



SCIENCE AGORA



©Alessandro Bioletti /
世界が広がる学問図鑑 (Gakken)

科学と社会をつなぐ5日間

サイエンスアゴラ 2023

Report on Science Agora 2023

Overview of Science Agora 2023

What is “Science Agora” *Agora is ancient Greek for “meeting place”

Science Agora is a generic term for a place connecting science and society, which is open to everyone. It is a forum in which various people promote activities in each region independently by connecting parties involved in different fields, sectors, generations, and nationalities. People gathering in this forum will aim to realize “science harmonized with society” and a “society harmonized with science” through dialogue and collaboration while respecting a diversity of values.

Science Agora activities fulfill these five conditions:

- (1) With society and for society
- (2) Science related
- (3) Self-motivated
- (4) Devoted to dialogue with a diverse range of people
- (5) Devoted to public dialogue

Science Agora 2023 Venue Curation by the Promotion Committee

This year, Science Agora collaborated with “The Encyclopedia of Academic Fields for Broadening Your Worldview: Your curiosity is YOU” (published by Gakken), a book for elementary and junior high school students that connects their curiosities with concrete learning. For the in-person events that began on November 18th, the Science Agora Promotion Committee categorized the exhibits based on the five curiosities in the book - arousing the intellectual curiosity of visitors and increasing the value of each exhibit by effectively curating exhibit locations, and devising ways to increase visitor enjoyment even further.

The five topics in “The Encyclopedia of Academic Fields for Broadening Your Worldview: Your curiosity is YOU”

1. *Curious about nature.*
2. *Curious about society.*
3. *Curious about sports and art.*
4. *Curious about leisure and entertainment.*
5. *Curious about social issues.*

Event outline

■Title: Science Agora 2023

■Dates: [Science Agora Online] Thursday, 26th– Saturday, 28th October

[Online pre-event] Friday, 17th November

[On-site (Held in Aomi area, Tokyo)] Saturday, 18th– Sunday, 19th November

■Host: Japan Science and Technology Agency (JST)

■Sponsor: Nippon Telegraph and Telephone (NTT)

■Collaborator: Tokyo Waterfront City Association/ Fuji Television Network/ Tokyo Teleport Center/ Yurikamome/ KYOTO Design Lab of Kyoto Institute of Technology (D-lab)/ A-Co-Labo/ DRONE STAR Powered by ORSO/ Gakken/ Dymon/ Fujitsu/ Minecraft Cup Organizing Committee/ Regional Fish

■Supporter: Cabinet office/ Ministry of Foreign Affairs/ Ministry of Education, Culture, Sports, Science and Technology/ Ministry of Economy, Trade and Industry/ Science Council of Japan/ Keidanren/ The Japan Association of National Universities /Federation of Japanese Private Colleges and Universities Associations /RIKEN/ The National Institute of Advanced Industrial Science and Technology (AIST)/ Japan Association for the 2025 World Exposition

■GlobalPartner: American Association for the Advancement of Science (AAAS)/ Department of Science and Innovation, Republic of South Africa/ EuroScience/ Korea Foundation for the Advancement of Science and Creativity (KOFAC)

Event Report

Heated Discussions, Immersive Experiences, and Looking to the Future ... Science Agora 2023 Comes to a Close

Science Agora 2023, one of the largest events in Japan connecting science, technology, and society for people from all walks of life through experiences and dialogues, came to a close on November 19th. It consisted of approximately 150 events, including online events that enabled discussions transcending geographic restraints, as well as in-person events that enabled face-to-face discussions and hands-on experiences with nature, science, and technology. The lively atmosphere provided an opportunity for attendees to satisfy their intellectual curiosity and to glimpse the future of humanity and society.



Once again this year, a variety of projects, mixing both hard and soft topics, kindled lively discussions on stage at the Telecom Center Building in Tokyo's Koto Ward on November 18th.

"Academic Diagnostics" and "Curation" that Spark Curiosity

Science Agora is sponsored by the Japan Science and Technology Agency (JST), and this year marked the 18th time the event has been held. In previous years Science Agora was held in person, but in 2020 and 2021 it was held online due to the spread of COVID-19. Last year saw the resumption of some in-person events. This year, online events were held from October 26th to 28th and on November 17th, immediately before the in-person events that were held at the Telecom Center Building in Aomi, Koto Ward, Tokyo on November 18th and 19th.

Every year, the on-site Science Agora comes with a lot of fun and creative events. Visitors to Science Agora 2023 could get a feel for the events as soon as they went to the reception desk and received a booklet with information about the venue. At the beginning of the booklet, even before introducing the programs, was an invitation for attendees to "Find the academic field that is perfect for you!" The idea was that visitors would be able to receive an "Academic Diagnosis" of what field was the best fit for them by answering the listed questions and getting a stamp at the venue. The Academic Diagnostic questionnaire was created by Kyoto University after analyzing the thinking trends of 1,757 researchers.



The "Academic Diagnostic" at the beginning of the information booklet for the venue.

"Curation" – the work of collecting information and then editing it according to a theme so as to find meaning and value – also stood out at this year's Science Agora. At Science Agora, the Promotion Committee consists of 10 experts who worked on curation, valuing, and categorizing a variety of projects according to the participants' interests and then utilizing that information when arranging the booths. The curation for this year was based on five topics to thoroughly stimulate visitors' curiosity: nature, society, sports and art, leisure and entertainment, and social issues. This curation was based on the book, "The Encyclopedia of Academic Fields for Broadening Your Worldview: Your curiosity is YOU", which was supervised by Kyoto University Associate Professor Naoki MIYANO and published by Gakken. The "Academic Fortune Telling" event, where visitors drew Japanese-style fortunes to discover academic knowledge, also seemed to be well received, especially by the children in attendance.

"Focus on What You Want to Do, Without Worrying Too Much about What Other People Think"

During both the online events and in-person stages there were lively discussions and presentations covering a wide range of themes, including the global environment and resources, finding solutions to issues such as health, the state of scientific research, and the government's large-scale "Moonshot" program goals to support challenging research and development. The fields spanned not only the natural sciences, but also the humanities and social sciences.



Similar to the previous year, Science Agora 2023 was held at the Telecom Center Building.

The speakers and panelists gave a variety of tips and advice on things to keep in mind when collaborating with people in research and other activities: "I tend to talk with the people around me who I get along with and who say 'You're right,' but sometimes they just have me handle everything and don't show any responsibility,"; "People who can thoroughly argue and discuss issues and who try to maximally protect their own interests will also protect their partner's interests when they team up,"; and "It is important to find the essence of each other's work while also exchanging different opinions with each other."

The speakers and panelists also talked about the difficulties they faced in conveying the appeal and necessity of their research: "Managers, office workers, researchers... it's so important to change the way you explain things depending on your audience. However, there are also times when researchers start talking to each other, thinking that they can understand each other, but then later it becomes clear that they didn't understand each other at all. You really have to be careful about how much the other person knows,"; "There are other issues beyond how to explain things. If the other person thinks that a prerequisite process is easy to do, then the conversation will go astray,"; "Even though I approach basic science with a sense of beauty and excitement, after I have been explaining things for a while people will still ask me, 'What's the use of that?'," so I really feel the difficulty of conveying research to the general public."

There was also a message for students and aspiring researchers: "Focus on what you want to do, without worrying too much about what other people think," words that surely resonated in some way with many of the participants, not just the researchers.



Visitors not only directly heard from the speakers and panelists, but also participated in Science Agora in numerous ways, such as by affixing stickers to discussion boards to express their opinions or taking part in real time votes by using their smartphones.

Unique Experiences: Lunar Rovers, Genome-Edited Fish, and Searching for Life

Exhibitors from research institutes, schools, and companies had Science Agora booths offering unique hands-on projects and workshops, such as experiments and observations, exchanging opinions on social issues, virtual reality (VR), and operating an ultra-compact lunar rover. One of the Science Portal Editorial Dept. staff members who tasted genome-edited fish noted that, “Even though the fish I ate was a red sea bream, it was chewy and soft, with a texture similar to that of chicken breast.”

The outdoor events, which took participants outside of the venue building, were also popular. The Odaiba area, where the Telecom Center Building is located, is reclaimed land, and participants went on a guided tour where they tried to find urban creatures in the area around the venue while also playing a game of bingo. The guide also taught the participants about precautions when observing living animals in the city as well as things that they shouldn’t touch so as to prevent the spread of infectious diseases. One fourth-grade elementary school boy from Tokyo’s Ota Ward, who was there with his younger sister, enthusiastically said “I like amphibians and reptiles, and it was fun to see so many kinds of animals. Now I also want to look for animals that are near my house!”



Searching for life (left) and piloting a lunar rover (right) – Several of the projects were quite popular.

While Science Agora was being held, we asked some of the researchers and other attendees about the significance of Science Agora and if they had any tips for participating. “Science Agora is an opportunity for people to realize that they engage with the scientific community not just because they like science, but also because they feel that a variety of fields and academic disciplines are involved. I hope that Science Agora will help people to discover their interests while being able to relax.”; “Don’t be shy! Step into the different booths and listen to what they have to say!”; “Instead of people just experiencing Science Agora and then saying, ‘It was interesting,’ I want them to focus on the background of the experiences. It is also important for parents to ask questions to their children.”; “Honestly, even though each booth is creative, there are some parts that may seem to be boring. If that’s what you think, then why was it boring, and

what could have been done to make it interesting? Looking at it in this way will also help you to think about how to convey information."

Collaborations Between the Humanities and the Social Sciences, and High Expectations

The Comment Board, where visitors could freely write down their impressions of Science Agora, was filled with thoughtful comments: "It was really interesting to see how the Science Agora exhibitors are trying to communicate with each other,"; "I want false information to disappear from the internet,"; "I wish I could read people's minds," and so on. Some of the people pondered their comments, selected a comment that had already been posted, and then placed their own comment next to it; some of the comments also had illustrations. Watching the Comment Board was like getting a glimpse of Science Agora's character, where people get to enjoy the act of expressing themselves.



The Comment Board was filled with a variety of comments and opinions.

One Science Agora attendee, a male civil servant in his 30s from Konosu City in Saitama Prefecture, noted that "Just like last year, it's a fun event to come and just look around. There is a wealth of things to experience, and it's great that it's being held in-person. However, I felt that there wasn't enough collaboration with the humanities and social sciences, and that it would be better if there was more." A male office worker in his 40s from the Shinagawa Ward in Tokyo said that "My child received a Science Agora flyer from their elementary school. I found out about it from the flyer and then we came here together. In contrast to their classes at school, my child seems to be having a lot of fun interacting with the science and technology here, so I want to come next year as well."

In recent years there has been an increase in symposiums and other events that are held online, which makes it easy to participate without having to worry about transportation costs or travel time. Being able to play or rewatch the event later is also incredibly convenient. However, it's also good to hold in-person events. Amidst the festive feeling from bustling crowds and a wide variety of exhibits and projects, this year's Science Agora made me realize that my curiosity was gradually taking hold, becoming more pronounced as the mingled voices of researchers and visitors washed over me and my thoughts and knowledge became more focused as I wandered here and there amidst the exhibitions.



The elaborate booths saw large crowds (left), and the costumed characters were extremely popular with children (right).

(Takeo KUSAKA and Nobuyo TAKIYAMA / Science Portal Editorial Dept.)

※This report is reprinted from the "Science Portal" comprehensive science website, which provides the latest information on science and technology.

Science Portal: <https://scienceportal.jst.go.jp>

Science Agora 2023 (Annual General Meeting)

Online: October 26 to 28, Agora Eve Event November 17, In person: November 18-19

■ Participants (as of 17:30 on Nov. 19, the last day) : **10,137**

〈Breakdown〉

Attendances			Total
On-site visitors (Excluding exhibitors)	Online attendees		
	Live stream participants	YouTube archive unique viewers during Science Agora 2023	
3,525	2,521	2,760	8,806
Contributors (Excluding Science Agora Secretariat)			1,282
Guests (Excluding online)			19
Press (Excluding online)			30
Total			10,137

■ Total views (as of 17:00, Dec. 15)

Total views (estimated) (Zoom+YouTube)
21,951

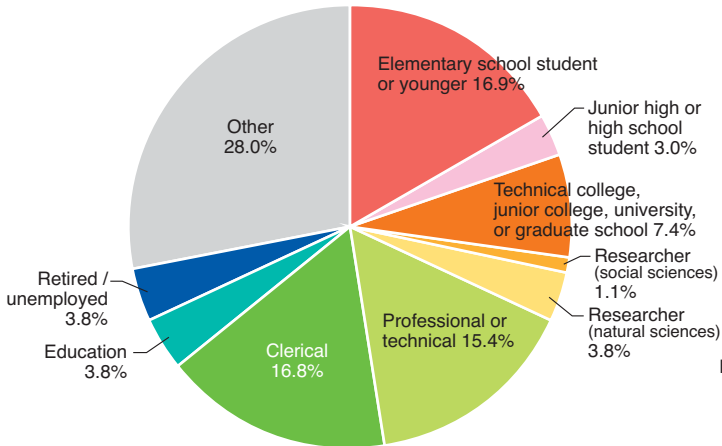
■ Exhibition Programs : **137**

〈Breakdown〉

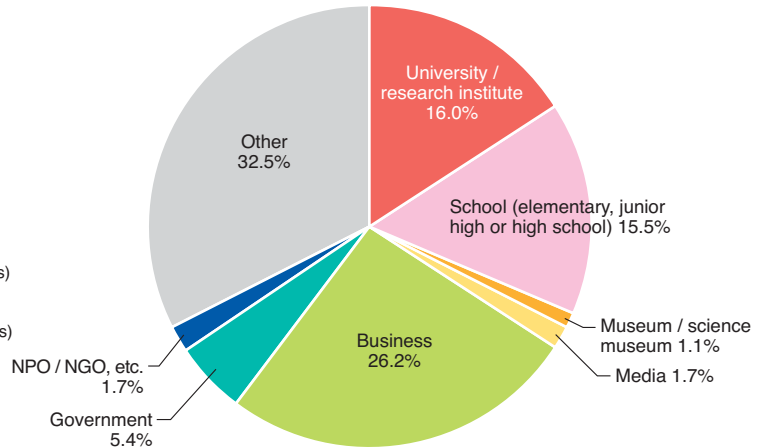
Online	23 events
In-person (Including Agora Eve)	114 events
Total	137

Attendee statistics (1) In-person events (based on the attributes of pre-registrants n=3,219)

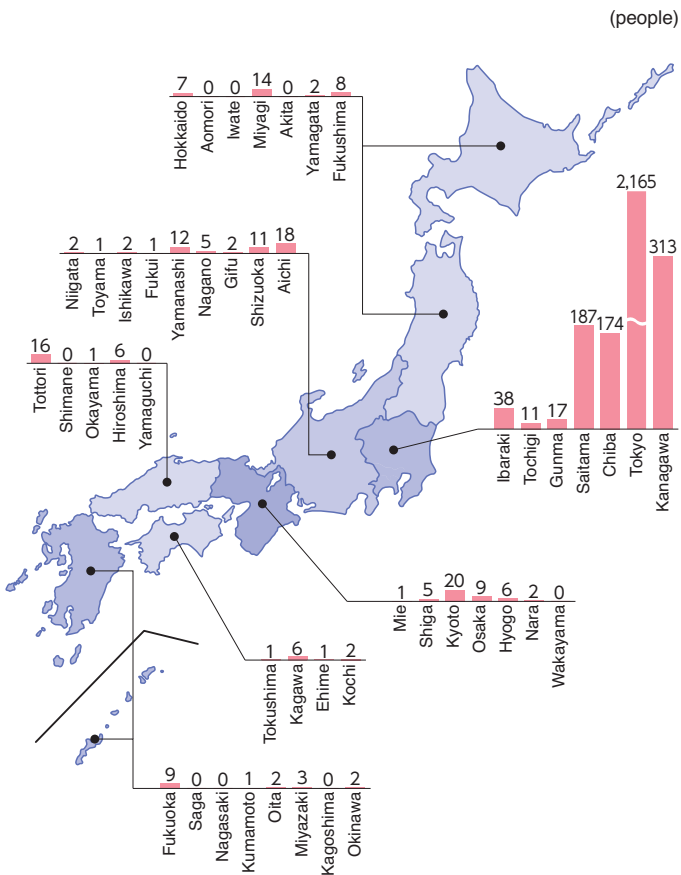
Occupation



Category of organization

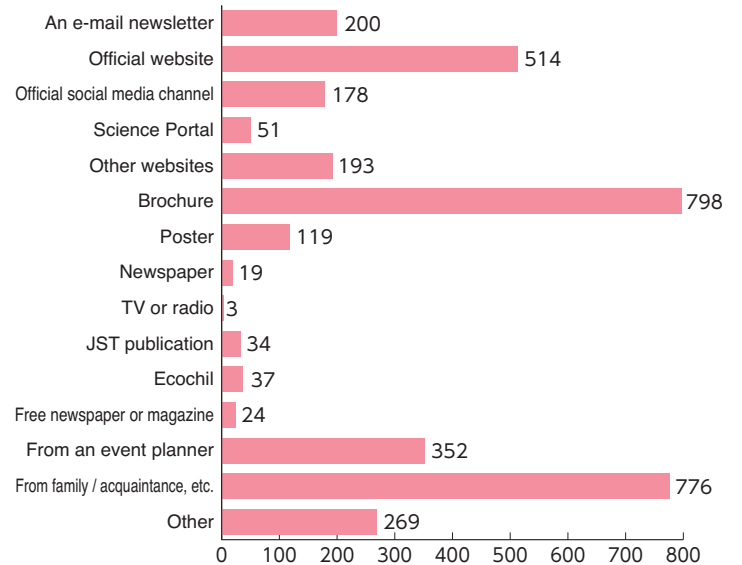


Location of attendance (prefecture)



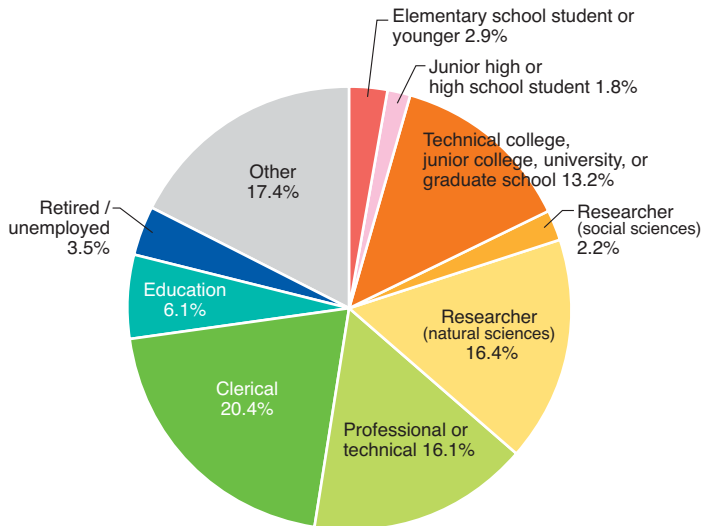
How did you hear about Science Agora 2023?

(Select as many as applicable)

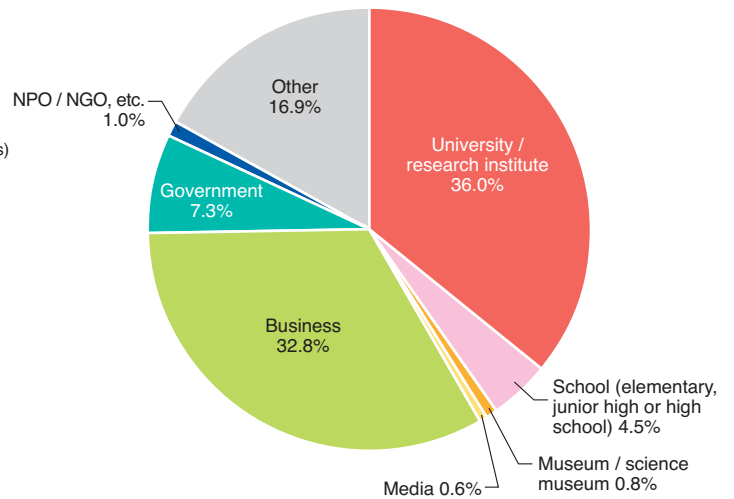


Attendee statistics (2) Online pre-registration (based on the attributes of pre-registrants n=858)

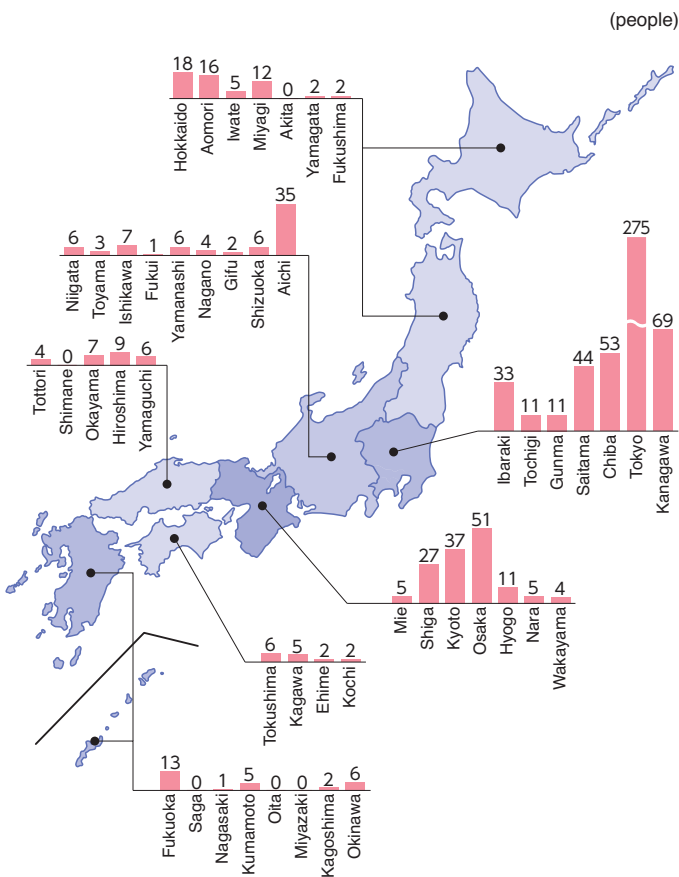
Occupation



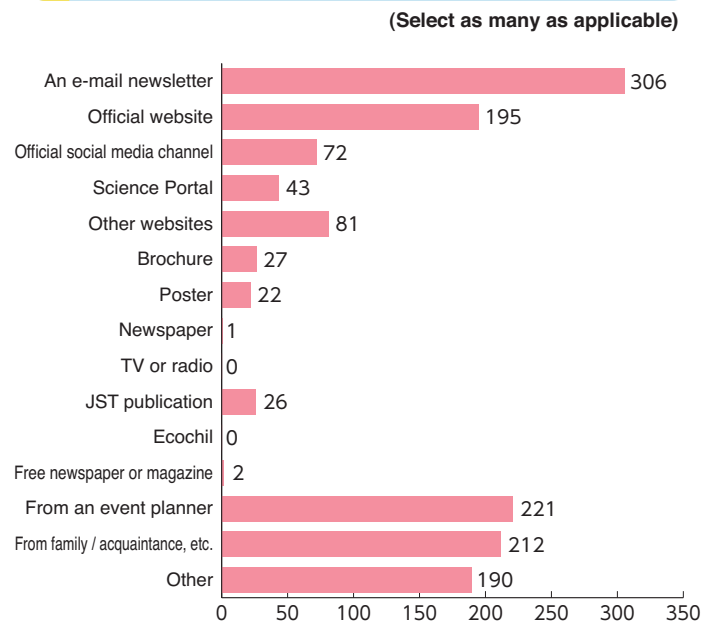
Category of organization



Location of attendance (prefecture)



How did you hear about Science Agora 2023?



Report on Major Sessions

Science for Nature Positive

Date and time: 14:30-16:00, Friday, October 27

Exhibitor: JST / ETIC.

<Speakers>

Professor Michio Kondoh Graduate School of Life Sciences, Tohoku University

Taiichi Satoh Managing Director, Sakyu Co., Ltd.

Asami Takahashi Senior Fisheries Officer, MSC Japan

Yuhei Kuratsuji Project Leader, NPO ETIC. Headquarters

Nowadays we are increasingly expected to be "nature positive". Biodiversity and carbon neutrality are two concepts at the core of much of today's R&D, but numerous obstacles must be overcome before research results can make any direct nature positive impacts on society. In an era of transparency promoted by groups such as the Taskforce on Nature-related Financial Disclosures (TNFD), this session brings together various stakeholders from both upstream and downstream of the value chain to discuss how obstacles to nature positive research contributions can be overcome through exploration of relevant case studies.

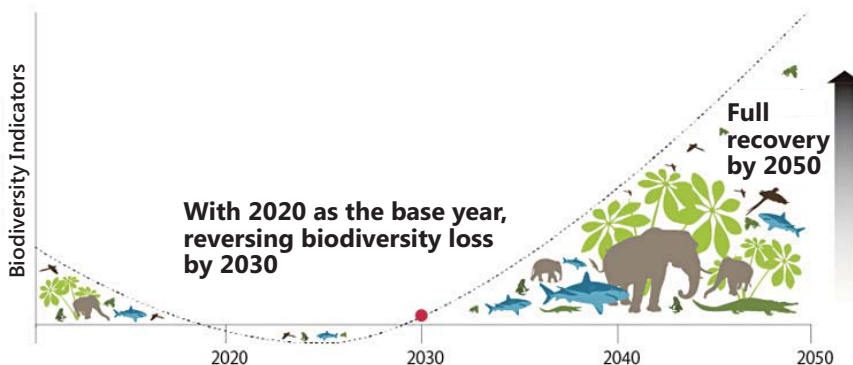
Session Report

Creating Sustainable Biological Environments (from the "Science for Nature Positive" Science Agora 2023 Online Project)

The habitats of living things are deteriorating due to environmental destruction. As such, what efforts are necessary to conserve biodiversity? The Japan Science and Technology Agency (JST), in collaboration with the NPO ETIC., recently held an online project entitled Science Agora 2023 "Nature Positive and Science & Technology." Scholars, corporate managers, and certified business operators each introduced their own case studies and gave their thoughts on how and what issues should be reflected in society, such as citizen participation.

Dramatic Declines in Living Things – Faster than Previous Extinctions

Nature positivity is defined as "halting and reversing biodiversity loss to put nature on a recovery path." The 15th Conference of Parties to the UN Convention on Biological Diversity (COP15) in 2022 called for a reversal of biodiversity loss by 2030 and a complete recovery by 2050. The Earth has experienced five major biological extinctions so far, but the current rate of decline in living organisms is said to be faster than in any of these previous major extinctions.



Conceptual diagram of nature positivity. Currently, habitats for living things are in danger, and within the next few years we must reverse these numbers for living things and return diversity to a positive trend (from the WWF Japan website).

If biodiversity loss continues at this rate, it could develop into threats to humanity, including energy and food problems, outbreaks of new pandemics, and the loss of international order. This online project presented three nature-positive projects that people can address.

Visualize Biodiversity with a Bucket of Water

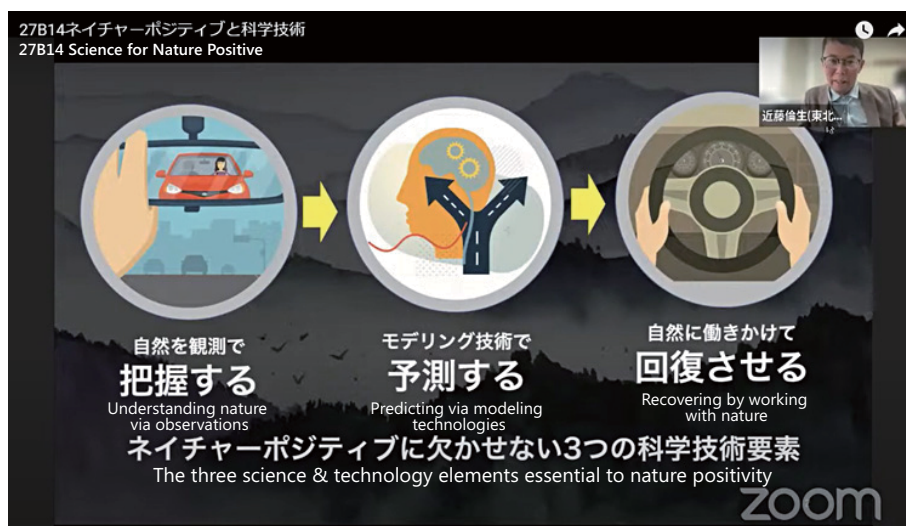
The first presenter was Michio KONDOH, Professor of Ecology at the Tohoku University Graduate School of Life Sciences. He analyzes environmental DNA based on the feces and mucus left behind by organisms from soil and water sampling, and conducts monitoring activities to determine what kind of organisms are living there.

As of June 1, 2022, he has conducted surveys at 861 locations across Japan, and said that not just researchers, but citizens as well, are participating in the activities. For example, he has a system where people can collect a bucket of water (approx. 2 liters) from a nearby body of water, or mountain climbers and hikers can collect soil from a cave or mountain and then send them to Prof. KONDOH to be analyzed.

Prof. KONDOH emphasized that three elements are necessary to realize nature positivity: "understanding the situation," "predictions via modeling technologies using AI, etc.," and "recovering by working with nature." ANEMONE is useful in the first step of understanding the situation.



Survey points in ANEMONE and its predecessor, the JST CREST project, are indicated by red circles, which show that locations all over Japan are being circled (provided by Prof. Michio KONDOH).



The three essential elements of nature positivity as proposed by Prof. KONDOH (screenshot from online presentation).

Corporate Managers: Sustainability as a Primary Industry

The next presentation was by Taiichi SATO, Managing Director of the Sakyu forestry company based out of Minamisanriku Town in Miyagi Prefecture. Sakyu is a company that handles locally produced cedar called minamisanriku cedar, which has a salmon pink color. Minamisanriku cedar is commercially used as a decorative material, and Sakyu has obtained FSC certification in order to promote sustainable forestry. FSC forest management certification is an international certification proving that a company's forest management is economically sustainable while also preserving the environment. Based on this certification, Sakyu has been working to eliminate the negative image that cedar forests have in Japan. With an eye towards biodiversity, Sakyu plants low plants close to the ground in its forests and then cares for them by allowing sunlight to shine through.



A minamisanriku cedar forest managed by Sakyu. The forest is maintained so that sunlight reaches the plants on the forest floor (provided by Sakyu).

Mr. SATO expressed his hope that nature-positive thinking will spread in the investment field. It is difficult to know what indicators to use when investing in primary industry companies, but he noted that, "Wouldn't it be safer if we had data and quantitative indicators like ANEMONE? Biodiversity is not as easy to understand as greenhouse gas emissions. Producers also have an obligation to provide easy-to-understand indicators that will serve as investment criteria."

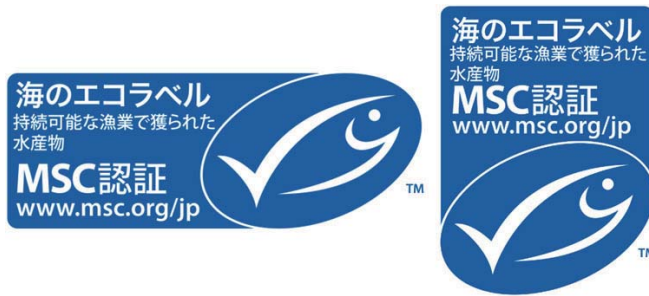
Managing Fisheries Catches to Protect the Abundance of the Sea

Nature positivity cannot be achieved unless we protect the richness of the seas as well as that of the forests. While protecting marine life, we also want to be able to continue to enjoy the various marine products that add color and flavor to our diets. It would be ideal if we could essentially "catch as many fish as possible," but, in reality, this is not the case for some fish.

One approach to this issue is the fisheries certification system by the Marine Stewardship Council (MSC), as explained by the next presenter, Asami TAKAHASHI, Senior Fisheries Officer for MSC Japan.

MSC, established in the UK in 1997, now has offices in approx. 20 countries around the world, and advocates for sustainable fishing through international certification systems. The blue MSC label on a product is proof that it has been caught in a fishery that takes marine resources and the environment into consideration. Ms. TAKAHASHI introduced the fact that fishermen in Japan have obtained MSC fishery certification for tuna, bonito, oysters, and scallops, and emphasized that, "Items that were only conditionally certified when a fishery obtained certification are subject to annual audits to confirm the progress of improvements and to ensure that fisheries remain compliant after acquiring their certification." Currently, 19% of global catches come from fishers that participate in the MSC's programs.

If a country conducts appropriate fisheries management, as in the case of Norway and Namibia, then fisheries resources are not easily depleted. On the other hand, in countries like Japan, where it is left to the "conscience" of fisherman, there are obvious declines in catches due to overfishing, and it is necessary to confront the problem.



The blue MSC label, which indicates that the seafood is sourced from sustainable and ecologically friendly fisheries (provided by MSC Japan).

Ms. TAKAHASHI believes that if more fishermen obtain MSC certification and if a cycle is established in which consumers purchase MSC-certified products, then "sustainable fishing will increase, and the marine environment will be kept in good condition." MSC certification is global, and the certification audits are conducted by independent experts with opportunities for stakeholder participation. Experts with a variety of perspectives are also involved in developing the standards for fisheries certifications, which are regularly reviewed to reflect the latest scientific and social conditions and to ensure feasibility and rigor.



Experts in a variety of fields spoke during the online event. Counterclockwise from the top right are Prof. Michio KONDOH, Asami TAKAHASHI, and Taichi SATO. In the bottom right is the coordinator staff from NPO ETIC (screenshot from online presentation).

These introductions to Nature Positive show that the initiatives aren't difficult. If people can tell at a glance during their regular shopping whether or not a product is environmentally friendly, then the hurdle to participating in nature positivity will be lowered. We can support biodiversity by being more aware and by making small behavioral changes, such as purchasing products with various certification marks.

ETIC., which served as the coordinator for the session, conducts social entrepreneurship support projects. The Science Agora 2023 Online Project was held from October 26th to 28th and is currently being streamed via the Science Agora Channel on YouTube.

(Nobuyo TAKIYAMA / Science Portal Editorial Dept.)

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Science Agora Online: Thursday, 26th – Saturday, 28th October

Thursday, October 26

26A13	Ion Beam x Biomass: Creating a Sustainable, Recycling-Oriented Society	National Institutes for Quantum Science and Technology
26A14	Vision and connections: Australia, Japan and space	Australian Space Agency
26A16	Impact of Technology on Learning	Asia-Pacific Assistive Robotics Association (APARA) & JST Singapore Office
26A17	STI cooperation with Global South	South African Embassy in Tokyo
26A19	World Science Forum 2024 – The Science and Policy Interface at the Time of Global Transformations	Embassy of Hungary, World Science Forum
26B14	How will our lives change if ultra-early disease prediction and intervention come true?	Moonshot Goal 2, Department of Moonshot Research and Development Program, Japan Science and Technology Agency
26B16	Let's talk together! "Decarbonizing with Ammonia"	Clean Fuel Ammonia Association
26B17	Let's reduce! Children's medicine accidents.	Project to Promote Medicinal Education for Elementary School Students

Friday, October 27

27A14	Realization of well-being regional society based on health	Research Institute of Health Innovation, Hirosaki University
27A16	Fundamental skills for PBL, setting theme and power of questions. Connecting dots between PBL and social issues.	Study Valley
27B14	Science for Nature Positive	JST / ETIC.
27A19	R&D challenges for food crisis ~Moonshot Beyond~	Moonshot Goal 5, Bio-oriented Technology Research Advancement Institution
27A21	The Next Crises: Emerging Risks and How We Can Prepare	Global Federation of Competitiveness Councils / Japan Science and Technology Agency
27B16	Let's learn about the cutting edge science, Muography through the puppet show "Miikshi"!	Embassy of Hungary / Kenji Sumiya (International Art Institute) / Hiroshi Nakajima (Artist) / The University of Tokyo
27B17	Can AI replicate your personality? Possibilities and legal restrictions	Mont Parnasse
27B19	Foresight in metaverse / VR! Let's think future society in 2040 from signs of futures in VRChat	Future Design Lab. The Japan Research Institute, Ltd.

Saturday, October 28

28A10	Connect to far. With Digital technology.	Fuji high school & junior high school - Physical Science Club
28A13	Let's start SDGs! Let's make plastic!	Osaka Science Museum Volunteers SCIENCE de DOYA
28A14	Liberal Arts Cafe "Philosophical dialogue on 'Science'"	Liberal Arts Tochigi
28A16	Changing the world with molecules ! Let's create molecules that solve future problems	Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University
28A17	"Edible Insects" & "Shokuiku(Food and Nutrition Education)" & "Conspiracy theory"	Higashiosaka Junior College / entomo protein Inc.
28A19	Data Science for Decision Making -Must-have skills in the digital era-	STEM Leaders

Online pre-event: Tuesday, 17th October

eve	Ask the contributors about the key points of exhibition or session planning	JST-RISTEX
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Science Agora On-site: Saturday, 18th – Sunday, 19th November

Booth, Telecom Center Building 1F

From Saturday, November 18th to 19th Sunday

101	Odaiba 100 Papers	JST-RISTEX
102	Written oracle for academic pursuits	Gakken / JST-RISTEX
103	Odaiba Biological Search! Urban creatures to look for in Bingo!	IKIMONO CLUB KONOMI / JST-RISTEX
104	Let's pilot and customize "YAOKI", the world's smallest lunar rover!	Dymon / JST-RISTEX / Miraikan
105	Mission Challenge with an ultra-compact drone	A-Co-Labo / ORSO / JST-RISTEX
106	Let's Play! Minecraft Education!!	Minecraft Cup Organizing Committee / JST-RISTEX
107,108	Shear your opinions	JST-RISTEX

Open space A, Telecom Center Building 1F

Saturday, November 18

18-1A12	Science Agora 2023 Highlights introduction	JST-RISTEX
18-1A13	Awards Celemony ~2023 'STI for SDGs' Award~	JST-RISTEX
18-1A14	Researcher's OGIRI: Let's Bring the Wizarding World / Space Life Together!	Arclev, Inc. / AASN
18-1A16	100 years after the Great Kanto Earthquake ~Toward Creating Collective Impact in BOSAI	World BOSAI Forum / International Research Institute of Disaster Science, Tohoku University / Study Group to Improve Disaster Prevention and Disaster Assistance
18-1A18	Social gathering for Science Agora 2023 Contributors	JST-RISTEX

Sunday, November 19

19-1A10	A Flying Car in Every Household !? - Let's Make A Flying Car Route Map	Comprehensive Research of the Ethical, Legal and Social Issues as Prerequisites for the Social Acceptance of Urban Air Mobility, R&D Project, RInCA Program, RISTEX-JST
19-1A13	Jun Ashida Award for Brilliant Female Researchers - Ceremony and Talk Session	Japan Science and Technology Agency
19-1A15	Lecture & Workshop: What is the origin of mass?	KEK / ILC-Japan

Booth, Telecom Center Building 3F

From Saturday, November 18th to 19th Sunday

301	How can we survive the future? -Learn "Nature Positive" from an example of endangered eagle species	Raptor Conservation Center
302	The red swamp crayfish and the red-eared slider. The threat to biodiversity.	The Japan Biodiversity Association / Mizumoto Nature Project
303	Science of Light and Color	Japanese Society of Science Books for Children
304	Take a peek! We are bodyguards for humans and animals.	Japanese Association for Experimental Animal Technologists (JAEAT)
305	Dissecting morphogenesis via PC simulation	Karada engineering
306	Creating secret codes using chemistry ~Invisible ink~	Science a la carte ecole (Osaka Institute of Technology)
307	Life with Stardust!	Society of Computer Chemistry, Japan
308	What is life? ~Development of useful educational games to understand biology~	Department of Applied Bioscience, Kanagawa Institute of Technology
309	RONBUN ART STREET Pop-up Store	Academimic
310	Let's imagine about our future with the high-tech innovators of the Edo period !	Techno Mirai Juku
311	A future where we can live in space. What kind of planet would you like to live on?	Correspondent Eito
312	Connect to far. With Digital technology.	Fuji high school & junior high school - Physical Science Club
313	"HO-HOU in the Dialogue Forest!" The Original Game for Co-creation	Rikkyo University, College of Science, Science Communication Office for Liberal Arts
314	Simple Science is Amazing !	Urawahigashi High School SPP
315	Let's do science in the city ~ Columbus' Egg Project ~	National Institute of Technology (KOSEN), Hachinohe College
316	Wonders of Space and Shape : Let's Play Tessellations!	Japan Tessellation Design Association
317	Bouncing? Stretching? The Secret of Rubber	musset (Nature and Science Museum support student team)
318	Arithmetic and mathematics with "Game, Quiz, and Puzzle"	math channel / happymath

319	Arithmetic and Mathematics Show	Japan Owarai Mathematics Association
320	The world of microorganisms ~Through Beer Brewing~	Kawano Lab / INUMM / Diamond Brewing
321	Let's Explore environment around us ! -getting to know the living things near you-	The National Museum of Emerging Science and Innovation, Department of Science communication
322	Nature's Tiny Heroes: Soil Microbes Rise Against Climate Change!	Citizen Science Project "Soil-in-a-Bottle"
323	Human Life and Mother Ocean - Wondering about the future of ocean -	Ocean Literacy and Education Panel, the Oceanographic Society of Japan
324	Towards learning from microscopic strategies of the single-cell, protists	Ethological dynamics in diorama environments / Nakagaki Lab. at Hokkaido Univ. / Shinohara Lab. at Tokyo Univ. of Agriculture and Tech.
325	Let's observe the red tide with your phone!	TUMSAT WANTED: RED Project Team / Edomae ESD Council / Office of Liaison and Cooperative Research (OLCR)
326	Deep-Sea Rocks	Research Institutes for Marine Geodynamics (IMG) and Value-Added-Information Generation (VAiG), JAMSTEC
327	What is the ILC?	Bureau of ILC Promotion, Iwate Prefectural Government
328	Insights from the cryosphere: Let's listen to and gaze at global environmental changes.	Kanto-Chubu-Nishinihon Branch of the Japanese Society of Snow and Ice

Open space B, Telecom Center Building 3F

Saturday, November 18

18-3B10	Welcome to the world of "tissue clearing"	ERATO Ueda Biological Timing Project / Chubu University
18-3B13	How is life created?	ERATO Kurumizaka Chromatin Atlas Project
18-3A15	Let's visualize and talk the future of artificial cells!	Keio Research Group on Artificial Cells and Society

Sunday, November 19

19-3B10	Secret Gadget Card Game ~Next-generation concrete saves the world!~	NitobeBunka Junior High School Science Lab / Institute of Industrial Science, the University of Tokyo MATSUYAMA Lab
19-3B13	Find your favorite psychologist! Presentation battle 2.5 ~What is the mind?~	LeaL
19-3B15	Why is the accumulation of knowledge necessary? And what is needed to establish it?	Dr. Shoji KOMAI

Booth, Telecom Center Building 4F

From Saturday, November 18th to 19th Sunday

401	The attractiveness of silkworms, insects that have played an active role in turing points in Japanese history	The Japanese Society for Sericultural Science
402	Let's make a tensegrity that can change the height that looks like it's floating with cardboard and string.	KEIO Professional Engineers association
403	The Journey from Science Agora to Creating the Society of the Future	UTaTané / JST-RISTEX
404	Wanted to know! An introduction to the Radiation - Let's search for treasures with a survey meter! -	Japan Atomic Energy Agency
405	One "flying car" for every family? ~A future with "flying cars" that everyone talks about and creates.	Comprehensive Research of the Ethical, Legal and Social Issues as Prerequisites for the Social Acceptance of Urban Air Mobility
406	Let's Explore! Adventure to Undiscovered Value	Value Exchange Engineering (Joint research project of Mercari / the University of Tokyo)
407	Let's represent the flow of water in programming.	Japan Information Technology Services Industry Association
408	A Must-See for Students! Solving Social Issues Together: You're in Charge! (Poster Session)	STEM Leaders
409	Enhancing Curiosity from Creative Activity	UTaTané
410	Futures Literacy 2 ~Please help us imagine the future!~	Japan Research Institute Future Design Labo
411	flasko workshop, think together about scientists, science and the future	flasko, Science media to make scientists more familiar.
412	Research Posters Created by Everyone: Making Research Easy to Understand!	KEK
413	Promotion of science communication for solving social issue -Practical lectures for undergraduate students at Doshisha University-	Sub-major for Science Communicator Training Program, Doshisha University
414	Let's enjoy various programming with SkyBerryJAM!	NIPPON STEEL Hitachi Systems Solutions, Inc. / SEIGAKUIN JUNIOR & SENIOR HIGH SCHOOL
415-1	Dr.Nadarenja's 25mm troposphere	Dr. Nadarenja's Natural Disaster Science Experiment Club
415-2	Education × Game @ A Group of Games Created by University Students to Learn Chemistry	EGCs / University Student Teams
416-1	Elemental Battle	Kumamoto Prefectural Kumamoto Kita High School
416-2	Heartbreak with dancing kagura	National Institute of Technology, Matsue College
417-1	What's your favorite molecule ? - Solve the molecular model puzzle and get your own favorite molecule !	Division of Chemistry, Center for Natural Sciences, College of Liberal Arts and Sciences, Kitasato University

417-2	The science of stroke order of Kanji	Hiro-Fumi Yanai from Ibaraki University
418-1	Installation of Light with Building Blocks: Book Report by Light of a Fairy Tale	Taizen / Kimikimiyo
418-2	Let's Dive into the Virtual World and Discuss the Future of "Avatar Technology" !	VCOST (Virtual Communicators of Science and Technology)
419-1	Pepper and Improvisational Theater - Can you change the ending of the story?	Science Forest Radio Production Team
419-2	Mechanical Safari Adventure	Seigakuin High School / VIVIWARE
420-1	Explore the world with robots through RobotATTA!	incubion Inc.
420-2	Cats Teach Us! Let's Explore Calm Communication.	Yuri Nakahashi

Open space C, Telecom Center Building 4F

Saturday, November 18

18-4C11	Challenge the Iwami Kagura quizzes using a microcomputer flag raising robot	National Institute of Technology, Matsue College
18-4C14	Children's Science Olympiad "Challenge Kukai"	Niconico Science Laboratory

Sunday, November 19

19-4C12	Experiencing a University Seminar. How do human consciousness, affection, and aversion arise?	Dr. Shoji KOMAI
19-4C14	How should we face the future of genomic medicine? ~Let's think about it with Certified Genetic Counselors !~	Japanese Association of Certified Genetic Counselors

Open space D, Telecom Center Building 4F

Saturday, November 18

18-4D10	Concerns about cultivation of the technical capabilities and the activities of the female managers in SMEs	The Institute of Professional Engineers, Japan, Science and Technology Promotion and Support Committee
18-4D13	Researchers' Life and Career	A-Co-Labo Inc.
18-4D15	STS Statement Science Session	Center for Science, Technology and Innovation Policy Studies, Kyushu University

Sunday, November 19

19-4D10	Let's create a blueprint for the future 10 years from now!	STEM Leaders
19-4D13	What is genomic medicine? "In order not to make people sad	Life & Bio plaza 21
19-4D15	Schlieren phenomena observed in experiments by hand-made tool using sugar candy	Yuhei Natsume

Booth, Telecom Center Building 5F

From Saturday, November 18th to 19th Sunday

501	Maze of Labyrinthine Sensation	Meijo University Faculty of Science and Technology Department of Information Engineering
502	To the Other Side of the TV	Information Systems Engineering, Graduate School of Information Science and Technology, Osaka University
503	You Are Now a Cormorant: Experience Fishing for Sweetfish on the Nagara River as a Cormorant	Department of Electrical, Electronic and Computer Engineering, Faculty of Engineering and Graduate School of Engineering, Gifu University
504	RadiantVR: Immersive Heat Experience	Department of Design, Graduate School of Design, Kyushu University
505	VR Bowling Rolling	Information Systems Engineering, Graduate School of Information Science and Technology, Osaka University
506	Multithreader	Tokyo Institute of Technology School of Engineering Department of Information and Communications Engineering
507	The Legend of Holy Sword - Proof of Concentration -	Graduate School of Information Science and Technology, The University of Tokyo
508	Drop Liquid	Department of Integrated Information Technology, College of Science and Engineering, Aoyama Gakuin University
509	The Unclaimed Masterpiece	ARTS ET MÉTIERS INSTITUT DE LAVAL
510	IVRC2023 Metaverse Division LEAPSTAGE Works Exhibition (1)	IVRC2023 Metaverse Division Steering Committee
511	IVRC2023 Metaverse Division LEAPSTAGE Works Exhibition (2)	IVRC2023 Metaverse Division Steering Committee
512	Megalo-me: A Giant Life Form for Listening to Sound	Department of Environment and Information Studies, Faculty of Environment and Information Studies, Keio University
513	Secret Gadget Card Game ~Save the world with the latest technology!~	Nitobebunka Junior High School Science Lab / Institute of Industrial Science, the University of Tokyo MATSUYAMA Lab
514	NPOclub science and technology wisdom talk to young people about future life~	CERTIFIED MANAGEMENT SUPPORT NPO CLUB
515	Creating Web3 Technologies and Businesses through Open Innovation	NEC Corporation

516	A Journey to EU-Japan Collaboration	Delegation of the European Union to Japan
517	SA x AI Be Happy by saying 'ngiyabonga'	South African Embassy in Tokyo
518	Let's find out! City of Happiness	asagao project
519	Let's play games to share the values with our loved ones!	Uryuhara Labo, Doshisha University
520	Explore our future with infectious diseases through insects and parasites	National Institute of Infectious Diseases
521	Board Games as Science Communication!?	Shineha Lab., Jissen Women's University
522	What is the real of the Arctic, the frontline of global warming?	Arctic Challenge for Sustainability II (ArCS II)
523	Seaweed will save the world! ~The challenge to develop the ultimate resource circulation system~	Graduate School of Bioresources, Mie University
524	Think about it now! SDGs action that everyone can do.	Young Chemists of the Professional Engineers, Japan
525	The experience of silent communication	Yoshioka Laboratory, School of Media Science, Tokyo University of Technology
526	Future for Urban DAC-U System (Artificial Photosynthesis)	NEDO Moonshot R&D Project "Integrated Electrochemical Systems for Scalable CO2 Conversion to Chemical Feedstocks"
527	genome editing × card game ~dialogue about science~	Kyoto Sangyo University - Laboratory of science communication
528	Taste the genome-edited fish, Think the genome-edited fish	Keitaro Kato (KINDAI UNIVERSITY) / Regional Fish / JST-RISTEX
529	A little curious! The story of the wood that support the town	Japan Society of Civil Engineers Wood Engineering Committee
530	The future of our community with disaster prevention club	Arakawa Third Junior High School
531	Simulate a "town" with cards! What kind of "town" is a good "town"?	Japanese Congress for Infrastructure Management (Citizen participation forum)
532	Japan Innovation Starting from "FUKUSHIMA"	Fukushima Innovation Coast Promotion Organization
533	Advancing towards the realization of fusion energy!	Fusion Energy Directorate, National Institutes for Quantum Science and Technology
534	A Global Energy Revolution to Solve Global Warming	Friends Girls Senior High School

Open space E, Telecom Center Building 5F

Saturday, November 18

18-5E11	An interactive workshop using the card game "QRP GAME" to think about gray areas in research.	UTokyo ELSI Game Lab & Ludix Lab
18-5E14	STI for SDGs: Shaping the Future with the Power of Science!	JST-RISTEX
18-5E16	Future Visionaries Conference	JST-RISTEX

Sunday, November 19

19-5E11	Dual-use, society and myself	ReDURC Project
19-5E15	What is "Feeling the Sound"? Co-design workshop based on Ontenna	Fujitsu / JST-RISTEX

Conference rooms, Telecom Center Building West 8F

From Saturday, November 18th to 19th Sunday

8F1	Murder mystery-ish game "Aldebaran Crisis"	Rikkyo University, College of Science, Science Communication Office for Liberal Arts / JST
8F2	Train your imagination to change the future with Minecraft! Challenge to create a power generation park using Minecraft!	Hidekazu Shoto / Minecraft Cup Organizing Committee / JST-RISTEX

The Science Agora Vision

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

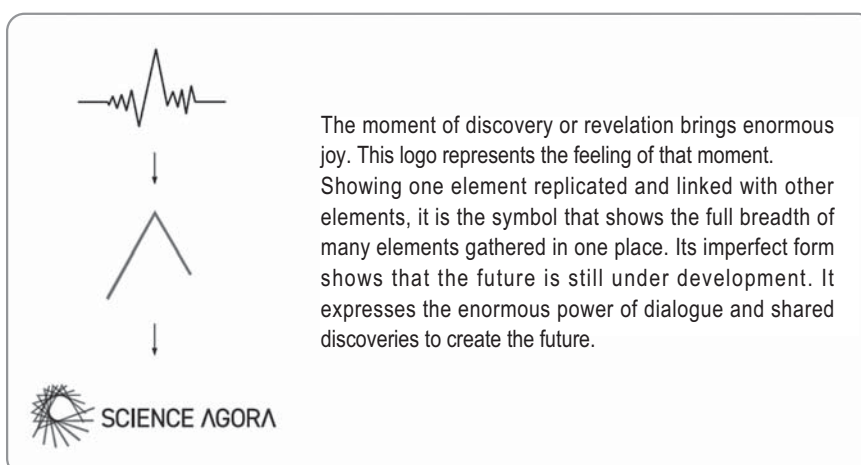
A future woven through dialogue between science & daily life

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]

- ① We emphasized not only “creating a space,” but also the approach of collaborative thinking to create the society of the future.
- ② The 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.
- ③ The 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



Science Agora 2023 Promotion Committee

- Chair **Masaharu Shiozaki** (Vice President of JST)
- member **Masahiko Inami** (Special Advisor to the President for The University of Tokyo, Deputy Director / Professor for Advanced Science and Technology)
- member **Mari Oshima** (Professor, Interfaculty Initiative in Information Studies/ Institute of Industrial Science, University of Tokyo; Director, Office for the Next Generation (ONG))
- member **Yoko Kamimura** (Chief Evangelist/ Community Designer/ Partner, SUNDRED Corporation)
- member **Kaede Sari** (Consultant, Commons Group, Nikken Sekkei Ltd.)
- member **Ryoichi Shinkuma** (Professor, Shibaura Institute of Technology; CTO, Hyper Digital Twins Co., Ltd.; Chair of MEIS Society)
- member **Shoko Takahashi** (CEO, Incubion Inc.)
- member **Tatsuya Honda** (Antenna Project Leader, Social Technologies Implementation Office, Converging Technologies Laboratory, Fujitsu Limited.)
- member **Taichi Masu** (Assistant Professor, Harris Science Research Institute, Doshisha University)
- member **Yuko Morita** (Specialist, Department of Planning and Management, Research Institute of Science & Technology for Society, JST)

As of November 2023 ※Titles omitted

Science Agora 2024

The event is to be held again in 2024

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

Science Agora 2023

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