



Contents

- Reports on
the 14th Annual Meeting
- Messages from STS *forum*
Regular Participants
 - *Professor Rita R. Colwell*
 - *Dr. Peter Gruss*
- Chairman Omi 's Trips
- Plans for 2018

Join us at : STS *forum* 2018, 15th Annual Meeting

October 7, 8 and 9, 2018

Kyoto International Conference Center

October 1-3, 2017: STS *forum* 14th Annual Meeting at International Conference Center in Kyoto, Japan



Chairman Omi declares STS forum 14th Annual Meeting open.

At 10:00AM on Sunday, October 1, Koji Omi, Founder and Chairman of STS *forum*, opened the 14th Annual Meeting by stating that "science and technology has a greater impact than ever on the future of humanity and STS *forum* has a greater role to play in encouraging dialogue on science and technology and the future of humanity".

More than 1,400 leaders from academia, industry and government from nearly 80 countries and regions gathered at the STS *forum* 14th Annual Meeting for three days,

from October 1-3, to discuss the future of science and technology and humanity.

At the Opening Plenary Session, we had the honor of welcoming Mr. Shinzo Abe, Prime Minister of Japan, Mr. Arkady Dvorkovich, Deputy Prime Minister of the Russian Federation, Mr. Charles O. Holliday JR., Chairman of Royal Dutch Shell Plc. and Mr. Sadayuki Sakakibara, Chairman of the Japan Business Federation (Keidanren) as speakers. Prime Minister Abe, in his key note speech, stated that "I am determined that in this age of science and technology making huge strides ahead, I must turn Japan into a cradle of innovation where the Japanese and anyone from overseas can work together to always create something new." During the Annual Meeting, a total of 40 sessions including 10 plenary and 30 concurrent sessions, were held with active and far-reaching discussions of the pressing matters facing humankind today.



Keynote Speaker Prime Minister Shinzo Abe at the Opening Plenary Session..

The 10 plenary sessions included "Sustainable Development," "Research and Innovation," and "Science, Technology and Education in Digitalized Society." At the "Sustainable Development" session chaired by Professor Cherry Murray of Harvard University and former Director of the Office of Science of the U.S. Department of Energy, Minister Hiroshige Seko of Japan's Ministry of Economy, Trade and Industry introduced an initiative titled Connected Industries (CI), which will utilize AI, sensing, robotics and other technologies to connect knowledge, technology and data across different companies and industries.



Opening Plenary Session. From right: Chairman Koji Omi, STS forum; Prime Minister Shinzo Abe, Japan; Deputy Prime Minister Arkady Dvorkovich, the Russian Federation; Chairman Charles O. Holliday JR., Royal Dutch Shell Plc.; and Chairman Sadayuki Sakakibara, Keidanren.



*Their Imperial Highnesses the Crown Prince and Crown Princess
at the Closing Plenary Session*

On October 3, STS *forum* had the honor of the presence of Their Imperial Highnesses the Crown Prince and Crown Princess of Japan at the Closing Plenary Session where His Imperial Highness the Crown Prince delivered the keynote speech. His Imperial Highness stated that "In thinking of the future of humankind, it is necessary to discuss issues like climate change, energy, food and water from the viewpoint of not only 20 to 30 years in the future but also from a longer-term perspective."

It is also crucial that leaders of governments, industries and academia should get together with specialists in science and technology, and discuss these global issues as their own problem by creating an inter-disciplinary network." His Imperial Highness concluded that "I would like to renew my sincere wishes that the STS *forum*, held here in Kyoto every year will continue concentrating the wisdom of world leaders to discuss the effective use of science and technology for the future of the earth and the sustainable development of humankind, and will further contribute to the future of humanity." Their Imperial Highnesses also listened to Plenary Session "Key Messages from Concurrent Sessions". At the end of The Closing Plenary, Chairman Omi announced 2017 Statement.



*His Imperial Highness the Crown Prince delivered
the keynote speech at the Closing Plenary Session*

Concurrent sessions "Artificial Intelligence" and "Big Data" (ICT), "Innovation in Society" (S&T and Society), and "Environment and Health" (Life Sciences) were especially well attended. "Artificial Intelligence" discussed the recurring themes of what intelligence is, how biases in AI results can be prevented, whether or not a machine can ever exceed human intelligence and win a Nobel Prize, and whether or not the science and technology community should be actively influencing governments to avoid the use of AI in armed conflict. At the "Innovation in Society" session, the major topic of discussion was emphasizing and implementing both science and social science and balancing the role of scientists with that of philosophers. Another topic of discussion was unintended consequences of innovation, such as tracking of internet use with malicious intent. In "Environment and Health" session, participants discussed the homeostasis and the relationship between people's natural and social environments and their health. This topic includes the development of individualized medicine, the impact of human activities on the environment, the spread of zoonotic diseases and the rise of hospital-based infections.

Summaries of the plenary and concurrent sessions will be available at the STS *forum* website (<http://www.stsforum.org/>) by mid-December 2017.



*"Science, Technology and Education in
Digitalized Society" Plenary Session*



*Chairman Omi announcing the 2017
Statement at the Closing Plenary Session*



"Artificial Intelligence" Concurrent Session

Reports on the 14th Annual Meeting

In addition to the plenary and concurrent sessions, eight peer meetings took place: S&T Ministers' Roundtable; University Presidents' Meeting; Research Institute Leaders Meeting; Academy of Science Presidents Meeting, Funding Agency Presidents' Meeting; Academy of Engineering Presidents Meeting; CEO (Chief Executive Officer) Meeting; and CTO (Chief Technology Officer) Meeting. These meetings were closed sessions where attendees could discuss various pending projects freely among themselves. The Regional Action on Climate Change Conference (RACC9), the partnership for adaptation to the natural and social impact of regional climate change and hazards through the power of knowledge action networks, was also held. Participants at the meeting discussed the challenges climate change produces for governments, organizations and regions as they develop adaptation strategies. Finally, the Future Leaders Program with 133 participants from 41 countries, took place.



S&T Ministers' Lunch Reception



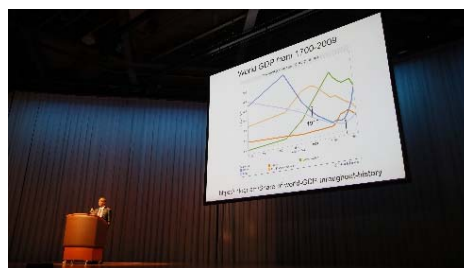
Global Summit of Research Institute Leaders



Networking during a coffee break



Sir Venki Ramakrishnan delivering the dinner speech



Networking at the cocktail before the official dinner



CEO Meeting



Farewell Buffet Lunch in the Kyoto International Conference Center garden

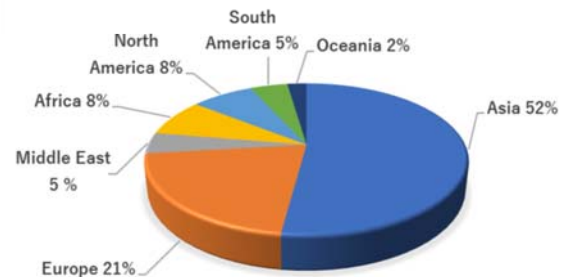


Performance of Japanese traditional dancing at the buffet dinner at Kenninji Temple

STS *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 challenges stemming from the application of science and technology. The STS *forum* community also explores opportunities arising from science and technology and addresses how to remove barriers by using science and technology to solve the problems facing humankind. The Annual Meeting offers various networking opportunities, one of which is the Official Dinner. This year, we invited Sir Venki Ramakrishnan, President of the Royal Society, UK, who received the Nobel Prize for chemistry in 2009, as the dinner speaker. Sir Venki spoke on the potential and risks of emerging technologies. Another highlight this year was a special buffet dinner at Kenninji Temple, the oldest Zen Temple in Kyoto organized by the STS *forum* Kyoto Support Committee headed by Kyoto Prefecture, the City of Kyoto, and others. More than 500 participants enjoyed these special dinners. Participants also had opportunities to interact during the three-day program's lunches, coffee breaks and a networking reception.

Future Leaders Program: “Dialogue between Future Leaders and Nobel Laureates”

STS *forum* invites young promising leaders under age 40 who display strong leadership to play central roles in their fields. They are recommended by academia, research institutions, governments, and member corporations to attend the Annual Meeting and the “Dialogue between Future Leaders and Nobel Laureates.” Future leaders can attend all STS *forum* sessions. They also reap the benefit of building networks with top world leaders such as scientist including Nobel Laureates, academics, policymakers, business leaders, and others.



Breakdown by region of the 133 Future Leaders in 2017

In 2017, 133 future leaders from 41 countries attended and interacted with participants including the dialogue with 15 Nobel Laureates. At the “Key Message from Concurrent Sessions” Plenary Session, two future leaders, Dr. Samia Subrina of Bangladesh and Dr. Glenn Platt of Australia, reported that the future leaders share the beliefs that independence is indispensable for science that collaboration and effective communication are needed to create societal benefits, and that the active participation of future female leaders is essential.



Future Leaders discussing with, from left, Prof. J. I. Friedman, Physics 1990; Sir R. Roberts, Physiology or Medicine 1993; and Prof. Takaaki Kajita, Physics 2015



Nobel Laureates and Future Leaders at the “Dialogue between Future Leaders and Nobel Laureates”

Message from Professor Rita R. Colwell, distinguished University Professor, Center for Bioinformatics and Computational Biology, University of Maryland; Professor Bloomberg School of Public Health, Johns Hopkins University, U.S.A. to the STS *forum* Newsletter.



With great pleasure, I have attended the Science and Technology in Society *forum* (STS *forum*) for more than ten years. It always is an enriching experience with a special pleasure to be able to discuss with colleagues and experts from around the world about advances in science and technology. The special aspect of the STS *forum* is that it is focused on advancement of science for societal benefit. Kyoto is a beautiful city that provides a wonderful venue with very pleasant surroundings in which to form new partnerships and friendships with international colleagues. Science and technology

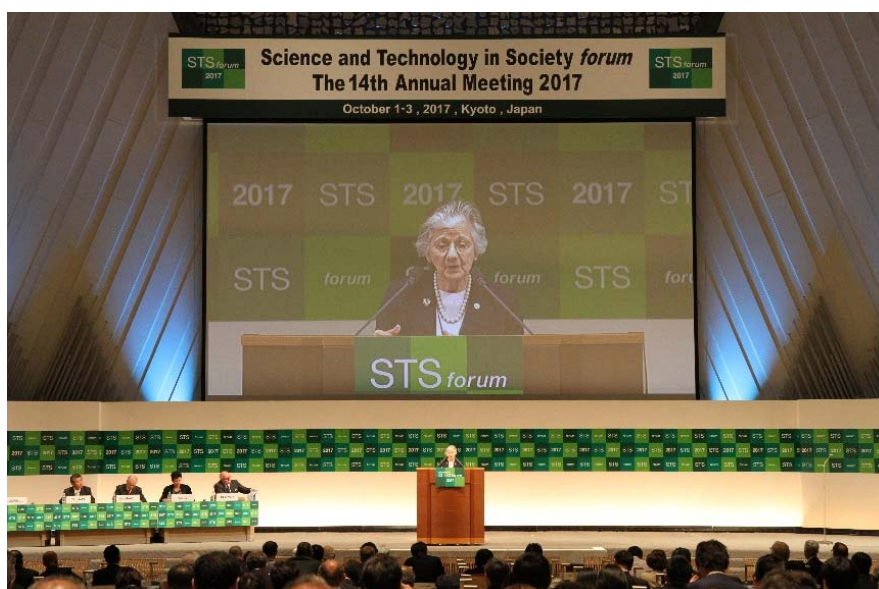
have a critical role to play in the security and advancement of society globally, especially since science provides a powerful means of investment in a sustainable future for humankind.

The STS *forum* can be considered a foundation for new ideas and shared knowledge in science and technology. Societal challenges we face, including the more recent ones of climate change, food security, emerging infectious diseases are topics of the STS, as well as the continuing social problems of poverty, inequality, and lack of opportunity. Both the new and continuing challenges require a coordinated global science and engineering effort to sustain life on this planet. For all of these reasons it is a great pleasure to acknowledge Mr. Omi, a visionary leader and a man who works ceaselessly for a better world. He clearly recognizes the need for a strong foundation for sustainable development, social equity, and strength through science and engineering on a global basis.

I look forward enthusiastically to next year's program, which will provide again, an opportunity to hear from science and technology leaders of the world and to share the dialogue between future leaders and Nobel Laureates, a program that brings young

people to the STS *forum*. I look forward to seeing you at the 2018 STS *forum*.

**Professor Colwell is a former Director of the US National Science Foundation from 1998 to 2004.*



Professor Colwell at the "Research and Innovation" Plenary Session

Message from Dr. Peter Gruss, President and CEO of Okinawa Institute of Science and Technology (OIST) Graduate University to the STS *forum* Newsletter.



This year, I had the opportunity to attend my first STS *forum*, and I left it with a renewed sense of passion and vigor for the future of science. The mixture of participants from all across the globe, from industry CEOs to politicians, from Nobel Laureates to young scientists, was particularly crucial to the effectiveness of this *forum*, as their diverse backgrounds and viewpoints led to many interesting conversations and connections.

The importance of this *forum* is underscored by the fact that the role of science and technology in society must continually be defined as new technologies emerge. As we conquer the global grand challenges of today, new ones will emerge. Cooperation between all sectors of society is necessary to solve these global problems. It is imperative that we prepare future generations for this through education, training and mentorship.

The STS *forum* provided me with a great opportunity to increase my network, both domestic and international. The *forum* provided ample opportunity for participants of all backgrounds to interact and directly contribute to sessions of interest to them.

As President and CEO of the Okinawa Institute of Science and Technology (OIST) Graduate University, I am honored to have been given the chance to represent the university at such a prestigious event. OIST welcomed its first class of students in 2012, many of whom will be graduating at our inaugural ceremony in February. Despite our relatively short existence, I was pleased to hear many positive remarks about OIST from leaders of other universities, institutes and organizations. This was no doubt enhanced by the gracious statements regarding OIST made by Chairman Koji Omi and Dr. Torsten Wiesel during their plenary sessions. Both Dr. Wiesel and Chairman Omi have played a vital role in shaping the future of OIST. I am forever grateful for their visionary leadership abilities. I can only imagine that the next *forum* will be equally enlightening, if not more, than this one. The effort on behalf of the *forum* to diversify the pool of participants in terms of gender, nationality, career level and background should be applauded. I hope to see an even more diverse crowd at *forum* next year. I am greatly looking forward to it.

**Before being inaugurated as President and CEO of OIST, Dr. Gruss was President of the Max Planck Society, Germany, from 2002 to 2014.*



Dr. Gruss acting as chair of the "Science, Technology and Education in Digitalized Society" Plenary Session at the STS forum 14th Annual Meeting

■ The 3rd Eastern Economic Forum, September 6 & 7, 2017



Chairman Omi attends the Russia-Japan Business Roundtable

The 3rd Eastern Economic Forum was held on September 6-7 at Far Eastern Federal University in Vladivostok. The Eastern Economic Forum is an international forum held annually since 2015 for the purpose of encouraging foreign investments in the Russian Far East. Chairman Omi has been an active participant in this Forum since it began.

He participated in the Russia-Japan Business Roundtable where more than 30 Japanese and Russian business and government leaders had active discussions. "The Russian Far East: Creating a New Reality" Plenary Session, was attended by Prime Minister Shinzo Abe of Japan, President Vladimir Putin of the Russian Federation, President Moon Jae-in of the Republic of Korea and President Khaltmaagiin Battulga of Mongolia. In addition to the Forum sessions, Chairman Omi had meetings with Mr. Alexey Repik, President of Business Russia, Mr. Anatoly Chubais, Chairman of RUSNANO Corporation, Mr. Stanislav Voskresensky, Deputy Minister of Economic Development of the Russian Federation, and others.



(LEFT) Chairman Omi attends the Russia-Japan Business Roundtable. (RIGHT) From left, Prime Minister Shinzo Abe of Japan, Chairman Ronnie C. Chan of Hang Lung Properties, Russia, President Moon Jae-in of the Republic of Korea, President Vladimir Putin of the Russian Federation and President Khaltmaagiin Battulga of Mongolia at "The Russian Far East: Creating a New Reality" Plenary Session.

Plans for 2018

- **3rd STS forum INDIA-Japan Workshop**
Date: February 28, 2018
Venue: Delhi, India
- **5th STS forum ASEAN-Japan Workshop**
Date: April 26, 2018
Venue: Cebu, Philippines
- **3rd EU-STS forum High-Level Conference**
Date: May 17, 2018
Venue: Brussels, Belgium
- **15th STS forum Annual Meeting**
Date: October 7-9, 2018
Venue: Kyoto, Japan