PRE AGORA 2020.11.13[Fri]—14[Sat] / SCIENCE AGORA 2020.11.15[Sun]—22[Sun]

SCIENCE AGORA 2020

サイエンスアゴラ
2020

科学と社会の関係を深める10日間

A future woven through dialogue between science & daily life

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convene entirely online / admission free / Pre-registration required [for some sessions]

サイエンスアゴラ 2020

Report on Science Agora 2020

Overview of Science Agora 2020

What is "Science Agora" *Agora is ancient Greek for "meeting place"

Science Agora is an open forum that aims to deepen the connections between science and society, where people from all walks of life (residents, researchers, specialists, media, business people, government officials) take part in dialogue. For exhibitors, this is a place they are able to communicate the interest and depth of their own research and development or of science itself to the public. This is a forum for thinking about "what society needs from science," based on the opinions of those attending. For attendees, it is a rare opportunity to hear the views of researchers and experts in person, and to express their hopes and dreams for science and technology in the future. As those attending Science Agora share their experience of the event with others, it also becomes an opportunity for those not attending to think about the connections between science and society.

- **Everyone gathered for Science Agora is a "participant"**

At Science Agora, exhibitors are just as much "participants" as the visitors are. This is not just an academic conference of researchers, and neither is it an event for children alone. Science Agora focus on "co-creation," or the meeting of diverse perspectives and setting all minds on the goal of creating a new and better future. Those participating in Science Agora are interested in co-creation through dialogue and collaboration among people from every walk of life, harnessing science and technology to make policy and create knowledge.

Event outline

■Title: Science Agora 2020

■Dates: Pre-Agora – November 13-14, 2020; Science Agora – November 15-22, 2020

■Format: Online

■Host: Japan Science and Technology Agency (JST)

■Supports (in alphabetical order): Asahi Kasei, Elsevier Japan, Gakken Holdings, IBM Japan, NEC Corporation, NTT

■Special Collaborator: the Swiss Embassy in Tokyo

■Collaborator: Tokyo Teleport Center, Inc., Fuji Television, Kyoto Design Lab at Kyoto Institute of Technology, Wiley, BASE Q

■Cosponsor: the Cabinet Office, Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Economy, Trade and Industry, Science Council of Japan, Japan Business Federation, Japan Association of National Universities, Federation of Japanese Private Colleges and Universities Associations, Institute of Physical and Chemical Research (RIKEN), National Institute of Advanced Industrial Science and Technology (AIST), Japan SDGs Action Platform, Japan Association for the 2025 World Exposition

Theme of Science Agora 2020

Life

The COVID-19 pandemic has caused tremendous change and upheaval in society. Remote work and online classes, thought to be coming sometime in the future, have to some extent become part of the "new normal." While some have seen the future coming faster than expected, others see society moving away from their ideals. The reality is that while some people have benefited from the increased convenience, others have not.

Theme of Science Agora 2019 was "Human in the New Age: What kind of future will we live in?" It called on participants to imagine in detail the lifestyle of the future as enabled by science and technology, and considered the ways to address challenges in a variety of fields. Amid societal upheaval, thought was given to what will change, what will not change, and what we would not want to change. The discussion continued in 2020, but with deeper thinking about our lives, that is to say, both life and lifestyle – who we should be as people, and our touchpoints with science and technology.

There are plenty of unprecedented factors that will change society beyond the pandemic. The way we engage with nature, the sense of distance from friends and family, the implications for health and safety, and social norms will also change. Through the prism of Science Agora 2020, think about our changed lives, life going forward, and our plans for the future.

Science Agora 2020 wraps up successfully, despite pandemic
Thinking deeply about life in the world of the future in 100 sessions

Science Agora 2020, where scientists and citizens gather to think about improving the future of society, is the biggest science event in Japan (host: Japan Science and Technology Agency, JST). After 10 days of sessions including Pre-Agora program, the event concluded in the afternoon of November 22. It was the 15th Science Agora, but the first to be held online amid the coronavirus pandemic. Many of the 100-odd presentations on the theme of life took the online format to heart and made special efforts to present their images and craft their explanations. Across the 10 days, including the Sunday opening and conclusion, large audiences from around Japan and across the generations tuned in to the wide-ranging sessions. Science Agora 2020 was a platform for more profound thinking about our lives and lifestyles, who we should be as people, and our interactions with science and technology.

The sessions are available for viewing until mid-2021 at Science Agora special website (https://www.jst.go.jp/sis/scienceagora/2020/), and are also archived as searchable video on YouTube.

Following the curtain-raising CYBATHLON 2020 Global Edition held on November 13-14, the main program of Science Agora 2020 kicked off with the opening session in the morning of November 15. The approximately 100 sessions were divided into 10 topics for a highly diverse program encompassing the common themes of life; future society; the new normal after COVID-19; diversity and inclusiveness; rural issues and the SDGs; crisis readiness; brainstorming with researchers; the next-generation researcher; applying cutting-edge technology and data; resources, environment, and energy; and study, experience, and production.

Science Agora 2020 was held online across 10 days, including the pre-program, on the theme of life (From the Science Agora 2020 website.)

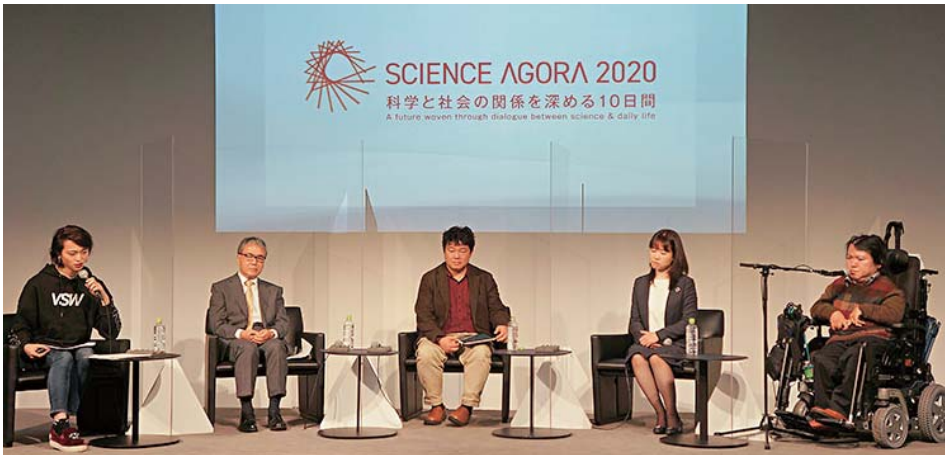
Representing the host, JST President Michinari Hamaguchi made the opening remarks, first addressing the pandemic. He stated, “No year has made us feel so many things about ‘life’ as this year.” Many of this year’s sessions acknowledged the COVID-19 pandemic in some form, and some even directly addressed the research challenges involved in overcoming the disease.

In the session that began at 6pm on November 21, “Researchers speak: COVID-19 from an immunological perspective and from a virological perspective” (Exhibitors – Osaka University Immunology Frontier Research Center and Research Institute for Microbial Diseases), Masayuki Miyasaka, Professor Emeritus at Osaka University and Japan’s leading immunology researcher, provided his analysis of vaccine development and related COVID-19 antibodies based on the latest knowledge.

Masayuki Miyasaka, Professor Emeritus at Osaka University

Professor Miyasaka pointed out that “there are three types of antibodies: the good ones that kill viruses, the bad ones that promote virus infection, and useless ones that do neither. The mysterious thing is that normally, the more antibodies created to fight infection, the less severe the illness, but with COVID-19, seriously ill patients have more antibodies. These patients have many good, bad, and useless antibodies, so it is likely that a poor balance of antibodies is exacerbating their symptoms.” He suggested that to fight the virus, an important line of research would be “to find out how the three types of antibodies are being created in infected patients.”

Having made a large number of points from an immunological perspective, he stressed that “in addition to taking steps to prevent infection, it is also important to stick to your daily routine so that you keep up your immune strength.”



Panelists discuss “Post-pandemic acceleration of the new normal: the Society 5.0 perspective” on the afternoon of November 16 (Exhibitor: JST)

Sessions related to the pandemic included “DIY Disaster Preparedness to Protect Yourself and Others” (afternoon of November 15), “Society 5.0: Renewal of Society Accelerated in the Post-Pandemic” (afternoon of November 16), the Agora citizen meeting, “Can technology connect people? Prospects for social life in the post-COVID society” (afternoon of November 15), and “The Role of the Scientific Community in Disaster Response - Lessons learned from the COVID-19 Pandemic” (afternoon of November 20). In the sessions, enthusiastic discussion continued as speakers made a large number of thought-provoking suggestions about individual lives now that we have all experienced the disaster of the pandemic and the society of the future.

As in previous years, Science Agora dedicated a good portion of the program to raising the interest of young people from elementary to university age and their families in science. Sessions where the online format was harnessed and special efforts were made to present images and craft explanations attracted big audiences and plenty of participants, such as “Illuminating and protecting the wonder of our world” and “What's new in Nishinoshima - A rapidly growing island.”

There were 20 on-demand video sessions to watch anytime, including “After all, we want to watch the atom and molecule!,” “Math behind Rubic's Cube - Using maths to solve Rubik's Cube” and “Science olympiads, the key to the future.”

Scene from the University of Tokyo Earthquake Research Institute on-demand video “What's new in Nishinoshima -A rapidly growing island”. Plume of ash escaping the volcano on Nishinoshima, in the Ogasawara Islands in June 2020. (Provided by University of Tokyo Earthquake Research Institute.)

On the closing day, November 22, a number of sessions were held about science in daily life. From all over Japan, high school students presented online sessions, such as “Welcome to the protein wonderland!” explaining the workings of protein, which is not just a nutrient but the building block of substances essential to living things such as blood and antibodies; “Introduction of paper tops that spin around and jump up with the power of air” by high school students in Okayama Prefecture who researched model rockets and took part in a contest, and who also generated and analysed plasma via dielectric-barrier discharge; and “Imagination x Creativity: Toward harmonious coexistence with AI,” a frank look at how we might live alongside AI and robots by students from a Tokyo high school. Another presentation, “Living by the Sea: 10 years from March 11 and beyond” from Tokyo University of Marine Science and Technology related to the upcoming 10-year commemoration of the Great East Japan Earthquake Disaster.

Panelists discuss the presentation “Living by the Sea: 10 years from March 11 and beyond” in a Zoom webinar
(November 22, afternoon, exhibitor: Tokyo University of Marine Science and Technology and Tohoku Ecosystem-associated Marine Sciences (TEAMS))

The last day also saw more sessions promoting deeper thought about the intertwining of science and technology in life and society. Presentations included “Do you eat genome edited red sea bream?” looking at approaches to genetically engineered food, a technology that is close to real-world application, “Let's live with non-humans” asking us to think about technologies that assist communication from the perspective of microbiology and robot research, and “Particle physics x accelerators x life =?” looking at how particle physics and accelerators have been involved with life.

The final session summarizing the event, “Look-back at Science Agora 2020,” began at 19:00. The Science Agora 2020 Promotion Committee Chair and Professor at the International Professional University of Technology in Tokyo, Shoji Komai, stated, “In line with this year’s theme of life, there was a lot of discussion about individuals and organizations connecting in various ways. With all of the forms of participation of everyone from researchers to high school, junior high, and elementary students, I personally enjoyed watching this event tremendously.”

Representing the host, Director of the Department for Promotion of Science and Society at JST, Atsushi Arakawa, recalled, “It was nerve-wracking to see if we could pull off a 100-session program over 10 days online for the first time, but it was a very full and interesting slate of presentations. I am delighted.”

Professor Shoji Komai (right) and JST’s Atsushi Arakawa look back on Science Agora 2020

As the first online event, Zoom webinars system were held with those wishing to attend registering in advance, in order to ensure two-way exchange with the panelists and attendees through questions from the audience. The webinars were also broadcast as “YouTubeLive” for a wider audience.

Before each session, messages were played from the host: “The COVID-19 pandemic has caused tremendous upset and change in society,” “Amid societal upheaval, thought was given to what will change, what will not change, and what we would not want to change,” and “Think about our changed lives, life going forward, and our plans for the future,”

※This report is reprinted from the Science Portal, a website that provides all the latest information about science and technology at **https://scienceportal.jst.go.jp**

The Event in Numbers

Science Agora 2020 (Annual General Meeting), Friday, November 13 – Saturday, November 22, 2020

Participate (as of final day 11/22, 17:30) **11,448**

〈Breakdown〉

Attendancees			Contributors	Guests	Press	Total
Zoom webinar attendees (excluding exhibitors)	Unique YouTube views during event	Total	※Excluding Science Agora Secretariat	※Excluding online	※Excluding online	
2,612	7,962	**10,574**	854	4	16	**11,448**

Exhibition sessions 102

〈Breakdown〉

Live stream	82
Recorded video	20
Total	**102**

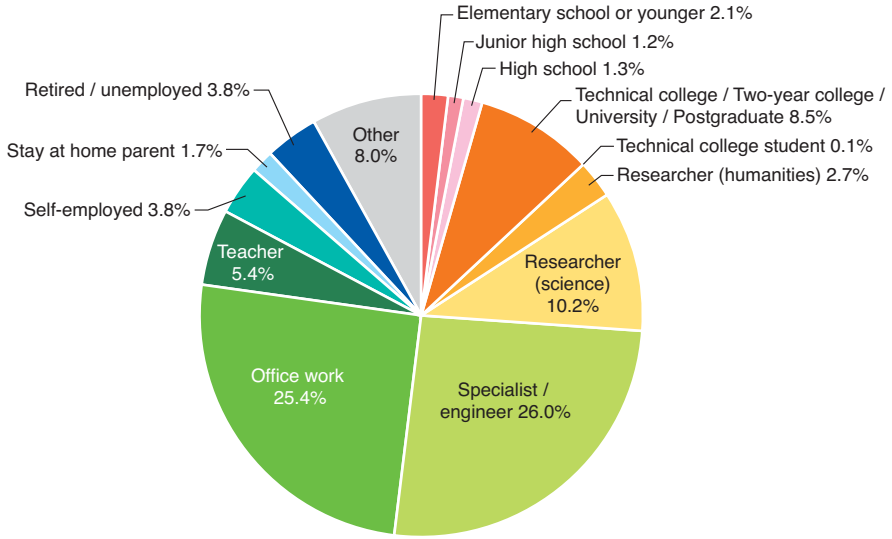
Total views (as of 11/24, 9:00)

〈Breakdown〉

Total views (estimate) (Zoom webinar+YouTube)
25,979

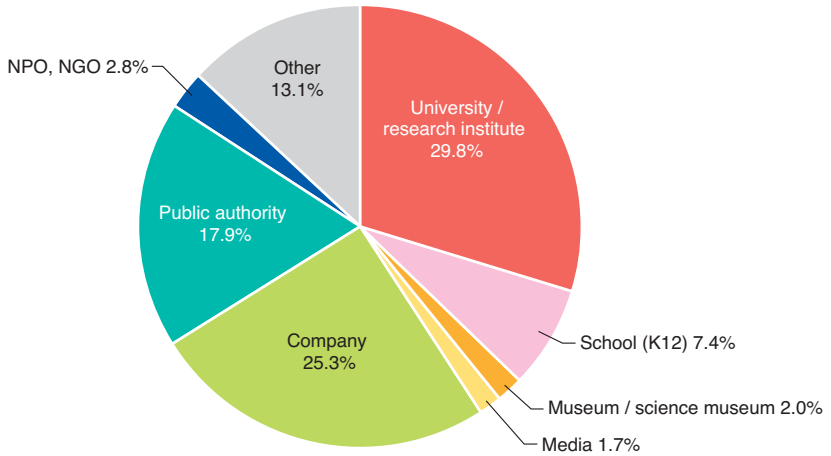
Attendee affiliation results (based on affiliation of pre-registered attendees)

Occupation



Elementary school or younger	60
Junior high school	33
High school	36
Technical college/ Two-year college/ University/Postgraduate	240
Technical college student	2
Researcher (humanities)	77
Researcher (science)	289
Specialist/engineer	732
Office worker	715
Teacher	152
Self-employed	106
Stay at home parent	47
Retired/unemployed	106
Other	226
Total	**2,821**

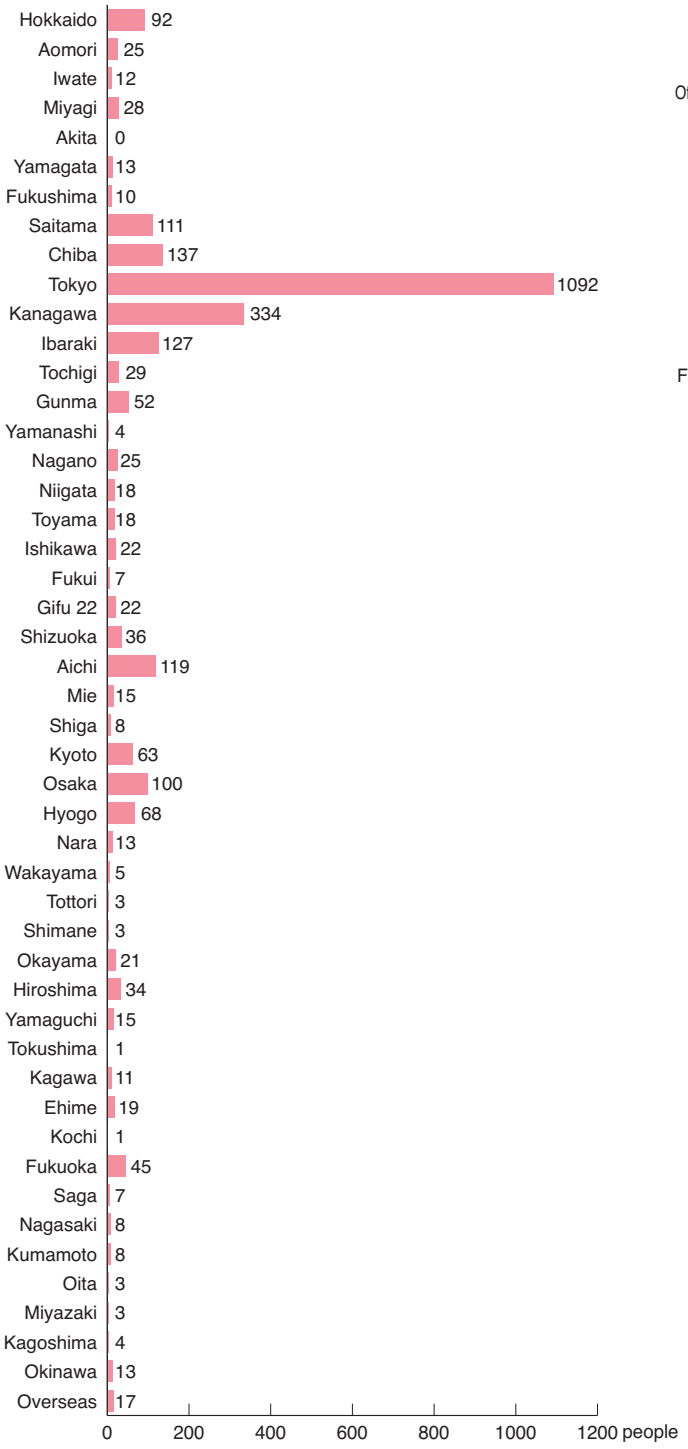
Affiliation category



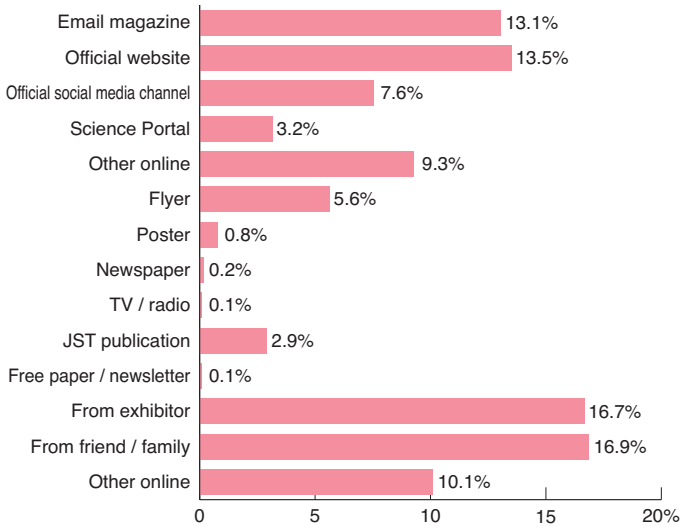
University/research institute	841
School (K12)	210
Museum/science museum	56
Media	49
Company	713
Public authority	506
NPO, NGO	78
Other	368
Total	**2,821**

Attendee affiliation results (based on affiliation of pre-registered attendees)

Location of attendance (prefecture)



How did you find out about Science Agora 2020?



The “Let’s Make a Future Icon” Contest

Message for entrants

In the future, when new technologies have become commonplace, signs and icons will be needed for people to recognize their presence. Which technologies have caught your eye? How will they change society? Imagine what the future will look like by coming up with innovative icons. Create an icon you believe will be needed in the future and make your winning entry.

Background of the “Let’s Make a Future Icon” Contest - Next Signage -

Science Agora 2020 used “Next Signage,” an artwork contemplating the future through the interface of signage, in its key visuals. The aim is to make discoveries that are not explicable by reason or logic by contemplating the scenes of everyday life when future technologies are ubiquitous and the emotions that will arise. Applying this concept, the “Let’s Make a Future Icon” Contest was held to imagine the look of the future through the signs and icons that will be required.

Winning entries

After a rigorous screening process, the following three winning entries were made into prototypes by a designer. To see the online awards ceremony, please watch the video on the dedicated Science Agora 2020 website event page. The “Let’s Make a Future Icon” Contest awards ceremony.

https://www.jst.go.jp/sis/scienceagora/2020/planning/planning_1302.html

First Prize

Excellence Award

Excellence Award

Opening session

Streaming time: 10:00-12:00, November 15
Exhibitor: Japan Science and Technology Agency

〈**Panelists**〉
Michinari Hamaguchi President, JST
Chieko Asakawa IBM Fellow
Hiromichi Shinohara Chairman of the Board, NTT, member of the Council for Science, Technology and Innovation
Shoko Takahashi CEO, Incubion, Science Agora 2020 Promotion Committee
Kazuhiko Toyama CEO and Representative Director, Industrial Growth Platform, member of JST's ACCEL R&D Management Committee
Yoshinori Hiroi Professor, Kokoro Research Center, Kyoto University

The coronavirus has upended our lives. What kind of society should we try to achieve now? And how can science and technology contribute to the realization of a bright future? With well-being and inclusiveness in mind, we sat down with experts to consider these questions.

The opening session of Science Agora debates the relationship between science and society

Science Agora 2020, hosted by the Japan Science and Technology Agency (JST), is an event designed for scientists and citizens to consider together the shape of future society. The opening session was an impassioned discussion between experts about "science and technology" and how they relate to society. Amid the COVID-19 pandemic, some of the panelists assembled at the National Museum of Emerging Science and Innovation (Miraikan) in Edogawa, Tokyo, while others participated remotely. In the discussion that followed the speeches, five speakers gave their views about what science and technology—and we—can do today as we advance into the future.

Discussion at the opening session of Science Agora 2020

The "big barrier" to the application of research findings to society

The discussion, which took place in the second half of the session held on November 15, proceeded on two topics. The first point of debate was "How do we connect R&D findings to society and industry as we look to the future society?" Shoko Takahashi, CEO of Incubion who provided opening remarks and facilitated the session, challenged the panel by stating, "There are big barriers to the societal implementation of research findings. What are we missing? How can we tackle this issue?"


Shoko Takahashi (left) and Chieko Asakawa

IBM Fellow Chieko Asakawa shed light on the current difficult situation: "We are hitting barriers when it comes to looking to implement new technologies quickly. Applying innovation requires the authorization of the organizations concerned. While authorization and adoption happen quickly where the organization sees a need, it is difficult to achieve

understanding of researchers' suggestions and of innovations that are not yet in the form of products. To drive innovation, the understanding of organizations and society must proceed quickly."

Regarding this authorization barrier, JST President Michinari Hamaguchi pointed out, "The technology exists to inactivate the coronavirus, but we are stuck at authorization. Japanese society is rigid because it is highly sophisticated, many people stay in their jobs for life and social life is hierarchical. There is also a disconnect because universities see 'long-term research' as 10-20 years, while companies see it as three years."

"We should talk frankly about the uncertainties of science and technology."

Hamaguchi went on to explain the concepts demanded by society. "Your life is decided by you. Surely the key is informed consent (clear explanation and genuine agreement). There are some things which experts cannot fully predict. That is why we gain understanding by explaining the current situation that these are the possibilities. We need to discuss, understand the pain of others, and find mutual agreement before deciding on the next steps. In this day and age, we need a culture of mutual agreement."

In response to Takahashi's query as to the difficulty of surmounting these barriers, Hamaguchi said, "Science holds on to the fantasy that it must appear almighty, yet science is full of uncertainties. We need to provide the honest truth."

Based on the arguments of the two panelists, Takahashi asked, "What is the prescription, what are the ideas to make it quick?" Chairman of IGPI Group, Kazuhiko Toyama replied, "There are plenty of companies that who can make a decision on a 60% basis."

Michinari Hamaguchi (left) and Kazuhiko Toyama who attended online

"Yet," Toyama continued, "the more people are involved in decision making, the more people there are to question. Then things come to a standstill. Even if the discussion is among the top level, it can still get lost at the departmental head level." In his own experience, he said, "This problem cannot be surmounted unless the chief, who can take risks, makes the decision." He also took a shot at the immobility of labor within Japanese companies: "It is crazy that we have companies where the elites of Tokyo and Kyoto university work for 30 or 40 years. Companies need to have about 10% turnover every year."

NTT Chairman of the Board and member of the Council for Science, Technology and Innovation Hiromichi Shinohara emphasized, "On science and technology, there needs to be much more partnership and mobility between academia and business. We are working to have the best blue sky research in the world, but for real-life application, it needs to be user friendly. Mobility is required if we are to increase social implementation and revitalization of both academia and business."

“Let’s think about how to eliminate the humanities vs science framework.”

Next on the agenda was the question, “As citizens, what approach should we take to science and technology, who should we consult, so that we can create a good life hand in hand with science and technology?”

Professor Yoshinori Hiroi, Kokoro Research Center, Kyoto University, touched on the ongoing pandemic situation. “There are many things we do not understand, such as the reasons for the difference in infections between Asia and the West. What is more, the experts do not agree amongst themselves. The starting point here is breaking away from the idea that science finds the truth and the people accept it. That does not just mean being sceptical. It is important to know that we are discovering the unknown together, and that scientists and citizens are in the same position.”

Hiromichi Shinohara (left) and Yoshinori Hiroi

Professor Hiroi added, “It is now vital to eliminate the humanities vs science framework. The Basic Law on Science and Technology is being amended, which is a big step forward because it moves toward thinking comprehensively about science and technology including social sciences.” He made two associated points. “The first suggestion is, companies do not have a long-term vision. Ironically, universities are now forced to take a short-term view, so at times, it appears that companies are taking a longer-term view than they are. Their time horizons are coming together. The second is that companies do not know what to do and cannot see the future anymore. However, from a humanities background like mine, plenty of issues are apparent, be it the hollowing-out of regional centers, population decline, or inequality.” Based on that view, he explained, “we are entering a new era of closeness between universities and business, science and the people. It is vital that we develop this point.”

What we can learn from the pager, which was transformed by high school girls.

Takahashi then asked, “The humanities may know more about the troubles of the world. However, people get defensive thinking that they do not know science and technology. What is the attitude that we need to enter a dialogue?”

Shinohara took up the query: “If we were to earnestly reveal all the uncertainties of science, people might accept that, but some [in the scientific community] might be scared to take responsibility, and they may put infallibility to the forefront. When it comes to the future of society, dialogue with citizens is essential. What is important then are debates to establish how innovations might play out.”

Shinohara continued, “As I was talking, I remembered something. Originally, the pager was designed as a tool for companies to reach their employees. When high school girls began to use it as a means of communication, the meaning of the pager changed completely. In other words, the users found a use that the provider had not thought of, which led to something new. That is why,” he emphasized, “we might also search together for innovations that arise from using technology.”

Answering Takahashi's query as to what science and technology would like to see from society, Asakawa said, "That is a very difficult question. Listening, I felt that it was up to scientists to make the first move. We are pursuing a dream in conducting R&D, but we need opportunities to enter dialogue with people using a common language. And if citizens would not just rely on a single news source but get information from a range of viewpoints, I feel that would improve the breadth and depth of the dialogue."

Mr. Takahashi (left) organized the various opinions and the discussion proceeded.

Hamaguchi said, "Through the pandemic, I have seen a very flexible side to Japan. One aspect is the high level of education. Thanks to the advance of IT, this is a society in which those in their 60s and 70s have very easy access to information. Individuals are also discovering that they can actually do things they never thought possible. For this to become a platform that leads to motivation in life, we need an agora, to use ancient Greek. If we do it right, we will get a sense of just how powerful a country Japan is. JST has a big part to play."

Life is a round robin game rather than a knock-out match.

A member of the audience asked a question, "How can we overcome status quo bias?" To this, Shinohara replied, "We might fail, and we might have fun. As long as the failure is not too big, it is important to start with a sense of adventure, whether it is your own life, at university, or in the company. We should create a society that encourages daring, without teachers or parents holding you back."

Toyama added, "If you treat life as a knock-out match, you end up with status quo. If it is a round-robin game, you are going to win and lose, in other words, it is okay to succeed and to fail. Whether it is society or a company, if we cannot assume there is turnover, we are going to be stuck with the status quo. How do we create a metabolizing mechanism? This must be confronted seriously by chief executives, citizens, universities and the nation."

Summing up the discussion, Takahashi left a suggestion to ponder: "It should not just be those involved in science in the discussion. I want students, scientists, and social scientists to engage too. We are holding Science Agora now, but wouldn't it be great if we could broaden our horizons and make it the 'Human Agora' in future?"

In the grip of a pandemic to which no escape is yet visible, people have a complicated relationship with science and technology—they are concerned, annoyed, and in search of a plan. Science and technology are in a time of historic strain, and this is equally true of its dialogue with society. This session was a moment to size up and re-affirm the challenges from both perspectives and the distance between them.

Takeo Kusaka, Editor, Science Portal

※This report is reposted from the Science Portal website, which provides the latest news about science and technology.
Science Portal - **https://scienceportal.jst.go.jp**

● The Opening Session in graphic form

Friday, November 13

1301-1	**CYBATHLON 2020 Global Edition (Tokyo Hub) / Global qualifier - Cybathlon and introduction of Japanese teams**	Embassy of Switzerland in Japan, JST Department for Promotion of Science in Society
1301-2	**CYBATHLON 2020 Global Edition (Tokyo Hub) / Global qualifier - Cybathlon streaming**	Embassy of Switzerland in Japan, JST Department for Promotion of Science in Society
1302	**"Let's make the mark for the future" Contest Awards Ceremony**	JST Science Agora Secretariat

Saturday, November 14

1401-1	**CYBATHLON 2020 Global Edition (Tokyo Hub) / Global finals - Demonstration from Cybathlon, Tokyo Hub**	Embassy of Switzerland in Japan, JST Department for Promotion of Science in Society
1401-2	**CYBATHLON 2020 Global Edition (Tokyo Hub) / Global finals - Cybathlon streaming**	Embassy of Switzerland in Japan, JST Department for Promotion of Science in Society
1403	**IVRC LEAP STAGE (Finals)**	IVRC Committee,IVRC (Virtual Reality Society of Japan)
1404	**IVRC 2020 Award Ceremony**	IVRC Committee, IVRC
1405	**Science Agora eve＋Science Agora 2020 recommended sessions**	JST Science Agora Secretariat

Sunday, November 15

1501	**Opening Session**	Japan Science and Technology Agency
1502	**Global Science Campus Students Research Conference**	JST Department for Promotion of Science Education
1503	**Kuro Rabu and Honda, science communicators**	University celebrity, Professor Kuro Rabu Honda Takayuki
1504	**The 2nd Brilliant Female Researchers Award (The Jun Ashida Award) - Ceremony & talk session**	Japan Science and Technology Agency
1505	**Should humans go to space or not? Let's debate manned space exploration**	Young Astronauts Club, SAKURA Chapter
1506	**A workshop on envisioning our own goals from the SDGs**	Transdisciplinary Initiative on Action & Learning for Sustainable Development (TRIAL for SD)
1507	**DIY Disaster Preparedness to Protect Yourself and Others**	University of Tokyo
1508	**Agora citizen meeting – Can technology connect people? Prospects for social life in the post-COVID society**	Japan Science and Technology Agency / Miraikan
1509	**Drama "Invisible Touch" presented by Tsurumaki-gakudan & Hokkaido University CoSTEP**	Hokkaido University CoSTEP, Tsurumaki-gakudan
1510	**What connects science to you? - Making Fake News**	UTaTané
1511	**Towards a Society without "Disabilities" - Clues from Cybathlon and Parasport**	Miraikan, Embassy of Switzerland in Japan

Monday, November 16

1602	**Healthy aging society with health big data and the most advanced science**	Innovation Center for Health Promotion, Hirosaki University (COI)
1603	**Society 5.0: Renewal of Society Accelerated in the Post-Pandemic**	Japan Science and Technology Agency
1604	**Create new lifestyles in a fishing village with cutting-edge technologies**	Institute of Industrial Science, the University of Tokyo
1605	**How to create warmth with machines**	Osawa Laboratory, Department of Information Science, Nihon University College of Humanities and Sciences, Miraikan

Tuesday, November 17

1701	**Social Business Design for Remote Healthcare System Innovation, Social Business Technology Lab**	Kyushu University
1702	**National Geographic Society in Asia: illuminating and protecting the wonder of our world**	National Geographic Society, Japan Science and Technology Agency
1703	**Approach to smart agriculture utilizing drones, AI, IoT, robotics for contributing to SDGs**	OPTiM
1704	**Information sharing of research activity in the post-corona era / Publication of research findings, and academic society**	Japan Science and Technology Agency
1705	**Future choice - Introduction to career decision making**	Kawaijuku Educational Institution
1706	**Imagine the future by anthropology-thinking**	Hakuhodo Brand Innovation Design

Wednesday, November 18		
1800	**Global Innovation Summit 2020 - DAY 1**	Global Federation of Competitiveness Councils, Australian Government
1801	**~Kyoto SATOYAMA Life ~ SDGs live broadcast**	Kyoto Super SDGs Consortium
1802	**New Normal driven by Human-Machine SymbioCity**	Department of Strategic Basic Research, JST
1803	**Deep Tech Towards a Resilient and Sustainable Economy**	SGInnovate / Japan Science and Technology Agency, Singapore Office
1804	**Let's Think about Life with the European and Japanese Scientists**	Delegation of the European Union to Japan
1807	**Edible Insect Symposium 2020@Science Agora**	The Japan Edible Insects Association, Entomo Protein Inc., Higashiosaka College and Higashiosaka Junior College, Insect Science Research Center (ISRC), Osaka Kyoiku University
Thursday, November 19		
1900	**Global Innovation Summit 2020 – DAY 2**	Global Federation of Competitiveness Councils, Australian Government
1901	**Science, Technology and Innovation for SDGs: Solving local social issues**	JST Department for Promotion of Science in Society
1902	**National Research & Development Agency Symposium: Surviving with / post COVID-19 society**	Association for National Research & Development Agency
1903	**Euglena's contribution to the achievement of the SDGs**	Euglena
1904	**How to grab and utilize the signs of future - Business practices**	Japan Foresight Community
1905	**Ultimate Strawberries by Quantum Technology**	National Institutes for Quantum and Radiological Science and Technology
Friday, November 20		
2001	**The Role of the Scientific Community in Disaster Response - Lessons learned from the COVID-19 Pandemic**	Japan Science and Technology Agency
2002	**Soft-Alliance Matching Mechanism**	Data Cake Baker, Ryuichiro Ishikawa Laboratory, Waseda University, Kobayashi Laboratory, Fukuoka Institute of Technology
2003	**Collective Knowledge Networking - For an effective multilateral collaboration**	Shoji Komai, International Institute for Advanced Studies
2004	**Let's connect the real world and the internet - Digitization of experience value**	AIST- AI Technology Consortium
2005	**International PBL with STI for SDGs**	Round Table Com, Inc.
Saturday, November 21		
2101	**Future Online Manufacturing Workshop**	Gakken Plus Co., Ltd.
2102	**Dialogue × Puzzle Game "Escape from Energy Crisis"**	Hokkaido University CoSTEP 15th Puzzle game committee
2103	**Social Issues are OUR Issues ~ DX of nursing for the aged**	STEM Leaders
2104	**JT-60SA Virtual Site Tour - Let's go see the world largest fusion experimental device!**	National Institutes for Quantum and Radiological Science and Technology
2105	**NEC Future Creation Forum**	NEC
2106	**HIRAKU Three Minute Thesis Competition 2020**	Home for Innovative Researchers and Academic Knowledge Users (HIRAKU), (Lead: Hiroshima University)
2107	**Sustainable Biotechnology**	Tokyo University of Pharmacy and Life Sciences
2108	**Know the infrastructure and create an infrastructure character!**	Japanese Congress for Infrastructure Management (Citizen participation forum)
2109	**LIFE after COVID-19: How a multi-agent system can solve the conflict between selfishness and altruism**	Kaoru Amino
2110	**Experiment in a kitchen, challenge the principle of the motor of Shinkansen**	Smile Life-Science Labo
2111	**Inclusive Science for Students With Disabilities**	University of Tokyo
2112	**LCS Online Workshop: "a euphoric and satisfying zero-carbon society"**	JST Center for a Low-Carbon Society Strategy
2113	**A small seaside world viewed with a mobile microscope - Microbes and microplastics**	Life is Small Project
2114	**Why don't we talk about "Tomo-Sodate" for preventing maltreatment and nurturing the future of children?**	JST Research Institute of Science and Technology for Society
2115	**Let's talk with the researchers! COVID-19, from the viewpoints of immunology and virology**	Osaka University, Immunology Frontier Research Center, Research Institute for Microbial Diseases
2116	**STS Statement, Online Science Session**	Center for Science, Technology, and Innovation, Policy Studies, Kyushu University
2117	**Our lives and the nurturing ocean**	the Oceanographic Society of Japan, Ocean Literacy and Education Panel

Sunday, November 22

2201	**Living by the Sea: 10 years from March 11 and beyond**	Tokyo University of Marine Science and Technology
2202	**Announcement ceremony of the Japan Finalists Team of Call for Code 2020 - Global competition to fight against COVID-19 and Climate change**	IBM Japan
2203	**Dialogue with COI young researchers on the potential of the Tohoku region**	Center of Innovation (COI), Co-creation Support Group (Yamagata University - Tohoku University - Ritsumeikan University)
2204	**Particle Physics × Accelerator × Life = ?**	KEK (High Energy Accelerator Research Organization)
2205	**Welcome to the protein wonderland!**	Institute for Protein Research, Osaka University
2206	**Let's talk about the New Normal from the point of view of the EcoHealth**	Research Institute for Humanity and Nature (RIHN)
2207	**Do you eat genome edited red sea bream?**	Future of Genome Editing
2208	**Co-create sustainable life & work space & time in the forest delighting your five senses**	MEGV
2209	**T3 Puzzle Online: Let's Tessellate! Math×Art**	Japan Tessellation Design Association
2210	**Introduction of paper tops that spin around and jump up with the power of air**	Okayama Prefectural Kurashiki-Amaki High School
2211	**Precious Lives – Think from Biodiversity**	Japan Biodiversity Association
2212	**Changing Snow Conditions in Japan and Avalanche Disasters**	Japanese Society of Snow and Ice, Kanto-Chubu-Kansai Branch
2213	**Touch specimens online!? What you can do with "sensation transfer" technology**	Hokkaido University CoSTEP, 16th Volunteer Group
2214	**Introduction of SEEC and workshop "Learning about the flight stability with a tethered paper plane,"**	Manabu Fujita (Okayama Prefectural Tamano High School Physics Teacher)
2215	**Gunma / Jutoku / Raw Silk**	Jutoku High School Science Club
2216	**You are King: Environmental decision-making game "Gachi-can" online**	NaLab.
2217	**Let's live with non-humans**	Department of Research Project (ERATO), JST
2218	**Solving Africa's food problem by molecules!? A discovery story of a molecule that tricks witchweed**	Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University
2219	**A look-back at Science Agora 2020**	JST Science Agora Secretariat

On-demand sessions

Y-01	**Online Science Class at home**	Life & Bio Plaza 21
Y-02	**After all, we want to watch the atom and molecule!**	Society of Computer Chemistry, Japan
Y-03	**Imagine / Creativity - Aiming for coexistence with AI**	Tokyo Metropolitan Fuji High School, Junior High School
Y-04	**Realizing "life" with the nuclides chart – the deep relationship of life and the nucleus**	Japan Atomic Energy Agency
Y-05	**Genetic testing comes home!? (Online version)**	Tohoku Medical Megabank Organization, Tohoku University
Y-06	**Foam Volcano by Chemical Reaction**	Science a la carte Ecole project at Osaka Institute of Technology
Y-07	**Science olympiads, the key to the future**	Japan Science Olympiad Committee
Y-08	**The New Normal and Digital Fabrication**	Asia startup office, MONO
Y-09	**Math behind Rubik's Cube - Using maths to solve Rubik's Cube**	Experience Workshop - Kristof Fenyvesi and the Embassy of Hungary
Y-10	**FSP Talk Session 2020: Fostering next-generation Scientists Program**	JST
Y-11	**Cheering girls up! Programming experience for girls**	KufeL (Kyoto University female engineering Link)
Y-12	**How the radio program "Forest of Science" is made**	“Forest of Science”
Y-13	**Genetic Cafe**	Reimi Sogawa, Okayama University Hospital
Y-14	**Let's learn with the engineers! Fun science experiments with everyday things**	Young Chemists of the Institute of Professional Engineers, Japan
Y-15	**Future Life Changed by ILC**	Bureau of ILC Promotion, Iwate Prefectural Government
Y-16	**What's new in Nishinoshima - a rapidly growing island**	Earthquake Research Institute, The University of Tokyo
Y-17	**Surveying Workshop: "Reproduction of Nazca Lines + Things like Tadataka Ino,"**	Yasuhiko Isami Laboratory, Kyushu Sangyo University
Y-18	**Bacteria World 2020**	Osaka City University and Notion
Y-19	**Online Anonymous Poster Session: Kyoto University, 100 papers**	Center for the Promotion of Interdisciplinary Education and Research, Kyoto University, Science Agora Secretariat
Y-20	**“Japan SDGs Action” kick-off event**	Japan SDGs Action Promotion Council

The Science Agora Vision

The vision sets forth the long-term objective that we wish to make through the Science Agora.

A future woven through dialogue between science & daily life

Science and technology have developed in parallel with wealth and power in the 20th century. However, in the face of limited resources on Earth and growing strain on the world, we are now beginning to see the limitations of science and technology. In particular, as we make the transition from a growth society into a mature society, the Japan of today is confronted by many problems and it has become extremely difficult to see ahead into the future. Therefore, we felt that a space was needed where relevant stakeholders could come together to consider the future of science and society, respecting the views of others, and create a future. We hope to foster such a culture. Furthermore, there are diverse attitudes and approaches depending on the country/region and culture, and we hope to explore methods that are unique to Japan.

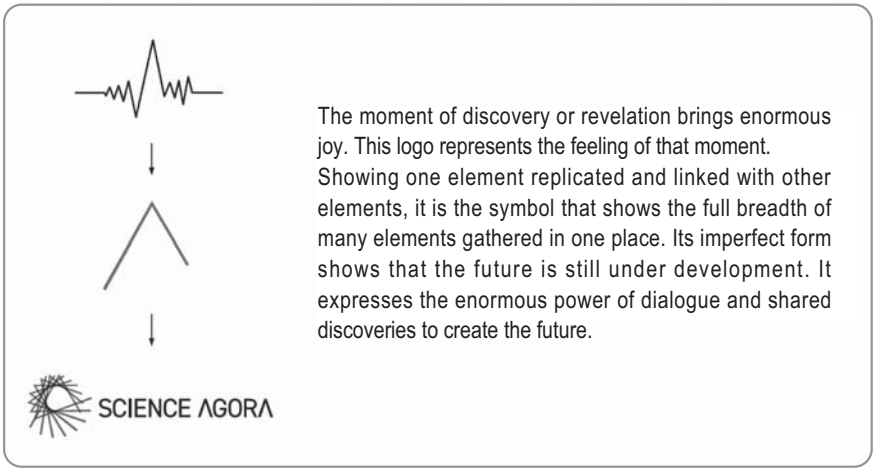
[Key points]

①We emphasized not only "creating a space," but also the approach of collaborative thinking to create the society of the future.

②The concept embedded in "daily life": The focus may be on the daily lives and the ways individuals live their lives, but we believe that this also leads to consideration of society as a whole.

③The concept embedded in "weaving": The importance of exploring methods that are unique to Japan for the creation of a future society. It calls to mind the image of spinning thread - a process of creating harmony in the sense of bringing short, thin, disjointed fibers together, gradually building up and creating something meaningful rather than taking a single leap all at once.

The story behind the brand logo



The moment of discovery or revelation brings enormous joy. This logo represents the feeling of that moment. Showing one element replicated and linked with other elements, it is the symbol that shows the full breadth of many elements gathered in one place. Its imperfect form shows that the future is still under development. It expresses the enormous power of dialogue and shared discoveries to create the future.

Science Agora 2020 Promotion Committee

Chair	**Shoji Komai** (Professor, International Professional University of Technology in Tokyo)
member	**Atsuko Saito** (Chair and Director, Future Center Alliance Japan (FCAJ))
member	**Sari Kaede** (Consultant, NIKKEN NAD)
member	**Shoko Takahashi** (CEO, Incubion)
member	**Kaori Nemoto** (Strategic Planning Director, Hakuhodo Brand Innovation Design Department)
member	**Keiichi Hirotsune** (Director, Institute of Creative industries and Culture)
member	**Kouta Minamizawa** (Professor, Keio University Graduate School of Media Design)
member	**Naoki Miyano** (Center for the Promotion of Interdisciplinary Education and Research (C-PiER)/Associate Professor)
member	**Atsushi Arakawa** (Director of the Department for Promotion of Science and Society, JST)
member	**Yuko Morita** (Science Communicator, Miraikan)

As of November 2020
※Honorifics abridged

Science Agora 2021

We are going ahead in 2021 !

https://www.jst.go.jp/sis/scienceagora/

Science Agora 2020

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