Science and Technology in Society forum
Second Annual Meeting

“Science and Technology in Society forum:
Lights and Shadows”
- For a Sustainable Future -

PROGRAM

Final

September 11-13, 2005, Kyoto
Kyoto International Conference Hall
September 10, 2005, Saturday

10:00-18:00 Registration
[Venue: Takaragaike Prince Hotel, Lobby Level]

September 11, 2005, Sunday

08:00 – 20:00 Registration
[Venue: Takaragaike Prince Hotel, Lobby Level]

12:30: Opening of the gates of the Kyoto International Conference Hall.

[Caution: For Security reasons no one will be allowed to enter the Kyoto International Conference Hall before 12:30. The Registration will be open all day on Sunday 11 of September, 2005]

14:00 – 15:00 100 Opening Plenary Session [Venue: Main Hall]

- Omi, Koji, Member, House of Representatives, JP (Session Chairman)
- His Imperial Highness The Crown Prince of Japan
- Koizumi, Junichiro, Prime Minister of Japan
- McKinnell, Henry, Chairman of Business Roundtable and Chairman of the Board and Chief Executive Officer, Pfizer Inc., CA
- Okuda, Hiroshi, Chairman, Nippon Keidanren (Japan Business Federation), JP
- Meyer-Krahmer, Frieder, State Secretary, Federal Ministry of Education and Research, DE
- Cicerone, Ralph, President, National Academy of Sciences, US
- Mehta, Goverdhan, President-Elect of International Council for Science (ICSU) and Director of Indian Institute of Science (IISC), IN

15:00-16:00 101 “Science and Technology in Society” [Venue: Main Hall]

- Yoshikawa, Hiroyuki, President, National Institute of Advanced Industrial Science and Technology, JP (Session Chairman)
- Bement, Arden, Director, National Science Foundation, US
- Rattanapian, Pravich, Ministry of Science and Technology, TH
- Sasaki, Hajime, Chairman of the Board, NEC Corporation, JP
- Taha, El-Zubier, Minister of Science and Technology, SD
- Van Ginkel, Hans, Rector, United Nations University, NL
16:00 – 16:30    Coffee Break

16:30 - 18:30 First Series of Concurrent Sessions

**102-A1 “Sustainability – Energy and Environment” [Venue: Room D]**

To draw a perspective as to how the science and technology can contribute to saving the mankind in the 21st century from the crisis of the global sustainability upon which a series of warnings were presented in the 20th century. To seek ways to establish a social system that creates a harmonious advancement of energy, environment and economy toward the restoration of global sustainability.

**Chair by: Komiyama, Hiroshi, President, The University of Tokyo, JP**

**Speakers:**
- Doucet, Gerald, Secretary General, World Energy Council, UK
- Phodhivorakhun, Praphad, Chairman, The Federation of Thai Industries, TH
- Rowland, Sherwood, Donald Bren Research Professor of Chemistry and Earth System, Science Department of Chemistry, University of California, Irvine, US
- Tai, Ichiro, Corporate Vice President, Toshiba Corporation, JP

**102-B1 “Life Sciences” [Venue: Room B-1]**

Recent developments in life science, such as decoding human genome, protein synthesis, and regenerative medicine are remarkable. Moreover, the impact of developments in life science is all the more important as it is directly related to human life and our daily needs.

What are probable major directions, and impacts, of life science and technology in the 21st century?

**Chair by: Corr, Peter, Senior Vice President, Science and Technology, Pfizer Inc., US**

**Speakers:**
- Hayashizaki, Yoshihide, Team Leader, Genemo Exploration Research Group, RIKEN, JP
- Mocumbi, Pascoal, High Representative, European and Developing Countries Clinical Trials Partnership (EDCTP), MZ
- Russell, Alan, Director, McGowan Institute for Regenerative Medicine, University of Pittsburgh, US
- Tjian, Robert, Professor, Molecular and Cell Biology, University of California, Berkeley, US
- Akimoto, Hiroshi, Managing Director, Member of the Board, MPDRAP Advisor, Takeda Pharmaceutical Co., Ltd., JP

**102-C1 “IT’s Impact on Human Society” [Venue: Room C-1]**

How will IT technological development impact: human society, business and work environments, and government services? Will it contribute to reducing the problem of lagging human welfare in the South?

**Chair by: Gage, John, Chief Researcher and Vice President of the Science Office, Sun Microsystems, Inc., US**

**Speakers:**
- Barlow, John Perry, Co-Founder and Vice-Chairman of the Board, Electronic Frontier Foundation, US
We see now “Knowledge-based Society” in which knowledge plays a central role in economic and social development. A competition over economic use of new knowledge is going on worldwide. In order to create new knowledge, to develop applications, and to provide practical benefit to society, how can we best: 1) motivate and educate human resources expected to continuously create and apply new knowledge; 2) maintain the organizations (including universities) that provide thoughtful perspective on applications; 3) address questions of basic rights of access to knowledge?

Chaired by: Kroó, Norbert, General Secretary, Hungarian Academy of Sciences, HU

Speakers:
- Esaki, Leo, Chairman, Science and Technology Promotion Foundation of Ibaraki, JP
- Laffitte, Pierre, Senator, Vice-President, Parliamentary Office of Evaluation of Scientific and Technological Choices (OPECST), FR
- Motuzas, Remigijus, Minister of Education and Science, Republic of Lithuania, LT
- Shirakawa, Tetsuhiisa, Deputy Minister, Ministry of Education, Culture, Sports, Science and Technology, JP

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Science and technology have been contributing to improve the quality of human life. Science and technology are also expected to help maintaining security, health, preventing or mitigating disasters, and so on. How will science and technology be able to contribute to human security and peace keeping?

Chaired by: Aho, Esko, President, Sitra Finnish National Fund for Research and Development, FI

Speakers:
- Chirwa, John, Minister of Industry, Science and Technology, MW
- Choudhury, Jamilur, Vice Chancellor, BRAC University, BD
- Kourilsky, Philippe, former President, The Pasteur Institute, FR
- Noyori, Ryoji, President, RIKEN, JP
- Orbach, Raymond, Director, Office of Science, US Department of Energy, US

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Science and technology have explored the spatial frontiers, for example in the ocean, and between the earth and the rest of the universe. At the same time, science and technology have largely improved humans’ quality of life. What can we, humankind, expect from science and technology in the future? What kind of impact will advanced science and technology have on humankind?

Chaired by: Newton, Richard, Dean of the College of Engineering and the Roy W. Carlson, Professor of Engineering, University of California, Berkeley, AU

Special opening address: Tanahashi, Yasufumi, Minister of State for Science and Technology Policy, JP

Speakers:
Bai, Chunli, Executive Vice President, Chinese Academy of Sciences (CAS), CN
Endy, Andrew, Fellow, Assistant Professor, Biological Engineering Division, Massachusetts Institute of Technology (MIT), US
Kusaka, Kazumasa, Vice-Minister for International Affairs, Ministry of Economy, Trade and Industry (METI), JP
Laughlin, Robert, President, The Korea Advanced Institute of Science and Technology (KAIST), US
Morris, James, Vice President, Engineering and Manufacturing, The Boeing Company, US

18:30 – 19:30    Cocktails
[Venue: Event Hall]

19:30 - 21:30 [104] Official Dinner (seated dinner) [Venue: Event Hall]

Master of Ceremony: Tsukamoto, Hiroshi, President, Japan External Trade Organization (JETRO), JP
Speakers:
• Lazaridis, Mike, Founder, President and Co-Chief Executive Officer, Research In Motion Limited, CA
• Wigzell, Hans, Director, Karolinska Institutet, SE
September 12, 2005, Monday

07:15 - 18:00:   Registration [Venue: Kyoto International Conference Hall]

08:00– 09:30 Plenary Session “Setting the Tone” [Venue: Main Hall]

**Chaired by:** Yeo, Philip, Chairman, A*STAR (Agency for Science & Technology and Research), SG

**Speakers:**
- **Tonegawa,** Susumu, Picower Professor of Biology and Neuroscience, Massachusetts Institute of Technology (MIT), JP
- **Hassan,** Mohamed, Executive Director, Third World Academy of Sciences (TWAS), SD
- **Wambugu,** Florence, Chief Executive Officer, A Harvest Biotech Foundation International (AHBFI), KE
- **Lee,** Yoon-woo, Vice Chairman and Chief Executive Officer, Samsung Electronics Co., Ltd., KR

09:30 – 10:00      Coffee Break

10:00-12:00 Second Series of Concurrent Sessions

**201-A2** “Sustainability – Energy and Environment: Global Warming and C02 Emission Control”
[Venue: Room D]

The world has become aware of the problem of global warming, and most accept the necessity to reduce projected CO2 emissions. As an outcome of efforts of many countries, the Kyoto Protocol came into force on February 16, 2005 although some nations have not signed the agreement. How should the international community address CO2 emission controls beyond the Kyoto Protocol provisions? If we don't act significantly and soon to reduce projected CO2 emissions, what will happen to our climate and to extreme weather events? How can we solve this issue without hindering economic development?

**Chaired by:** Salje, Ekhard, President, University of Cambridge, UK

**Speakers:**
- **Acosta,** Nereus, Congressman, House of Representatives, PH
- **Gagosian,** Robert, President and Director, Woods Hole Oceanographic Institution, US
- **Kawaguchi,** Yoriko, Special Assistant to the Prime Minister, JP
- **Kaya,** Yoichi, Associate Director for Research for Joint Program, Research Institute of Innovative Technology for the Earth (RITE), JP
201-B2 “Life Sciences: Ethical Aspects of Stem Cells and Regenerative Medicine” [Venue: Room B-1]

There is opposition, on ethical grounds, to obtaining human stem cells to use in regenerative medicine. On the other hand, there are high hopes for this type of medicine for people who have no hope to be healed by other means. How should humankind deal with this issue?

Chaired by: McLaren, Anne, Group Leader, The Wellcome Trust/Cancer Research UK Gurdon Institute of Cancer and Developmental Biology, UK

Speakers:
- Burrill, Steven, Chief Executive Officer, Burrill & Company, US
- Murray, Thomas, President and Chief Executive Officer, The Hastings Center, US
- Nielsen, Linda, Rector, University of Copenhagen, DK
- Tandon, P.N., President, National Brain Research Center, IN
- Ten Have, Henk, Director, Division of Ethics of Science and Technology, UNESCO, NL

201-C2 “IT’s Impact on Human Society: Interoperability” [Venue: Room C-1]

To secure interoperability is becoming more and more significant for further applications of IT within society, which is leading to calls for standardizations.

What will be the issues and obstacles to standardization in IT?

Who will be in charge of solving these issues? And how should they be solved?

Chaired by: Anzai, Yuichiro, President, Keio University, JP

Speakers:
- Bentzin, Ben, Chief Executive Officer, World Congress on Information Technology, US
- McCoy, Thomas, Executive Vice President, Legal Affairs and Chief Administrative Officer, AMD, US
- Murakami, Mitsuo, Senior Vice President, Systems Engineering Department, NTT Communications Corporation, JP
- Nishimura, Koichi, Member of the Board of Directors, Fortinet, JP
- Rombach, Dieter, Executive Director, Fraunhofer Institute for Experimental Software Engineering (IESE), DE

201-D2 “Capacity Building: Science Education and Communication” [ Venue: Room E]

Improving ordinary people’s capability to understand science and technology is a worldwide problem. There is broad concern that science may become increasingly like “a black box” for most of the public and that children and students might be “shunning away” from sciences. How can the educational system, including continuing education for all ages, improve all people’s capacity to understand science and technology and let them feel it closer? How can educators and scientists help all people to appreciate the scientific methods of observation, experimentation, and challenge of prevailing views, especially when faith and religious beliefs dominate many people’s thinking?

Chaired by: Omenn, Gilbert, President, American Association for the Advancement of Science (AAAS), US

Speakers:
- Ernst, Richard, Professor Emeritus, Laboratory of Physical Chemistry, ETH -- Swiss Federal Institute of Technology, CH
- Holmgren, Sven-Olof, Professor of Elementary Particle Physics, Stockholm University, SE
- Hopt, Klaus, Vice President, German Research Foundation (DFG), DE
• Shuler, Sally, Executive Director, National Science Resources Center (NSRC), US
• Syka, Josef, President, Czech Science Foundation, CZ
• Xue, Lan, Director, China Center for Science and Technology Policy, Tsinghua University, CN

201-E2 “Science and Technology for Human Security: Infectious Diseases” [Venue: Room C-2]

Infectious diseases are a continuing, and unpredictable threat. Meeting that threat is complicated by the high and increasing costs of dealing with rapid development of drug resistance. How can we deal with this problem, using science and technology?

Chaired by: Rubinstein, Ellis, President and Chief Executive Officer, New York Academy of Sciences, US

Speakers:
• Arai, Kenichi, Trustee, Tokyo Metropolitan Organization for Medical Research, JP
• Gallo, Robert, Director & Professor, Institute of Human Virology, University of Maryland Biotechnology Institute, US
• Matangkasombut, Pornchai, President, Mahidol University, TH
• Montagnier, Luc, President and Co-Founder, World Foundation for AIDS Research and Prevention, FR

201-F2 “New Frontiers Opened in NT” [Venue: Room B-2]

What are the latest opportunities offered through research and development in the NT field? What can we expect from the development of NT technology in the near future; in the long-term future? What are the fears and risks of these latest applications?

Chaired by: Kishi, Teruo, President, National Institute for Materials Science, JP

Speakers:
• Bhandhubanyong, Paritud, Director, National Metal and Materials Technology Center (MTEC), TH
• Ferrari, Mauro, Professor of Internal Medicine, Mechanical Engineering and Materials Science, The Ohio State University, US
• Singer, Peter, Director, University of Toronto, Joint Center for Bioethics, CA
• Williams, R. Stanley, HP Senior Fellow and Director, Quantum Science Research, Hewlett-Packard Laboratories, US

Rapporteur: Tanthapanichakoon, Wiwut, Director, National Nanotechnology Center, TH


Friedman, Jerome, Professor, Massachusetts Institute of Technology (MIT), US
Wallberg-Henriksson, Harriet, President, Karolinska Institutet, SE
Colwell, Rita, Distinguished Professor, Center for Bioinformatics and Computational Biology, University of Maryland, US
13:30 – 15:30  Third Series of Concurrent Sessions


What should we do given the outlook of 1) global energy demand and supply, especially rapidly growing demand in developing countries and 2) future technology? Energy conservation, nuclear power, renewable energy, cleaner use of fossil fuels and hydrogen in the future. Which combination will be the best to use, and how can we, developed and developing countries, work together in this challenge?

Chaired by: Kodaira, Nobuyori, Director-General, Agency for Natural Resources and Energy, JP

Speakers:
- Brouwer, Hugo, Director General for Energy, Dutch Ministry of Economic Affairs, NL
- Gopalakrishnan, Adinarayantampi, Honorary Professor, Energy and Security Department, Administrative Staff College of India, Hyderabad, IN
- Jacometti, Jack, Vice President, Shell International Gas Ltd., UK
- Richter, Burton, Director Emeritus, Stanford Linear Accelerator Center, US

203-B3 “Life Sciences: New Applications of Genomics to Agriculture” [Venue: Room B-1]

It is hoped that applying genetic engineering to agriculture will increase food production and improve nutritional quality. At the same time some people are skeptical about applying genetic engineering to agriculture, on safety or environmental grounds. What is the current situation of agricultural biotechnology? What regulatory and information environment is needed to apply genomics to agriculture in ways broadly acceptable to society? The need to harmonize international trade regulations for transgenic seeds and foodstuff.

Chaired by: Peacock, Jim, President, Australian Academy of Science, AU

Speakers:
- Datta, Asis, Director, National Center for Plant Genome Research New Delhi, IN
- Fauquet, Claude, Director, International Laboratory for Tropical Agricultural Biotechnology, Danforth Plant Science Center, FR
- Fischhoff, David, Director, Technology Strategy and Development Department, Monsanto Company, US
- Thomson, Jennifer, Professor, Department of Molecular and Cell Biology, University of Cape Town, ZA
- Kast, Hans, President and Chief Executive Officer, BASF Plant Science Holding GmbH, DE

203-C3 “IT’s Impact on Human Society: Digital Archiving” [Venue: Room C-1]

A “digital library” is not just collection of text and data in digital form. To be sure, a collection is part of such a library, and by itself that enables a number of good things – easy and inexpensive distribution of mankind’s totality of collected knowledge to the developing world, for example. But in addition, the digital form:
- Allows (semi) automated analysis and manipulation of objects in the collection.
- Allows animate objects in the collection – objects that change with time, user, or external events, for example.
- Allows a far richer interconnection of related information than was possible in a paper-based library.

To reap the potential benefits of a digital library we must explore many questions; for example
- How can developing countries afford the necessary digital infrastructure and access to (copyrighted) digital information?
- How should scholarship be published and how should we pay for that publication?
- What sort of tools need to be developed to locate, analyze and manipulate information in the digital library?
- What standards of scholarship are appropriate to “born digital” objects – animate ones, for example?

**Chaired by:** Omi, Asako, Professor, Research Institute of Science and Technology, Tokai University, JP  
**Speakers:**  
- **Adly,** Noha, ISIS/ICT Director, Department of Information and Communication Technology, Library of Alexandria, EG  
- **Hung,** Ta Ba, Director, National Center for Scientific and Technological Information (NACESTI), VN  
- **Keller,** Michael, University Librarian, Green Library, Stanford University, US  
- **Murakami,** Norio, Vice President, Google Inc., JP  
- **Okerson,** Ann, Associate University Librarian, Yale University, US  
- **Zich,** Otto, Chairman of the University Council, University of Salzburg, AT  

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**203-D3 “Capacity Building: University Reform” [Venue: Room E]**

Many universities in the world are now facing a passing through a difficult situation in that they are not able to create the world-class research and the education expected by the society and the corporate world. What reform is needed for universities to meet these expectations?

**Chaired by:** Zehnder, Alexander, President of the Board, ETH -- Swiss Federal Institute of Technology, CH  
**Speakers:**  
- **Badran,** Ibrahim, future President, Nile University, EG  
- **Bassi,** Davide, Rector, The University of Trento, IT  
- **Kirtikara,** Krissanapong, President, King Mongkut’s University of Technology Thonburi (KMUTT), TH  
- **Leslie,** Ian, Pro-Vice-Chancellor, Research, University of Cambridge, UK  
- **Nagata,** Toyoomi, Chancellor and President, Ritsumeikan University, JP  

**Rapporteurs:**  
- **Burnside,** Mary, Vice Chancellor, Research, University of California, Berkeley, US  
- **Moore,** C. Bradley, Vice President, Research Department, Northwestern University, US

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**203-E3 “Science and Technology for Human Security: Science and Technology to Reduce the Vulnerability of Critical Infrastructures” [Venue: Room C-2]**

Disruption of infrastructure has been caused intentionally by activities such as cyber terrorism or terrorists’ attack on transport facilities. Damage can also be the result of accidents or infrastructure weakness or overloads, for example leading to power blackouts or an atomic power accident. How can science and technology be used to increase the resilience of infrastructures? If major incidents or accidents occur, what can science and technology do in order to minimize the damage?

**Chaired by:** Shah, Haresh, Professor Emeritus, Stanford School of Engineering, Stanford University, US  
**Speakers:**  
- **Pan,** Tso-Chien, Dean of Civil and Environmental Engineering, Nanyang Technological University, US  
- **Ross,** Nick, Independent Journalist and Newscaster, UK  
- **Van Anne,** Craig, Chief Executive Officer, OYO RMS, US  
- **Yakushiji,** Taizo, Member of the Council for Science and Technology Policy, JP
“New Frontiers Opened in IT” [Venue: Room B-2]

What is the present situation and near future prospects of research and development in IT world? What possibilities will the development of IT offer us in a longer range?

Chaired by: Elliott, Roger, Treasurer, International Council for Science (ICSU), UK

Speakers:
- Bishop, Robert, Chairman and Chief Executive Officer, Silicon Graphics, Inc., US
- Fayyad, Usama, Chief Data Officer and Senior Vice President, Yahoo! Inc., US
- Mundie, Craig, Senior Vice President & Chief Technical Officer, Advanced Strategies & Policy, Microsoft Corporation, US
- Nakamura, Michiharu, Executive Vice President and Executive Officer, Hitachi Ltd., JP
- Sekiguchi, Satoshi, Grid Technology Research Center, Director, National Institute of Advanced Industrial Science and Technology (AIST), JP

15:30 – 16:00 Coffee Break

16:00 – 18:00 Fourth Series of Concurrent Sessions


How and to what extent renewable energy can penetrate into the energy market? What are required policies to promote those energy supply systems to reduce CO2 emissions? Is there an efficient framework to promote renewable energy systems internationally, and/or domestically, especially in developing world? As to short term CO2 reduction options by energy conservation, what are the main barriers to promote economically viable, energy saving technologies and equipment on demand side? What are the efficient policies to realize rapid diffusion of energy saving technologies both internationally and domestically? What are key factors to realize drastically efficient energy saving technologies as well as CO2 reduction technologies, and what are efficient strategies to promote RD&D with international cooperation. Is there any energy conservation standard for systems and equipments? How should they be developed, recognized and utilized to increase energy efficiency worldwide?

Chaired by: Ishitani, Hisashi, Professor, Graduate School of Media Governance, Keio University, JP

Speakers:
- Pereira de Carvalho, Eduardo, President, São Paulo Sugarcane Agroindustry Union (UNICA), BR
- Gonzalez-Finat, Alfonso, Director, EC Transport and Energy Directorate, European Commission, BE
- Hirst, Neil, Director, International Energy Agency (IEA), UK
- Masuda, Yukio, Senior Executive Vice President, Mitsubishi Corporation, JP
- Reilly, John, Associate Director for Research for Joint Program, Massachusetts Institute of Technology (MIT), US

“Life Sciences: Translation of Science to the Marketplace – The Development..."
What will be a suitable form of medical development in order to promote human health all over the world, include poor populations? When an outcome of science and technology is brought to the marketplace as a product, how can health benefit to the public be maximized consistent with appropriate benefit (and therefore incentive) for the company that developed the product?

**Chaired by:** Krieger, Eduardo, President, Brazilian Academy of Sciences, BR

**Special opening address:** Otsuji, Hidehisa, Minister of Health, Labour and Welfare, JP

**Speakers:**
- Cassell, Gail, Vice President of Infectious Diseases, Eli Lilly and Company, US
- Laoubdia-Sellami, Karim, Director, Campaign for Access to Essential Medicines, Médecins Sans Frontières (MSF), FR
- Marshak, Daniel, Vice President and Chief Technology Officer, Cambrex Corporation, US
- Yamada, Tadataka, Chairman, Research and Development, GlaxoSmithKline, JP

**Rapporteur:** Choudhary, Muhammad, Iqbal, Acting Director, H.E.J. Research Institute of Chemistry, University of Karachi, PK

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**204-C4 “IT’s Impact on Human Society: Security / Privacy” [Venue: Room C-1]**

It is essential to guarantee appropriate privacy of information. But public security and law enforcement also have needs for access to certain information. Based on ethics, which principles should we respect in order to protect private information? What are appropriate limits on access to information for public security reasons? How should digitized private information be secured? From the viewpoint of securing privacy, what kind of information can be allowed to be digitized and utilized?

**Chaired by:** Ito, Joichi, President and Chief Executive Officer, Neoteny Co., Ltd., JP

**Speakers:**
- Fruchterman, James, President and Chief Executive Officer, Benetech Initiative, US
- Goggans, Chris, President, Security Design International Inc., US
- Ilolov, Mamadsho, President, Academy of Sciences, TJ
- Shirai, Katsuhiko, President, Waseda University, JP

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**204-D4 “Capacity Building: Intellectual Property Rights” [Venue: Room E]**

The outcomes of research and development need an appropriate balance of protection of intellectual property rights to promote future progress of R&D, and availability to the public and to other researchers to continue progress. There are problems for researchers due to inconsistencies in intellectual rights systems between different countries. How can this situation be improved? Can more global standards for intellectual property rights be established? What systems could be better promote international cooperation in research and development? How can we increase intellectual property experts who are acquainted with science and technology, and promote intellectual property mind among scientists?

**Chaired by:** Arai, Hisamitsu, Secretary General, Intellectual Property Strategy Headquarters, Cabinet Secretariat, JP

**Speakers:**
- Brimelow, Alison, President-Elect, The European Patent Office, UK
- Chu, Victor, Chairman and Chief Executive Officer, First Eastern Investment Group, HK
- Myers, Mark, Visiting Executive Professor of Management, The Wharton School, University of
Pennsylvania, US

- **Nowotny**, Helga, Chair, European Advisory Board-EURAB, AT
- **Yu**, Geoffrey, Deputy Director General, Economic Development Sector, World Intellectual Property Organization (WIPO), SG
- **Wilbanks**, John, Executive Director, Science Commons, Creative Commons, US

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**204-E4** “Science and Technology for Human Security: Science and Technology against Natural Disasters” [Venue: Room C-2]

Natural disasters such as the Tsunami in the Sumatra Area cause tremendous damages to human life and economic society. In order to minimize the damages, how can accurate forecasts and rapid alarm systems be put in place? How can science and technology contribute to an efficient information system for prevention, warning, and recovery all over the world? What can science and technology do to reduce economic impact caused by natural disasters?

**Chaired by:** Katayama, Tsuneo, President, National Research Institute for Earth Science and Disaster Prevention, JP

**Speakers:**
- **Chen**, Yong, Professor of Geophysics, China Earthquake Administration, CN
- **Kato**, Teruyuki, Professor, Earthquake Prediction Research Center, Earthquake Research Institute, University of Tokyo, JP
- **Loster**, Thomas, Chairman, Munichre Foundation, DE
- **Sopaheluwakan**, Jan, Deputy Chairman for Earth Sciences, Indonesian Institute of Sciences (LIPI), ID
- **U. Than Myint**, President, Myanmar Engineering Society, MM
- **Thiruppugazh**, V., Joint Chief Executive Officer, Gujarat State Disaster Management Authority, IN

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**204-F4** “New Frontiers Opened in Manufacturing” [Venue: Room B-2]

What is the present situation of cutting-edge research and development in manufacturing? What possibilities can we expect from its cutting-edge research and development?

**Chaired by:** Warnecke, Hans-Juergen, former President, Fraunhofer Institute for Manufacturing Engineering and Automation (IPA), DE

**Speakers:**
- **Ahtisaari**, Marko, Director, Design Strategy, Nokia Corporation, FI
- **Chang**, Morris, Chairman, Taiwan Semiconductor Manufacturing Co., Ltd., US
- **Hobbs**, Robert, Director of Research Operations, United Technologies Research Center, US
- **Mařík**, Vladimir, Head, Department of Cybernetics, Czech Technical University in Prague, CZ
- **Schlögl**, Herwig, Deputy Secretary-General, Organisation for Economic Co-operation and Development (OECD), DE
- **Yoshino**, Hiroyuki, Director and Advisor, Honda Motor Co., Ltd., JP

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18:00 – Transfer by bus to Shokokuji Temple

18:30 – 20:30 **205** Special Buffet Dinner: “Experience Kyoto” hosted by the Kyoto
Support Committee for the STS forum

Welcome Speeches:
- Masumoto, Yorikane, Mayor, City of Kyoto, JP
- Yamada, Keiji, Governor, Kyoto Prefecture, JP
- Murata, Junichi, Chairman, The Kyoto Chamber of Commerce and Industry, JP

Special Entertainment

20:30 – 22:00 Transfer by bus from Shokokuji Temple to Hotels
September 13, 2005, Tuesday

07:15 - 13:00:   Registration [Venue: Kyoto International Conference Hall]

08:00– 09:45 300 Plenary Session: Summaries from Concurrent Sessions [Venue: Main Hall]

Overall theme rapporteurs will report the results of discussions from the concurrent sessions.

**Chaired by:** Arima, Akito, Chairman, Japan Science Foundation, JP

**Sessions Rapporteurs:**
- Cicerone, Ralph, President, National Academy of Sciences, US
- Imura, Hiroo, Chairman, Foundation for Biomedical Research and Innovation (FBRI), JP
- Serageldin, Ismail, Director, Library of Alexandria, EG
- Meyer-Krahmer, Frieder, State Secretary, Federal Ministry of Education and Research, DE
- Goldin, Daniel, Chairman, The Intellisis Corporation, US
- Yoshikawa, Hiroyuki, President, National Institute of Advanced Industrial Science and Technology, JP

09:45 – 10:15      Coffee Break

10:15 – 11:15 301 Plenary Session: “Innovation as a Source of Growth” [Venue: Main Hall]

**Chaired by:** Desmarescaux, Phillippe, Chairman, The World Life Sciences Forum, Scientific Foundation of Lyon, Biovision, FR

**Speakers:**
- Carty, Arthur, National Science Advisor to the President, Government of Canada, CA
- Kotanchek, Theresa, Global Research & Development Director, Dow Chemical Company, US
- Lee, Yuan Tseh, President, Academia Sinica, Chinese Taipei
- Mimura, Akio, Representative Director and President, Nippon Steel Corporation, JP

11:15 – 12:00 302 Closing Plenary Session: “Act Now for the Future” [Venue: Main Hall]

**Chaired by:** Kurokawa, Kiyoshi, President, Science Council of Japan, JP

**Speakers:**
- Gregorian, Vartan, President, Carnegie Corporation of New York, US
- Omi, Koji, Member, House of Representatives, JP
• Alberts, Bruce, Professor, Department of Biochemistry & Biophysics, University of California, San Francisco (UCSF), US

12:00 – 13:00    Farewell Buffet Lunch
[Venue: Garden – Kyoto International Conference Hall]

13:00 –    Press Conference