

Fifth Annual Meeting of the Science and Technology in Society (STS) *forum*

"Harmony with Nature" and "How is Information and Communication Technology Affecting Humankind?" October 5-7, 2008, Kyoto

Kyoto International Conference Center (ICC Kyoto)

Saturday, Octo	ober 4, 2008
18:00-20:30	Networking Plaza [Royal Room, Grand Prince Hotel Kyoto]
Sunday, Octob	ber 5, 2008
08:30	Doors Open at the Kyoto International Conference Center (ICC Kyoto)
10:30-11:30 100	Opening Plenary Session: "Science and Technology and the Future of Humankind" [Main Hall]
	<u>Chair</u> : Omi , Koji, Member, House of Representatives; Chairman and Founder, STS <i>forum</i> , JP
	<u>Speakers:</u> Noda , Seiko, State Minister in charge of Science and Technology and Consumer Affairs, JP, of behalf of Taro Aso , Prime Minister of Japan
	Furukawa, Kazuo, Representative Executive Officer, President, CEO and Director, Hitachi Ltd.; Vice Chairman, Nippon Keidanren (Japan Business Federation), JP Garmendia Mendizábal, Cristina, Minister of Science and Innovation, ES Kindler, Jeff, Chairman and CEO, Pfizer Inc, US
	Lu, Yongxiang, President, Chinese Academy of Sciences (CAS), CN Molina, Mario, Professor, Department of Chemistry and Biochemistry, University of California, San Diego (UCSD), MX (Nobel Laureate in Chemistry 1995)
11:45-13:00	Buffet Lunch [Sakura / Lobby]



13:20-14:50 101	Plenary Session: "Crucial Issues and Development of Science and Technology" [Main Hall]
	What are the most crucial issues today at the crossroads of science and society? What are the challenges that need to be dealt with immediately? How can the sustainability dimension remain a top priority?
	<u>Chair:</u> Yoshikawa , Hiroyuki, President, National Institute of Advanced Industrial Science and Technology (AIST), JP
	Speakers: Bréchignac, Catherine, President, French National Center for Scientific Research (CNRS); President-Elect, International Council of Science (ICSU), FR Gaidar, Yegor, Director, The Institute for the Economy in Transition (IET), RU Johnson, Ray, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation, US Ogata, Sadako, President, Japan International Cooperation Agency (JICA), JP Okamoto, Kazuo, Vice Chairman and Representative Director, Toyota Motor Corporation, JP Rahman, Atta-ur-, Federal Minister and Chairman of the Higher Education Commission (HEC), Government of Pakistan, PK Zehnder, Alexander, Scientific Director, Alberta Water Research Institute; former President of the ETH Board, Swiss Federal Institute of Technology (ETH) Zurich, CH
14:50-15:50 102	Plenary Session: "How is ICT affecting Humankind?" [Main Hall]
	What is information communication technology's impact on the lives of people and on the way corporations and governments function around the world? What new technology is emerging? What conflicts arise from these new developments?
	<u>Chair:</u> Thomson , Robert, Managing Editor, The Wall Street Journal; Editor-in-Chief, Dow Jones & Company, AU
	<u>Speakers:</u> Gopalakrishnan , S. Kris, CEO and Managing Director, Infosys Technologies Limited, IN Hanazawa , Takashi, Director and Senior Vice President, Director of Research and



	Development Planning Department, Nippon Telegraph and Telephone Corporation (NTT), JP Kleiber, Michał, President, Polish Academy of Sciences, PL Sasaki, Hajime, Chairman of the Board, NEC Corporation, JP Swope, William, Vice President and General Manager, Corporate Affairs Group, Intel Corporation, US
15:50-16:30	Coffee Break
16:30-18:30 103	A1: Climate Change: Socioeconomic and Security Impacts [Room B-1]
	The expanding economic and industrial activities of humankind have made climate change into a global issue. In recent years, business and industrial initiatives have been undertaken in order to tackle this issue, and economic interest is increasing. In this session, the following points will be discussed from the perspective of socioeconomic and security impacts: 1) Big picture of climate change, including the impacts of a changing climate on economic, social and industrial infrastructure and activities. 2) Respective approaches of industrial circles to tackling climate change: CO2 reduction technology, emissions trading, reducing vulnerability and related issues. Chair: McBean, Gordon, Chair of Board and CEO, Canadian Foundation for Climate and Atmospheric Sciences, CA Speakers: Adachi, Toshio, Representative Director and Executive Vice President, Sharp Corporation, JP Bernard, Rob, Chief Environmental Strategist, Microsoft Corporation, US Da Silva, Wilson, Editor-in-Chief, Cosmos Magazine, AU Kennel, Charles, Professor, Scripps Institution of Oceanography, University of California, San Diego (UCSD), US Masuda, Yukio, Corporate Advisor, Mitsubishi Corporation, JP von Deessen, Ulrich, Climate Protection Officer and President, Competence Center Environment, Health and Safety, BASF SE, DE



B1: Infectious Diseases [Room C-2]

What are the results of state-of-the-art research in preventing and controlling both creeping and surging pandemics? What mechanisms would allow these products to be equally shared by the whole of humankind?

Chair:

Yeo, Philip, Senior Science and Technology Advisor, Ministry of Trade and Industry, SG

Speakers:

Hacker, Jörg, President, Robert Koch-Institut, DE

Herrling, Paul, Head of Corporate Research, Novartis International AG, CH Imura, Hiroo, President, Foundation for Biomedical Research and Innovation (FBRI), JP Matano, Tetsuro, Professor, Division of Microbial Infection, Institute of Medical Science, International Research Center for Infectious Diseases, The University of Tokyo, JP Poovorawan, Yong, Professor, Department of Pediatrics, Faculty of Medicine, Chulalongkorn

Sun, Xiaodong, Director, Office of Public Health Emergency Response & Preparedness, Shanghai Municipal Center for Disease Control & Prevention, CN

Rapporteur:

University, TH

Karpati, Melinda, CEO and Chairman, AmVac AG, CH

C1: New Materials – What Can They Do for a Sustainable Society? [Room K]

Materials to facilitate the practical application of new technologies will be discussed for new energy systems, fresh water supplies, and critical issues of the global environment.

Chair:

Kitazawa, Koichi, President, Japan Science and Technology Agency (JST), JP

Speakers:

Brandstetter, Franz, Senior Technology Consultant, former President, Polymer Research, BASF SE, DE

Eastham, Tony, Acting Vice President for Research and Development, Hong Kong University of Science and Technology (HKUST), CA

Hosono, Hideo, Professor, Materials and Structures Laboratory, Tokyo Institute of Technology, JP

Schlapbach, Louis, CEO, Swiss Federal Laboratories for Materials Testing and Research



(EMPA), CH

Yasui, Itaru, Vice Rector Emeritus, United Nations University, JP

D1: Science and Engineering Education [Room I]

Making science-based studies more attractive to students is a worldwide issue. This session will cover science and engineering education at all levels, from K - 12 to college/university and at the application level. Businesses are feeling a shortage of the skills that ensure innovation. How can we entice a larger number of students to embark in a career in science and research? What can be done on the policy side? What is the role of the media?

Chair:

Peacock, Jim, Fellow, Commonwealth Scientific and Industrial Research Organisation (CSIRO); former Chief Scientist, Department of Education, Science and Training (DEST), Australian Government, AU

Speakers:

Cox, Stephen, Executive Secretary, The Royal Society of U.K., UK

Ding, Lei, President, Shanghai General Motors Corporation Limited, CN

Krieger, Eduardo, Head, Hypertension Unit, InCor - Heart Institute/USP; former President, Brazilian Academy of Sciences, BR

Mazur, Eric, Balkanski Professor, Harvard University, US

Ponting, Arlene, CEO, Science Alberta Foundation, CA

Schaal, Barbara, Vice President, National Academy of Sciences (NAS), US

E1: International Collaboration in Science and Technology [Room C-1]

There are two levels of international collaboration; by country and by laboratory. Collaboration can apply to two types of research: a) projects, with a fixed term and commitment, and b) programs, which are on a longer term basis; the latter are more difficult to implement between laboratories.

What is driving the strategic orientations of these projects? What kind of innovation can we expect as a result of such collaborations? What difficulties might be encountered and what are the keys to overcoming the obstacles?

Chair:

Aymar, Robert, Director General, CERN (European Organization for Nuclear Research), FR



Speakers:

Ikeda, Kaname, Director General, ITER, JP

Klocke, Fritz, President, International Academy for Production Engineering (CIRP), DE **Talwani**, Manik, President and CEO, Integrated Ocean Drilling Program Management International (IODP-MI), US

Taylor, Martin, President and CEO, Ocean Networks Canada (ONC), CA

F1: Collaboration among Universities / Research Institutes / Industries [Room B-2]

Collaboration among universities, research institutes and industries is extremely important for profound innovation processes. Spin-offs are quite successful in many countries. We will explore and validate processes, discuss best practice examples, and sketch the chances as well as possible risks of such efforts.

Chair

Wince-Smith, Deborah, President, Council on Competitiveness, US

Speakers:

Feczko, Joseph, Senior Vice President and Chief Medical Officer, Pfizer Inc, US

Gomez Restrepo, Hernando, President, Council of Competitiveness, CO

Lau, Lawrence, Vice Chancellor and President, Chinese University of Hong Kong (CUHK), HK

Matsushige, Kazumi, Professor, Kyoto University, JP

Profumo, Francesco, Rector, Polytechnic University of Torino, IT

Rietschel, Ernst, President, Leibniz Association (WGL), DE

Russell, Alan, Chairman and Director, McGowan Institute for Regenerative Medicine, University of Pittsburgh, UK

Tan, Chorh Chuan, Acting President, National University of Singapore, SG

G1: Business Innovation through ICT – How ICT Affects Business [Room J]

What significant impacts have you seen in your organization by using ICT, and how can ICT improve business? What are the major issues which we are facing now? How can we best use ICT, and what kind of change could it bring to the future of the business world?

Chair:

Higashi, Tetsuro, Chairman and CEO, Tokyo Electron Limited, JP

Speakers:

Balasubramanian, Bharat, Vice President, Group Research and Advanced Engineering, E/E, IT



	& Processes, Daimler AG, DE Chami, Ahmed, Minister of Industry, Trade and New Technologies, MA Ito, Chiaki, Member of the Board and Vice Chairman, Fujitsu Limited, JP Ito, Joichi, CEO, Creative Commons, JP Sahin, Kenan, President, TIAX LLC, US Rapporteur: Saracco, Roberto, Director, Future Centre and Scientific Communications, Telecom Italia SpA, IT
18:30-19:30	Cocktails [Event Hall]
19:30-21:00 104	Official Dinner: "Lights and Shadows of Science and Technology" followed by Nightcap [Event Hall]
	Moderator: Hayashi , Yasuo, Chairman and CEO, Japan External Trade Organization (JETRO), JP
	Speakers: El-Hassan, Princess Sumaya, President, Royal Scientific Society of Jordan (RSS), JO Holliday Jr., Charles, Chairman and CEO, DuPont (E.I. du Pont de Nemours and Company), US
Monday, Octo	ober 6, 2008
08:30-09:50 200	Plenary Session: "Science and Technology in the Service of Health" [Main Hall]
	Biological science cannot be pursued for its own sake. Rather, it should be directed to enhance society, and translate into meaningful health solutions. However, developing these health solutions is not enough; we must be able to deliver them to the people who need them most. Successful delivery requires that we confront significant hurdles, including regulatory, logistical and demand creation barriers. After overcoming these barriers, we are then faced with the biggest challenge: to make these solutions broadly available even to those who cannot afford them.

Yamada, Tadataka, President, Global Health Program, Bill & Melinda Gates Foundation, US



	Т :
	Speaker:
	Brennan, David, CEO, AstraZeneca Plc, UK
	Hasegawa, Yasuchika, President, Takeda Pharmaceutical Company Limited, JP
	Kosgei, Sally, Minister of Higher Education, Science and Technology, KE
	Lim, Chuan Poh, Chairman, Agency for Science, Technology and Research, (A*STAR), SG
	von Eschenbach, Andrew, Commissioner, U.S. Food and Drug Administration (FDA), US
09:50-10:20	Coffee Break
10:20-12:20 201	A2: Harmony with Nature – Nuclear Energy Alternative [Room B-2]
	Nuclear power generation, both fission, and in the future, fusion, is key to meeting future global energy needs. What are the policies and technologies available to ensure safety and non-proliferation?
	Chair:
	Orbach, Raymond, Under Secretary for Science, U.S. Department of Energy (DOE), US
	Speakers Arima Akita Chairman Japan Science Foundation JB
	Arima, Akito, Chairman, Japan Science Foundation, JP Batterham, Robin, President, Australian Academy of Technological Sciences and Engineering (ATSE), AU
	Debreuille , Marie-Françoise, Vice President, Research and Innovation, AREVA Group, FR Gottfried , Kurt, Co-founder and Chair, Union of Concerned Scientists (UCS), US
	Laval, Guy, Foreign Secretary, Academy of Sciences of France, FR
	Maekawa, Osamu, Chief Technology Executive, Toshiba Corporation Power Systems Company, JP
	Muto, Sakae, Managing Director, The Tokyo Electric Power Company Inc., JP Otheguy, Héctor, CEO, INVAP, AR
	Table Rapporteur
	Pradel, Philippe, Director, Nuclear Energy Division, French Atomic Energy Commission (CEA),
	FR
	B2: New Development in the Genome Era [Room C-2]
	Will whole genome sequencing be used for medical purposes in the future and if so, how?
	Will whole genome sequencing be applied to all citizens of a society in the future? If so,



what would be the concerns? How will whole genome sequencing be regulated in terms of research as well as public use? How will the possibility to conduct whole genome sequencing influence pharmaceutical companies? How is the FDA reacting to whole genome sequencing?

Chair:

Hayashizaki, Yoshihide, Director, Omics Sciences Center, RIKEN, JP

Speakers:

Colwell, Rita, Distinguished University Professor, Center for Bioinformatics and Computational Biology, University of Maryland and Johns Hopkins University, US **Conde**, Jorge, President and CEO, Knome Inc., US

Landis, Story, Director, National Institute of Neurological Disorders and Stroke, National Institutes of Health (NIH), US

Lindpaintner, Klaus, Head, Roche Genetics, Molecular Medicine Laboratories, F. Hoffmann-La Roche Ltd., AT

Ugrumov, Mikhail, Counselor of the Presidium of the Russian Academy of Sciences on Foreign Affairs, Russian Academy of Sciences, RU

Winter, Alan, President and CEO, Genome British Columbia, CA

C2: What can ICT do for Education? [Room K]

With technology natives, it is not about getting an ICT education, but rather integrating ICT into all education, making it a part of all disciplines. How do you make ICT a tool, rather than a subject of study? How do you integrate it, when the teachers are not technology natives and the students know more than their instructors?

Technology natives will continue to push the boundaries of innovation in order to achieve their goals. They are the new generation of IT "experts." How do you encourage innovation without hampering technology natives' expectations and the way they operate? How do you educate non-technology natives to adapt to rapidly changing information needs within the business to provide mobility and simplicity while at the same time securing it?

Chair:

Bregman, Mark, Executive Vice President and Chief Technical Officer, Symantec Corporation, US

Speakers:

Adly, Noha, Director, Information and Communication Technology Department and International School of Information Science (ISIS), Bibliotheca Alexandrina, EG **Kulikov**, Gregory, Executive Vice President, TransTeleCom, RU **Leslie**, Ian, Pro-Vice Chancellor (Research), University of Cambridge, UK



Martin, David, Executive Chairman, SMART Technologies, CA

Murai, Jun, Vice President, Keio University, JP

Schoenberger, Chana, Associate Editor, Forbes Magazine, US

Siriruchatapong, Pansak, Executive Director, National Electronics and Computer Technology Center (NECTEC), TH

D2: Role of Universities – What is Needed of Universities in the 21st Century? [Room B-1]

Are universities producing the right talents to respond adequately to the emerging needs of society? Are they living up to the expectation of excellence in research? Are they equipped to do so?

Chair:

Anzai, Yuichiro, President, Keio University, JP

Speakers:

Eichler, Ralph, President, Swiss Federal Institute of Technology (ETH) Zurich, CH **Ghubash**, Rafia, President, Arabian Gulf University (AGU), AE

Kovačević, Branko, Rector, University of Belgrade, RS

Lenzen, Dieter, President, Free University of Berlin, DE

Seabra Santos, Fernando, Rector, University of Coimbra (UC), PT

Suh, Nam Pyo, President, Korea Advanced Institute of Science and Technology (KAIST), KR

Table Rapporteur

Minami, Masago, Senior Writer, Yomiuri Shimbun, JP

E2: Research Collaboration between Developed and Developing Countries [Room C-1]

We live in an age of scientific and technological abundance, which is estimated to double every 12 months. But nearly 80% of it is generated in developed countries, widening the capability gap with developing countries. The rapid expansion in knowledge opens up new avenues for promoting research cooperation between developed and developing countries to solve challenges such as meeting human needs, enhancing economic performance, protecting the environment and improving governance. What do you consider to be the single most effective way to promote such cooperation? Can you provide one example that illustrates the efficacy of the approach?

Chair:

Juma, Calestous, Professor, Practice of International Development, Belfer Center for Science



and International Affairs, Harvard University, KE

Speakers:

El Nazer, Hani, President, National Research Center (NRC), EG

Forssberg, Hans, Vice President, Karolinska Institutet, SE

Fujii, Nobutaka, Executive Vice President, Kyoto University, JP

Hassan, Mohamed, Executive Director, the Academy of Sciences for the Developing World (TWAS), SD

Kojima, Seiji, Ambassador for Science and Technology Cooperation, Ministry of Foreign Affairs (MOFA), JP

Rubinstein, Ellis, President and CEO, New York Academy of Sciences, US **Rwamasirabo**, Emile, Ambassador, Embassy of the Republic of Rwanda, RW **Singer**, Peter, Professor of Medicine, University of Toronto, CA

F2: Interface and Dialogue between Humanities and Natural Sciences [Room I]

In this session, humanities includes social sciences; we will particularly focus on good practices, whereby humanities and hard sciences can complement each other in serving specific objectives in certain areas, including sustainability and education. A larger interface between the two areas can be instrumental in many ways, including raising awareness in society, and linking new scientific findings to policies.

<u>Chair:</u>

Yaari, Menahem, President, Israel Academy of Sciences and Humanities, IL

Speakers:

Dutkiewicz, Rafał, Mayor, City of Wrocław, PO

Haiduc, Ionel, President, Romanian Academy, RO

Hasse Ferreira, Joel, Member, European Parliament, PT

Kuroda, Reiko, Professor, Graduate School of Arts and Sciences, The University of Tokyo, JP

Niiniluoto, Ilkka, Chancellor, University of Helsinki, FI

Otieno Malo, Joseph, President, Kenya National Academy of Sciences (KNAS), KE

G2: Role of Venture Capital in the Developed and Developing World [Room J]

One original purpose of venture capital was to discover seeds of new businesses and industries for the next generation and to foster their growth. However, lately, in Silicon Valley for example, the purpose of venture capitals has become too often to earn big money



through a "money game." In this session, we will discuss not the "money game" but the original and ideal role of venture capital: discovery and practical realization of new businesses, based on the speakers' respective experience and vision.

Chair:

Hara, George, Group Chairman and CEO, DEFTA Partners; Ambassador, UN ECOSOC, JP

Speakers:

Hsu, Charles, President, eMemory Technology Inc., Chinese Taipei

Massingue, Venâncio, Minister of Science and Technology (MCT), MZ

Moon, Chulso, CEO, Cangen Biotechnologies; Adjunct Professorship of Otolaryngology and Oncology, Johns Hopkins Medical Institute, KR

Patel, Ketan, CEO, Greater Pacific Capital, UK

Vargas Guerrero, Rodolfo, Chief Technology Officer, XVD Technology Holdings (USA) Inc., MX

12:20-14:05 202

Working Lunch: "Dialogue between Political Leaders and Scientists" [Annex Hall]

A productive dialog between political leaders and scientists might begin by addressing three questions: How should we strike a balance between global cooperation and competition? What should be the balance between public resources for basic research and for applied research and innovation? How should we establish a wise balance of resources to match the disparate goals of the various actors in the scientific arena - students, researchers, governments and companies?

Chair:

Goldin, Daniel, Chairman and CEO, Intellisis Corporation, US

Speakers:

Barañao, Lino, Minister of Science, Technology and Productive Innovation, AR **Cohen**, Jay, Under Secretary for Science and Technology, U.S. Department of Homeland Security, US

Kumar, Ashok, Chair, Parliamentary Office of Science and Technology (POST), Houses of Parliament, UK

Mlynek, Jürgen, President, Helmholtz Association of National Research Centres, DE **Rowland**, F. Sherwood, Donald Bren Research Professor of Chemistry and Earth System Science, University of California, Irvine (UCI), US (Nobel Laureate in Chemistry 1995) **Schiesser**, Fritz, President of the ETH Board, Swiss Federal Institute of Technology (ETH), CH



14:20-16:20 203

A3: Harmony with Nature – Managing Water Resources [Room B-1]

The world faces serious challenges in ensuring that it has enough water resources to sustain a growing population, rapid urbanization and new agricultural needs. More than half the world now lives in cities, many of which do not have good water services and have serious water pollution problems. But there are solutions to these challenges. Many of these are the result of technological innovation combined with good governance and management. This session focuses not just on the challenges, but the solutions and especially the role of technology.

Chair:

Khoo, Teng Chye, Chief Executive, Public Utilities Board (PUB), SG

Speakers:

Braga, Benedito, Director, Brazilian National Water Agency (ANA), BR **Conzelmann**, Claus, Vice President for Safety, Health and Environment, Nestlé S.A., DE **Guinot**, François, President, National Academy of Technologies of France (NATF), FR *Kada*, Yukiko, Governor, Shiga Prefecture, JP

Szöllösi-Nagy, András, Deputy Assistant Director General, Natural Sciences Sector, UNESCO, HU

B3: GMOs for Food, Fiber and Fuel [Room C-2]

How can GMOs gain broader acceptance in contributing to food storage alleviation and in improving the productivity of biomass and other crops for fuel production?

Chairs:

El-Beltagy, Adel, Chair, Global Forum on Agricultural Research (GFAR), EG **Fedoroff**, Nina, Science and Technology Adviser to the Secretary of State, U.S. Department of State, US

Speakers:

Datta, Asis, Professor of Eminence, National Institute for Plant Genome Research (NIPGR) New Delhi, IN

Fischhoff, David, Vice President, Technology Strategy and Development, Monsanto Company, US

Holmgren, Peter, Director, Environment, Climate Change and Bioenergy Division, Natural Resources Management and Environment Department, Food and Agriculture Organization of the United Nations (FAO), SE



Oishi, Michio, Director, Kazusa DNA Research Institute, JP **Van Montagu**, Marc, President, European Federation of Biotechnology (EFB); Chairman, Institute for Plant Biotechnology for Developing Countries (IPBO), BE

C3: What can ICT do for Health? [Room K]

What is the role of ICT in personalized medicine, remote diagnostics and care and early warning systems in global health challenges? What are some opportunities for efficient and cost-effective healthcare? What are the demands of the state, and what are the expectations from the society and the citizens? How can inherent risks be avoided to ensure privacy and safety of information while infinite storage of information about individuals will never vanish?

Chair:

Campbell, Donald, Senior Strategy Advisor, Davis LLP, CA

Speakers:

Chang, Morris, Chairman, Taiwan Semiconductor Manufacturing Co. Ltd., US Gage, John, Partner, Kleiner Perkins Caufield & Byers, US Graydon, Oliver, Editor-in-Chief, Nature Photonics, UK Harbour, Malcolm, Member, European Parliament for the West Midlands, UK Hegarty, John, Provost, University of Dublin, Trinity College, IE Kitano, Hiroaki, Director, The Systems Biology Institute (SBI), JP Sangin, Amirzai, Minister of Communications and Information Technology, AF Sutherland, Garnette, Professor of Neurosurgery, Department of Clinical Neurosciences, University of Calgary, CA

D3: Proposals from Young Scientists [Room I]

In this new initiative we have identified 10 new leaders from around the world, the 2008 STS *forum* Future Leaders. Topics will include: fostering young researchers, schemes to develop the creative ideas of young researchers, establishing networks among young researchers and mutual and international exchange between industrial, academic and governmental sectors within participants and compiling the offered opinions.

Chair:

Schürer, Wolfgang, Chairman, Foundation Lindau Nobelprizewinners Meetings at Lake Constance, CH



E3: Brain Drain, Brain Gain and Brain Circulation [Room B-2]

Brain drain for some countries is brain gain for others. What are the conditions to attract talents? What are the conditions to retain talents?

Chair:

Zhang, Jie, President, Shanghai JiaoTong University, CN

Speakers:

Bououny, Lazhar, Minister of Higher Education, Scientific Research and Technology, TN *El-Hassan*, *Princess Sumaya*, *President*, *Royal Scientific Society of Jordan (RSS)*, *JO* **Kabganian**, Mansour, Deputy Minister, Ministry of Science, Research and Technology, IR **Omer**, Ibrahim, Minister of Science and Technology, SD **Winnacker**, Ernst-Ludwig, Secretary General, European Research Council (ERC), DE

Winnacker, Ernst-Ludwig, Secretary General, European Research Council (ERC), DE **Wintermantel**, Margret, President, German Rectors' Conference, DE

F3: Role of Media in Science and Technology [Room C-1]

For the media to play a constructive role in the development of science policy, is the job of journalists more than simply to translate complex issues into a form the public can understand? With issues such as Embryo Research and GM crops, which have a strong policy dimension, should reporters not challenge information given to them by scientific bodies — which like other vested interests can be prone to give a biased view of issues that concern them? Is the role of the science reporter in the 21st century to do more than report clearly and accurately? For the sake of proper policy making, should science correspondents now begin to resist one-sided lobbying by scientific interests groups and subject important social and scientific issues to the same critical scrutiny as good political, economic and foreign correspondents?

Chair:

Kurokawa, Kiyoshi, Special Advisor to the Cabinet; Professor, National Graduate Institute for Policy Studies, JP

Speakers:

Jain, Jinendra K., Chairman, Jain TV Group, IN

Jasny, Barbara, Deputy Editor for Commentary, Science, American Association for the Advancement of Science (AAAS), US

Kamanga, Daniel, Director of Communications and Public Acceptance, Africa Harvest Biotech Foundation International (AHBFI), KE



Osterwalder, Konrad, Rector, United Nations University; Under-Secretary-General of the
United Nations, CH

Park, Penny, Supervising Producer Discovery Specials, Discovery Channel Canada, CA **Power**, Christopher, Assistant Managing Editor – International, BusinessWeek, US

Table Rapporteur:

Bergman, Catherine, Author and Journalist, CA

G3: International Reconciliation of IPR [Room J]

Recent worldwide changes call for the transformation of intellectual property (IP) systems into an internationally coherent framework that is conducive to innovation and creation, which could be called a "pro-innovation global IP infrastructure." To this end, we should consider: (i) forming a common understanding on what is necessary for innovation, including the enhancement of patent quality, and how to reduce the socio-economic risks that arise; (ii) harmonizing national IP systems in view of the pro-innovation factors; and (iii) addressing the North-South issue based on the common understanding.

Chair:

Yu, Geoffrey, Senior Specialist Advisor, Ministry of Foreign Affairs, SG

Speakers:

Akimoto, Hiroshi, Counsel of Intellectual Property, Japan Pharmaceutical Manufacturers Association (JPMA), JP

Hennessey, William, Professor of Law, Franklin Pierce Law Center, US

Koezuka, Masahiro, former Commissioner, Japan Patent Office; Advisor, Mitsui Sumitomo Insurance Co. Ltd., JP

Li, Yonghong, Director General, Electricity Examination Department, State Intellectual Property Office of P.R. China, CN

Oosterlinck, René, Director, Galileo Programme and Navigation related activities, European Space Agency (ESA), BE

Stein, Christian, CEO, Ascenion GmbH, DE

Takagi, Yo, Executive Director, Office of Strategic Planning and Policy Development and the WIPO Worldwide Academy (WWA), World Intellectual Property Organization (WIPO), JP

16:20-16:50	Coffee Break
16:50-18:00 204	Plenary Session: "Biofuels and their Potential Effect on Food Production and the Environment" [Main Hall]



Biofuels are considered to be cheap and dependable alternatives to fossil fuels. Alternative energy crops are being seen as a more profitable use of the land formerly dedicated to food crops and forests. However, this poses a threat to food supply levels, and researchers are exploring the possibility that biofuels pose a serious threat to the global environment. How can we ensure that we can meet the increasing demands of food and energy, and still take into consideration the impact on the environment?

Chair:

Serageldin, Ismail, Director, Library of Alexandria, EG

Speakers:

Desmarescaux, Philippe, Chairman, Scientific Foundation of Lyon, FR

Riisgaard, Steen, President and CEO, Novozymes A/S; Chairman, EuropaBio, DK

Rosegrant, Mark, Director, Environment and Production Technology Division, International Food Policy Research Institute (IFPRI), US

Taha, Elzubeir, Minister of Agriculture, SD

Wambugu, Florence, CEO, Africa Harvest Biotech Foundation International, KE

18:30-20:00 205

Special Buffet Dinner at "Kenninji Temple"

Tuesday, October 7, 2008

08:30-09:25 300

Plenary Session: Summaries from Concurrent Sessions [Main Hall]

Overall Theme Chairs will share with participants their take from all the discussions in different theme tracks.

Chair:

Helal, Hany, Minister of Higher Education and Scientific Research, EG

Speakers:

- [A] Schellnhuber, Hans, Director, Potsdam Institute for Climate Impact Research (PIK), DE
- **[B] Bhumiratana**, Sakarindr, President, National Science and Technology Development Agency (NSTDA), TH
- [C] Carty, Arthur, Executive Director, University of Waterloo Institute for Nanotechnology, CA
- [D] Shirai, Katsuhiko, President, Waseda University, JP
- [E] Córdova, France, President, Purdue University, US
- [F] Lee, Yuan Tseh, President Emeritus, Distinguished Research Fellow, Academia Sinica,



	Chinese Taipei (Nobel Laureate in Chemistry 1986) [G] Brown, Gavin, Inaugural Director, Royal Institution of Australia, AU
09:25-10:15 301	Participants' Open Session [Main Hall]
	In this session, participants are invited to take an active role by coming onstage to briefly express their opinions or ask questions in an open exchange.
	<u>Chair:</u> Helal , Hany, Minister of Higher Education and Scientific Research, EG
10:15-10:45	Coffee Break
10:45-11:45 302	Plenary Session: "Role of Science and Technology in the 21st Century" [Main Hall]
	Leaders from various fields will discuss the role of science and technology. What is the state of S&T in developing countries, and of the North-South research collaboration? How can we fund research? How does business drive research, and how does science impact that business?
	<u>Chair:</u> Komiyama , Hiroshi, President, The University of Tokyo, JP
	Speakers: Bement Jr., Arden, Director, National Science Foundation (NSF), US Hwang, Chang-Gyu, President, Corporate CTO, Samsung Electronics Co. Ltd., KR Markides, Karin, President, Chalmers University of Technology, SE Noyori, Ryoji, President, RIKEN, JP (Nobel Laureate in Chemistry 2001) Sibal, Kapil, Minister of Science, Technology and Earth Sciences, IN Thumann, Jürgen, President, Federation of German Industries (BDI), DE
11:45-12:30 303	Closing Plenary Session: "Returning to Harmony with Nature – What can we do?" [Main Hall]
	We achieved some degree of success last year when the G8 summit adopted our proposals regarding a post-Kyoto protocol, which would be more flexible and practical, and include all major countries. How can we keep that momentum going to achieve harmony between



	nature and humankind so future generations can enjoy the beauty and plenty of Planet	
	Earth we ourselves enjoy?	
	Chair:	
	McKinnell, Henry, Chairman, Accordia Global Health Foundation, US	
	<u>Speakers:</u>	
	HIH The Crown Prince of Japan	
	Friedman , Jerome, Institute Professor and Professor of Physics Emeritus, Physics	
	Department, Massachusetts Institute of Technology (MIT), US (Nobel Laureate in Physics 1990)	
	Omi , Koji, Member, House of Representatives; Chairman and Founder, STS <i>forum</i> , JP	
	Schavan, Annette, Minister, Federal Ministry of Education and Research, DE	
	Swaminathan, Monkombu, Chairman of the Board of Trustees, M. S. Swaminathan Resea	arch
	Foundation, IN	
12:30-13:30 304	Farewell Buffet Lunch [Swan]
14:15-14:45	Press Conference [Room C-2	2]