

# GLOBAL RESEARCH COUNCIL

4<sup>TH</sup> ANNUAL MEETING  
IN TOKYO 27-28 MAY 2015

Agenda Book





# Words of Welcome

## Dear Colleagues

It is our great pleasure to welcome you to this 4th Annual Meeting of the Global Research Council (GRC), hosted jointly by the Japan Society for the Promotion of Science (JSPS) and the National Research Foundation (NRF) of South Africa. The meeting is also supported by the Japan Science and Technology Agency (JST) and the Department of Science Technology (DST) of South Africa.

This 4th GRC Annual Meeting, held in Tokyo during 27-28 May, is expected to be attended by representatives of more than 60 research funding agencies as well as a number of stakeholders in promoting research. Their discussions will focus on two themes: “Research Funding for Scientific Breakthroughs” and “Building Research and Education Capacity”. Regarding the first theme, the deliberations will focus on the most effective ways of supporting research with a high potential for scientific breakthroughs—an issue of increasing importance to all research funding agencies. The second theme will address ways to strengthen the capacity of researchers, research institutions and research systems, which is a challenge that all countries,

including developing nations, have in common.

Two important side-events which are open to the public, and that will add value and complement the GRC discussions, are also hosted on 26 May: (1) the “Global Symposium on Scientific Breakthroughs”, hosted by JSPS, and the (2) “Roundtable on Building Education and Research Capacity in Africa: How to Support Young Researchers for Sustainable Development”, organized by the NRF of South Africa and United Nations University (UNU). We are confident that these important events will facilitate vigorous sharing and exchange of views among research funding agencies and various stakeholders, while enhancing public understanding on these issues.

Another feature of this year’s GRC Annual Meeting is its initiative to expand the GRC globally. Following the good practices of the previous annual meetings, GRC Regional Meetings were held from October through December in cities of the five GRC regions: Brussels, Kuwait, Lima, Stellenbosch and Singapore. Highlights of these regional meetings include a GRC Africa Summit,





organized by the NRF of South Africa and the National Commission on Research, Science and Technology (Namibia) (also supported by JSPS and DFG), that brought together many research funding agencies from the African region. We thank the hosts of those regional meetings for their tremendous efforts, and intend to amplify the spirit of inclusiveness these meetings fostered in the convening of this meeting in Tokyo to make the GRC a truly global forum. As the hosts of this year's GRC Annual Meeting, we extend our sincere appreciation for your participation in this landmark endeavor.

Lastly, it is our aim to reach a common understanding and shared principles with regard to this meeting's two themes. It is equally important, however, for the GRC to engage collectively in follow-up activities to realize and advance these principles. We would like to request your cooperation in strengthening the network among GRC participants, and collectively carry out concrete activities that advance global research initiatives.

As the hosts of the 4th GRC Annual Meeting, JSPS and the NRF of South Africa extend to you a warm welcome to this event. To the speakers and moderators, we express our wholehearted appreciation for your cooperation and contribution. And to all of the participants, it is our firm belief that your cumulative experience and knowledge in supporting research to be shared in this meeting will endow it with a very high quality of results.



Dr. Yuichiro Anzai  
President  
Japan Society for  
the Promotion  
of Science



Dr. Beverley Damonse  
Acting CEO  
National Research  
Foundation  
of South Africa



Global Research Council  
Tokyo 27 – 28 May 2015

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Global Research Council

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# The Global Research Council



The Global Research Council (GRC) is a voluntary, informal organization of heads of research councils (HORCs) from around the world, pledged to find mutually acceptable paths to greater international research collaboration. Its goal is to represent most of the world's research potential by getting all interested key players in research and research funding involved. The worldwide growth of support for research has presented an opportunity for countries large and small to work in concert across national borders. Cooperation and collaboration can enhance the quality of science, avoid unnecessary duplication, provide economies of scale, and address issues that can only be solved by working together. Heads of research funding agencies have a responsibility to meet these objectives on behalf of the research community.

To ensure a globally consultative process and to improve communication and cooperation among research funding agencies, the GRC annually holds a set of regional meetings as well as an annual global meeting to gather input from the different world regions, address issues of mutual concern to research and research funding worldwide, and to agree on guidelines and principles by which multinational research collaboration can be enhanced. Thereby, the GRC shall also provide assistance to those research institutions and funding organizations wishing to build a world-class research landscape.

The purposes of the Global Research Council are:

- To improve communication and cooperation among funding agencies;
- To promote the sharing of data and best practices for high-quality research cooperation;
- To provide a forum for regular meetings of the Heads of Research Councils;
- To respond to opportunities and to address issues of common concern in the support of research and education;
- To be a resource for those institutions wishing to build a world-class research landscape;
- To explore mechanisms that support the global science enterprise and the worldwide research community; and
- To remain focused and reach decisions based on scientific merit.



## Governing Board 2014/15

### Chunli Bai

*Chair of GRC Governing Board*  
President  
Chinese Academy of Sciences (CAS)

### Peter Strohschneider

*Vice-Chair of GRC Governing Board*  
President  
German Research Foundation (DFG)

### Yuichiro Anzai

*Vice-Chair of GRC Governing Board*  
President  
Japan Society for the Promotion of Science (JSPS)

### Mohammed Al-Suwaiyel

President  
King Abdulaziz City for Science and Technology (KACST), Saudi Arabia

### Hernan Chaimovich Guralnik

(from 2/2015)  
President  
National Council for Scientific and Technological Development (CNPq), Brazil

### Glaucius Oliva (until 2/2015)

President  
National Council for Scientific and Technological Development (CNPq), Brazil

### Tavarekere Kallian

**Chandrashekar**  
Secretary  
Science and Engineering Research Board (SERB), India

### France A. Córdova

Director  
National Science Foundation (NSF), United States

### Romain Murenzi

Executive Director  
The World Academy of Sciences (TWAS)  
– for the advancement of science in developing countries

### Vladislav Yakovlevitch

**Panchenko**  
Chairman of the Board  
Russian Foundation for Basic Research (RFBR)

### B. Mario Pinto (from 11/2014)

President  
Natural Sciences and Engineering

Research Council of Canada (NSERC)

### Janet Walden (until 10/2014)

Chief Operating Officer  
Natural Science and Engineering Research Council of Canada (NSERC)

### Miguel Seabra (from 10/2014)

President  
Science Europe (SE)

### Paul Boyle (until 9/2014)

President  
Science Europe (SE)

## Executive Secretary 2014/15

### Graham Mark Harrison

*Executive Secretary*  
Office Head  
NSF Europe Office

## International Steering Committee 2014/15

### Aldo Storoebel

Executive Director  
International Relations and Cooperation (IRC)  
National Research Foundation (NRF), South Africa

### Eino Natangwe Mvula

Chief Executive Officer  
National Commission on Research Science and Technology (NCRST), Namibia

### Bérangère Perret

Specialist  
Office of Technical Cooperation and International Affairs  
National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru

### Manuel Luis Sanchez

CEO  
National Fund for Research, Development and Technological Innovation (FONDECYT), Peru

### Arturo Borja Tamayo

Director  
International Cooperation  
Mexican National Council of Science and Technology (CONACYT)

**Gonzalo Arenas**

Director  
the International Cooperation Program  
National Commissions for Scientific and  
Technological Research (CONICYT), Chile

**Karen Tan**

Deputy Director  
Grant Management  
National Research Foundation (NRF),  
Singapore

**Kiyoshi Saito**

*Chair of GRC International Steering  
Committee*  
Deputy Director  
International Program Department  
Japan Society for the Promotion of Science  
(JSPS)

**Benny Geiger**

Chair  
Academic Board  
Israel Science Foundation (ISF)

**Tamar Jaffe-Mittwoch**

General Director  
Israel Science Foundation (ISF)

**Stephan Kuster**

Head  
Policy Affairs  
Science Europe (SE)

**Maud Evrard**

Senior Policy Officer  
Science Europe (SE)

**Essam Omar Asem**

Director  
Research Directorate  
Kuwait Foundation for the Advancement of  
Sciences (KFAS)

**Jörg Schneider**

Head  
International Affairs  
German Research Foundation (DFG)

**Governing Board Working  
Group for the Further  
Development of the GRC**

**Jörg Schneider**

*Chair of GRC Working Group*  
Head  
International Affairs  
German Research Foundation (DFG)

**Rainer Grulich**

*Secretary of GRC Working Group*  
Programme Officer International Affairs  
German Research Foundation (DFG)

**Abdulaziz Mohammed Al-Swailem**

Vice-President for Research Support  
King Abdulaziz City for Science and  
Technology (KACST), Saudi Arabia

**Aldo Stroebe**

Executive Director  
International Relations and Cooperation  
(IRC)  
National Research Foundation (NRF),  
South Africa

**Tieniu Tan**

Chinese Academy of Sciences (CAS)

**Kiyoshi Saito**

Deputy Director  
International Program Department  
Japan Society for the Promotion of Science  
(JSPS)

**Karen Tan**

Deputy Director  
Grant Management  
National Research Foundation (NRF),  
Singapore

**Paulo Beirao**

Director  
Institutional Cooperation  
National Council for Scientific and  
Technological Development (CNPq), Brazil

**Jean Elissaint Saint-Vil**

Director of Policy and International  
Relations  
Executive Vice-President Office  
Natural Sciences and Engineering  
Research Council of Canada (NSERC)

**Stephan Kuster**

Head  
Policy Affairs  
Science Europe (SE)

**Sophie Laurie** (until 12/2014)

Head  
International  
Research Councils UK (RCUK)



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# Agenda

## Global Symposium on Scientific Breakthroughs Tuesday, 26 May 2015

Venue: Ascot Hall II, South Wing B2F  
Hotel Okura Tokyo

9:30-9:40	<b>Opening</b>
9:40-9:55	<b>Special Lecture</b> <b>Education and Science /Technology Policy for Creating Scientific Breakthroughs</b> Mr. Hakubun Shimomura, Minister of Education, Culture, Sports, Science and Technology (MEXT) (TBD)
9:55-10:20	<b>Keynote Speech 1</b> <b>Policies to Catalyze Breakthrough Science</b> Dr. Rush Holt, CEO, American Association for the Advancement of Science (AAAS)
10:20-10:40	<b>Keynote Speech 2</b> <b>Supporting Excellence with Impact – the European Experience</b> Prof. Paul Boyle, Former President, Science Europe President and Vice-Chancellor, University of Leicester
10:55-11:20	<b>Keynote Speech 3</b> <b>Basic Research Leading to Scientific Breakthrough</b> Prof. Ei-ichi Negishi, Herbert C. Brown Distinguished Professor of Chemistry, Purdue University 2010 Nobel laureate in Chemistry
11:20-11:40	<b>Keynote Speech 4</b> <b>The Eureka Moments in Science</b> Dr. Erling Norrby, Emeritus Professor, Royal Swedish Academy of Sciences
12:45-14:55	<b>Panel Session</b> 1) Dr. France Córdova, Director, National Science Foundation (NSF) 2) Prof. Jean-Pierre Bourguignon, President, European Research Council (ERC) 3) Prof. Peter Strohschneider, President, German Research Foundation (DFG) 4) Dr. Michiharu Nakamura, President, Japan Science and Technology Agency (JST) 5) Mr. Yutaka Tokiwa, Director-General, Research Promotion Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT)
14:55-15:00	<b>Closing</b>

## Roundtable on Building Education and Research Capacity in Africa: How to Support Young Researchers for Sustainable Development Tuesday, 26 May 2015

Venue: Ascot Hall I, South Wing B2F  
Hotel Okura Tokyo

12:45-13:00	<b>Opening</b> <b>Opening remarks</b> •Dr. Makoto Asashima, Executive Director, JSPS •Dr. Gansan Pillay, Deputy CEO: RISA, NRF (South Africa) •Dr. Kazuhiko Takemoto, Director, UNU-IAS
13:00-13:10	<b>Part 1</b> Introductory Video: "Sustainability and innovation: Critical challenge for the next generation"
13:10-14:10	<b>Part 2</b> Issues and challenges for building young researchers' capacity for sustainable development Presentations for issue-raising: 1. Dr. Divine Fuh, University of Cape Town (South Africa) 2. Dr. Orleans Mfuné, University of Zambia (Zambia) 3. Dr. Eino Mvula, CEO, NCRST (Namibia) 4. Dr. Julia Tagüña Parga, Deputy Director General for Scientific Development CONACYT (Mexico) Moderator: Prof. Masafumi Nagao (UNU-IAS)
14:10-15:00	<b>Part 3</b> Opportunities for supporting capacity building of young researchers -Presentation of a review of Japan-South Africa collaborative research activities under the joint JSPS-NRF support scheme for research -Roundtable discussion Moderator: Dr. Aldo Stroebe (NRF, South Africa)



## Annual Meeting of the Global Research Council

**Tuesday, 26 May 2015**

Venue: Akebono, 1F  
Hotel Okura Tokyo

18:30-20:00	Joint Reception of GRC Annual Meeting, Global Symposium and Roundtable	
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**Wednesday, 27 May 2015**

Venue: Heian, 1F  
Hotel Okura Tokyo

8:30-9:00	Registration	
9:00-9:30	<b>Opening Remarks</b>	<b>Chair:</b> <b>Yuichiro Anzai</b> <b>President of JSPS</b>
	Opening Remarks •Yuichiro Anzai, JSPS, Japan •Beverley Damonse, NRF, South Africa •Address by Senior Government Official	
9:30-9:40	Break	
9:40-13:00	<b>Session I: Research Funding for Scientific Breakthrough</b>	<b>Chair:</b> <b>Yuichiro Anzai</b> <b>President of JSPS</b>
9:40-9:55	Introduction of Participants	
9:55-10:05	Keynote Speech I: Report of the Global Symposium on Scientific Breakthroughs •France A. Córdova, NSF, USA	
10:05-10:15	Keynote Speech II: Report from the Asia-Pacific Regional Meeting •Teck Seng Low, NRF, Singapore	
10:15-10:25	Keynote Speech III: Report from the European Regional Meeting •Benjamin Geiger, ISF, Israel	
10:25-10:45	Coffee Break	
10:45-12:00	Plenary Discussion Discussion and Endorsement of the "Statement of Principles for Funding Scientific Breakthroughs"	<b>Moderator:</b> <b>Yuichiro Anzai</b> <b>President of JSPS</b>
12:00-13:00	Group Discussion Group Discussion by HORCs in 5 Groups and a Group of Observers	
13:00-14:00	Lunch	Akebono, 1F
14:00-17:20	<b>Session II: Building Research and Education Capacity</b>	<b>Chair:</b> <b>Beverley Damonse</b> <b>Acting CEO of NRF</b>
14:00-14:05	Brief Background •Aldo Stroebel, NRF, South Africa	
14:05-14:20	Keynote Speech IV: Report of the GRC Africa Summit and the Roundtable on Capacity Building •Eino Natangwe Mvula, NCRST, Namibia •Emmanuel Mutisya, United Nations University ESDA/NGR Project	
14:20-14:30	Keynote Speech V: Report from the American Regional Meeting	
14:30-14:40	Keynote Speech VI: Report from MENA Regional Meeting •Ahmad Essa Bishara, KFAS, Kuwait	
14:40-15:50	Plenary Discussion Discussion and Endorsement of the "GRC Approaches to Building Research and Education Capacity"	<b>Moderator:</b> <b>Dorsamy Gansan Pillay</b> <b>Deputy CEO of NRF</b>
15:50-16:00	Group Photo	
16:00-16:20	Coffee Break	
16:20-17:20	Group Discussion Group Discussion by HORCs in 5 Regional Groups and a Group of Observers	
17:30	Transfer to the Venue of the Dinner	



<b>18:30-21:30</b>	<b>Conference Dinner</b>	Host: Tokyo National Museum, Ueno
18:30-20:00	Museum Tour and Welcome Drink	
20:00-21:30	Conference Dinner	

**Thursday, 28 May 2015**Venue: Heian, 1F  
Hotel Okura Tokyo

8:00-9:00	Breakfast Meeting for Regional Discussions (Optional)	
<b>9:00-9:30</b>	<b>Session III: Progress Report on Open Access Issue</b>	<b>Chair:</b> <b>Michiharu Nakamura</b> <b>President of JST</b>
	Report on the Activities of the GRC Members in OA Issues • <i>B. Mario Pinto, NSERC, Canada</i> Report of the Workshop "Unlocking the Future" • <i>Rick Rylance, RCUK, UK</i> Proposal of a Symposium in 2017 • <i>Joseph Engelen, NWO, Netherlands</i>	
<b>9:30-10:50</b>	<b>Wrap-up Session</b>	
9:30-9:45	Reporting out of Group Discussion (Session I)	
9:45-10:10	Discussion and Decision for the Follow-up Activities on Scientific Breakthroughs	<b>Chair:</b> <b>Dorsamy Gansan Pillay</b> <b>Deputy CEO of NRF</b>
10:10-10:25	Reporting out of Group Discussion (Session II)	
10:25-10:50	Discussion and Decision for the Follow-up Activities on Capacity Building	
10:50-11:10	Coffee Break	
<b>11:10-12:20</b>	<b>Session IV: GRC Business and Future Directions</b>	<b>Chair:</b> <b>Yuichiro Anzai</b> <b>President of JSPS</b>
11:10-11:20	Report by the Chair of the GRC Governing Board	
11:20-11:30	Report by the Chair of the GRC Working Group	
11:30-12:00	Discussion and Decision on the GRC By-laws	
<b>12:00-12:20</b>	<b>A Look Ahead to 2016</b>	
12:00-12:15	Announcement by the Hosts of the Annual Meeting 2016 • <i>Tavarekere Kallian Chandrashekar, SERB, India</i> • <i>Rick Rylance, RCUK, UK</i>	
12:15-12:20	Q&A	
<b>12:20-12:45</b>	<b>Special Session: Presentation from GRC Partner Organizations</b>	<b>Chair:</b> <b>Yuichiro Anzai</b> <b>President of JSPS</b>
12:20-12:30	• <i>Koji Omi, Chairman, STS forum</i>	
12:30-12:40	• <i>William Lee Howell, World Economic Forum</i>	
12:40-12:45	Q&A	
<b>12:45-13:00</b>	<b>Closing Remarks &amp; Adjournment</b> • <i>Yuichiro Anzai, JSPS</i> • <i>Beverley Damonse, NRF</i>	
13:00-14:00	Farewell Lunch	Akebono, 1F
13:30-14:00	Press Conference *	Emerald, 2F
14:00-17:00	Excursion (Optional) (1)National Museum of Emerging Science and Innovation (Miraikan) (2)Kazusa DNA Research Institute (3)Yokohama Institute for Earth Sciences of the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) Departure 14:00, Arrival (Hotel Okura) 18:00	

\* For Co-hosts of 2015 and 2016 Annual Meetings, and Chair of Governing Board



Global Research Council  
Tokyo 27 - 28 May 2015

# Research Council Representatives

## Argentina



### **Faustino Siñeriz**

National Research Council of Argentina (CONICET)

**Faustino Siñeriz** studied at the Faculty of Sciences, University of Buenos Aires, where he graduated in Biological Chemistry, getting his PhD in 1972. He got a CONICET post doc fellowship at Queen Elizabeth College, University of London 1974/1975. Researcher at the New York State Dept of Health in Albany, NY till 1977. Fellow of the Alexander von Humboldt Foundation at University of

Konstanz in Germany 1984/85. Visiting Professor at TU Berlin 2007-2008.

Now he is Director of the CONICET - GMP fermentation facility in Tucuman and Adviser to the CONICET President for international relations.

Previously Researcher from CONICET since 1978, Professor of Microbiology at the University of Tucuman till his retirement in 2012, Vicerector for research at the National University of Tucuman 2002/2006, Director of CONICET between 2004 to 2012, Vicepresident for technological affairs in CONICET (2008/2011).

His scientific work (107 papers) is mostly in the field of microbial physiology. Use of microorganisms for the development of industrial processes for the production of biomolecules and for waste water treatment and bioremediation.

He advised 16 PhD students who are now in different positions in Argentina and abroad.



## Australia



**Aidan Byrne**

Australian Research Council (ARC)

**Professor Aidan Byrne** was appointed CEO of the Australian Research Council in July 2012. Previously the Dean of Science and the Director of the ANU College of Physical and Mathematical Sciences, Professor Byrne brings with him a wealth of industry knowledge and expertise particularly in the Physical and Mathematical Sciences and Engineering.

Professor Byrne completed a BSc and MSc degrees at the University of Auckland and a PhD degree at the ANU in 1981. He held positions with the University of Melbourne and spent several years in Bonn, Germany as a von Humboldt fellow. He returned to the ANU in 1989 as a Research Fellow and in 1991 commenced a joint appointment between the Department of Physics, in the Faculty of Science and the Department of Nuclear Physics, Research School of Physical Sciences and Engineering. He was Head of the Department of Physics 2003- 2007.

His research interests involve the use of gamma-rays as probes to determine the structure of heavy nuclei and as probes in the examination of the atomic level structure of materials (especially semiconductors); he has published over 200 papers.

## Austria



**Pascale Ehrenfreund**

Austrian Science Fund (FWF)

**Pascale Ehrenfreund** is the president of the Austrian Science Fund (FWF) since September 2013. The purpose of the FWF is to support science and basic research in Austria on a high international level. Thereby the FWF plays a key role in the development of the Austrian science and research landscape.

Pascale Ehrenfreund is also Research Professor of Space Policy and International Affairs at the Center for International Science and Technology Policy (George Washington Univ.). As lead investigator of the NASA Astrobiology Institute she is involved in several international space missions. Her activities in science policy focus on the promotion of international cooperation and interdisciplinary research.

Pascale Ehrenfreund holds a Master in Molecular Biology (Univ. Vienna), a PhD in Astrophysics (Univ. Vienna) and a Master in Management & Leadership (Webster Univ.). She is also present in outer space since 1999, as the asteroid "9826 Ehrenfreund 2114 T-3" bears her name.



## Belgium



**Elisabeth Monard**

Research Foundation Flanders (FWO)

**Elisabeth Monard** is Secretary General of the Research Foundation Flanders. She was trained as a civil engineer (applied chemistry) and holds a PhD in Applied Sciences from the KU Leuven, Belgium.

Elisabeth Monard began her professional career as a teaching and research assistant at the KU Leuven. This was followed by a position as engineering director at the Federal Department of Public Health in the division Radiation Protection and from 1989 until 2005 she was the secretary of the Flemish Science Policy Council. She is vice-president of Science Europe and the European Science Foundation, member of the Royal Flemish Academy of Belgium for Science and the Arts, member of the Board of the Queen Elisabeth Medical Foundation (GSKE), Academia Belgica, the Fulbright Commission Belgium and of the Flemish Council for Science and Innovation (VRWI).

## Benin



**Placide F. G. A. Cledjo**

Beninese Centre for the Scientific and Technical Research (CBRST)

**Clédjo Placide FGA**, geographer by training, is Master of Science in Environmental Conferences and Spatial Planning now. I'm the Beninese Centre Deputy Director of the Scientific and Technical Research and Director of the Waste Recovery Centre in renewable energy and in agriculture. He is the master of Research at the Laboratory for the Study of Climates Water Resources and Ecosystem Dynamics (LECREDE). General Rapporteur of the General Advisory Board of the African and Malagasy Council for Higher Education (CAMES). Expert in Environment and Local Development UNDP, I am Consultant Management Program Wetlands (PAZH), and the Beninese Agency for Environment (ABE). I participated in seminars, workshops, seminars and training workshops in Benin, Kenya, Ivory Coast, Ghana, the Netherlands, and Singapore. The results of my thesis research work are published in peer-reviewed journals in France and the Netherlands. Kenya training seminar focused on: (AFRICA AND GLOBAL CHANGE) Singapore on leadership, and the Netherlands on urban ecology. Environmental expert to INSAE, I presented a paper on Climate Change and Nature Protection. Assistant Professor Michel BOKO (Chairman of Group 4 of the IPCC), our laboratory has participated in the IPCC's work on Climate Change, accompanied the Nobel Peace Prize in 2007.



## Brazil



**Eduardo Moacyr Krieger**

Sao Paulo Research Foundation (FAPESP)

**Eduardo Moacyr Krieger** is currently the director for International Relations of the Medical School of the University of São Paulo, member of the National Council of Science and Technology, and the Vice-President of São Paulo Research Foundation - FAPESP. Graduated in Medicine in 1953, specialized in physiology supervised by Bernardo Houssay (Nobel Prize, 1947) and Eduardo Braun Menendez. From 1957 to 1985, worked at the Medical School of Ribeirão Preto-USP, where he became Emeritus Professor. From 1985 to 2010: directed a multidisciplinary team at the Hypertension Unit, Heart Institute-FMUSP. From 1993 to 2007: President of the Brazilian Academy of Sciences. From 1998 to 2002: Chairman of the Committee on Science and Technology in Developing Countries (COSTED) of the International Council of Science. From 2000 to 2003: co-chairman of the InterAcademy Panel-IAP, representing Brazil at the Executive Committee of the InterAcademy Council-IAC (2000-2010), and the Inter-Academy Medical Panel (2010-current).

## Canada



**B. Mario Pinto**

Natural Sciences and Engineering Research Council of Canada (NSERC)

**Dr. B. Mario Pinto**, of Goan and Sri Lankan origin, served as Chair of Chemistry for 5 years and Vice-President, Research for 10 years at Simon Fraser University. Dr. Pinto is a chemical biologist who has combined theoretical and experimental methods to study the interactions of proteins with their cognate ligands. His contributions include the design of diagnostic tests for blood disorders and bacterial infections, therapeutics for the control of chronic and infectious diseases, and anti-bacterial vaccines. Dr. Pinto is a Fellow of the Royal Society of Canada and the Chemical Institute of Canada, and has received numerous awards for his research, leadership and community service. He is currently President of the Natural Sciences and Engineering Research Council (NSERC).



## China

**Chunli Bai**

Chinese Academy of Sciences (CAS)

**Prof. Chunli BAI**, a well-known chemist and leading scientist in nanoscience, is the President of the Chinese Academy of Sciences (CAS), and the President of the TWAS. His research areas include the structure and properties of polymer catalysts, X-ray crystallography of organic compounds, molecular mechanics and EXAFS research on electro-conducting polymers. In the mid-1980s, he shifted his research to the fields of scanning tunneling

microscopy and molecular nanotechnology.

Prof. BAI has a long list of scientific publications and has won more than twenty prestigious awards and prizes for his academic achievements. He has been elected member or foreign member of more than 12 world-known academies of science or engineering, such as CAS, TWAS, US National Academy of Sciences (NAS), the Royal Society (RS), the Russian Academy of Sciences (RAS), German National Academy of Science and Engineering (actach.de), the Australian Academy of Science (AAS), Royal Danish Academy of Sciences and letters, Brazilian Academy of Sciences (ABC), etc. and Honorary Doctorate or professor of more than 15 foreign universities. He also serves as the Chief Scientist for the National Steering Committee for Nanoscience and Technology and was the Founding Director of China National Center for Nanoscience and Technology. Moreover, he is the member of the International Editorial Advisory Board of JACS, Angewandte Chemie, Advanced Materials and Chemical Physics Letters.

**Congqiang Liu**

National Natural Science Foundation of China (NSFC)

**Professor Liu** received his PhD degree from the Department of Chemistry, School of Science, University of Tokyo, Japan. He became a member of the Chinese Academy of Sciences in 2011. Professor Liu has published over 300 academic articles. His research areas include the earth surface geochemical process and its eco-environment effects, as well as the fundamental and applied geochemical research of trace elements and isotopes. He

explored the bio-geochemical mechanism and cycling pattern of nutrients in the karst region, identified the relationship between chemical erosion, geology and ecosystem in the karst drainage area, and revealed the mechanism underlying the impact of human activities on the bio-geochemical cycling of nutrients in the karst drainage area. These greatly enriched the conventional geochemical theory on the Earth's surface. His research on the distribution of rare earth elements in the solid-liquid system of the Earth's surface & interior developed the geochemistry of rare earth elements. He has also made a series of important achievements with special features in the surface and interior geochemical process and provenance identification by using trace elements or isotopes. Professor Liu is currently Director of the Academic Committee of the State Key Laboratory of Environmental Geochemistry, Honorary President of the Chinese Society for Mineralogy, Petrology and Geochemistry, member of the Board of Geological Society of China, Vice Chairman of the Guizhou Association for Science and Technology. He has twice won the first prize of the Provincial and Ministerial Level Scientific and Technological Progress Awards (as the first contributor), and the title of National Outstanding Worker in Science and Technology.



## Colombia

**Lucy Gabriela Delgado**

Department of Science, Technology and Innovation  
(COLCIENCIAS)

**Dr. Lucy Gabriela Delgado** is the Director of Research Promotion of The Department of Science, Technology and Innovation, COLCIENCIAS. She worked as a research assistant and investigator of Functional Molecular Immunology Group of the Foundation Institute of Immunology of Colombia

(FIDIC). She worked as research associate and coordinator of the group until September 2005. In July 2005 received the degree of Doctor of Pharmaceutical Sciences, National University of Colombia whose doctoral thesis titled "Dendritic cells (DCs) as natural adjuvants in evaluating the immunogenicity of peptide-based vaccines (synthetic vaccines)" where she earned honored mention.

Since September 2005 is linked as a teacher plant microbiology professors of the Department of Pharmacy. The research projects in the areas of their expertise are developed from the Research Group Immunotoxicology (created since joining the University).

## Denmark

**Liselotte Højgaard**

Danish National Research Foundation (DNRF)

**Professor Liselotte Højgaard** is Head of the Department of Clinical Physiology, Nuclear Medicine & PET at Rigshospitalet and Professor, University of Copenhagen and The Technical University of Denmark. She has published >200 peer review publications. Liselotte Højgaard is Chair of The Danish National Research Foundation. Chair of The EU Advisory Board, Horizon

2020 Health. Member of The Conseil d'Administration, INSERM, France. Knighthood (Ridder af Dannebrog). Member of the Royal Danish Academy of Sciences and Letters and the Danish Academy of Technical Sciences.



## Egypt



**Hany Abdel-Aziz El-Shemy**

Ministry of Scientific Research (MSR)

**Prof. Hany A. El-Shemy** received his two Ph.D. degrees in Biochemistry and Genetic Engineering from the University of Cairo, Egypt and University of Hiroshima, Japan. He became an Assistant Professor with Biochemistry Department of Cairo University, Egypt from Sept. 1996, and advanced to Associate Professor in Sept. 2002, as well as full Professor in March 2007.

His research interests are in the fields of plant biotechnology and medicinal plants (Molecular Biology). He received 2 patents, wrote 7 international books, published more than 65 SCI Journal papers, and 30 conference presentation, and served as the technique committee member as well as chair in many international conferences and the editors including PLoS ONE journal, BMC Genomics, also reviewer for more than 10 SCI cited journals. He received several awards, including State prize awarded from Academy of Science, Egypt (2004), Young Arab Researcher prize Awarded from Shuman Foundation, Jordan (2005), State Excellence prize from Academy of Science, Egypt (2011), Cairo University Prizes 2007, 2010. He served an expert for African Regional Center of Technology, Dakar, Senegal plus visiting professor at Pan African University, African Union, Nairobi, Kenya. He was appointed acting vice president of the Academy of Science and Technology from 11/2013 to 11/2014, Egypt. Recently, he is working as a Dean of Faculty of Agriculture, Cairo University and Coordinator of Egypt-Africa Scientific Relations, Ministry of Scientific Research, Egypt.

## Ethiopia



**Tsige Gebremariam Woldemariam**

School of Pharmacy (SOP), Addis Ababa University (AAU)

**Tsige Gebre-Mariam** is Professor of Pharmaceutics at the School of Pharmacy (SOP), Addis Ababa University (AAU). He got his Bachelor of Pharmacy (Distinction) from AAU (1980) and PhD in Pharmaceutics from University of Wales, UK (1988). He did his Post-Doc in University of Tübingen, Germany (1994-95).

Prof. Tsige has served AAU as Vice President for Graduate Studies and Research (2004-09) and Dean of the SOP. He is currently the General Manager of the Regional Bioequivalence Center.

His research interests include development of excipients and phytomedicines; Modified and controlled drug release; improving bioavailability of poorly soluble drugs. He has published over 100 manuscripts in peer reviewed journals, and three books and several technical reports.

Prof. Tsige is a member of several societies and committees including: Founding and Board member of the Ethiopian Academy of Sciences (EAS); Chairperson of the Consensus Study Team of EAS on establishment of National Research Council of Ethiopia.

Prof. Tsige is a recipient of several honors and awards including: Outstanding Faculty Award, AAU (2013); Humboldt Ambassador Scientist (since 2009); Certificate of Recognition and Gold Medal for Outstanding Services and Contribution to Research, AAU (2000); and Ethiopian Pharmaceutical Association (2000).



## France

**Michael Matlosz**

French National Research Agency (ANR)

**Michael MATLOSZ** was born in 1957 in Elizabeth (New Jersey, USA). He holds a BS degree in chemical engineering from the New Jersey Institute of Technology and a PhD from the department of chemical engineering of the University of California, Berkeley. He began his professional research career in the department of materials science at the Swiss Federal Institute of Technology

(EPFL) in Lausanne (Switzerland) from 1985 to 1993.

He was appointed university professor of process engineering at the National School for Advanced Study of the Chemical Industries (ENSIC) in Nancy (France) in 1993.

From 2005 to 2009 Prof. MATLOSZ initiated and directed for CNRS (France) the major European research initiative entitled IMPULSE. It involved 20 academic and industrial partners from eight European countries, and centered on innovation in production processes for the chemical industries.

Prof. MATLOSZ was Director of ENSIC-Nancy from 2006 to 2011 and head of the ANR's Department of Emerging and Exploratory Research from 2012 to 2014.

A member of the National Academy of Technologies of France, Prof. MATLOSZ was appointed ANR's Deputy Scientific Director General in April 2014, and was named President / Chief Executive Officer of the French agency in September 2014.

**Philippe Baptiste**

National Center for Scientific Research (CNRS)

**Philippe Baptiste** was appointed CNRS Chief Research Officer in June 2014. Baptiste is responsible for coordinating the ten CNRS institutes. He is also in charge of interdisciplinarity, innovation, international cooperation and partnerships. A civil engineering graduate from the École des Mines de Nancy, he holds a Master of Science from the University of Strathclyde (UK)

and the Université Pierre & Marie Curie in Paris, and a PhD in Computer Science from the Université de Technologie in Compiègne. He joined CNRS in 1999 and worked at a French software publisher, then at the Bouygues E-lab, and at IBM Research (US) from 2000 to 2001. In 2002 he joined the LIX computer science laboratory (CNRS/École Polytechnique). Baptiste was then appointed director of the CNRS Institute for Information Sciences and Technologies in 2010. In 2013, he joined the Ministry of Higher Education and Research as head of research and innovation strategy. He lectured at the École Polytechnique from 2002 to 2011. His work on scheduling theory, combinatorial optimization and operations has earned him awards (the Cor Baayen Award, the IBM Goldstine Fellowship and the Robert Faure Prize). Baptiste has also led several industrial partnerships with companies such as Microsoft, Thalès and IBM, and has helped start up a number of companies.



## Germany



**Peter Strohschneider**

German Research Foundation (DFG)

**Peter Strohschneider** was born in Stuttgart in 1955. He is the President of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), the central self-governing organization for sciences and the humanities, which promotes research in universities and other publicly funded research institutions in Germany. He studied German philology, as well as law, history, sociology and political science, and received his PhD from the Ludwig-Maximilians-University (LMU) in 1984. He was Professor of German Medieval and Early Modern Studies at Dresden University of Technology from 1993 until 2002. Since 2002 he has held the chair of German Medieval Studies at the LMU in Munich. His research foci lie in the fields of German medieval and pre-modern culture and literature, as well as academic research policy. He was a visiting professor at the École Pratique des Hautes Études in Paris, the Freiburg Institute for Advanced Studies and the Goethe University Frankfurt/Main and declined calls from the University of Tuebingen and the Freie Universität Berlin. From 2006 to 2011 he chaired the German Sciences and Humanities Council (Wissenschaftsrat). He is a member of numerous international committees and academies, including the Bavarian Academy of Sciences and the Academia Scientiarum et Artium Europaea.



**Matthias Kleiner**

Leibniz Association

**Matthias Kleiner** completed his habilitation in the field of forming technology in 1991. In 1994, he joined the faculty of the newly founded Brandenburg Technical University of Cottbus as Professor of Forming Technology in the Chair in Design and Manufacturing. Professor Kleiner was awarded the most prestigious prize in German research, the DFG's Gottfried Wilhelm Leibniz Prize in 1997. He responded to the call to the TU Dortmund University in 1998, where he held the Chair of Forming Technology. From 2004 to 2006, he served as managing director of the newly established Institute of Forming Technology and Lightweight Construction (IUL). He has played an instrumental role in a number of international and interdisciplinary research projects and research networks and acts as a member of numerous international professional committees and academies. In 2011, he co-chaired the German "Ethics Commission for a Safe Energy Supply". Matthias Kleiner was elected President of the German Research Foundation (DFG) in 2007. His six year-term of office as President of the DFG ended in December 2012. Since July 2014 Matthias Kleiner is the President of the Leibniz Association.



## Hungary



### József Pálincás

National Research, Development and Innovation Office of Hungary (NKFIH)

**Professor József Pálincás** (born 1952), a physicist with more than 600 scientific publications, is an ordinary member of the Hungarian Academy of Sciences. In addition to previous appointments (senior scientist, research professor, and director of the Institute for Nuclear Physics at the Hungarian Academy of Sciences, research fellow in the USA and Sweden, head of the Department of Experimental Physics and director of the Institute of Physics at the University of Debrecen, president of the University of Debrecen), he served as minister of education (2001-2002) and as president of the Hungarian Academy of Sciences (2008-2014). His past international commitments have included presidency of the World Science Forum and memberships in Academia Europaea, the European Academies of Science Advisory Council, and the Science Europe Governing Board. Upon completing his mandate as government commissioner for research, development, and innovation, he has been president of the National Research, Development and Innovation Office since January 1, 2015.

## India



### Tavarekere Kallian Chandrashekar

Science and Engineering Research Board (SERB)

**Tavarekere K. Chandrashekar** was born in Shimoga, Karnataka, India in 1956. He earned his Ph.D from Indian Institute of Science, Bangalore in 1982. After Post doctoral work at University of Massachusetts, Boston (1982-1984) and at Michigan State University, East Lansing, USA (1984-1986), he joined the faculty of Indian Institute of Technology, Kanpur in 1986 as a lecturer. He has been a full professor since 1995. He spent a year (1993-1994) on sabbatical at University of Koln, Germany as an Alexander Van Humbolt Fellow. He was deputed as Director, (NIIST, CSIR), Trivandrum from Nov 2003 to Nov 2008. He was the Founder Director of (NISER), Bhubaneswar, India (08 Dec 2008 - 06 Dec 2013). Since June 2013, he is serving as Secretary, Science and Engineering Research Board (SERB), DST New Delhi.

Professor Chandrashekar has received several recognitions for his contributions. His awards include; Shanti Swarup Bhatnagar prize and J.C. Bose National Fellowship. He is an elected fellow of all the three science academies of India. He was elected as a fellow of TWAS, Trieste, Italy. He was awarded D.S. Kothari Gold Medal which he received from Hon'ble Prime Minister of India.



## Indonesia



**Iskandar Zulkarnain**

Indonesian Institute of Sciences (LIPI)

**Professor Iskandar Zulkarnain** was born on April 14, 1959. Since October 17, 2014 has served as the Chairman of the Indonesian Institute of Sciences (LIPI), the prominent science and research institution in Indonesia. He first graduated from the Department of Geology, Bandung Institute of Technology (ITB) in 1985, accomplished a PhD Programme with the degree of *Doktor rerarium naturalium (Dr. rer.nat.)* from *Johannes Gutenberg Universitaet*, Germany in 1991. He joined LIPI in 1985. Professor Zulkarnain has been a Research Professor in Geology and Geophysics since August 21, 2013. He previously served as the Head of Research Center for Geotechnology LIPI from 2006 to 2011 and the Deputy Chairman for Earth Sciences LIPI from 2011-2014.

## Ireland



**Mark Ferguson**

Science Foundation Ireland (SFI)

**Professor Mark W.J. Ferguson** commenced as Director General of Science Foundation Ireland in January 2012 and as Chief Scientific Adviser to the Government of Ireland in October 2012. Previously he was Professor in Life Sciences at the University of Manchester (since 1984) and co-founder, CEO and Chairman of Renovo Group plc (1998-2011).

He is the recipient of numerous international research awards including the 2002 European Science Prize (jointly), and is the author of 327 research papers and book chapters, 60 patent families and author / editor of 8 books.

Mark graduated from the Queens University of Belfast with degrees in Dentistry (BDS 1<sup>st</sup> class honours), Anatomy and Embryology (BSc 1<sup>st</sup> class honours, PhD) and Medical Sciences (DMedSc), holds Fellowships from the Royal Colleges of Surgeons in Ireland (FFD), and Edinburgh (FDS) and is a Founding Fellow of the UK Academy of Medical Sciences (FMedSci). He is a member or Fellow of a number of learned Societies, and was made a "Commander of the British Empire" (CBE) by the Queen in 1999 for services to Health and Life Sciences.



## Israel

**Benjamin Geiger**

Israel Science Foundation (ISF)

Born in Israel, **Prof. Benjamin Geiger** focuses on the mechanisms responsible for communication between cells, both normal and cancerous. He is attempting to identify and trace the specific molecules involved in cell adhesion and communication, and to investigate the molecules and signaling processes that mediate and regulate such interactions. With his colleagues, he is investigating the molecular diversity of adhesion complexes, the roles of mechanical force in adhesion development, and the role of phosphorylation in regulating cell adhesion, migration, differentiation, and communication with the microenvironment. Prof. Geiger has held a number of senior posts at the Weizmann Institute, among them Dean of the Feinberg Graduate School (1989-1995), founder and head of the Department of Molecular Cell Biology, and Dean of the Faculty of Biology (2004-2009). He chaired the Life Science and Medicine Section at the Israel Science Foundation (ISF), the major funding source for scientific research in Israel, and since 2009, has been serving as Chair of the ISF's Academic Board.

## Italy

**Corrado Spinella**

National Research Council of Italy (CNR)

**Corrado Spinella** received his Dr. degree in Physics in 1985. In 1989 he joined as researcher the Istituto Nazionale di Metodologie e Tecnologie per la Microelettronica (IMETEM) of the Italian National Research Council (CNR). From 1999 to 2001 he was Director of IMETEM and in 2002 he moved as senior researcher to the Institute for Microelectronics and Microsystems (IMM). Since 2008 to 2014 he was Director of IMM. At the present he is President of the National Technological District "Sicilia Micro Nanosistemi" and Director of the Department of Physics and Technology of Matter - CNR. His research activity is in the field of new materials and processes for micro-and nanoelectronics: front-end processing for ultra large scale Si technology; Si-based optoelectronics; science and technology of silicon carbide for RF or power electronics; novel memory devices based on silicon nanocrystals; advanced techniques, based on transmission electron microscopy, for characterization of nanostructured materials. He is co-author of more than 230 scientific papers and of several international patents.



## Japan



**Yuichiro Anzai**

Japan Society for the Promotion of Science (JSPS)

**Yuichiro Anzai** is President of the Japan Society for the Promotion of Science, Japan's core government-supported research funding agency. Dr. Anzai also serves as Senior Advisor to Ministry of Education, Culture, Sports, Science and Technology and Chairperson of the Japanese National Commission for UNESCO. From 2001 to 2009, Dr. Anzai was President of Keio University. Prior to that, he was Dean of the School of Science Technology (1993 to 2001) and Professor of Computer Science (starting in 1988) at Keio. After receiving his PhD from Keio in 1974, Dr. Anzai was a postdoctoral researcher (1976 to 1978) and Visiting Assistant Professor (1981 to 1982) at Carnegie Mellon University, where he conducted research on human and machine learning in the Department of Psychology and the School of Computer Science. He has been engaged in research on cognitive and computer sciences for forty years. His work with Herbert Simon on "learning by doing" has long been influential in the fields of cognitive science and artificial intelligence.



**Makoto Asashima**

Japan Society for the Promotion of Science (JSPS)

Since 2007 Emeritus Professor of the University of Tokyo; since 2010 Fellow, Director of Research Center for Stem Cell Engineering, National Institute of Advanced Industrial Science and Technology (AIST); since 2011 Executive Director of the Japan Society for the Promotion of Science. He was the Dean and Head of the Graduate School of Arts and Sciences at the University of Tokyo from 2003 to 2005, From 2005 to 2008 he was the Vice-President of Science Council of Japan; From 2007 to 2009 he was the Managing Director, Executive Vice President, Visiting Professor at the University of Tokyo. He received the following awards: Prize of Japanese Society of Zoological Science, Prize of Inoue Academic Foundation, Prize of Kihara Memorial Academic Foundation, Siebold Prize, Toray Science Prize, Mochida Medical Science Prize, Naito Memorial Science Prize, Prize of Japanese Society of Bioindustry, Uehara Prize, Japan Academy Prize and Imperial Prize, Purple Ribbon Prize from the Japanese Government, The Prince Hitachi Prize for Comparative Oncology, Erwin-Stein-Preises, Person of Cultural Merits from the Japanese Government. He is executive director of International Association of Universities (IAU).





**Michiharu Nakamura**

Japan Science and Technology Agency (JST)

**Dr. Nakamura** graduated from the University of Tokyo and joined Hitachi Central Research Laboratory in 1967, where he was engaged in compound semiconductors and optoelectronics research. He was a pioneer of semiconductor DFB laser development. In 2004, he was appointed Executive Vice President and Executive Officer of Hitachi Ltd., and then assumed a position of Board of Director till September 2011. He was responsible for corporate technology development and new business incubation. He was a visiting Researcher at California Institute of Technology in 1972-73.

Since October 2011, he has been serving as President of JST, where policy-driven R&D funding is a major mission. Also, the dissemination of scientific information, science education for young generation, and science communication are among current activities. He is also serving as Chairman of Tsukuba Global Innovation Promotion Agency.

He has been actively working on national STI strategy. He has served for Industrial User Society for Neutron Application, Industrial R&D Committee of the Japan Business Federation, Council of Competitiveness Japan, Management Committee of Tsukuba Innovation Arena, Nanotechnology Business Creation Initiative and Council for Science and Technology of Minister of Education, Culture, Sports, Science and Technology (MEXT).

He is entitled IEEE fellow, JSAP fellow, and IEICE fellow.

## Kenya



**Moses K. Rugutt**

National Commission for Science, Technology and Innovation (NACOSTI)

**Dr. Moses Kipngeno Rugutt** is the Director General/ Chief Executive Officer, National Commission for Science, Technology and Innovation. He has also served as Acting Chief Executive Secretary and Deputy Council Secretary at the Commission since 2010.

Previously he worked as Chief Research Officer and was later promoted to Deputy Director of Research Collaborations and Partnership at the Directorate of Research Management and Development, Ministry of Higher Education, Science and Technology. He has also worked as a research scientist with the Kenya Agricultural Research Institute, now the Kenya Agriculture and Livestock Research Organization in the animal health research programme.

Dr. Rugutt is trained as a veterinarian at the University of Nairobi, he later got a Master of Science in Tropical Veterinary Science degree at the Center for Tropical Veterinary Medicine, University of Edinburgh and a doctorate from University of Glasgow Veterinary School.



## Korea



**Min Keun Chung**

National Research Foundation of Korea (NRF)

**Dr. Chung** received both his Master and Ph.D. in Industrial and Operations Engineering from the University of Michigan Ann Arbor (1978 and 1984, respectively). He earned his Bachelor of Science in Industrial Engineering at Seoul National University, Seoul, Korea (1974). He specializes in Ergonomic Workplace Design, Rehabilitation Engineering, Engineering Statistics, and Product

Design and Development.

He is a member of the Institute of Industrial Engineers, Human Factors and Ergonomics Society, The Ergonomics Society Pan Pacific Council of Occupational Ergonomics, Japan Ergonomics Society, Korean Institute of Industrial Engineers, Korean Operations Research, and Management Science Society, among others.

## Kuwait



**Ahmad Essa Bishara**

Kuwait Foundation for the Advancement of Sciences (KFAS)

A chemical engineer by training (B.Sc. and M.Sc., Columbia University (1970, 72) and Ph.D., the University of Michigan (1978). He is currently a professor of chemical engineering at Kuwait University. Dr. Bishara is intimately knowledgeable about past technical research in Kuwait and the region by virtue of his involvement in Kuwait Institute for Scientific Research (KISR,

1981-85) as DDG responsible for research; and in teaching and manpower development as Vice President for Academic Affairs (1985-89) at Kuwait University. He teaches chemical engineering at Kuwait University. He recently joined Kuwait Foundation for Advancement of Science (KFAS).

Dr. Bishara served on the board of directors of many public and private organizations, dealing with education, industry, construction, services and others. His activities have covered a wide variety of private sector areas: nuclear energy, communication, information technology and investment.

Dr. Bishara served as the Secretary General of *Kuwait National Nuclear Energy Committee (KNNEC)*, a high level government agency responsible for studying nuclear energy with the aim of introducing it to Kuwait's total energy mix. He also serves on Kuwait's *Planning Council*.

He specializes in the application of science, technology and education for development.



## Luxembourg



**Marc Schiltz**

Luxembourg National Research Fund (FNR)

**Marc Schiltz** holds a PhD in Physics (Crystallography) and an Executive MBA from INSEAD. He has been active in research and higher education for more than 18 years and is a recognised scientist in his field of expertise. Drawing on his international experience he has developed a thorough expertise in strategic research management and organisation. Since 2011, he is heading the National Research Fund, which is the central agency for promoting and funding research activities in Luxembourg. In this role, he has significantly contributed to enhance the quality of the Luxembourg research system and to build bridges with the private sector as well as with the international scientific community.

## Malawi



**Anthony Muyepa**

National Commission for Science & Technology – Malawi (NCST)

**Anthony Muyepa** was appointed Director General of National Commission for Science & Technology – Malawi in October 2013. As the 2nd Director General of the NCST he has engaged NCST in a strategic and transformative journey in exercising and performing powers, duties and functions in connection with the commitment of the Government of Malawi in advancing Science and Technology as declared in the National Science and Technology Policy. The NCST principally provides Science and Technology advice to the Government and other stakeholders on all matters related to science and technology in order to achieve a science and technology-led development. With more than 10 years' experience working in strategic and operational planning, organizational structures, scalable networking, information systems, collaborative tools, system design and development, and ICT for development, he holds a Master of Science from Michigan State University (Computer Science and Engineering) and a Bachelor of Science (Computers Science and Physics) from Chancellor College of the University of Malawi. Achieved the Prince2® Practitioners and the ITIL Certifications. He is the Chief Technical Officer of the Malawi Research and Education Network-MAREN and the Vice Chairperson of Malawi Internet Service Providers' Association-MISPA.



## Malaysia



**Khalid Bin Haji Yusoff**

National Science and Research Council (NSRC)

**Senior Professor Dato' Dr Khalid Yusoff** is a Member of the National Science and Research Council, under the Prime Minister's Office, Malaysia since 2011. He has been appointed as the third Vice-Chancellor and President of UCSI University since 2013. A clinical cardiologist by training, Professor Khalid formerly served as the Dean of the Faculty of Medicine at Universiti Teknologi MARA and also as the Dean of the Faculty of Medicine at Universiti Kebangsaan Malaysia. He was instrumental in developing the Heart Centres at these universities. His medical career began as a student at The University of Melbourne, Australia before being trained in Cardiology at the University of Newcastle-upon-Tyne, UK. On returning to Malaysia, he built a strong career in academia bolstered by national and international recognition of his contributions. He is a firm advocate of research and development and his findings are frequently published in high-impact international journals. Among the numerous awards and accolades received, his latest includes the Honorary Doctorate award, Doctor of Medical Sciences (*honoris causa*) from Melbourne University, Australia. The citation for the honorary doctorate by the Melbourne University's Council identifies him as a person of distinguished eminence in medical science, research and effective medical education.

## Mexico



**Julia Tagüeña**

Mexican National Council of Science and Technology (CONACYT)

**Dr. Julia Tagüeña** is Deputy Director General for Scientific Development at the Mexican National Council of Science and Technology (CONACYT). For over 25 years, she has been a research professor at the Energy Research Center of the Universidad Nacional Autónoma de México (UNAM), of which she also served as Director. She studied physics at UNAM and obtained a PhD at Oxford University. Her main fields of research are solid-state physics and renewable energies, and she has also worked extensively on science communication. She is a member of the Mexico's National Research System, with the highest rank, and of different societies such the Mexican Academy of Sciences and the Institute of Physics of the United Kingdom.



## Mozambique



**Vitoria Langa A. de Jesus**

FNI - National Research Fund (Mozambique)

**Vitoria Langa A. de Jesus** was born on January 15, 1960, in Manjacaze, Mozambique. It is a PhD in Sociological Sciences. Since 2014, she is Executive Director Role on the National Fund for Research Institution under the Ministry of Science and Technology, Higher Education and Vocational Technical. In terms of training, has participated in several courses in several countries, namely: Human Resources Management, Socio-pedagogical and Social Development; Urban Planning and Chairwoman Rurality, Teaching Methodology, Gender Stereotypes of Women, Reproductive Health of Girls and the Uright of Social Development, Transmission Techniques of Knowledge in High Performance Studies, Initiation Bank, Statistics Analyst, among others. During the career, performed various functions of Management and Leadership, with emphasis on National Director of Planning, Statistics and Cooperation, Assistant to the Minister of Science and Technology (MCT) for Research and Community Development, National Coordinator of the Millennium Villages in MCT, Resident Coordinator Polytechnic University, among others. It is University Professor since 2004, and has played several roles such as Scientific Pedagogical Coordinator, Professor of the disciplines of social identities, Monitors at the University of Havana / Cuba, President of the Association of Women Diplomats Accredited in Cuba, Coordinator of Women's Chair in University of Havana.

## Namibia



**Eino Natangwe Mvula**

National Commission on Research Science and Technology (NCRST)

**Dr. Eino Mvula** is the founding Chief Executive Officer of the NCRST. Dr. Mvula holds a Bachelor of Science *Cum Laude* majoring in Chemistry and Mathematics from the University of Namibia (UNAM), a Bachelor of Science Honours (BSc.hons) and Master of Science (MSc) in Chemistry from the University of Cape Town. Dr. Mvula completed a (PhD) Doctoral research programme at the Max-Planck Institute for Bioinorganic Chemistry, in Muelheim der Ruhr, Germany in Collaboration. He also holds a Bachelor of Business Administration (BBA) from the University of South Africa (UNISA) and a Master of Business Administration (MBA) degree from the University of Cape Town, Graduate School of Business. Prior to joining the NCRST, Dr. Mvula worked at the Namibian Standards Institution (NSI) as the General Manager: Regulatory and Consumer Protection responsible for testing, inspection, and metrology services. He also served in a position of acting Director of the Sam Nujoma Marine and Coastal Resources Research Centre at UNAM and as Senior Lecturer at the University of Namibia. Dr. Mvula, has published extensively in numerous peer reviewed international journals. He is a Commissioner of the National Planning Commission, and also serves on the Board of the Multidisciplinary Research Centre (MRC) of UNAM and on the Natural Science Advisory Board of the School of Health and Applied Sciences at the Polytechnic of Namibia.



## Netherlands



### Joseph Engelen

The Netherlands Organisation for Scientific Research (NWO)

**Jos Engelen** (1950) studied physics in Nijmegen. After graduating in 1973 he worked there as a researcher and lecturer, gaining his doctorate in 1979. From 1979 to 1985 Engelen worked at CERN, before accepting a position at Nikhef (National Institute for Subatomic Physics) in 1985. He became professor of Experimental Physics at Universiteit van Amsterdam in 1987. At CERN and DESY (Hamburg) he carried out experiments in the area of the strong interaction, hard photoproduction and dispersion in deep inelastic collisions. He also developed initiatives for research in the field of astroparticle physics. From 2001 to 2003 Engelen was director of Nikhef and in 2004 he became the scientific director and acting director-general of CERN, a position he held until 2008. His responsibilities there included overseeing the construction and commissioning of the new LHC particle accelerator and the associated experimental set-ups. From 2007 to 2008 Engelen was chair of ASTRON, the NWO institute for radio astronomy.

## New Zealand



### Prue Williams

Ministry of Business, Innovation and Employment (MBIE)

**Dr Prue Williams** is General Manager Science Investments for the Ministry of Business, Innovation and Employment. The Ministry advises the Government on New Zealand's science and innovation system, oversees RS&T investment and fosters commercialisation to enhance productivity and deliver benefit to New Zealand.

Prue has a PhD in soil science and a research career in understanding sustainable land management issues in pastoral and cropping systems. She was General Manager Research for Crop & Food Research, one of the New Zealand Crown Research Institutes, and spent four years as Chief Science Adviser to the Foundation of Research Science & Technology and the Ministry of Science and Innovation.

Prue has been involved in collaborative international research programmes and has been a regular reviewer of international proposals and programmes.



## Norway



### Arvid Hallén

The Research Council of Norway (RCN)

**Arvid Hallén** is Director-General of The Research Council of Norway.

Arvid Hallén has his degree in sociology, and after an early career as a researcher at the Institute for Social Research and the Norwegian Institute for Urban and Regional Research (NIBR), he was appointed Director-General at NIBR from 1987 to 1995.

From 1995 and up to present, Arvid Hallén has been a member of the strategic leadership of The Research Council of Norway. His first position was Division Director for Culture and Society. In 2004 he was appointed Director-General and is currently in his second six-year term.

With a main focus on regional studies, Arvid Hallén has published in the areas of sociology and political science. He has been editor of a social science journal.

Arvid Hallén has a broad international experience concerning research cooperation, participation in research steering groups, international expert panels and policy bodies. He was member of the Mid-term Evaluation Panel of the 7<sup>th</sup> Framework Programme (FP7) and is currently member of the panel doing the ex-post review of FP7. He has been member of the Governing Council of Eurohorcs and of the European Science Foundation, and is currently a member of the Governing Board of Science Europe, Brussels.

## Oman



### Hilal Ali Al Hinai

The Research Council (TRC)

**Dr. Al-Hinai** is the Secretary General of The Research Council. He was the Director of the Water Research Center and an Associate Professor in the Department of Mechanical and Industrial Engineering at Sultan Qaboos University. He obtained his B.Eng. in Manufacturing Systems Engineering from Bradford University in 1986 and joined Sultan Qaboos University as a

Maintenance Engineer. He obtained his M.Sc. (1988) and Ph.D. (1992) from the Applied Energy Department at Cranfield Institute of Technology in the UK. Beside his teaching duty, he was appointed as an Academic Assistant for Innovation and Industrial Links at SQU.

Dr. Al-Hinai's research interests are in Solar Energy and Water Desalination with emphasis on solar water desalination and on Solar Cooling Techniques for Buildings in Hot Climates.



## Peru



### **Gisella Orjeda Fernández**

National Council for Science, Technology and Technological Innovation (CONCYTEC)

**Gisella Orjeda**, is the President of the National Council for Science Technology and Technological Innovation of Peru (CONCYTEC). From 2012 she is completely devoted to boosting Science Technology and Innovation as the major instruments for development, competitiveness and welfare in her country.

She holds a M.Sc. in Plant Breeding from Universidad Nacional Agraria "La Molina" (UNALM) Lima, Peru and a Ph. D. in Plant Genetics, from University of Birmingham, UK. She joined Universidad Peruana Cayetano Heredia in Lima seven years ago, as a professor, through a scientist repatriation program with the mission of establishing the first Genomics Research Unit in Peru. She conducted research on the positional cloning of 4HL stripe rust resistance quantitative trait loci in barley, and on the Identification and utilization of durable resistance to barley diseases in Latin America. Gisella was also the PI of the Peruvian Potato Genome Sequencing Project and the focal point for the Latin American Potato Genome Sequencing Consortium.

Gisella has been living in France for 10 years, where she worked at Genoscope to build the rice chromosome XII physical map and she actively participated in the French rice genome sequencing project. In INRA, she worked on positional cloning of viral resistance genes in melon.

## Poland



### **Maciej Zylicz**

Foundation for Polish Science (FNP)

**Maciej Zylicz** studied experimental physics and biology at the University of Gdansk. In 1986 he was awarded the habilitation degree in molecular biology, and in 1992 he became a full professor (Head of the Department of Molecular Biology, Faculty of Biology and next Faculty of Biotechnology; 1991-1999). He was elected a vice-rector for science of the University of Gdansk (1990-1993). In 1993-1994 he was a visiting professor at the Institute of Oncology of the University of Utah. Since 1999 he has been head of the Molecular Biology Department of the International Institute of Molecular and Cell Biology in Warsaw. Maciej Zylicz is best known for his work on molecular chaperone activity of heat shock proteins. He is author of almost 90 scientific papers (over 6000 citations). He is a member of the Polish Academy of Sciences, German National Academy of Sciences Leopoldina, EMBO and a member of the Senate of the Max Planck Society. He has been a Voluntary Advisor to the President of the Republic of Poland since 2010.



## Portugal



**Paula Elyseu Mesquita**

Foundation for Science and Technology (FCT)

**Paula Elyseu Mesquita** is appointed to GRC 2015 by Professor Arménia Carrondo, President of FCT, who was unable to attend. A member of FCT since 2010, Mesquita has worked closely with the organisation's Scientific Councils and has headed the Department of International Relations for 3 years. Her background is academic lecturing and research. She holds a PhD degree in Humanities from the University of Coimbra (Portugal 2005). Her research career began at University College Dublin (Ireland 1996-1997). While pursuing postgraduate research, she taught at the University of Birmingham (UK 1997-2001). She was Fulbright Visiting Professor at the University of Mississippi (U.S. 2008), a lecturer at the University of Beira Interior (Portugal 2005-2010) and a researcher of the University of Lisbon's Centre for English Studies (Portugal 2009-2014). She is currently attending a Master's in Science, Innovation and Society at Lisbon University Institute. The Department she heads at the Foundation for Science and Technology (FCT) operates the public agency's multilateral and bilateral relations, including international organisations.

## Qatar



**Abdul Sattar Al-Taie**

Qatar National Research Fund (QNRF)

**Dr. Abdul Sattar Al-Taie** is the founding Director and currently the Executive Director of Qatar National Research Fund (QNRF). He holds BSc (Hons), MSc, DIC and PhD in Chemical Engineering from Imperial College London. Before joining Qatar Foundation in 2006, Dr. Al-Taie held key positions in Iraq with the Ministry of Oil, the Iraqi Atomic Energy Commission and the Ministry of Industry and Minerals and was a key player in a number of strategic programs and initiatives in Iraq. He also taught in a number of universities in Iraq and supervised a number of PhD and MSc students and he published more than 20 research papers, and more than 40 technical reports. Dr. Al-Taie received numerous awards and decorations during his career, including the Jabir Bin Hayyan Medal, the Reconstruction Medal and the prestigious Science Medal of the Republic of Iraq.



## Russia



### **Vladislav Yakovlevitch Panchenko**

Russian Foundation for Basic Research (RFBR)

Born in 1947 **Vladislav Panchenko** graduated from the Moscow Lomonosov State University (MSU) in 1974 and got his PhD (Physics) in 1975 to join the MSU faculty where he got full Professor position in 1994. At the same time he was deeply engaged in the research activities at the Russian Academy of Sciences (RAS) after he joined the RAS Institute of Laser and Information Technologies (ILIT) in 1992. At present in addition to his Chairmanship in the RFBR Board he is also acting as the ILIT director, director of the Molecular Physics Institute associated with the leading national research center "Kurchatovsky Institute", and chairing the Medical Physics Department at the MSU. He is the RAS full member, author of more than ten monographs and about 300 collected papers and articles. Major fields of research performed by academician Vladislav Panchenko are "Nonlinear kinetic in molecular systems", "Laser matter interaction", "Laser material processing and laser micro-nanotechnology", "Lasers and information technologies for bio-medical applications", "Medical physics".

## Saudi Arabia



### **Abdulaziz Mohammed Al-Swailem**

King Abdulaziz City for Science and Technology (KACST)

**Prof. Al-Swailem** is the Vice-President of King Abdulaziz City for Science and Technology for Research Support, as well as Chairperson of the National Committee of Bioethics (NCBE), Saudi Arabia. Previously, he served as Director of the Natural Resources and Environment Research Institute for ten years. Furthermore, he served as Chairperson of the Biotechnology Research Center, Arab Committee of Ethics of Science and Technology, and as the Chairperson of the International Governmental Bioethics Committee-UNESCO (2009-2011). Prof. Al-Swailem has also contributed in numerous research projects in fields of Genomics, Proteomics and Biosafety; and serves as chair and member of several national and International boards and committees. Prof. Al-Swailem completed his doctorate at Sheffield University, UK, in the field of Biotechnology and genetic engineering and has authored numerous scientific reports and articles in the area of biotechnology, genetic engineering and Bioethics. Prof. Al-Swailem has also lectured in several national and international symposia and conferences.



## Singapore



**Teck Seng Low**

National Research Foundation (NRF)

**Prof Low Teck Seng** is the Chief Executive Officer of the National Research Foundation (NRF), Prime Minister's Office, Singapore. The NRF sets the national direction for research and development (R&D) by developing policies, plans and strategies for research, innovation and enterprise.

Prior to joining NRF, Prof Low served as the Managing Director of the Agency for Science, Technology and Research. As A\*STAR's Managing Director, Prof Low oversaw A\*STAR's strategic priorities of driving innovative research and developing scientific talent to support Singapore's economic and industry development goals.

Prof Low was instrumental in setting up the Magnetism Technology Centre (MTC) in NUS in 1992. The MTC is the predecessor of the Data Storage Institute (DSI), a leading research institute focusing on data storage technologies. He was Dean of Engineering at the National University of Singapore from 1998 to 2000.

Prof Low is presently a Senior Advisor to Provost, Nanyang Technological University and a tenured Professor with National University of Singapore. He has been elected as an International Fellow of the Royal Academy of Engineering, UK in 2014.

## South Africa



**Beverley Damonse**

National Research Foundation (NRF)

**Dr Beverley Damonse** is the Acting CEO and Group Executive for Science Engagement and Corporate Relations of the National Research Foundation (NRF); which drives strategy development and implementation in the areas of science communication, education, public engagement with science and corporate relations. In this portfolio, she connects chiefly with government,

researchers and scientists, both nationally and internationally, science centres, outreach and awareness partners as well as media partners.

Dr Damonse is a member of The International Women's Forum of South Africa (IWFSa), invited member of the NRF Board, a member of The Technology and Human Resources for Industry Programme (THRIP) Advisory Council, a member of the Board of the Cape Town Science Centre and a member of the South African Young Academy of Science (SAYAS) Advisory Board.

She obtained a BSc (Microbiology and Plant Pathology), B.Ed and MEd from the then University of Natal (now UKZN) and a doctorate degree (Education Policy and Management) from the University of Pretoria.