



10th Anniversary "Let's build a society harmonized with science"

Official Report

Science Agora 2015 outline Science

About Science Agora

Science Agora is an open arena for people from different sectors who desire a future society harmonized with science. Aggregated in this arena are independent, self-motivated individuals involved in activities that connect people to different areas, sectors, and different generations and nationalities. Science Agora is a platform for people to build a future society where science is inherently rooted through collaboration and mutual respect for diverse values.

Vision

We promote Science Agora 2015 with the following vision, which defines future Science Agora.



"Let's build a society harmonized with science"

The 10th anniversary Science Agora 2015 is attracting attention as a platform for co-producing value through good science communications among multiple stakeholders in society. For this objective, we categorized the stakeholders of Science Agora 2015 into five sectors (policymakers, scientists, businesspeople, the media, and the general public) to try to meet the various needs.

General information

(1) Schedule: 10:00 - 17:00 November 13th (Fri), 14th (Sat), 15th (Sun), 2015

(2) Venue: Odaiba area, Tokyo

(National Museum of Emerging Science and Innovation (Miraikan), National Institute of Advanced Industrial Science and Technology Tokyo Waterfront, Tokyo Metropolitan Industrial Technology Research Institute, Tokyo International Exchange Center, Symbol Promenade Park, Fuji Television Wangan Studio) Host:

Japan Science and Technology Agency

Co-hosts and partner: Science Council of Japan

National Institute of Advanced Industrial Science and Technology Tokyo Metropolitan Industrial Technology Research Institute Japan Student Services Organization Tokyo Academic Park Tokyo Rinkai Fukutoshin Group, Fuji Television Sponsors : EuroScience KOFAC KADOKAWA Kadokawa Uplink Supporters : Cabinet office Ministry of Foreign Affairs Ministry of Education, Culture, Sports, Science and Technology National Museum of Nature and Science Japan Society for the Promotion of Science RIKEN Japan Aerospace Exploration Agency Japan Agency for Marine-Earth Science and Technology Japan Atomic Energy Agency National Astronomical Observatory of Japan Tokyo Waterfront City Association Japan Business Federation Japan Science Foundation/Science Museum Tokyo Metropolitan Board of Education Saitama Prefecture Board of Education Kanagawa Prefectural Government Board of Education Chiba Prefectural Government Board of Education National Association of Science Education, Junior High Schools Japanese Council of Science Museums Japan Science Museum Association Japanese Association of Science & Technology Journalists Japanese Association for Science Communication The Japan Society of Applied Physics The Chemical Society of Japan



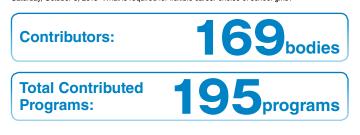


Agora 2015 Results

Total Number of Participants:	9,	14	5people
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	11/13th (Fri)	11/14th (Sat)	11/15th (Sun)	Satellite	Total
Attendees	787	2,320	3,955	20	7,082
Invitees	57			10	67
Contributors	1,963		10	1,973	
Press	23			0	23

% Satellite event was presented by department of science education: Saturday, October 3, 2015 "What is required for flexible career choice of school girls?"



Exhibition Program Details

	11/13th (Fri)	11/14th (Sat)	11/15th (Sun)	Satellite	Total
Booth Exhibitio	8	123	119	0	127
Sessior	7	30	36	1	68

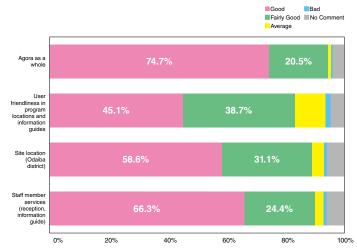
Results of Attendees Survey

Period : November 13th(Fri)~15th(Sun),2015

The number of respondents : 659(Number of subjects:7082) Recovery rate : 9.3%

Questionnaire collection : Questionnaires were distributed at the registration and collected inside the venue

Please give feedback on your Science Agora experience.



Changes in the Number of Participants



Changes in the Number of Contributors and Programs



Results of Contributors Survey

Investigative method : Answer accepted from the online form to for all Contributors

Period : December 3rd(Thu)~21th(Mon),2015 The number of respondents : 118

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Please give feedback on your Science Agora experience.

Good Bad Fairly Good No Comment Average



Agora Opening Session

Let's build a society harmonized with science **Special Session for the 10th Anniversary**

Date: 13:30-16:30, November 13th (Fri), 2015 Venue: International Conference Hall(3F)Tokyo International Exchange Center (TIEC) Organizer: Japan Science and Technology Agency (JST)

Part 1 **Presenters**

Michinari Hamaguchi, President, Japan Science and Technology Agency (JST) Mivoko O. Watanabe, Deputy Executive Director, Japan Science and Technology Agency (JST) Koichi Morimoto, Director General for Science, Technology and Innovation, Cabinet Office of Japan Kazuo Todani, Deputy Minister of Education, Culture, Sports, Science and Technology Tadashi Onodera, Chairman, Committee on New Industry and Technology, Keidanren (Japan Business Federation)/Chairman, KDDI Corporation Takashi Onishi, President, Science Council of Japan Koji Takahashi, Executive Vice President, Japan Student Services Organization Dame Anne Glover, Professor, The University of Aberdeen Satoru Ohtake, Principal Fellow, Japan Science and Technology Agency (JST)



Hiroshi Amano, Professor, Director, Center for Integrated Research of Future Electronics, Institute of Materials and Systems for Sustainability, Nagoya University Kazuo Iwano, Principal Fellow, Center for Research and Development Strategy, Japan Science and Technology Agency (JST) Yuichiro Anzai, President, Japan Society for the Promotion of Science

Kazuo Kyuma, Executive Member, Council for Science, Technology and Innovation, Cabinet Office of Japan Tateo Arimoto, Professor, National Graduate Institute for Policy Studies (GRIPS)

Overview

The opening of Science Agora, which marked its 10th anniversary this year, was declared in Part 1. Then there were some speeches from guests followed by the keynote lecture by Dame Anne Glover, Professor, the University of Aberdeen in the United Kingdom. During the special session in Part 2, Professor Hiroshi Amano, 2014 Nobel Physics Prize Laureate, gave a special lecture, followed by the panel discussion titled "Cyber Society and Human Beings - REALITY 2.0 and the Society in the Future -", and presenters provided insights regarding the relationships between cuttingedge technologies and the society



Keynote Session 1

Fb-506

Possibilities for Science Contents Innovation ~ Accelerating the Interaction between the Frontier Scientists and Creators ~

Date: 10:30-12:30, November 13th (Fri), 2015

Venue: International Conference Hall (3F), Tokyo International Exchange Center (TIEC) Organizers: Hayakawa Publishing Corporation, Industry-Academia Collaboration Initiative Nonprofit Organization

Masahiro Asami, Executive Officer, Director of Technology Business, Director of Intellectual Property Strategy, Director, FUJIFILM Holdings Corporation

Presenters

Ryosuke Takatsuki, CEO, INSPIRE Corporation Taiyo Fujii, Science fiction writer/ President, Science Fiction and Fantasy Writers of Japan

Yutaka Matsuo, Associate Professor, Department of Technology Management for Innovation, Graduate School of Engineering, the University of Tokyo/ Artificial intelligence researcher

Ken Senoh, President, Industry-Academia Collaboration Initiative Nonprofit Organization

Overview

What would emerge when scientific research and science fictions cross each other's path?Inviting experts in different fields such as scientific researchers, technical engineers, writers and venture capitalists, we shared our dreams and discussed possibilities to create a new intellectual field that can arise from the collaboration of science and contents.



Fb-506

Keynote Session 2

Science Advice / Open Science: How science is socialized in each country and region?

Date: 10:30-12:45, November 14th (Sat), 2015

Venue: Miraikan Hall (7F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: Japan Science and Technology Agency(JST)

Presenters	Takao Kuramochi, Senior Deputy Director-General, Center for Research and Development Strategy (CRDS), Japan Science and Technology Agency (JST) Jan Staman, Special Advisor, SciREX Center, National Graduate Institute for Policy Studies (GRIPS)	
	Yuko Harayama, Executive Member, Council for Science, Technology and Innovation, Cabinet Office	
	of Japan David Cope , Fellow, Clare Hall, Cambridge University	
	Michiharu Nakamura, Counselor to the President, Japan Science and Technology Agency(JST) Tateo Arimoto, Professor, National Graduate Institute for Policy Studies (GRIPS)	
	Peter Tindemans, Secretary General, Euroscience	
	Seunghwan Kim, President, Korea Foundation for the Advancement of Science and Creativity (KOFAC)	1-
	Massimiano Bucchi, Professor, The University of Trento	
	Mohau Pheko, Ambassador extraordinary and plenipotentiary, Embassy of the Republic of South Africa in Tokyo	
	Tadashi Kobayashi, Executive Vice President, Osaka University	
	Satoru Ohtake, Principal Fellow, Japan Science and Technology Agency (JST)	
Overview	How can scientists and citizens take part in science that is more open to public and democratic driv	ven by

How can scientists and citizens take part in science that is more open to public and democratic driven by the spread of information technology and globalization, and how do they develop their own activity? We discussed the current state and issues.

Keynote Session 3

The Future of Cyber Society: Views of Europe and Japan

Date: 13:30–15:00, November 14th (Sat), 2015 Venue: Miraikan Hall (7F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: Delegation of the European Union to Japan

 Presenters
 Philippe Codognet, Director, The Regional Office of National Center for Scientific Research (CNRS) for North Asia

 Hiroaki Kitano, President and CEO, Sony Computer Science Laboratories,

 Nicole Dewandre, Advisor for societal issues to the Director General of the Directorate General, Communications, Networks, Content and Technologies (DG CONNECT), The European Commission

 Shuji Hashimoto, Vice President, Waseda University,

 Raja Chatila, Director of Research, The French National Center of Scientific Research

 Minao Kukita, Associate Professor, Nagoya University

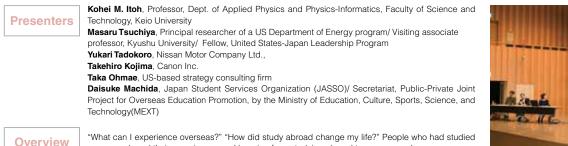
Overview

We are in the middle of "Cyber Society" that is highly connected by networks. How does cyber society influence the industry? And how does it change human lives? In this keynote session, experts and researchers from Japan and Europe discussed from each standpoint.

Keynote Session 4

Let's explore the world! – The link between the society and scientists who transformed themselves after studying abroad –

Date: 10:15–11:45, November 15th (Sun), 2015 Venue: International Conference Hall (3F), Tokyo International Exchange Center (TIEC) Organizer: Japan Science and Technology Agency (JST)



overseas shared their experiences and learning from studying abroad to young people.



<u>Ab-105</u>



Ab-084



Keynote Session 5

<International Year of Light Special Session>The Universe, Time, Our Evolution and Future through "Light"

Date: 12:50-16:00, November 15th (Sun), 2015 Venue: International Conference Hall (3F), Tokyo International Exchange Center (TIEC) Organizer: Japan Science and Technology Agency (JST)

	Yasuhiko Arakawa, Professor, The University of Tokyo & President, ICO
Presenters	Tomonori Usuda, Professor, National Astronomical Observatory of Japan
	Hidetoshi Katori, Professor, The University of Tokyo
	Ryotaro Muramatsu, Artist & President, NAKED Inc.
	Kenichi Iga, Professor emeritus, Ex-president, Tokyo Institute of Technology

2015 is the International Year of Light declared by the United Nations. In Agora Keynote Session 5, scholars who have been doing critical research on light and an artist using light were on stage, and they introduced the audience the world of light from various perspectives.

Agora Closing Session

Overview

The past and the future of Science Agora

Date: 16:00-18:00 November 15th (Sun), 2015

Venue: Miraikan Hall (7F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: Japan Science and Technology Agency (JST)



In the "Closing Session", Dr. Miyoko O. Watanabe, Director-General of Center of Science Communication, Japan Science and Technology Agency (JST) reported Science Agora's performance this year and presented their achievements up until now. The session was followed by this year's Awards Ceremony, and a panel discussion by professionals to address their prospects for the future and the relationship between science and the society.



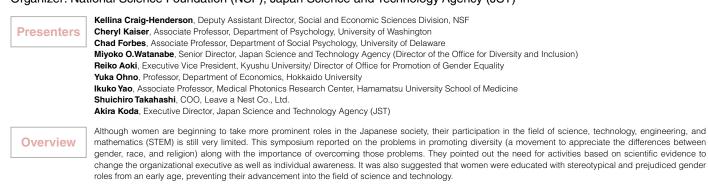


Featured Session 1

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Lessons Learned to Broaden the Participation of Women in STEM -The Science of Broadening Participation-

Date: 10:30 –13:00, November 13th (Fri), 2015 Venue: Miraikan Hall (7F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: National Science Foundation (NSF), Japan Science and Technology Agency (JST)



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Featured Session 2

Intense Discussion! Innovation Challenge through Leading-Edge ICT

Date: 13:00 –17:00, November 13th (Fri), 2015 Venue: Media Hall(3F), Tokyo International Exchange Center(TIEC) Organizer: Japan Science and Technology Agency (JST) Strategy Research Promotion Department

Presenters	Norihiro Hagita, Executive Director, Advanced Telecommunications Research Institute International (ATR) Stuart Evans (Video lecture), Professor, Carnegie Mellon University
FIESEIILEIS	Frances Sol Palrada (Video lecture), Emeritus professor, Universitat Politècnica de Catalunya • Barcelona Tech (UPC)
	Minoru Eto, Executive Officer, NTT DOCOMO, Inc.
	Ryota Kanei, CEO, ARAYA Brain Imaging
	Koichi Kise, Professor, Graduate School of Engineering, Osaka Prefecture University
	Kai Kunze, Associate Professor, Graduate School of Media Design, Keio University
	Chiaki Hayashi, Co-founder, Loftwork Inc.
	The lecture and panel discussion was held on the subject of "causing innovation (reform by new value creation) and solving

exchanged on the importance and requirements in causing innovations and future visions of the society.

Featured Session 3

Overview

Fighting Social Problems with Japanese Technology and Social Business

Date: 10:00-12:30, November 14th (Sat), 2015

Venue: Conference Room 1(7F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: Kyushu University Graduate School and Faculty of Information Science and Electrical Engineering, Grameen Communications Global Communication Center

social problems through the latest research results of ICT (information communication technology)". Various opinions were

 Presenters
 Ashir Ahmed, Associate Professor, Kyushu University Graduate School and Faculty of Information Science and Electrical Engineering

 Nacki Nakashima, Professor, Medical Information Center, Kyushu University Hospital

 Takuzo Osugi, Specially Appointed Associate Professor, Cross-Boundary Innovation Program, Osaka University

 Takashi Tsuno, Researcher, Grameen Communications

 Noriharu Maruyama, Regional Group Leader of Healthcare Marketing Department, Konica Minolta, Inc.

 Overview
 Grameen Communications is an information technology company in the Grameen Bank Group, established by an economist and Nobel Peace Prize winner

class of Bangladesh through Portable Health Clinic (PHC) services and other businesses. Five people involved with the project spoke about this aid program.

Featured Session 4

Let's Imagine 2020!

Date: 10:00–13:00, November 14th (Sat), 2015 Venue: Conference Room 2(7F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: Stimulating Science with Art

 Presenters
 Shoji Komai, Associate Professor, Graduate School of Biological Sciences, Nara Institute of Science and Technology

 Massimiano Bucchi, Professor of Sociology, Trent University Yuichiro Takeuchi, Sony Computer Science Laboratories, Inc.

 Introduced projects combining science and arts and proposed the future vision

Overview Introduced projects combining science and arts and proposed the future vision of science. Cultivated thinking and imagination (imagination and creativity) in the participants through a workshop using modern art and technology.



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2015 Major Sessions

Featured Session 5

Open-Science Revolution -Future of Research Promotion through Online Collaboration-

Date: 14:00-16:30, November 14th (Sat), 2015

Venue: Agora Stage C(1F), National Museum of Emerging Science and Innovation (Miraikan) Organizer: Academist

	Daiki Horikawa, Specially Appointed Lecturer, Institute for Advanced Biosciences, Keio University
Presenters	Wataru Suehiro, Doctorate Student of Laboratory of Insect Ecology, Kyoto University Graduate School of
	Agriculture/Research Fellow, Japan Society for the Promotion of Science
	Teruaki Enoto, Program-specific Associate Professor of Department of Astronomy, Kyoto University Hakubi

Center Takayuki Yuasa, Research Fellow, RIKEN Tsubasa Yumura, Temporary Engineer of CYREC, National Institute of Information and Communications

Technology/Doctorate Student of Theoretical Information Science Group, Japan Advanced Institute of Science and Technology

Overview

Five presenters spoke on the new research style "online collaboration" and introduced current activities, examples of each field abroad, and ideas to make it successful.

Featured Session 6

Future Society Created by Automated Driving Technology

Date: 10:30-12:00, November 15th (Sun), 2015

Venue: Miraikan Hall (7F), National Museum of Emerging Science and Innovation (Miraikan) Program Offer: SIP Automated Driving System Promotion Committee



Hiroyuki Watanabe, SIP Automated Driving Program Director Masao Fukushima, Nissan Motor Co., Ltd. Seigo Kuzumaki, Toyota Motor Corporation Toshio Yokoyama, Honda R&D Co., Ltd. Rumiko Iwasada, Automobile Journalist

Overview

Automated driving signifies vehicles that run without anyone driving. Recently, cars with this driving aid technology have started to run on public roads, however, a completely automated driving car is yet to be realized. The current state and the future of automated driving cars and society were discussed.



Featured Session 7

Our Thoughts on Global Warming and Energy Usage!

Date: 14:30-16:30, November 15th (Sun), 2015 Venue: Conference Room 1(11F), AIST Tokyo Waterfront Annex Building Program Offer: Japan Science and Technology Agency (JST)



Seita Emori, Head of the Center for Global Environmental Research(Climate Risk Assessment Section) Akitsugu Koga, Head of the Department of Green Innovation, Japan Science and Technology Agency

Junior high and high school students gathered to learn about global warming caused by greenhouse gas emitted from human activities. The threats in the near future, reduction of greenhouse gas emission, and energy usage were discussed in the interactive workshop



Featured Session 8

Ab-099

Cb-208

Humanities and Social Sciences can Change so Much with the Integration of Arts and Sciences!

Date: 14:30-16:00, November 15th (Sun), 2015 Venue: Conference Room 2(7F), National Museum of Emerging Science and Innovation (Miraikan) Program Offer: Scientist Committee and Science and Society Committee of Science Council of Japan

Presenters

Kazuhisa Todayama, Graduate school of Information Science, Department of Systems and Social Informatics, Philosophy, Nagoya University Takaya Arita, Graduate school of Information Science, Department of Complex Systems Science, Nagoya University Tatsuya Kameda, Graduate school of Humanities and Sociology, Department of Social Psychology, Tokyo University

Overview

introduced the latest scientific research on inquires of mankind often discussed in the fields of humanities and sociology



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Ab-106

7 Science Agora 2015

"Issues of mankind are not separated into science and arts." The session began with passionate words of the organizer, and two researchers