

Science and Technology in Society (STS) forum  
11th Annual Meeting  
Kyoto, Japan, October 7, 2014  
STATEMENT

1. The 11th Annual Meeting of the Science and Technology in Society forum took place from October 5 to 7, with the participation of about 1,000 global leaders in science and technology, policy, business and media from approximately 100 countries, regions and international organizations who met to reflect on how to strengthen the “lights” and control the “shadows” of science and technology.
2. We are highly honored that Japanese Prime Minister Shinzo Abe, who has attended the forum four times, has now accepted to serve as honorary chairman of this forum. His leadership, based on profound insights into humanity’s future and the role of science and technology in society, will contribute greatly to our forum achieving its goals.
3. The STS forum has entered its second decade. It is with satisfaction that we see that the forum has grown from a mere conference into one of the most important movements for global leaders, and we will build on and broaden the network we have established to further address the problems facing humanity and seek solutions. As part of our mandate, at this year’s meeting the forum fully instituted an “STS Young Leaders Program” inviting more active participation of younger leaders. We will also hold workshops in major cities of the world, including Beijing, Berlin and Kuala Lumpur, before the next Annual Meeting, to expand the forum’s activities.
4. The STS Forum will thus be reaching out to expand the communities with which it is involved. 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. Exchanges between scientists and society should be broadened and improved so that the public can make informed decisions, provided that the risks and benefits are clearly explained. In addition, the importance of STEM education should be highlighted and high-quality science programs should be developed to interest and inform the public about the role of science and technology in society. The arts, humanities, social and political sciences and social innovations are also key elements.
5. Out of that intensified interaction, we strive to develop a coalition that includes the public and private sectors, academia, government and industry as well as the civil society. This coalition will help develop inclusive frameworks that cover the entire global community, frameworks that will expand the role of women and give greater voice to academies of science, engineering and medicine. Chief Technology Officers will become bridges between business and the developers of science and technology in universities, private labs and the public sphere, to nurture innovation.
6. Industrial innovation driven by new manufacturing technologies, robotics, nanotechnology and new materials is playing a vital role in various areas including product development, healthcare and urban living. Agricultural innovation will also be needed as climate change will challenge the production patterns in many parts of the world and aridity makes itself felt in larger geographic zones.
7. It will be necessary to link the innovations in one part of the world to others that need them, thereby ensuring that sustainable solutions spread throughout the planet and that expanding populations, especially in the poorest countries, find the means for decent living standards by husbanding resources and working with new plant varieties of more drought tolerant and salinity resistant plants to ensure food security despite the vast and expanding aridity that will be spreading in large parts of the globe.
8. Science and technology diplomacy enhances relations across national boundaries. Supporting education, research and local entrepreneurship is essential for capacity-building in developing countries. Funding agencies should finance international science collaboration programs promoting multilateral arrangements, especially on global issues. Competition and cooperation among industries focusing on science and technology in the global economy today are increasingly important.

9. Global environmental problems are reaching a critical stage. The need for a consensus on specific measures to reduce CO<sub>2</sub> emissions is urgent. The adjunct session on Regional Action on Climate Change (RACC6) reviewed best practices to promote resilience, and to explore mechanisms that would enhance the incentives for communities and institutions to build up their resilience ahead of the likely severe weather phenomena which different parts of the world will witness; and encouraged initiatives through Knowledge Action Networks, for example, to prepare coastal cities and regions for sea level rise. RACC6 will cooperate closely with “Future Earth,” a new 10-year international research initiative begun in 2013, and will organize a workshop in Alexandria before next year’s meeting.
10. The environment we live in and the ecosystem we are part of are not just the land mass we inhabit and the atmosphere that envelops us. By far the greatest part of our planet is covered by water: the oceans and the glaciers and the surface waters that replenish the moisture in the earth, in a hydrological cycle that allows life to exist. The oceans and their deep currents are central to the climate and the management of GHG emissions and the improved understanding of the oceans and the fresh waters of the earth are at the core of developing effective sustainable development futures for humans, with adequate energy, good health and a rich social life.
11. The shale gas and oil revolution has opened a new phase in the world’s energy supply. We must recognize that any future energy supply should include a wide range of options that adhere to the best standards of safety and environmental and social compatibility. Over the long term, continued burning of fossil fuels will exact an unacceptable environmental cost. 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.
12. In the area of global health issues, research into genomic and regenerative medicine has developed very rapidly. iPS cells have high potential to generate breakthrough technology for cures, and research into personalized and preemptive medicine should also be accelerated together with scientific knowledge on nutrition. Promoting brain science research will contribute to improving quality of life, especially among aging populations. There is more need than ever for a new international system to improve collaboration among industry, academia, the public sector and WHO for global health. It is also urgent to strengthen the global community’s capacity for dealing with infectious diseases, including Ebola hemorrhagic fever.
13. ICT, especially with the emergence of “Big Data,” is changing everything, from research to production, from education to entertainment, from discussion to discovery. A global-level consensus on universal ICT rules is needed, with particular emphasis on security and privacy. The merging of the internet with mobile telephony will transform society and also assist the increased empowerment of women, in advanced and developing countries alike, by encouraging more female participation in research and development, education and entrepreneurship.
14. More than half the world’s population is already living in cities; rapidly growing urbanization raises a variety of challenges and opportunities. More livable, humane and safer urban environments must be developed using science and technology for urban planning to create “smart cities,” to support the evolution of cities, peoples, values and cultures.
15. The world’s population should not continue to expand indefinitely, as the earth is finite. We need to think of humanity’s condition from the perspective of 100 or 500 years from now and promote global cooperation on the management of resources and waste. In this respect, living in harmony with nature is of the utmost importance and we will therefore continue to focus on sustainability for humankind and our planet. We are all committed to activities to pave the way for future generations.
16. We look forward to meeting here again next year. We agreed to hold the 12th Annual Meeting of the STS forum in Kyoto from Sunday, October 4 to Tuesday, October 6, 2015.