 19:30 -

### RECEPTION

Museum of Fine Arts

The reception is given by Pál Schmitt, President of Hungary

Concert of Muzsikás Folk Ensemble and Thiago Bertoldi Dinner DAY 3
SATURDAY
19 NOVEMBER 2011

Venue: The House of Parliament

### 09:30 - 11:15

### PLENARY SESSION VI: "Parliamentary session"

Chair: Balázs Gulyás, Executive Director, World Science Forum Tibor Navracsics, Deputy Prime Minister, Minister of Public Administration and Justice

Paul Rübig, Chairman, STOA – Science and Technology Options Assessment – European Parliament

Patrick Amuriat Oboi, Member of Parliament, Uganda

Ulla Burchardt, Chair, Committee on Education, Research and Technology Assessment, Bundestag, Germany

Rémi Barré, Conservatoire National des Arts et Métiers

Recherche (CNAM), France

Andrew Miller, Chairman, Science and Technology Committee, House of Commons UK

### 11:15 - 11.30

# PRESENTATION AND ENDORSEMENT OF THE DECLARATION

Declaration presented by:

József Pálinkás, President, Hungarian Academy of Sciences; President WSF

Gretchen Kalonji, Assistant Director-General for Natural Sciences, UNESCO

Yuan Tseh Lee, President, ICSU

### 11:30 - 12:00

COFFEE BREAK

# SPECIAL SESSIONS

# **EXHIBITIONS**

### 12:00 - 13:00

Closing plenary lectures

Pál Schmitt, President of Hungary

Katalin Bogyay, President of the General Conference, UNESCO

HRH Princess Sumaya bint El Hassan, President of El Hassan

Science City and the Royal Scientific Society, Jordan

Ahmed Zewail, Nobel Laureate, California Institute of Technology

Aloizio Mercadante, Minister of Science and Technology, Brazil József Pálinkás, President, Hungarian Academy of Sciences

Jozsef Palinkas, President, Hungarian Academy of Science.



### 16 NOVEMBER

16:00 - 17:00

Executive Board Meeting of African Parliamentary Forum on Science and Technology

Council Hall of the Presidium (Room B), HAS

This session is for selected audience only.

### 17 NOVEMBER

14:45 - 18:30

World Federation of Science Journalist Board Meeting

Council Hall of the Presidium (Room B), HAS

This session is for selected audience only.

17:00 - 19:00

**G77** Meeting

"South-South Cooperation in Science and Technology"

Library Conference Hall (Room J), HAS

This session is for selected audience only.

### 18 NOVEMBER

14:30 - 16:30

**UNESCO Parallel Parliamentary Session** 

Reading Room (Room D), HAS

This session is for selected audience only.

### PHOTOGRAPHY EXHIBITION

On the occasion of awarding the Sultan Qaboos Prize for Environmental Preservation in 2011, the Ministry of Education of the Sultanate of Oman is proud to present you a photography exhibition on the topic of "Environmental Preservation towards Sustainable Development in Oman".

This exhibition highlights some of the unique environmental and cultural features that characterise the Sultanate of Oman and takes the viewer on a visual trip to Oman. It shows the country's diverse environment and geology including golden sand, rugged mountains, rocky and sandy beaches. It also unveils the rich culture and history focusing on the intangible heritage in which it represents the expressions, rituals and traditions that have been inherited from their ancestors and will be passed down to their descendants.

### **MOMENTUM LOBBY**

There is fierce competition for talented scientists worldwide as their achievements in science and development have a crucial role in shaping the future of individual countries and therefore contribute to a global future.

The Momentum Program was launched by the Hungarian Academy of Sciences in 2009 with a double aim in mind. It is designed to stop young talented researchers from seeking career opportunities abroad by providing them support to achieve genuine scientific results in Hungary. The researchers selected are given sufficient funds to create their own schools of thought, establish their research teams in order to conduct internationally competitive research, and to assist the renewal of institutional structures. Visitors are welcome to learn about the work and scientific results of the awardees through the posters exhibited in the lobby.

### **BRAZILIAN COFFEE CORNER**

The Brazilian Academy of Sciences, as the host of the next World Science Forum to be held in Rio de Janeiro in 2013, is delighted to invite all participants of the Budapest Forum for an authentic cup of coffee made from world-famous Brazilian coffee-beans. While enjoying your espresso, take some time to get acquainted with Brazilian science and the Brazilian Academy of Sciences as well!

### HUNGARIAN ACADEMY OF SCIENCES

The foundation of the Hungarian Academy of Sciences in 1825, is marked by the most generous gestures in Hungarian history. Count István Széchenyi offered one year's income of his estate for the purpose of establishing a Learned Society and his example of generosity was followed by other delegates to the National Assembly. The Hungarian Academy of Sciences is uniquely the only Academy in the world built up from public donations. The building of the Academy was one of the first Budapest edifices in Neo-Renaissance style yet it turned out to be the most mature and valuable example of its sort in Budapest. This harmonious building, richly ornamented both inside and outside has always been a distinctive feature of the cityscape.

### THE MUSEUM OF APPLIED ARTS

The Hungarian Museum of Applied Arts, founded in 1872, was among the first museums of its kind in Europe. The actual building housing arts and crafts items was constructed later and is characterised by the oriental ornamentation of early Art Nouveau. It was established to function as a school of applied arts in order to raise the standard of design and develop public taste as well as to collect art works. The permanent exhibition presents pieces of art in a manner that reflects the changes of taste over time of the curators.

### THE MUSEUM OF FINE ARTS

The Budapest Museum of Fine Arts is regarded as one of the most significant museums in Central Europe. It houses an extensive display of art including a rich collection of Egyptian items and classical antiquities, a wide range of European paintings, sculptures, drawings and prints as well as a collection of Modern Art. The Museum of Fine Arts was first opened to the public on the occasion of the visit of Franz Joseph I., Emperor of Austria and King of Hungary, December 1st, 1906.

# VENUES OF THE FORUM GENERAL INFORMATION

### PARLIAMENT

The Parliament building is an outstanding landmark, stretching along the Pest embankment of the River Danube. It is the seat of the unicameral National Assembly, the legislative body of the Hungarian Republic. The building was designed in a neo-Gothic style and constructed between 1884 and 1906. (Guided tours in foreign languages are available daily.)

Admission to the House of Parliament (19 November): 8:00 - 9:00 Participants must pass through security control at the entrance. Please note that passport or identity card is required to enter.

### GENERAL INFORMATION

### INTERNET ACCESS

Participants of the Forum are provided with free internet access in the building of the Hungarian Academy of Sciences. Please, use the following password to connect to the wireless network: wsf2011

### **FORUM WEBSITE**

The website of the Forum (http://www.sciforum.hu), which has served as an important tool in the preparatory phase of the World Science Forum, will be updated after the Forum with further presentations, conclusions, and proposals for the future.

### LIVE BROADCAST

All sessions of the Forum, both plenary and thematic sessions, will be streamed to the www.sciforum.hu website for the wider public. World Science Forum operates a remarkable video archive, available on the Forum website, where you can watch all sessions of previous Fora.

18 19

# WORLD SCIENCE FORUM

**GROUND FLOOR** \_ Arany János Street 1. Akadémia Street

- A Ceremonial Hall
- B Council Room of the Presidium
- C WSF Secretariat
- D Reading Room
- E Concert Room

- F Bolyai Room
- G Press Room
- H Large Lecture Hall

Széchenyi Square

- I Dome Hall
- J Library

# AT THE HUNGARIAN 1ST FLOOR

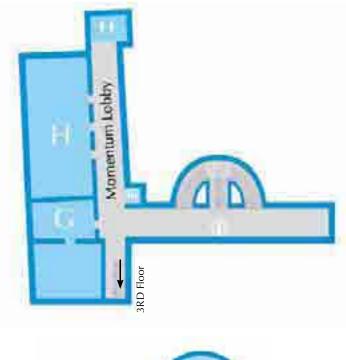
-1 FLOOR



T Restaurant

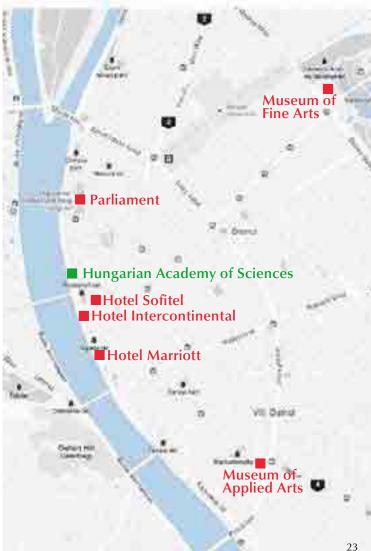
# **ACADEMY OF SCIENCES**

2ND FLOOR





# IN BUDAPEST





### ORGANIZER:



### FOUNDING PARTNERS:





### PARTNERS:











### SPONSORS:













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