SPARC Japan NewsLetter
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SPARC Japan NewsLetter provides activity and seminar reports. The seminar report includes its outline, program with speakers' introductions and abstracts, panel discussion, attendee feedback, and afterword.

All affiliations and titles are current as of the time of the event.

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Support for arXiv.org

As a preprint server for physics, mathematics, computer science, etc., arXiv.org <https://arxiv.org/> promotes open access and archiving of research results mainly in these fields. In March 2025, the number of available papers exceeded 2.7 million. These papers were downloaded approximately 3.21 billion times as of March 2025.

Financial support is provided by the top-ranking institutions in terms of usage, and the arXiv.org Membership Program, launched in 2013, had 278 participating institutions in 30 countries as of October 2023.

In Japan, a consortium of research institutes with extensive experience using arXiv.org has formed to support this effort. The National Institute of Informatics has been confirming intentions to participate and collecting annual membership fees since 2009.

Surveys of institutions in Japan that frequently use arXiv.org concerning their intention to participate in 2024 showed 17 participating institutions as of the end of March 2025.

The website below provides more information about arXiv.org.

https://www.nii.ac.jp/sparc/about/international/arXiv/

Support for CLOCKSS

CLOCKSS (Controlled Lots of Copies Keep Stuff Safe) <https://clockss.org/> is working to realize long-term preservation of electronic scholarly content for researchers around the world. Specifically, CLOCKSS is working to build an archive as well as a community to manage it, and to make the content in the archive widely available in the event that it is no longer provided by publishers. In addition, the National Institute of Informatics is participating as one of the twelve node institutions in the world that hold such content.

In Japan, the National Institute of Informatics has been confirming intentions to participate and collecting annual membership fees since 2013.

A survey conducted on the intention to participate in 2024 mainly among member libraries of the Japan Alliance of University Libraries Consortia for E-Resources (JUSTICE) showed 103 participating institutions as of the end of March 2025.

Related conferences were held as follows, with Professor Hideaki Takeda of the National Institute of Informatics participating on behalf of the Japanese participating institutions.

- CLOCKSS Board of Directors Meeting: October 23, 2024 (online), and February 24, 2025 (online)

Support for the SCOAP³

SCOAP³ <https://scoap3.org/> is an international collaborative project led by the European Organization for Nuclear Research (CERN) to provide open access to peer-reviewed journal articles in the field of high-energy physics (HEP). In Japan, support is provided for the open access of major journals in the HEP field by transferring the subscription fees that libraries have traditionally paid to publishers to the article publication processing charge (APC), mainly for research institutions that subscribe to SCOAP³ journals.

In Japan, the National Institute of Informatics has been confirming intentions to participate and collecting annual membership fees since 2014.

A survey of domestic institutions supporting Phase 3 (2020-2024) and their intention to participate in 2024 showed 82 participating institutions as of the end of March 2025.

In September 2024, we conducted a survey with institutions participating in SCOAP³ on their level of interest in the SCOAP³ for Books 2024 Project < https://scoap3.org/scoap3-books/ >, which aims at open access to related books and was approved at the 2024 Governing Council. Seven institutions expressed their support in the survey.

The website below provides more information about SCOAP³.

https://www.nii.ac.jp/sparc/about/international/scoap3/

Contributions allocated for SCOAP³ Phase 4 (2025-2027)

The project commenced with Phase 3 (2020–2024) in 2020 and completed it at the end of 2024. During this period, libraries, major funding institutions, research centers, and others in over 47 countries backed up the project, and consequently supported open access publishing of more than 68,500 high-quality peer-reviewed academic papers. The project has also covered 90% of journal publications in the field of High-Energy Physics (HEP), including three journals published by the American Physical Society (APS). In light of this, the Governing Council, comprising representatives from countries participating in SCOAP³, decided to continue the project for three more years from 2025 to 2027 as Phase 4.

Continuing the project requires continued support from university libraries, etc. that have paid subscription fees to target journals. Therefore, following Phase 3, allocation of contributions for supporting SCOAP³ to libraries participating in Phase 4 was determined based on the calculations below:

1. Contribution to journals published by the American Physical Society (APS)
   Calculated by multiplying the subscription fees (regular prices) of the library in and after 2025 by the coefficient specified by document type.*1
2. Contribution to journals published by institutions other than the APS (non-APS)
   Calculated by multiplying the amount of contribution (cost) allocated to the library in Phase 3 by 0.82.*2
   Amount of contribution by institutions participating since Phase 3 should be any amount that is greater than or equal to 20 euros.

*1: The coefficient differs year by year. In 2025, APS-ALL = 11.25%, PR C = 8.00%, PR D = 54.00%, and PR Letters = 11.00%

*2: 5.3 (the share of Japanese academic papers in the field of high-energy physics calculated for Phase 4) ÷ 6.5 (the share of Japanese academic papers in the field of High-Energy Physics calculated for Phase 3)

The participating libraries must make a contribution in yen at the exchange rate specified by the National Institute of Informatics.

After the calculations were announced in October 2024, the National Institute of Informatics, which serves as SCOAP³ secretariat in Japan, asked the participating libraries to respond to a survey on whether or not they intend to participate in the project in 2025. The survey ended on January 31, 2025, but we can still accept your participation in the project or your partnership with the project.

For more information, please access the website. We ask for your participation in the project, as your cooperation will assist us in reaching the goal of more efficient distribution of academic information.

https://www.nii.ac.jp/sparc/scoap3/survey2025.html

SPARC Japan Seminar Report

SPARC Japan Seminar 2024

"What Lies Beyond the Open Access Mandate?: Preparing for the world to come"

Thursday, January 30, 2025: Online (Attendees: 805)

See the SPARC Japan website for handouts and other details (https://www.nii.ac.jp/sparc/en/event/2024/20250130en.html).

Outline

We are on the verge of immediate open access to academic papers and other publications, as we work to create an environment where researchers can freely and widely publish and share their research results, and the public can broadly access these intellectual assets.

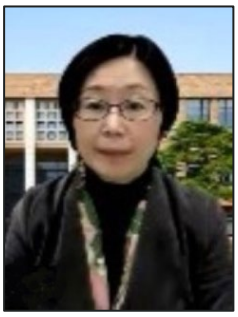
What kind of world will the future be, when these intellectual assets are widely accessible? How will researchers and the public be able to make use of them? In some research fields, research data and papers are already being made openly accessible, and research is being conducted with open access in mind. Therefore, in order to meet the open access mandate, it is important not only to 'make research results open access according to policy', but also to consider how they will be used and prepare for the future.

In this seminar, we will explore what the world beyond open science might look like, how research results can be utilized, and what the future holds in 2030, drawing on advanced examples and initiatives from researchers, libraries and others. We will also discuss what actions we should take now to achieve these future visions.

Presentation Abstracts and Speakers

Strengthening research impact and open access in Japan

Noriko Osumi (Tohoku University)



This presentation will explore the role of open access (OA) in enhancing Japan's research capabilities, particularly focusing on academic publications. It examines challenges faced by researchers and institutions, alongside solutions in the context of the immediate OA policy for publicly funded research beginning in 2025. While Read & Publish agreements offer a means to tackle rising subscription fees and enhance transparency, reproducibility, and international competitiveness, the APC-based Gold OA model raises concerns about its sustainability. The talk will examine OA's impact and strategies for advancing and nurturing science and technology.

Profile

Prof. Osumi has graduated Tokyo Medical and Dental University, been given PhD thesis from the same university, and now is a professor at Tohoku University School of Medicine since 1998. She has been appointed Vice President in charge of public relation, promoting diversity, and President of University Library from April 2018. Her research background is developmental biology, and she has interest in brain development, evolution, and disease.

Restoring Researchers' Autonomy in Scholarly Communications through Open Access

Takashi Hikihara (Kyoto University)

Open access to research results and evidence data will be mandatory starting in 2025. This brings attention to the many challenges related to the rights and responsibilities of research, which have become a massive source of data but remain ambiguous. Scholarly communication has contributed to scholarly distribution through the visible activities of academic societies and voluntary peer review. It is, however, overshadowed by a chaotic situation in which the distribution process itself takes the lead. Therefore, reversing this situation means enabling researchers to regain the ability to visualize and disseminate research results with evidence and transparency on their own terms. Whether this can be achieved depends on whether a source node in the network can be created in such a way that researchers are able to take initiative within the system.

Profile

Professor Emeritus of Kyoto University. Dr. Hikihara's field of research includes nonlinear dynamics and its engineering application, measurement and system control, and power processing. Director-General of Kyoto University Library Network (2012-2022). Director-General of Institute for Information Management and Communication (IIMC), Kyoto University (2020-2024). Executive Vice President of Kyoto University (2022-). To transform the university library into a dynamic service organization, he led it to declare the open access policy in 2015, the open data policy in 2020, and to establish a Center for Open Science and Data Management in 2024 to accelerate these efforts. arXiv.org MAB (2016-2018).

The History of Open Access in Life Sciences

Shuichi Kawashima (Database Center for Life Science, ROIS-DS)

Open access in the life sciences has played a crucial role in advancing science and fostering international collaboration. In this presentation, I will review the history of genome data sharing, which developed alongside the Human Genome Project, and introduce the current state of open data through successful examples of early open databases such as GenBank and PubMed. I will also discuss the role of the FAIR principles in ensuring the proper publication and reuse of data. Furthermore, I will examine the technical and ethical challenges and explore the future possibilities enabled by AI and big data analysis.

Profile

Project Associate Professor at the Life Science Database Center, Joint Support-Center for Data Science Research, Research Organization of Information and Systems. Ph.D. in Science. After working at the Institute for Chemical Research, Kyoto University, and the Human Genome Center, Institute of Medical Science, The University of Tokyo, joined DBCLS in 2012. Since then, engaged in developing life science databases and advancing technologies for database integration.

Bridge Communication that Thrives in a Society with Implemented Open Science

Shuichiro Takahashi (Leave a Nest Co., Ltd.)

For open science initiatives to have a broad impact within society, it is essential, as a prerequisite, to create momentum in which all social players, including non-specialists, are aware of and interested in the results of cutting-edge research and are motivated to access new knowledge. To achieve this, it goes without saying that it is important for information to be visible and accessible. In addition, it is crucial for the specialists who publish information to deeply understand the target audience (such as specialists from other fields, industry and the next generation) and actively bridge the gap with them. In this presentation, he will introduce practical examples of 'bridge communication' initiatives from the perspectives of next-generation education, industry-academia collaboration and venture creation, and then discuss expectations for open science.

Profile

Ph.D. in Life Sciences, graduated from the Graduate School of Frontier Sciences, The University of Tokyo. After he co-founded Leave a Nest Co., Ltd., he built some new platform that includes not only academia but also industry, government and education sectors, such as "Leave a Nest Grant" and "L-RAD" which enables us to implement underutilized researchers' ideas into the society. He has been a Representative Director COO, of Leave a Nest Co., Ltd., and also a Representative Director of Leave a Nest Capital Co., Ltd. since 2010 and 2022, respectively.

Development of Open Collaborative Mapping and its Data Use

Toshikazu Seto (Komazawa University; the University of Tokyo)

Geospatial information, which supports digital maps and GIS (Geographic Information Systems), has largely been developed by the public sector, primarily by government agencies. On the other hand, opportunities to use geospatial information have been increasing in various contexts, such as urban planning, disaster prevention and infrastructure management, beyond just daily life. There are initiatives to collect various geospatial information that cannot be covered by public data in a participatory manner and to share it as open data. In this presentation, I will focus on the activities of OpenStreetMap as a representative example and explain its role and use cases as data commons.

Profile

Appointed as a Research Associate in 2004 and later as a Lecturer (2006–March 2009) in the Department of Geography, College of Letters, Ritsumeikan University. Completed the doctoral program at the Graduate School of Letters, Ritsumeikan University, and was appointed as a Special Researcher at the same institution in 2012. Visiting Fellow at the Center for Geographical Analysis, Harvard University (2012). Served as Project Assistant Professor from 2013 and later as Project Lecturer from April 2016 at the Center for Spatial Information Science (CSIS), The University of Tokyo. Associate Professor at the Department of Geography, Faculty of Letters, Komazawa University, since April 2021, while also serving as a Project Associate Professor at CSIS, The University of Tokyo, and as a Visiting Associate Professor at The Open University of Japan. Specializes in social geography and geographic information science, with research focused on participatory GIS, civic tech, and data governance. Ph.D. in Literature.

Missing Link in the Circulation of Knowledge: What Use Cases Will Intellectual Assets Lead to?

Asanobu Kitamoto (National Institute of Informatics)

By widely opening access to intellectual assets, knowledge is hoped to circulate among people and be used, leading to more intellectual assets. However, compared to the wealth of information on the publication of intellectual assets, information on use cases of intellectual assets is scarce, and this is the “missing link” in the circulation of knowledge. We have been attempting to trace the missing link by developing the Mahalo Button, a platform for collecting and sharing use cases of datasets. We want to discuss the future image of the circulation of knowledge from publication to use.

Profile

Digital Content and Media Sciences Research Division, Professor / ROIS-DS Center for Open Data in the Humanities (CODH)
https://www.nii.ac.jp/en/faculty/digital_content/kitamoto_asanobu/

The outlook of Scholarly Communication in Next Ten Years

Hideaki Takeda (National Institute of Informatics)

The world of scholarly communication is undergoing a major transformation with the advancement of open science. The world of scholarly communication has changed dramatically with the development of open science. The use of this information has also expanded to include not only research but also research evaluation. This talk presents a schematic diagram of such scholarly communication and describes the role of PID, which plays a central role in it.

Profile

Hideaki Takeda received Dr. Eng. degree from the University of Tokyo, Japan in 1991. After working at Norwegian Institute of Technology and Nara Institute of Science and Technology, he joined National Institute of Informatics (NII) in 2000 and currently the professor at Informatics Principle Research Division and the director of Research Center for Knowledge Media and Content Science in NII. His interest includes Semantic Web, Social Web, and Community-based systems. He is a member of JSAI, IPSJ, IEICE and AAAI.
http://www.nii.ac.jp/en/faculty/informatics/takeda_hideaki/

Information Literacy in the Age of Open Access

Toshihiko Nozue (Aoyama Gakuin University)

Open access to research results, such as papers and data, is merely a means to an end, and the true goal is for users, including researchers, to make use of them. When it comes to seeking and using papers, data and other resources, users are required to have information literacy (including data literacy in this case). I would like to explore how information literacy has changed as the landscape of scholarly communication develops, and how it will continue to evolve. Additionally, I would like to examine how information literacy can be acquired and improved in the future, including the role of university libraries.

Profile

Professor and Dean of the College of Education, Psychology, and Human Science, Aoyama Gakuin University (AGU), and Vice Director of Institute for Technological & Social Transformation (iTST), AGU. After serving as a Research Associate at the National Center for Science Information Systems (NACSIS), a Supervisor for Social Education at the Ministry of Education, an Associate Professor at the College of Literature, AGU, and a Visiting Associate Professor at the National Institute of Informatics (NII), currently holds the present position. Also serves as the Chair of the Committee for User Education of the Japan Library Association (JLA), the Chair of the Basic Policy Committee of the Council on the Organization of Information on Science and Technology at the National Diet Library (NDL), and the Chair of the Tokyo Metropolitan Library Council. Specializes in library and information studies and education and information studies, with research interests in information literacy education and teaching materials (learning resources) development.

"The 2030 Digital Library" as the model of university libraries after mandatory open access.

Hiroya Takeuchi (Chiba University)

The report titled "How University Libraries Should Be in the Age of Open Science (Summary of Deliberations)," published in January 2023, presents the concept of the "Digital Library" as the ideal form of university libraries to be realised by 2030 academic year. This "2030 Digital Library" is not merely about digitising library collections but rather represents a transformation that includes changes in operations, services, and staff knowledge and skills, promoting the DX (digital transformation) that should be achieved based on the digitisation of content. The digitisation of content provided through university libraries is a prerequisite for this realisation. Still, it is necessary to distinguish between the digitisation of "existing" collections and the digitisation of content to be produced "in the future." I want to examine how the mandatory open access for publicly funded research results starting in 2025 will impact this transformation, considering the principles of open access and the role of university libraries.

Profile

M.A. in LIS from Keio University in 1987. Before joining Chiba University as the associate professor of library and information science in 2003, he had experience at the University of Tokyo Library System, the UNESCO Principal Regional Office in Asia and the Pacific, and the University of Shizuoka Junior College, both in practice and teaching. Prof. Takeuchi has served in several management positions at Chiba University, including University Librarian and the Director of the Academic Link Center(2011-), Vice President for Educational Innovation and Learning Support(2014-), and Director of the Higher Education Center(2023-). He has also served the chairmanship in some government committees such as the Subcommittee on How University Libraries Should Be in the Age of Open Science, Committee on Information Science and Technology, Council for Science and Technology (CST).

Panel Discussion

Summary:

There was an exchange of opinions between speakers and the audience during the panel discussion session.

・Changes in the role of libraries: supporting literacy, expanding the social interface, and partnering with researchers

The role of libraries is expanding to include support for publishing and the use of scholarly information in addition to the provision and storage of such information. Some pointed out that literacy education must evolve from formal technical guidance to developing the ability to determine credibility of information and its context. Wikipedia Town and other cases were introduced to bring up the possibility of becoming a center that supports the transition of citizens and students from the user side to the creator side. Some suggested that, although libraries are currently playing the unfavorable role of salesperson for OA promotion, they could take on the collaborative position of a consultant working with researchers.

・Significance of publishing research results: reconstruction of autonomy and connections

Some recognized publishing research results as a means of restoring researchers' autonomy and reconstructing the scholarly community, not as a simple institutional response. Research should originally begin with a researcher's interest or question, with neither paper acceptance nor obtaining a budget as its goal. Visualization and sharing of results may result in the creation of cross-disciplinary cooperation and discussion. Specific cases in which open source and map data publishing led to new joint research projects were introduced.

・Understanding open access as an investment rather than a burden

Some voiced that opening access to research results should be understood as an investment that creates opportunities for future reuse and cooperation, not as a labor-requiring burden. Some said that development of a findable environment would improve the visibility of research and researchers. Cases including GitHub and L-RAD were introduced to emphasize feedback and evaluation along with publishing. A shared opinion was that an attitude of strategically disseminating results, not just responding to the mandate, is needed.

Moderator: Ui Ikeuchi (Bunkyo University)

Associate Professor, Faculty of Language and Literature, Bunkyo University. Doctor of Philosophy (Library and Information Science). After graduating from the Faculty of Law at Keio University (1995) and completing a master's degree in library and information science at the Graduate School of Letters at Keio University (1997), Ui worked at Ferris University Library from 1997 to 2005. Ui then spent time as a housewife and a doctoral student at the University of Tsukuba and took the current

position in 2019. Her research interest is to understand the changes brought by open science in the distribution of scholarly information from a cross-disciplinary perspective. Since 2016, Ui has been conducting surveys on research data sharing, open access and preprints in Japan as a visiting researcher at the National Institute of Science and Technology Policy (NISTEP), Ministry of Education, Culture, Sports, Science and Technology (MEXT). She is also a member of SPARC Japan Seminar Planning Working Group since FY2020.

Moderator: Nobuhiro Yabuki (Yokohama National University)

Profile

A member of the SPARC Japan Seminar 2024 planning working group. Associate Professor, Strategic Planning Division / Research Administrator, Research Initiatives and Promotion Organization, Yokohama National University. He completed coursework for the doctoral program in International Political Economy at the Graduate School of Humanities and Social Sciences, University of Tsukuba, and holds a Master's degree in International Political Economy. After serving as a Junior Researcher at the University of Tsukuba, focusing on international relations in the context of large-scale scientific projects, he started his career as a University Research Administrator (URA) at Yokohama National University in 2014. He moved to his current position in April 2024. He is involved in science and technology policy studies, institutional research activities, and the promotion of open science within the university.

Attendee Feedback

(person affiliated with university library)
– It was beneficial to listen to speakers from diverse fields. I'm happy to hear researchers' voices.

– The panel discussion was significant, as I was able to hear an exchange of opinions from different standpoints. Information from the Ministry of Education, Culture, Sports, Science and Technology and the Cabinet Office seems to suggest that information should be disseminated within an organization via a library, which seems too excessive and difficult. Now that I know that individual speakers coming from different positions have various concerns, I may be able to get a bird's-eye view of the situation, which I appreciate.

– The seminar featuring many prestigious speakers was very useful. In particular, the presentation by Mr. Takahashi from Leave a Nest Co., Ltd. was very fresh and encouraging. Universities' potential attractiveness, human resources, and contents can be put to use even more effectively. The panel discussion was also very inspiring.

– The point that resonated with me is that researchers must have awareness to autonomously work on immediate open access instead of allowing libraries to lead the effort.

– Very interesting. Mostly new topics, which I found inspiring. On a separate note, I hope someone in a public position would clearly state that "the subject of OA/OS is researchers," because I realized that other university libraries are also proactively working and fighting lone battles, as mentioned during the panel discussion. Like the case of electronic journal (EJ) development in the past, criticizing libraries as being annoying or as asking for money all the time would prevent productive discussions and have a negative impact on promotion.

(person in university)
– Presentations on the meaning of the open access mandate, the ideal direction, and so on were so informative. I thought the issues were not just about researchers and libraries. We may need to fundamentally re-think what research is.

– So good to hear opinions from various perspectives. As each university is now trying to figure out how they should work, particularly on immediate open access, I hope that the optimal solution will be found through presenting opinions and wisdom from across Japan like in this manner.

(other library staff)
– I used to feel forced to do it. Today, I gained the perspective of strategically thinking of OA as an investment.

– The theme of what lies beyond the open access mandate was very interesting. I had tended to put on restraints or think negatively, focusing on current environmental and work resources. Now, I realize that, as long as I have a mindset to take the initiative in action, thinking where I am going and what kind of world I want to create, I can correct a mistake even if it has already been made. All opinions presented by the speakers during the panel discussion were words of wisdom. I really appreciate them.

Afterword

☺ To deepen discussions on the possibilities that arise with the expansion of open access and about the evolution of scholarly communities and libraries while listening to speakers who are actively working on the front lines—these were my motives as I planned the event. I believe the event provided an opportunity to exchange opinions with speakers and the audience, reconsider scholarly communications more freely for the future, and update the view of OA and libraries. Regrettably, I was not able

to hear all the questions and opinions of the SPARC Japan Seminar Planning Working Group, but I hope we will continue the dialogue.

Ui Ikeuchi
(Bunkyo University)

☺ Due to the word "mandate," people working in the field may tend to consider the open access mandate as what they are required or forced to work on. Opinions from speakers from various positions allowed me, having participated in the SPARC Japan Seminar Planning Working Group for the first time, to renew my recognition of open access as an effort to create future possibilities, not just as a mandate.

Miho Ezawa
(Hitotsubashi University)

☺ I joined the SPARC Japan Seminar Planning Working Group in fiscal 2024 because of my connection with my colleague who was a former member of the working group. I had puzzling and confusing experiences in the unknown world of university libraries, but my naïve curiosity about what a "library" is helped inspire me on so many occasions. I was also given an opportunity to speak about the history and vision of open data in life sciences, and it allowed me to learn a lot. I would like to deepen my understanding, even if only gradually.

Shuichi Kawashima
(Database Center for Life Science, ROIS-DS)

☺ With the theme of not just "making research results open access according to policy" but also considering how the future will be, the seminar was so rich, starting with the nine presentations by the speakers from diverse backgrounds, followed by the fulfilling panel discussion with the prestigious members. It may not be so easy to provide such an event even in the future. I am happy and thankful to have been involved in the planning.

Yuji Nonaka
(Kyoto University)

☺ As we did in the previous year, we picked up a theme related to the open access mandate in this fiscal year's SPARC Japan seminar. SPARC Japan looks one step ahead of the times, so we tried to see the future beyond the mandate. As we aimed at having a view of achieving more sound scholarly communications and actions to achieve it rather than aiming at open access itself, we now have a strong, renewed recognition of the importance of having a platform where people from diverse positions can exchange their opinions.

Kazuhiro Hayashi
(National Institute of Science and Research Unit for Data Application)

☺ We have heard bewilderment about the open access mandate from many researchers and librarians ever since the policy was announced. So I got involved in the planning, thinking that what lies beyond the mandate or what the future would be may help improve motivation to work on it. Undeniably, any policy has an aspect of "forcing" people to do things, but I hope the nine speakers' presentations can be a light that makes you believe in the future and boosts your morale to work on it.

Takanori Hayashi
(Japan International Research Center for Agricultural Sciences)

☺ The policy made open access mandatory. That can be a trigger, but "doing it because it is mandatory" may not promote it properly. It seems crucial to work on it while sharing its significance with as many people as possible. The seminar allowed me to hear very precious opinions from all speakers. I hope the audience also found the seminar useful.

Nobuhiro Yabuki
(Yokohama National University)