

STS *forum*

Science and Technology in Society *forum*

2015

<http://www.stsforum.org>

The 12th ANNUAL MEETING

October 4,5 and 6, 2015 Kyoto, Japan



Laurent Fabius
Minister of Foreign Affairs and
International Development, France, FR



Koji Omi
Founder and Chairman, STS *forum*, JP



Shinzo Abe
Prime Minister, Japan, JP



Paul Nurse
President, The Royal Society, UK



Naledi Grace Mandisa Pandor
Minister of Science and Technology, South Africa, ZA



Charles O. Holliday, Jr.
Chair, Council of the National Academy of
Engineering, US

Science and Technology in Society *forum*: Lights and Shadows

Fundamental Concept

The explosive progress of science and technology up to the 20th century brought prosperity and enriched the quality of life for much of mankind.

However, the advance of science and technology raises important ethical, safety and environmental issues: possible negative applications are threatening mankind's own future. Since progress in science and technology is expected to accelerate and will be necessary for sustainable human development in the 21st century, wisdom must be exercised to keep it under proper control.

In that sense, the most pressing problems we face today include harmonizing economic development with global warming; preventing terrorism; controlling infectious diseases; and assessing the potential health benefits and ethical factors relating to cloning technology. International efforts to address these problems are needed now more than ever. This is really what symbolizes the "lights and shadows of science and technology". Opportunities need to be taken, but the risks must also be controlled. Health, meeting energy needs, and many other aspects of human welfare are dependent on continued progress in science and technology.

At the same time, the benefits of science and technology are not reaching a major part of the world's people. The barriers to seizing the opportunities for using science and technology to solve the problems of humankind need to be discussed.

Because the problems we face today are becoming increasingly complex against

the backdrop of globalization and international competition, they are beyond the control of any single country.

These issues are also beyond the control of the scientific community alone, because many of the problems will find solutions through changes in social systems, international collaboration, global networks, and the building of common rules.

The time has come for not only scholars and researchers but also policy makers, business leaders and media leaders from all over the world to meet and discuss science and technology issues in the 21st century.

The Science and Technology in Society *forum* aims to provide a new mechanism for open discussions on an informal basis, and to build a human network that would, in time, resolve the new types of problems stemming from the application of science and technology. The forum community will also explore the opportunities arising from science and technology, and address how to remove the barriers to using science and technology to solve the problems facing humankind.

Forum members are expected to participate, not as representatives of their country or organization, but as individuals expressing their own views. This forum is not necessarily a platform for specialists to unilaterally convey their knowledge, but rather an opportunity for real dialogue among peers. Participants should also undertake cross-border activities towards the establishment of shared values and commitment for the future.

STS *forum* Council Members

*Board Members **Auditor of the STS *forum* (Non-Profit Organization)
(As of June 8, 2015)

In alphabetical order of individual names

ABDUL HAMID, Zakri, Science Advisor to the Prime Minister of Malaysia, Malaysian Government, MY

AHO, Esko, Executive Chairman of the Board, East Office of Finnish Industries; Former Prime Minister, FI

ALBERTS, Bruce M., Professor Emeritus, Biochemistry and Biophysics Department, University of California, San Francisco (UCSF), US

ANZAI, Yuichiro, President, Japan Society for the Promotion of Science (JSPS), JP

ARIMA, Akito, Chancellor, Musashi Academy of the Nezu Foundation, JP

BAI, Chunli, President, Chinese Academy of Sciences (CAS), CN

BLANCO, Herminio, Founder and Chief Executive Officer, Soluciones Estratégicas, MX

BRUDERMÜLLER, Martin, Vice Chairman of the Board of Executive Directors, BASF SE, DE

CAMPBELL, Donald W., Senior Strategy Advisor, Davis LLP, CA

CARTY, Arthur J., Research Professor and Executive Director, University of Waterloo Institute for Nanotechnology, CA

CHUBACHI, Ryoji, President, The National Institute of Advanced Industrial Science and Technology (AIST), JP

CHUBAYS, Anatoly B., Chairman and Chief Executive Officer, OJSC "RUSNANO", RU

CHUCHOTTAWORN, Pailin, President and CEO, PTT Public Company Limited, TH

***CICERONE**, Ralph J., President, National Academy of Sciences (NAS), US

CLARK, Megan, former Chief Executive, Commonwealth Scientific and Industrial Research Organization (CSIRO), AU

COLOMBANI, Pascal, Vice Chairman, National Strategic Council for Research, Ministry for Higher Education and Research, FR

COLWELL, Rita R., US Science Envoy; Distinguished University Professor, Center for Bioinformatics and Computational Biology, University of Maryland and Johns Hopkins University, US

CONNELLY, Jr., Thomas M., Executive Vice President and Chief Innovation Officer, DuPont, US

DIJKGRAAF, Robbert, Director and Leon Levy Professor, Institute for Advanced Study, (IAS), Princeton, NL

DURONGKAVEROJ, Pichet, Minister, Ministry of Science and Technology, TH

***FRIEDMAN**, Jerome I., Institute Professor and Professor of Physics Emeritus, Massachusetts Institute of Technology (MIT); Nobel Laureate, US

FUCHS, Alain, President, French National Centre for Scientific Research (CNRS), FR

FURSENKO, Andrei A., Presidential Aide, Presidential Office; former Minister of Education and Science, RU

GOLDIN, Daniel S., Chairman and Chief Executive Officer, The Intellis Corporation; former NASA Administrator, US

GREGORIAN, Vartan, President, Carnegie Corporation of New York, US

GROS, François, Honorary Permanent Secretary, Academy of Sciences, FR

GUTFREUND, Hanoach, Executive Committee Chairperson, Israel Science Foundation, IL

HACKER, Jörg, President, German Academy of Sciences Leopoldina, DE

HARA, George, Chairman of the Board, The Alliance Forum Foundation/Cabinet Office of Japan, JP

HASSAN, Mohamed, Co-Chair, Iap, SD

HOFFMANN, Jules Alphonse, Member, Academy of Sciences of France; Nobel Laureate, FR

***HOLLIDAY** Jr., Charles O., Chairman, Royal Dutch Shell plc.; Chair, Council of the National Academy of Engineering; Chairman Emeritus, Council on Competitiveness; former Chairman and Chief Executive Officer, DuPont, US

HÜTTL, Reinhard, President, acatech (National Academy of Science and Engineering); Scientific Executive Director, German Research Centre for Geosciences (GFZ), DE

IGLESIAS, Enrique V., Secretary-General, Ibero-American Secretariat (SEGIB), UY

***ISHIGE**, Hiroyuki, Chairman and Chief Executive Officer, Japan External Trade Organization (JETRO), JP

ISKANDAR, Marzan A., former Chairman, Agency for the Assessment and Application of Technology (BPPT), ID

JOHNSON, Ray O., former Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation, US

JUMA, Calestous, Professor of the Practice of International Development, Belfer Center for Science and International Affairs, Harvard University, KE

KAGERMANN, Henning, President, acatech (National Academy of Science and Engineering), DE

KING, David, Special Representative for Climate Change, Foreign & Commonwealth Office, UK Government, UK

KLEIBER, Michal, President, Polish Academy of Sciences (PAN); former Minister of Science and Technology, PL

KLEINER, Matthias, President, Leibniz Association, DE

***KOMIYAMA**, Hiroshi, Chairman of the Institute, Mitsubishi Research Institute, Inc.; President Emeritus, The University of Tokyo, JP

KOANANTAKOOL, Thaweesak, President, National Science and Technology Development Agency (NSTDA), TH

***KUMAR**, Ashwani, Member of Parliament of India, Rajya Sabha (India); former Minister of Science and Technology, IN

***KUROKAWA**, Kiyoshi, Adjunct Professor, National Graduate Institute for Policy Studies (GRIPS); Chairman, Health and Global Policy Institute, Japan, JP

LEE, Yuan Tseh, former President, International Council for Science (ICSU); President Emeritus; Distinguished Research Fellow, Institute of Atomic and Molecular Sciences, Academia Sinica; Nobel Laureate, CHINESE TAIPEI

LIM, Chuan Poh, Chairman, Agency for Science, Technology and Research (A*STAR), SG

LIU, Peng, Managing Director, Sinocity Investment Limited, CN

McBEAN, Gordon, President, International Council for Science (ICSU); Professor and Research Chair of Institute for Catastrophic Loss Reduction, Department of Geography & Political Science, University of Western Ontario, CA

***McKINNELL**, Henry A., Chairman and co-Founder, Accordia Global Health Foundation; Chairman, Moody's Investor Services; Chairman and CEO, Optimizer Pharmaceuticals; Chairman, Emmaus Life Sciences, US

MEUNIER, Bernard, President, Academy of Sciences of France, FR

MURRAY, Cherry, Professor of Physics, School of Engineering and Applied Sciences, Harvard University, US

NAKAMURA, Michiharu, President, Japan Science and Technology Agency (JST), JP

***NAKANISHI**, Hiroaki, Chairman and Chief Executive Officer, Hitachi Ltd., JP

***NISHIDA**, Atsutoshi, Adviser, Toshiba Corporation, JP

NORMARK, Staffan, Permanent Secretary, The Royal Swedish Academy of Sciences (RSAS), SE

NOYORI, Ryoji, Director-General, Center for Research and Development Strategy (CRDS), Japan Science and Technology Agency (JST); Nobel Laureate, JP

***NURSE**, Paul, President, The Royal Society; Nobel Laureate, UK

****OKIMURA**, Kazuki, Chairman, Japan Foundation of Public Communication on Science and Technology (PCOST), JP

***OMI**, Koji, Founder and Chairman, Science and Technology in Society (STS) *forum*, JP

ONISHI, Takashi, President, Science Council of Japan (SCJ), JP

PALIS, Jr., Jacob, President, Brazilian Academy of Sciences (ABC); President, The Academy of Sciences for the Developing World (TWAS), BR

RIETSCHEL, Ernst Th., European Affairs Representative, acatech (National Academy of Science and Engineering), DE

ROBERTS, Richard J., Chief Scientific Officer, New England Biolabs Incorporated; Nobel Laureate, UK

RUBBIA, Carlo, Scientific Director, Institute for Advanced Sustainability Studies e.V. (IASS), Nobel Laureate, IT

RÜBIG, Paul, Chairman, Science and Technology Options Assessment (STOA); Member, European Parliament, AT

RUBINSTEIN, Ellis, President and Chief Executive Officer, The New York Academy of Sciences (NYAS), US

***SAKAKIBARA**, Sadayuki, Chairman, Keidanren (Japan Business Federation); Chairman of the Board, Toray Industries, Inc., JP

SERAGELDIN, Ismail, Director, Library of Alexandria; Advisor to the Prime Minister for Cultural, Scientific and Museum Affairs, EG

TAHA, Elzubair B., Governor, Gezira State; former Minister of Science and Technology, SD

TANIGUCHI, Tomihiro, Senior Advisor, Science and Technology in Society (STS) *forum*, JP

***UCHIYAMADA**, Takeshi, Chairman of the Board, Toyota Motor Corporation, JP

***WALLBERG**, Harriet, Professor of Physiology; former-President, Karolinska Institutet, SE

WALPORT, Mark, UK Government Chief Scientific Adviser, Government Office for Science, UK

WAMBUGU, Florence M., Chief Executive Officer, Africa Harvest Biotech Foundation International (AHBFI), KE

WINCE-SMITH, Deborah L., President and Chief Executive Officer, Council on Competitiveness, US

***YEO**, Philip, Chairman, Economic Development Innovations Singapore (EDIS); Chairman, SPRING Singapore, SG

YONEKURA, Hiromasa, Counselor, Sumitomo Chemical Co., Ltd., JP

***YOSHIKAWA**, Hiroyuki, Special Counselor to the President, Japan Science and Technology Agency (JST), JP

ZEHNDER, Alexander J.B., President and Founder, Triple Z Ltd.; former President of the ETH Board, Swiss Federal Institute of Technology (ETH), CH

ZERHOUNI, Elias A., U.S. Science Envoy; President of Global Research & Development, Sanofi SA, US

Overview of the 11th Annual Meeting of the STS forum *October 5-7, 2014, Kyoto, Japan*

The 11th Annual Meeting of STS *forum* was held in Kyoto on October 5-7, 2014. More than 1,000 global leaders in science and technology, policy, business and media from about 100 countries, regions and international organizations, attended the program.



Nizar M. Al-Adsani
Chief Executive Officer,
Kuwait Petroleum Corporation, KW



Megan Clark
Chief Executive, Commonwealth
Scientific and Industrial Research
Organization (CSIRO), AU



Shinya Yamanaka
Director, Center for IPS Cell Research and
Application (CiRA), Kyoto University, JP



France A. Córdova
Director, National Science Foundation (NSF),
US



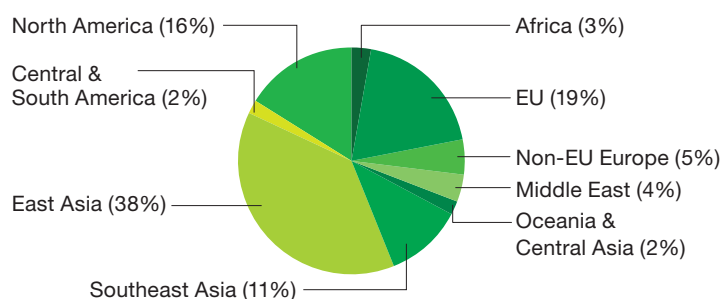
Sadayuki Sakakibara
Chairman, Toray Industries Inc. and Keidanren
(Japan Business Federation), JP

The 2014 Statement, announced on October 7 particularly emphasized the following issues:

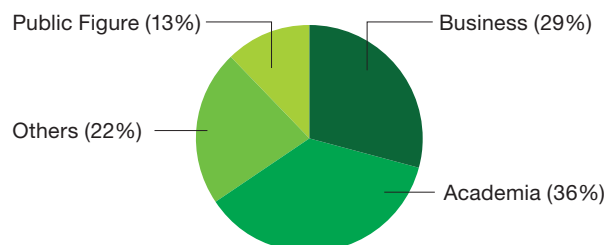
- The quest for a sustainable future for humankind will require greater collaboration between science and society, to increase public trust and promote significant changes in individual and social behavior.
- We strive to develop a coalition that includes the public and private sectors, academia, government and industry as well as the civil society.
- It will be necessary to link the innovation in one part of the world to others that need them, thereby ensuring that sustainable solutions spread throughout the planet.
- Any future energy supply should include a wide range of options that adhere to the best standards of safety and environmental and social compatibility. We will need diverse energy sources, and nuclear power will remain an important option. Intensive enhancement of nuclear safety, security and non-proliferation are also vital.
- It is urgent to strengthen the global community's capacity for dealing with infectious diseases, including Ebola hemorrhagic fever.
- A global-level consensus on universal ICT rules is needed, with particular emphasis on security and privacy.
- The earth is finite. We need to think of humanity's condition from the perspective of 100 or 500 years from now. Living in harmony with nature is of the utmost importance.

Who will you meet? Breakdown of participants at the 11th Annual Meeting of the STS forum (October 5-7, 2014)

◎BY GEOGRAPHICAL REGION



◎BY CONSTITUENCY



STS forum 12th Annual Meeting *October 4-6, 2015, Kyoto, Japan*

ABOUT PARTICIPATION

- Participation is upon invitation only.
- Participants are requested to make their own travel arrangements to the venue.
- Participation fee: JPY100,000 (business); JPY50,000 (other).
- All sessions are conducted in English.

REGISTRATION

- Registration (if and when relevant, hotel reservation also) to be made online.
- Registration deadline: **September 10, 2015.**

In order to ensure full security at the conference venue, participants should be informed that metal detector and X-ray of personal belongings is mandatory at the entrance of the conference.

*This information is subject to change.

STS forum (Non-Profit Organization) Tel: (+81-3) 3519-3351 / Fax: (+81-3) 3519-3352 / www.stsforum.org

