## Sforum

Science and Technology in Society forum

2023

## The 20th ANNUAL MEETING

October 1, 2 and 3, 2023 Kyoto, Japan



ssioner for Innovation, Research, Culture, on and Youth, European Commission



Bonginkosi Emmanuel "Blade" Nzimande Minister, Department of Higher Education, Science and Innovation SOUTH AFRICA



Fumio Kishida Prime Minister, Government of Japan





Robbert Dijkgraaf Minister, Ministry of Education, Culture and Science NETHERLANDS



Munir M. Eldesouki President, King Abdulaziz City For Science & Technology (KACST) SAUDI ARABIA



Keiko Nagaoka Minister, Ministry of Education, Culture, Sports, Science and Technology JAPAN



Sethuraman Panchanathan Director, National Science Foundation (NSF) U.S.A.



Masakazu Tokura Chairman, KEIDANREN



Inger Andersen Under-Secretary-General UNITED NATIONS





Lidia Borrell-Damián Secretary General, Science Europe BELGIUM

## **Chairman's Vision**



**Hiroshi Komiyama** Chairman STS *forum* 

As a species, humankind has flourished, developed civilizations and improved living standards. Throughout the long history of humankind, progress was slow, but change came with the Industrial Revolution. The pace of change speeded up, particularly in the 20th century, and has continued to do so.

For example, humans are living longer. In the past, most human lives were short; even at the beginning of the last century, the average lifespan was 31 years. Nowadays, life expectancy has expanded to 73 years and continues to grow. Long life, which our ancestors could only dream of, has become a reality and proof of civilization's success.

Meanwhile, ever-increasing human activity has brought great changes to planet Earth, and economic growth consuming its finite resources has deepened inequality. While it is undoubtedly true that science and technology have contributed to the development of civilization, we now face the situation where development itself is leading to unease about the future.

It was against this background that the STS *forum* was founded in 2004 by Koji Omi. The basic concept of the STS *forum* is to bring together scientists and global leaders in the fields of politics, business and academia who meet yearly in Kyoto, Japan, a city that is both a 1,200-year-old ancient capital and a center of cutting-edge science and technology. There they discuss strengthening the lights and controlling the shadows of science and technology from the long-term perspective of 100 years or 500 years for the future of humanity, not as representatives of their organizations but as concerned individuals. Now in its 20th year, the STS *forum* has grown in size, quality and diversity to become the world's premier platform for discussing issues related to science and technology and their implications for society.

In assuming the role of chairman of the STS forum, I will continue to uphold its basic concept and promote its activities. In addition to our annual meeting, we will continue holding side events, including the Science and Technology Ministers' Roundtable, the Global Summit of Research Institute Leaders, the Academy of Science Presidents' Meeting, the Academy of Engineering Presidents' Meeting, the University Presidents' Meeting, the Funding Agency Presidents' Meeting, CEO and CTO Meetings, the Regional Action on Climate Change Meeting, the Heads of Private Foundations Meeting, the Dialogue between Young Leaders and Nobel

Laureates and the Kyoto Symposium. Our regional workshops will also continue.

As the new chairman, I intend to introduce a new direction in order to further stimulate our organization's growth. Analysis and synthesis are the basic methodology in science and technology, and I intend to place more focus on synthesis. We must create a vision allowing us to identify what we need to do today for the sake of future society. Information must be synthesized, but the explosion of knowledge and its growing compartmentalization have made it increasingly difficult to grasp the overall picture. This makes the task more challenging than ever.

I also look forward to introducing more topics for discussion, from energy, circular society and communications to artificial intelligence and medicine, to help us develop a vision for 2050. In discussing the 100- to 500-year long-term vision for humanity in the STS *forum*, I believe that 2050, or even as early as 2030, will be turning points.

We must also develop a vision for education. In days past, when humanity's progress was slower, the future that young people were likely to see was not much different from what their elders had experienced. That is why the method of the old teaching the young worked well. But today, when science, technology and society are all changing so rapidly, we need to continue learning throughout our lives. This means that lifelong mutual active learning in inclusive societies where people from all walks of life confront social issues together must be at the heart of capacity building. I believe that the STS forum can spearhead this movement.

Population issues are another area where a vision is needed. In some areas of the world, high birth rates and high infant and child mortality are still common, whereas elsewhere average birth rates continue to fall. Current birth rates in half the countries and regions of the world are already insufficient to maintain existing population levels. Consequently, overcoming low birth rates is likely to become an issue for this century.

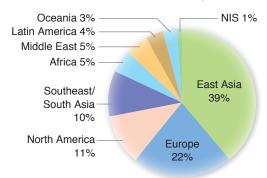
The STS forum's greatest asset is its human network, which goes beyond national boundaries and academic disciplines. To further this asset, we will do our best to continue improving the age and gender balance of participants. In addition, we hope to go beyond our existing circle of friends to include figures prominent in art and literature. I look forward to the insights and creativity that artists and writers can bring to our endeavors.

For the sake of a bright future, we must bring the discussions and activities of the STS *forum* to fruition. The best way to control the shadows of science and technology is to create a society that strengthens their lights. This, I am certain, humankind can accomplish.

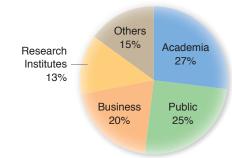
As my thoughts turn toward the future of science and technology and of civilization, this message expresses my hopes and my vision as the new chairman of the STS forum.

## Participants of 19<sup>th</sup> Annual Meeting October 2, 3 and 4, 2022

## **Participants by Region**



## **Participants by Constituency**



## Nearly 1,000 global leaders from over 80 countries, regions, and international organizations attended

- Heads of state, top political advisors and highlevel government officials
  - 29 government ministers
- Academia/Research community strongly represented
  - 10 Nobel Laureates
  - 35 presidents of leading universities
  - 5 academy of science presidents
  - 7 academy of engineering presidents
  - 12 research institute presidents
- Senior business executives
  - 27 CEOs, 39 CTOs
- Funding Agencies, NPOs, and other organizations
  - 35 funding agency presidents
  - 10 private foundation presidents

## More speakers from 19th Annual Meeting

**GOVERNMENT** 



Cathy Foley
Australia's Chief
Scientist, Australian
Government
AUSTRALIA



Yasutoshi Nishimura Minister of Economy, Trade and Industry, Government of Japan JAPAN



Paul Monks Chief Scientific Adviser, UK Government U.K.

ACADEMIA/ RESEARCH INSTITUTES



Ray O. Johnson Chief Executive Officer, Technology Innovation Institute U.A.E.



Ana Mari Cauce President, University of Washington U.S.A.



Antoine Petit Chairman and CEO, National Center for Scientific Research (CNRS) FRANCE

**BUSINESS** 



Marie-Noëlle Semeria Chief Technology Officer, TotalEnergies, FRANCE



Takeshi Uchiyamada Chairman of the Board, Toyota Motor Corporation JAPAN



Amadou Diarra Senior Vice President, Global Policy, Advocacy & Gvt. Affairs, Bristol-Myers Squibb U.S.A.

FUNDING AGENCIES, NPOs, and OTHER ORGANIZATIONS



Magdalena Skipper Editor-in-Chief, Nature U.K.



Maria Leptin President, European Research Council (ERC)



Harvey V. Fineberg President, Gordon and Betty Moore Foundation U.S.A.

## **Plenary Sessions**

# Science and Technology in Society forum The 19th Annual Meeting 2022 Control of 1, 2022 Figure STS Forum STS forum STS 2022 STS Forum STS forum

Mr. Fumio Kishida, Prime Minister of Japan, at the Opening Plenary Session (2022)

## **Concurrent Sessions**



Concurrent Session "Big Data (Opportunities and Risks)" (2022)

## **Peer Meetings**



CTO Meeting (2022)

## **Young Leaders' Program**



"Dialogue between Young Leaders and Nobel Laureates" (2022)

## **Networking**



Networking at the Kyoto International Conference Center (2022)

## Participation in the Annual Meeting

- Participation is by invitation only.
- All sessions are conducted in English.
- Participation fee: Industry - JPY 120,000 / Others - JPY 70,000.
- Participants are requested to make their own travel arrangements to and at the venue.

## Membership

Membership is available to support the STS forum's activities. Please contact member@stsforum.org for details.



### STS forum (NPO)

Sanno Grand Building 419, 2-14-2 Nagatacho, Chiyoda-ku, Tokyo 100-0014, Japan Tel: +81-(0)3-3519-3351 Fax: +81-(0)3-3519-3352

email: information@stsforum.org https://www.stsforum.org/