Gender Summit® 10
Asia-Pacific 2017

Better Science and Innovation through Gender, Diversity and Inclusive Engagement

Gender Summit 10 Report

ジェンダーサミット10 報告書

Gender Summit 10 (GS10)

Report

Contents

Ⅰ. General Information

Date and time: Thusday, May 25-Friday, May 26, 2017

Venue：Hitotsubashi Hall (2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo, 101-8439 JAPAN)

Theme：Better Science and Innovation through Gender, Diversity and Inclusive Engagement

Organizer：Japan Science and Technology Agency (JST)

Co-organizer：Science Council of Japan Portia Ltd.

Associates（23）：

Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Gender Equality Bureau Cabinet Office
Ministry of Internal Affairs and Communications (MIC)
Ministry of Foreign Affairs of Japan
Ministry of Health, Labour and Welfare
Ministry of Agriculture, Forestry and Fisheries (MAFF)
Ministry of Economy, Trade and Industry (METI)
Ministry of Land, Infrastructure, Transport and Tourism
Ministry of the Environment
Keidanren (Japan Business Federation)
Keizai Doyukai (Japan Association of Corporate Executives)
The Japan Chamber of Commerce and Industry
The Japan Association of National Universities
The Japan Association of Public Universities
Federation of Japanese Private Colleges and Universities Associations
Association for national research and development agencies
Japan National Committee for UN Women
United Nations Information Centre
Japanese National Commission for UNESCO
Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE)
National Governors' Association
European Commission
Royal Scientific Society (The Hashemite Kingdom of Jordan)

■ List of Supporting Organizations

○ Partner (9 institutions)

※ Partner institutions that made particularly great contributions to the summit (support amount over 5 million yen, and / or sending support personnel equivalent to the same amount)

Okinawa Institute of Science and Technology Graduate University (OIST)
Kyushu University
Center for Gendered Innovations in Science and Technology Research (GISTeR)
Korea Institute of S & T Evaluation oand Planning (KISTEP)
NSF (National Science Foundation)
NSERC(Natural Sciences and Engineering Research Council of Canada)
National Natural Science Foundation of China (NSFC)
Deutsche Forschungsgemeinschaft (DFG)
Elsevier

○ Supporting agencies (73 organizations)

・Platinum (7 companies・institution)

※ More than 1 million yen support

IBM Japan, Ltd.
Toyota Motor Corporation
Asahi Kasei Corporation
All Nippon Airways
Nature
Funds de recherche du Québec

・Gold (14 companies・universities・organizations)

※ Support of 500,000 yen or more and less than 1 million yen

Toray Industries, Inc.
The Japan Science Society
Shimadzu Corporation
Teijin Limited
Yamaguchi University
Hitachi, Ltd.
Fujitsu Limited
Nissan Motor Corporation
Taisei Corporation
NEC Corporation
The Sasakawa Peace Foundation
KDDI Corporation
Mitsubishi Heavy Industries, Ltd.
Toshiba Corporation

・Pearl (52 universities・companies・organizations)

※ *Support of more than 100,000 yen and less than 500,000 yen

The Engineering Academy of Japan
Tokyo University of Agriculture and Technology
The University of Tokyo
Waseda University
Thorlabs Japan Inc.
The Society of Chemical Engineers, Japan
Kobe University
Tokyo Institute of Technology
LIXIL Group Corporation
Shiseido Co., Ltd.
Nagoya University
Hosei University
National University Corporation Shizuoka University
Osaka University
The Ichthyological Society of Japan
The Japanese Society of Plant Physiologists
The Chemical Society of Japan
The Ecological Society of Japan
Tokyo University of Science
Chuo University
The Union of Japanese Societies for Biological Science
Japan Society for Bioscience, Biotechnology, and Agrochemistry
Nara Institute of Science and Technology
Kaneka Corporation
Nara Women's University
Kumamoto University
Japan MOT Association
Panasonic Corporation
JPS-JSAP Liaison Committee for Gender Equality
Uchida Yoko Co., Ltd.
Tsuda University
The Mathematical Society of Japan
RIKEN
Nippon Life Insurance Company
University of Yamanashi

Yokohama National University
National University Corporation Ochanomizu University
Keio University
Kajima Corporation
The Research Organization of Information and Systems (ROIS)
The University of Electro-Communications
University of Tsukuba
National Institute of Technology
Shibaura Institute of Technology
UL Japan, Inc.
College of Indsutrial Technology,
Nihon University
Japan Geoscience Union
Japan Agency for Medical Research and Development (AMED)
Tohoku University
Japan Aerospace Exploration Agency (JAXA)
New Energy and Industrial Technology Development Organization
Japan Agency for Marine-Earth Science and Technology

○ Cooperating organizations (6 organizations)
※ Support for smooth operation (ex. Panel exhibition and 5 or more paid participants)

Yamagata University
National Institute of Advanced Industrial Science and Technology
Japan Society for the Promotion of Science
Osaka Prefecture University
Japan Atomic Energy Agency
Kyoto University

(Supporting and cooperating organizations are in order of acceptance of application forms)

■ Regional Committee

Chair Miyoko O. Watanabe (Japan Science and Technology Agency)
Vice chair Kumie Inose (Science Council of Japan ※)
※ Affiliation notation is at the time of GS10.
Member Kimio Ito (Kyoto University)
Yoko Kamio (National Center of Neurology and Psychiatry)
Yoko Nameki (IBM Japan, Ltd.)

Ryoichi Fujii (Research Organization of Information and Systems)
Yukari Matsuo (Hosei University)
Miho Mitsunari (Nara Women's University)
Chisato Miyaura (Tokyo University of Agriculture and Technology)
Hatsumi Mori (The University of Tokyo)

Ⅱ. Program

Date : 25 May 2017（Thu.）, 26 May 2017（Fri.）

※ For details on satellite events, refer to Chapter 4.

Venue : Hitotsubashi Hall,Tokyo

※ Banquet held at Tokyo Dome Hotel.

25 May 2017（Thu.）			
08:00 - 08:45	Regintration		
08:45 - 09:45	Opening		
09:55 - 11:15	Plenary 1 **History and Future of Gender and Diversity**		
11:30 - 12:45	Plenary 2 **Female Researchers Tackling Serious Global Issues**		
13:45 - 15:15	Plenary 3 **Gender-based Research and Innovation**		
15:30 - 18:15	Parallel 1 **Benefits from Women's Participation for Science, Technology and Innovation**	Parallel 2 **Promotion of Gender Equality by Improving Access and Use of Researcher Database**	Parallel 3 **Gender Dimensions in Sport**
15:30 - 16:45	1. Gendered innovations from data, education and infrastructure	1. Making Gender-related Database	1. The Performance of Female Athletes in Olympic and Paralympic Games and Gender Equality in Society: An International Comparison
17:00 - 18:15	2. Real cases of innovation generated by women's participation	2. Analyzing Gender-related Database	2. Alternative physical cultures and the new possibilities
19:00 - 21:00	Banquet(Tokyo Dome Hotel.)		
26 May 2017（Fri.）			
09:00 - 11:45	Parallel 4 **Developing Evaluation Methods for Diversity in Research**	Parallel 5 **Gender Equality from Perspective of Men and Boys**	Parallel 6 **Equal Opportunities for Women & Men in STEM Education**
11:45 - 13:15	POSTERS AND STANDS		
13:15 - 14:30	Plenary 4 **Social Responsibilities of Science**		
14:30 - 15:00	Plenary 5 **Conclusions /Next Steps Report of Workng Gourps (Parallel Sessions)**		
15:15 - 16:30	Plenary 6 **Conclusions /Next Steps Tokyo Recommendation on Gender Equality for UN SDGs**		
16:30 - 16:50	Closing		

Ⅲ. Report on Each Session

1. Opening Session

■ Session Outline

Date and Time: Thursday, May 25, 2017. 8:45-9:45

Speakers:

<Chair>

Michinari Hamaguchi (President, Japan Science and Technology Agency, Japan)

<Speakers>

HRH Princess Sumaya bint EI Hassan (Royal Scientific Society, Jordan)

Toshiei Mizuochi (Parliamentary Vice-Minister, Ministry of Education, Culture, Sports, Science and Technology, Japan)

B. Mario Pinto (President, Natural Sciences and Engineering Research Council, Canada)

Ruiping Gao (Vice president, National Natural Science Foundation of China, China)

Kimiko Murofushi (President, The National University Corporation Ochanomizu University, Japan)

Carlos Moedas (Commissioner, European Commission, Belgium)[Video message]

Kirsty Duncan (Minister of Science, Canada)[Video message]

Takashi Onishi (President, Science Council of Japan, Japan)

Attendance: Approx. 200

■ Report

At the beginning of the Gender Summit 10, Mr. Hamaguchi, the president of Japan Science and Technology Agency (JST: one of the organizers of GS10) introduced the configuration of the summit, and expressed his acknowledgment to the invited speakers and the audience. Topics of the seven invited speakers were as follows.

Princess Sumaya bint EI Hassan talked about the importance of scientific diplomacy as a good platform of activity for women, and that scientific technology is essential for global challenges including food, energy and environment. For the contribution of women to stimulate the development of science, the education system for girls is important. She quoted the poem of Princess En-hedu-ana, Princess of Primary Akkadian King Sargon, in her speech.

Next, Mr. Mizuochi of the Ministry of Education, Culture, Sports, Science and Technology, mentioned that the female contribution is essential for scientific innovation and advanced research. The rate of female researcher is 28% globally, but 15% in Japan. The promotion of female

Opening ceremony

Audience

researchers' activity is important for science and technology in Japan due to the social situation of aging and depressed birth rate. Japan is enhancing the various activities of STEM education for girls.

Dr. Pinto in Canada spoke on R&D, Research and Development, but which now also means RDD (Research Delivery and Development), an advanced type of R&D. The idea of "Two-eyed seeing" elicits excellent ideas and views. He expressed his view that gender equality and diversity was essential for good decision-making, using McKinsey & Company as an example. In Canada, the research center in the extreme northern area enhances the analysis of climate change and population movement, and gender diversity and international collaboration are important to stimulate this kind of global research.

By video message, Dr. Duncan talked about the role of gender equality in science and technology policy, and that the Government emphasizes the gender balance in cabinet in Canada. In addition, she showed enthusiasm for GS11 being held in Montreal, Canada in November 2017.

Dr. Moedas of the European Commission explained the activity in European Commission based on the EU's Horizon 2020, and pointed out three important points; the increase in the number of female researchers, the viewpoint of gender in research, and the research of gender equality. These ideas may be associated with open information and good practice. For the progress of the EU, gender equality in science is essential issue in the present and future.

Prof. Gao from China expressed her view that gender equality and female potency were essential for innovative changes of the world, and this is also the agenda of the United Nations. In China, NSFC focused on gender equality and scientific innovation, and pointed out that the change of male thinking is necessary to change the social situation. In GS10, ten Chinese researches will talk and contribute to active discussion in the summit.

Prof. Murofushi gave a talk on the history of Ochanomizu University, a national women's university in Japan. In 1975 and 1996, Women's culture museum and gender research center were founded in the university. For female students and researchers, the gender research center has various activities such as seminars, study abroad, analyses of gender and specific training of leadership. In this summit we had an excellent chance to think about gender diversity and our contribution for female successful action.

As the final speech, Prof. Onishi, President of the Science Council of Japan, talked about Japanese policy for scientific innovation and gender balance. In the Science Council of Japan, the number of members is 210 and the rate of female researchers will be more than 30% in the next membership in 2017. The number of directors is now 16, including 6 female directors in the Council. However, the female members are limited in STEM field, and he pointed out GS10 would be a good chance to enhance gender equality in Japan.

■ Conclusion

A Group Photo of Participants

In the opening session, the congratulatory speeches were given by guests of honor from Europe, Middle East, Canada and China. There are environmental, cultural and historical differences between each country in the activities of gender and diversity. However, we concluded that sharing information would be necessary for the promotion of science and innovation. It is more meaningful to advance mutual understanding of gender diversity and collaborate with each other through international summits. It is significant that we held an international summit, Gender Summit 10 in Japan. Finally, Dr. Hamaguchi, the president of JST, gave us welcome remarks, and declared the meeting open.

（Chisato Miyaura/Kimio Ito）

2. Plenary Session

2-① . History and Future of Gender and Diversity

■ Session Outline

Date and Time: Thursday, May 25, 2017. 9:55-11:15

Speakers:

Chieko Asakawa (IBM Fellow, IBM Research, Japan)

Angela Ki Che Leung (Director and Chair Professor, Hong Kong Institute for the Humanities and Social Sciences, University of Hong Kong, Hong Kong)

Juichi Yamagiwa (President, Kyoto University, Japan)

Audience: Approx. 300

■ Report

1. Accessibility Ignites Innovation

Diversity is crucial to ignite innovation. Diversity creates a variety of needs for accessibility and leads to innovation. Dr. Asakawa herself embodies three elements of diversity; female, visually impaired and Japanese. As the history of technology shows, the needs of people with disabilities have created new innovation. Dr. Asakawa herself has made efforts to solve the inconvenience of blindness at the age of 14 and suffering about information and movement. After joining IBM, which actively accepted people with disabilities from an early stage, Dr. Asakawa worked on the development of digital Braille technology and completed it in the late 1980s. In 1997, she succeeded in inventing the first world practical voice browser, "Homepage Reader". Now, she develops cognitive assistant computing— navigation application for smartphone to allow people with visual impairment, elderly people and foreigners to go alone by voice navigation using mobile terminals. Make your own perspectives your advantage and make impossible possible by never giving up. This is her important message for us.

2. Is Confucianism to blame for gender inequality in East Asia?

It is certain that Confucianism led to the gender role system, but it cannot be said to be to blame for gender inequality in East Asia. Confucianism has the characteristic of flexibility, it has survived incorporating diversity. In other words, Confucianism has flexibly changed in history due to women's active agencies, and it shows diverse forms in each region, Prof. Leung said. In the feminist historical studies that started in the early 20th century, women in East Asia (China, Japan, Korea) were considered as main victims of the traditional Confucian culture and emphasized that they were released by modernization (westernization). In contrast, recent gender studies focus on ① gendered space and ② gendered body. ① In pre-modern East Asian society, the

separation between "inside" and "outside" was not strict, and the two were organically connected. Women played a public role regarding house management, labor, and education in the "inner" world, supporting the Confucian political order of "outside". ② The issue of bound feet was also politically dramatized. There are not many historical materials left with records on foot-binding and many foot-binding women worked. Women also had controlled fertility, including female infanticide which Confucian male doctors worked to prohibit. The way of imposing responsibility for gender inequality on Confucianism does not solve any modern gender inequality.

3. Origin and biological base of Human sociality

Great apes belonging to hominid constitute the patrilineal societies with female desposal. Prof. Yamagiwa talked about gender from the viewpoint of human history. Delaying reproduction in primates may be a female strategy for increasing the survival rate of both mothers and their offspring. Human life history has different characteristics. In the case of the human, weaning age is low and the childbirth interval is short. It was a strategy to increase population in the Savanna. On the other hand, compared to great apes, human beings have large brain capacities, and body development is delayed in order to prioritize the development of the brain. As a result, the "childhood period" and "adolescence period" unique to humans appeared. After weaning, the adult must give soft food to children before beginning teething at 6 years old. Moreover, supplementation is indispensable, since it reaches 90% of adult brains by 5 years old. For this reason, it is necessary to jointly nurture children and share food, the human formed "family" and "community". And incestuous relations were avoided by bringing up a child jointly. Human family is not totally based on biological kin relationships but constructed on cognitive relations through caretaking after birth. It is necessary to keep in mind that parenting involved not only real parents but also many adults of the community.

The audience was very enthusiastic listening to the three presentations. In particular, Dr. Asakawa's presentation seems to have brought strong impression.

Dr. Chieko Asakawa

Prof. Angela Ki Che Leung

Dr. Juichi Yamagiwa

Situation of the hall

■ Conclusion

The conclusion of plenary 1 "History and future of gender and diversity" is as follows.
First, diversity is essential for innovation. This is clear from a historical point of view. In order to accelerate innovation towards the future, further respect for diversity is indispensable.

Secondly, one-sided historical interpretation does not lead to a resolution of gender inequality, resulting in neglect of women's historical subjectivity. By clarifying women's diversity in history, challenges for the future become clear.

Thirdly, from the perspective of anthropology, human family is a social unit to care for long the "childhood period" unique humans. Rather than sticking to a single indicator of blood relative, respecting the diversity of family patterns is the most suitable for the history and biological characteristics of humans.

（Miho Mitsunari）

2-②. Female Researchers Tackling Global Serious Issues

■ Session Outline

Date and Time: Thursday, May 25, 2017. 11:30-12:45

Speakers:

<Chair>

Michinari Hamaguchi (President, Japan Science and Technology Agency, Japan)

<Speakers>

Reiko Abe (Managing Director, Oriental Consultants India, Pvt. Ltd., India)

Daw Than Nwe (Executive Member, Myanmar Academy of Arts and Science, Myanmar)

Seng Mom (Vice Rector, Royal University of Agriculture, Cambodia)

Audience: Approx. 200

■ Report

The Global Gender Gap Reports of the World Economic Forum point out the lower GGI (Global Gender Gap Index) and less achievement of Asian countries in the world. The speakers of the session were female researchers tackling global serious issues in these Asian countries. The chair, Dr. Hamaguchi started the session by introducing and praising them as brave hearts.

The first speaker was Dr. Reiko Abe, the Managing Director of Oriental Consultants India. She is the top of 400 engineers of the Delhi Metro Project, India where she has worked for 10 years. She is called "Madam Metro", being the only female engineer. She finished her master's degree in civil engineering in Japan, however, she was not allowed to enter the tunnel construction areas in Japan due to old Japanese religious beliefs. Then, she moved to abroad, namely Norway, Taiwan, Ukraine, and India and obtained extensive experience in construction fields.

In terms of safety, India has a different cultural background from Japan and also the Metro Project is a multi-language environment. To overcome difficulties she introduced thorough and rational safety measures like safety visualization system to the construction fields. The safety monitoring itself does not help the safety situations, so that the training of communications and specific actions are particularly important. Owing to the effort of Dr. Abe, wearing helmets, safety jackets and shoes is the symbol of the Delhi Metro Project. "Madam, This is our Metro!" in the title of the talk was a phrase a taxi driver told Dr. Abe being proud of the subway construction in his hometown, although he did not know the guest was the Madam herself.

Professor Nwe, the second speaker, introduced the development of laws concerning equal

opportunity in education in Myanmar. Ensuring quality education corresponds to SDGs goal 4. Myanmar is making efforts to fulfill the international promise of human rights. Free and compulsory primary education has not been achieved yet, however, the reformation since 1988 has improved the situation significantly. Non-formal education systems such as Buddhist monastic education for poor girls also take important roles. For example, schools operated by nuns offer education to girls with no parents and daughters of emigrant laborers on the border that need special help. These education systems contributed to literacy improvement. Finally, Prof. Nwe introduced the current situation of female education in Myanmar. The ratio of advancement rate and the number of teachers are larger for women probably because women are more hard-working. Especially, it deserves much wider recognition that the number of female graduates in higher education is larger than male graduates. On the other hand, the gender equality in decision-making remains an issue.

Professor Mom, the last speaker, gave a talk on potentials and issues for female students in agriculture education in Cambodia. The Cambodian population is in special structure where the younger generation is more populated as a consequence of the tragic civil war in the late 1970's caused by the Khmer Rouge (Pol Pot). Today, gender equality is guaranteed by the constitution. Many families were reluctant to educate girls in the past. However, these days the ratio of women in higher education has increased and female stuff in universities accounts for about 30%. At the same time, Cambodian women share common issues with other Asian countries. For instance, only women are burdened with housework. Prof. Mom mentioned various roles women have to play as individuals and members of families as well as society, and encouraged women to take action. She powerfully talked about the goals of Cambodia; raising the interest of women's higher education, overcoming the social norms that only men are privileged by empowering women.

Dr. Reiko Abe

Prof. Daw Than Nwe

Prof. Seng Moma

■ Conclusion

In the session three Asian female researchers from Japan, Myanmar, and Cambodia presented their own ways opened up under difficulties caused by gender and/or tragic national histories. From the other perspective, the way could be paved due to the difficulties. Though there is still a long way for gender equality in Asian countries, concrete policies like laws, international treaties, and leadership in the field have steadily improved the situation. How does gender equality lead to a better society? Memorable talks based on the concrete experiences of the speakers driving social changes as well as the existence of the three speakers left a deep impression on the audience.

Plenary Session ②

(Yukari Matsuo)

2-③. Gender based Research and Innovation

■ Session Outline

Date and Time: Thursday, May 25, 2017. 13:45-15:15

Speakers:

<Chair>

Londa Schiebinger (Professor, Stanford University, U.S.A.)

<Panel>

Wolfgang Burtscher (Deputy Director-Gneneral, European Commission, Belgium)

Hee Young Paik (Director, Center for Gendered Innovations in Science and Technology Research, South Korea)

Xueyan Yang (Full Professor, Xi'an Jiaotong University, China)

Mathias Wullum Nielsen (Professor, Stanford University, U.S.A.)

Audience: Approx. 350

■ Report

To begin, Professor L. Schiebinger gave a lecture, entitled "Moving beyond Sex: Gender Variables in Health Research". Research deeply relate to sex as well as gender differences. To advance Gendered Innovations, a Canadian team that studies the Acute Coronary Syndrome developed a gender-related score measuring seven specific gender variables: household primary earner, personal income, number of hours per week spent doing housework, etc. The team found no sex differences, but found that gender matters. Patients with a higher "femininity" score - regardless whether they were a man or a woman - were more likely to suffer a recurrence of ACS. Therefore, it is necessary that gender is considered by three dimensions of gender (norms, identity, and relations), to move beyond binary notions of masculinity and femininity. As an online questionnaire to capture those variables was created, we will inform you of the results.

Dr. W. Burtscher gave a speech under the title, "The Gender Dimension in European Research and Innovation". The European Commission will make research and innovation more gender equal. There are three objectives for EU policy for gender mainstreaming in research. 1) Promoting gender equality in careers. 2) Achieving gender balance in decision-making bodies. 3) Integrating the gender dimension in a research and innovation context. He set out the present gender situations of EU Members States. In Horizon 2020, that is, the funding Framework Programme 2014-2020, researchers are requested to describe how sex and/or gender analysis is considered in their projects' contents.

Dr. H. Y. Paik gave a speech under the title "How to Promote Gendered Innovations in Science and Technology Research: The Case of South Korea". The Korea Federation of Women's Science and Technology Associations (KOFWST) started in 2003 and has been leading the activities promoting Gendered Innovations (GI) in research. KOFWST encouraged women in science and technology to realize the great possibility of GI and to establish a Center for GI in Science and Technology Research (GISTeR) in 2016. Dr. Paik introduced the great achievements promoted by GISTeR in the Basic Sciences, Biomedical Science and Nutrition, Engineering and Technology, City Planning and Environment, and Policy Development.

Professor Xueyan Yang gave a speech under the title "Boy crisis or Girl risk? The gender difference in non-suicidal self-injurious (NSSI) behaviors among middle school students and its relationship with gender role conflicts and violent experiences". There is no significant gender difference in the prevalence of NSSI behaviors, the frequency of NSSI behaviors, body parts, the methods, the motivations and the consequences of NSSI behaviors. The gender role conflicts and the variables of violent experiences were significantly associated with NSSI behaviors.

Dr. M. W. Nielsen gave a speech under the title "Integrating gender and sex analysis into medical research: Does author gender matter?" Are women and men equally likely to integrate gender and sex analysis into their research designs? To elucidate this question, a comprehensive analysis of almost 150 million medical papers was conducted. As a result, a robust positive correlation between women's authorship and a study's likelihood of engaging gender and sex analysis was shown. Moreover, women's participation in medical science links to research outcomes, and there are the mutual benefits of promoting both women's scientific advancement and the integration of gender and sex analysis into medical research.

Beginning of Session

Prof. Londa Schiebinger

Dr. Wolfgang Burtscher

■ Conclusions

To advance science and technology, it is crucial to integrate the dimensions of GSA into all research. Promoting women's participation in science and technology increases gender diversity and creativity, which in turn promotes gender equality and the quality of innovation.

(Mariko Ogawa)

2-④. Social Responsibilities of Science

■ Session Outline

Date and Time: Friday, May 26, 2017. 13:15-14:30

Speakers:

<Chair>

Yuko Harayama (Executive Member, Council for Science, Technology and Innovation, Japan)

<Panel>

Philip Campbell (Editor-in-Chief, Nature, U.K.)

Kinlay Tshering (Director, Department of Agriculture, Ministry of Agriculture & Forests, Bhutan)

Rowena Cristina L. Guevara (Undersecretary, Department of Science and Technology / Professor, Electrical and Electronics Engineering Institute, University of the Philippines Diliman, Philippines)

Audience: Approx. 150

■ Report

1. Science and inclusivity

There are two major challenges for science to become inclusive. ① subsumption of other fields (establishment of collaborative system of interdisciplinary study) and ② inclusion of women. As for ①, it is often that there is insufficient dialogue between natural science performing quantitative analysis and social science emphasizing qualitative analysis. In order to solve this, it is necessary to list the items to be agreed, give organizational support, reconsider the fund provision method and promote participatory research. As for ②, it is essential to provide assistance to raise the proportion of female authors and reviewers. One example of this is the initiative of NIH (National Institute of Health) using "Athena SWAN Charter" (Recognising advancement of gender equality). The NIH stipulates that it funds only companies that received the Silver Award (achievement with female success support) in the same charter, and it has proved that it was effective.

2. Bhutanese Women in Agriculture: Their Livelihood, Happiness Index and well-being

Bhutan is an agricultural country. 62.2% of the population is engaged in agriculture, accounting for 16% of GDP. The key to employment and eradication of poverty is still in the agricultural sector. In Bhutan, gender equality is relatively realized in comparison with other developing countries.

However, gender equality in education, enterprise, politics, employment and decision-making has not advanced in spite of legal gender equality and gender bias remains. 51.24% of the agricultural population is female, the ratio of women is high. Happiness is lower for women than for men and lower for rural areas than for urban areas. In order to overcome the feminization of poverty and the low level of women's happiness, gender equality policy and a national action plan must be developed. Policies for a woman to be able to fully and equally participate in the decision-making in all fields is expected. It is hoped to ensure political, economic, cultural and social equality rights for women and equal opportunities in education and employment.

3. Gender and Development in Philippine Science, Technology and Innovation Ecosystem

In the Philippines, two female presidents took office: Aquino and Arroyo. In each era of President, there was a big change in gender policy. During president Aquino's term, gender equality in the Constitution was stipulated (1987). In the era of President Arroyo, the "the Magna Carta for Women" (2009) was enacted. The Magna Carta for Women is a comprehensive women's human rights law aimed at the elimination of discrimination against women. All government agencies are required to perform gender and development planning and budgeting, using no less than 5% of agency budget for gender mainstreaming. Among government-funded research and development projects and programs, more than 40% are led by women. In the Philippines, gender equality in science, technology and innovation is expected in the next 10 years.

Plenary Session ④

Many active questions and answers took place, which showed a high interest in "Social Responsibilities of Science".

■ Conclusions

The purpose of this session was to clarify how society and science connect and how gender relates to it. The key messages of the three presentations were that in order to change society, it is essential to respect diversity (gender is also an important factor of diversity). In modern society, where science is to design society, the social responsibilities of science become increasingly important. In order to fulfill these responsibilities, gender equality must be achieved both in science and society. Measures such as the appropriate introduction of positive actions, rigorous evaluation of achievement degree, fund provision and budget management based thereon is necessary. We can realize an inclusive society for the first time through these.

(Miho Mitsunari)

2-⑤. Conclusions/Next Steps: Report of Working Groups (Parallel Sessions)

■ Session Outline

Date and Time: Friday, May 26, 2017. 14:30-15:00

Speakers:

<Chair>

Kumie Inose (Vice President, Science Council of Japan, Japan / Professor, Konan University, Japan)

<Panel>

Yoko Nameki (IBM Distinguished Engineer, IBM Japan, Japan)

Hatsumi Mori (Professor, The University of Tokyo, Japan)

Hisako Ohtsubo (Nihon University, Japan)

Kimio Ito (Professor, Kyoto Sangyo University, Japan)

Chisato Miyaura (Vice President, Tokyo University of Agriculture and Technology)

Audience: Approx. 250

■ Report

Parallel Session 1: "Benefits from Women's Participation in Science, Technology and Innovation" consisted of two sub-sessions: "Gendered innovations from research, data and case examples" and "Real cases of innovation generated by women's participation in the business world".

Plenary Session ⑤

The topics were the definition of innovation, data that innovations will be generated by women's participation, how to support women in developing careers, and Diversity 100 selection (Diversity 2.0 as a Competitive Strategy) by METI. An interesting scientific result was presented that patents made by mixed gender teams showed higher reusable rates than those by either only male or female teams. Company executives talked about successful examples of outstanding achievements with women researchers.

Parallel Session 2: "Promotion of Gender Equality by Improving Access and Use of Researcher Database" consisted of two sub-sessions: "Making a Gender Related Database" to share knowledge and experience from four different initiatives and to discuss how to best communicate gender issues in science to a wider audience and "Analyzing a Gender-related Database" to introduce analyses of gender-related databases and large-survey, and the gendered innovation Index (GII), etc. Several indispensable suggestions were given, for example, the importance of including the gender dimension in evaluations such as university rankings.

Parallel Session 3: "Gender Dimension in Sport" consisted of two sub-sessions: "The Performance of Female Athletes in Olympic and Paralympic Games and Gender Equality in Society: An International Comparison" and "Alternative Physical Cultures and the New Possibilities". The session extensively discussed the recent trend of highlighting the performance of female athletes and tried to understand whether it changed the status of gender equality in society or if it is a reflection of the promotion of gender equality in wider society. The session also debated alternative physical culture and environment for the sustainable, inclusive, and super-aging society.

Parallel Session 4: "Developing Evaluation Methods for Diversity in Research" exchanged ideas about the current situation and problems for gender equality, the degree of which varies among countries, depending on cultural, historical, as well as religious backgrounds and discussed extensively how to develop evaluation methods for diversity in research. After the panel discussion, the session proposed "Recommendations for Evaluation Systems", e.g., Evaluation should be based on good data and indicators, focusing on research and innovation and a monitoring system and Government and national funding agencies should include gender equality as one of their review considerations and should implement it in their evaluation review systems, including previous evaluation results and trends.

Parallel Session 5: "Gender Equality from the Perspective of Men and Boys" focused on the 'educational performance' of boys and male students. There were several important reports on: International evidence on gender differences in educational participation and achievement; gender equality, gender democratization and gender complexity; and educational underperformance of boys and young men in Asian countries from the perspective of regional diversity. Extensive discussions followed about what you knew about the achievement of boys in your country and whether there was a need for specific strategies or approaches for boys in school.

Parallel Session 6: "Equal Opportunities for Women & Men in STEM Education" discussed various systems for gender equality in science, and the problem on the achievements of equal opportunities for women and men in STEM education. The session also focused on the international comparisons for educational systems in junior high school, high school and university. The session dealt with a variety of aspects in STEM, e.g., the development of a collaborative transnational perspective on gender and STEM, the cause/driver of the gender gap and strengthening R&D capacity of female students in STEM.

■ Conclusions

In summary, this session gave brief descriptions of the six sessions with those of the activities by the corresponding working groups that had designed and prepared the parallel sessions. Session 1 clarified gendered innovation driven by gender equality and its outstanding achievements in both academic and industry sectors. Session 2 pointed out the importance of improving access and use/analyses of researcher database for the promotion of gender equality. Session 3 discussed how the recent trend of highlighting female athletes has impacted the status of gender equality in society. Session 4 discussed how to develop evaluation methods for diversity in research and proposed seven recommendations. Sessions 5 and 6 respectively discussed gender equality from the perspective of men and boys and the importance of gender balance in STEM education in junior high school, high school and university. In conclusion, gender equality is indispensable and beneficial not only for academic sector but also for a wider society. The essence of gender equality is the balance between the female and male, while recognizing the differences in their strengths and weaknesses.

(Ryoichi Fujii)

2-⑥. Summery and Future Development

■ Session Outline

Date and Time: Friday, May 26, 2017. 15:15-16:30

Speakers:

<Chair>

Elizabeth Pollitzer (Director, Portia Ltd, U.K.)

< Panel >

Heisook Lee (Principal Research Fellow, Center for GISTeR, South Korea)

Norichika Kanie (Professor, Keio University, Japan)

Seema Kumar (Vice President, Johnson & Johnson, U.S.A.) [Attended via Skype]

Yuko Harayama (Executive Member, Council for Science, Technology and Innovation, Japan)

Miyoko O. Watanabe (Deputy Executive Director, Japan Scince an Technology Agency, Japan)

< Commentator >

Teruo Kishi (Science and Technology Advisor to the Minister for Foreign Affairs of Japan, Japan)

Eudy Mabuza (Minister Counsellor, Science and Technology, Embassy of South Africa, South Africa)

Audience: Approx. 250

■ Report

Seven experts took the stage in order to review the progress of the results of the previous Gender Summit and to reflect on the role of this summit in the future.

Dr. Heisook Lee reported on the progress of recommendations adopted at GS 6 held in 2015. After GS6, GISTeR (Center for Gendered Innovations in Science and Technology Researches) was founded in Korea. She pointed out the role gender should play in the SDGs was extremely important and "Innovation based on gender difference" was an indispensable viewpoint to achieve all related goals. Furthermore, we should consider the role that gender should play in the 4th industrial revolution.

Prof. Norichika Kanie also mentioned the relationship between gender equality and SDGs. He showed that gender was involved in all SDGs, such as working methods, education, poverty etc. using his own tools. The explanation of "sustainable development" was not easy until the SDGs were presented, however SDGs are already a common language in the world. SDGs were not a uniform approach like rules, "those who want to act should act" and they can be scaled up by those who agree. Japan's approach to gender is not good and we should consider how to improve by 2030.

Dr. Seema Kumar, who participated by videophone, reported on the innovation that many companies were seeking to solve the problems facing society. Innovation firms up the growth of individual companies, and thinking about diversity is necessary to realize this. But, the realization of diversity is not easy and the participation rate of women in science is very low. Realizing only the formation of diversity is not sufficient, and managing it is important. It is key for companies to achieve great success not only to participate in the private sector, but also to collaborate with universities, public institutions, NGOs, etc., she said.

Dr. Yuko Harayama pointed out that in the goals of SDGs, the pursuit of gender equality for sustainable development could be adaptable for all countries, and it was important to share these value. The policies driven by Japanese government are related to the goals of No. 7, 8, 9 of SDGs. She also talked about the issues to be addressed globally, such as climate change, and said in order to give a good reaction to these issues, STEM resources and especially female success is needed.

Finally, Dr. Watanabe announced the "Tokyo Declaration: BRIDGE (Better Research and Innovation through Diversity and Gender Equality)" to realize the implementation of SDGs as a result of GS10. In this declaration, she proposed "Gender Equality 2.0 (focus on diversity)" promoted from "Gender Equality 1.0 (core: focus on women & girls)" so far.

Dr. Teruo Kishi and Ms. Eudy Mabuza acted as commentators. Dr. Kishi introduced that the Japanese government gave priority to realize a world where the female could build their global career as a policy for female. Ms. Mabuza discussed "Gender insight" and introduced that in Africa, there were the countries that sacrifice homosexuality, and she was making an effort to revise this.

Dr. Miyoko O. Watanabe

Dr. Heisook Lee

Prof. Norichika Kanie

Ms. Seema Kumar via Skype

Dr. Teruo Kishi

Ms. Eudy Mabuza

■ Conclusions

The problem of gender is important not only for SDG as one of the goal of Gender Summit 10 but also a target of all SDGs.

Currently, the Japanese government emphasizes policies to enhance gender equality. Gender disparity in Japan is extremely harsh, with Japan ranking 111th out of 144 countries in the World Economic Forum's 2016 Global Gender Gap Index. “Tokyo Declaration: BRIDGE” was proposed as a result of Gender Summit 10 and should overcome the disparity and contribute to achieving the SDGs. It is expected to be deployed in Japan and overseas in the future.

（Yoko Nameki）

3. Parallel Session

3-①. Benefits from Women's Participation in Science, Technology and Innovation

■ Session Outline

Date and Time: Thursday, May 25, 2017. 15:30-18:15

Speakers:

1. Gendered innovations from research, data and case examples

<Chair>

Yoko Nameki (IBM Distinguished Engineer, IBM Japan, Japan)

<Relay Talk>

Li-Ling Tsai (Associate Professor, National Kaohsiung Normal University, Taiwan)

Yukari Mochi (Associate, Development Bank of Japan, Japan)

Silaporn Buasai (Deputy Director, Thailand Research Fund, Thailand)

Mikiko Ishikawa (Professor, Chuo University, Japan)

<Commentator>

Rashidah Shuib (Professor, Universiti Sains Malaysia, Malaysia)

2. Real cases of innovation generated by women's participation in the business world

<Chair>

Tsukiko Tsukahara (Vice President, Catalyst Japan, Japan)

<Panel>

Hideaki Fujisawa (Director, Ministry of Economy, Trade and Industry, Japan)

Asako Hoshino (Senior Vice President, Nissan Motor Co., Ltd., Japan)

Sunita Cherian (Senior Vice President, Wipro Limited., India)

Zane Zumbahlen (Vice President, Human Resources, IBM Japan, Japan)

Audience: Approx. 200

■ Report

Ms. Yoko Nameki (IBM), the chair, introduced the session objective. This session focused on 'Innovation through Women's participation'. The point of this discussion was participation. It is not a question of whether women can bring about innovation but rather that innovation can be generated by increasing diversity and inclusion and by women participating more actively. The aim was to share ideas on how to integrate and make proper use of the unique strengths and capabilities of women in pursuit of innovation.

During the first half, experts from academia and research development spoke in turn. Prof. Li-Ling Tsai (NKNU) explained the importance of the shift from 'gender equilty'

First half of Parallel Session ①

to ‘gendered innovations’ in the field of gender and science.

Ms. Yukari Mochi (DBJ) introduced a recent study that patents filed by a mixed team have higher reuse rates than patents filed by teams who have only male or only female members.

Dr. Silaporn Buasai(TRF) showed the important researcher’s skills that women possess, as seen in Area Based Collaborative Research in Thailand.

And Prof. Mikiko Ishikawa(Chuo Univ.) pointed out that women were the decision-makers to save elder people and children of disaster recovery after the Great East Japan Earthquake. If we can increase women’s inclusion, we expect a more effective and stable development.

Prof. Rashidah Shuib(USM) summarized each talk point and organized Q&A.

In the second half, company executives from various fields shared real-life situations and success stories achieved through female participation. Ms. Tsukiko Tsukahara (Catalyst) showed key findings of ‘inclusion’ and chaired the panel.

Mr. Hideaki Fujisawa (METI) introduced 'diversity 2.0', new concept toward companies’ sustainable growth. Ms. Sunita Cherian (Wipro) said ‘Inclusion & Diversity’ is essential for success to engage with the organization together without consciousness of issues such as gender, disability, nationality, economically oppressed people. Ms. Asako Hoshino (Nissan) pointed that there are more and more females in decision-making of purchasing cars. It is inevitable to introduce diverse perspective in product development and manufacturing processes. Mr. Zane Zumbahlen(IBM) introduced IBM’s best practices regarding training and mentoring, within the community for STEM females not only in Japan but also in other countries in Asia and US.

A Group Photo

■ Conclusions

It was very meaningful to examine this subject with experts from diverse fields of specialization and various backgrounds, and essential in forming a comprehensive understanding of the subject at hand. It will be a cornerstone of taking women's participation to the next level, that will in turn result in major changes for society as a whole.

(Yoko Nameki)

3-②. Promotion of Gender Equality by Improving Access and Use of Researcher Database

■ Session Outline

Date and Time: Thursday, May 25, 2017. 15:30-18:15

Speakers:

1. Making Database

<Chair>

Hatsumi Mori (Professor, The University of Tokyo, Japan)

<Panel>

Noriko Arai (Professor, Information and Society Research Division, Ntional Institute of Informatics, Japan)

Sveva Avveduto (Research Director, National Research Council, Italy)

Monika Raharti (Director, Center for Young Scientists Indonesia, Indonesia)

Nan Zhang (Deputy Director and Vice editor of Audit Vision, National Auditing Publishing House, The National Audit Office of the People's Republic of China, China)

2. Analyzing Database

<Chair>

Chikako Yoshida-Noro (Professor, Nihon University, Japan)

<Panel>

Anders Karlsson (Vice President, Elsevier, Netherlands)

Youngah Park (Professor, Myongji University, South Korea)

Naomi Shibasaki-Kitakawa (The 15th President, Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering, Japan)

Number of audiences: about 70

■ Report

(1) Organizers of Parallel Session 2

The session 2 was organized by the following researchers;

Hatsumi MORI	(The Univ. of Tokyo, JPS; The Physical Society of Japan)
Mihoko NOJIRI	(KEK, JPS)
Nahoko KASAI	(NTT, JSAP)
Atsushi MASUDA	(AIST, JSAP; The Japan Society of Applied Physics)
Aiko NAGAMATSU	(JAXA, JSAP)
Ichiro SHOJI	(Chui Univ., JSAP)
Miho TAGAWA	(Nagoya Univ., JSAP)

Nobuyuki MATSUKI	(Kanagawa Univ., JSAP)
Yuko HAYASHI	(TITEC)
Chikako YOHIDA-NORO	(Nihon Univ.)
Ludivine ALLAGNAT	(Elsevier)
Toshinori AMANO	(JST)
Miho HORIUCHI	(JST, observer)
Kuniko SHIRAISHI	(JST, observer)

2） Program of Parallel Session 2

Parallel session 2 “Promotion of Gender Equality by Improving Access and Use of Researcher Database” was organized in two parts: the first session 2-1 “Making the Database” and the second session 2-2 “Analyzing the Database”.

Parallel Session 2-1

After a brief introduction by session chair Dr. Hatsumi MORI, the 4 speakers gave 15 min. presentations.

Prof. Noriko ARAI (NII) gave a presentation titled “How can researchmap help network female researchers?”. More than 1/4 million researchers and 500 organizations have registered with the researchmap, which will be revised in 2019 to improve the search engine by utilizing AI (artificial intelligence). In addition, researchmap is linked to the Japanese women researchers database “Habatake”. These database are useful to promote collaborative research and construct networks of researchers.

Dr. Sveva Avveduto (National Research Council of Italy) gave a presentation titled “Making and Analyzing Gender-related Database” in which GENERA (GENERA Gender Equality Network in the European Research Area performing in Physics) project in a series of EU Horizon2020 was introduced. In order to promote gender equality and educate the next generation in physics, evidence-based analysis is necessary, so the database of affiliation, carrier path, and research was created.

Dr. Monika Raharti (Center for Young Scientists Physical Society of Indonesia) gave a presentation entitled “Indonesia’s Achievement in Narrowing Gender Gap in Education and Women’s Voice”. The gender gap in education in Indonesia is narrower after the gender equality regulation in 1986, but women’s voice in politics is important to support the empowerment through regulations.

Dr. Zhang Nan (The National Audit Office of the People's Republic of China/ The National Auditing Publishing House) gave the presentation entitled, "Research on S&T Preferential Polices of Women Personnel in China". The conclusion was that (i) the number of high-level women scientists are fewer, (ii) women scientists have advantages in medical science, and (iii) high-level women scientists are aged over 45.

The 2-2 session was chaired by Dr. Chikako YOSHIDA-NORO.

Anders Karlsson (Elsevier) gave a presentation entitled "Gender in the Global Research Landscape-establishing a scalable framework to support policy evidence", in which he introduced a global investigation and analyses of research and researchers in view of gender. He found that (i) the percentage of women researchers has increased in all scientific fields in these 5 years, (ii) the number of papers divided by number of authors is slightly higher for women in Japan, (iii) men are more likely to take the first or corresponding author position, and (iv) Japan is the only country with a higher percentage of women researchers leaving from Japan to abroad.

Dr. Youngah Park (Myongji Univeristy, President of the AAPPS Working Group on Women in Physics) spoke on "How to Promote Gendered Innovations in Global S&T Landscapes: Gendered Innovations Index (GII) Project". The importance of promoting S & T in view of gender was demonstrated. Japan has been given the lowest GII in the category of social foundation, women empowerment, and better knowledge.

Finally, Dr. Naomi Shibasaki-Kitakawa (Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE)) addressed "What we need to proceed in near future for maximizing our potential in STEM field". She discussed an analysis of the 4th large survey for 16314 researchers in EPMEWSE, which found that: (i) in societies with a high female ratio (more than 20 %), there is a high possibility that a female president will appear, (ii) the female rate in PhDs increased from that in Master and the ratio in higher position in Universities and Research institutions also increased, (iii) the difference in the index between male and female became smaller and there is an improving trend, and (iv) the average number of children slightly increased and hours spent at work became shorter. Thus there is an improving trend of work life balance.

After the presentations there was a panel discussion. The importance of evidence-based proposals was mentioned. It was proposed that the gender equality index should be evaluated in University ranking. It was very fruitful to have the session on the theme of "Making and Analyzing Databases" to share knowledge and experience with different initiatives in Japan, EU, Indonesia,

China, and Korea, and to discuss about gender issues with a wide audience.

■ Conclusions

(i) The WG1 organized the Parallel Session 2 "Promotion of Gender Equality by Improving Access and Use of Researcher Database", in which the speakers and audience shared knowledge and experience of the activities to make and analyze databases in Asia and EU. With the aim of improving S&T, the importance to reflect the analysis result of database towards the policies and university rankings was discussed in the session.

(ii) The S&T Gender Portal was opened in JST HP. It is necessary to make the English portal version and revise regularly to share information for promoting gender equality.

The group photo of speakers and organizers in GS10 session 2

(Hatsumi Mori)

3-③. Gender Dimentions in Sport

■ Session Outline

Date and Time: Thursday, May 25, 2017. 15:30-18:15

Speakers:

【Session 1 15:30-16:45】The Performance of Female Athletes in Olympic and Paralympic Games and Gender Equality in Society: An International Comparison

<Chair>

Kumie Inose (Vice President, Science Council of Japan, Japan / Professor, Konan University, Japan)

<Panelists>

Kyoko Raita (Professor, Chukyo University, Japan)

Toni Bruce (Professor, University of Auckland, New Zealand)

Gilda Lasat-Uly (Professor/Director, University of the Philippines Diliman, Philippines)

【Session 2 17:00-18:15】Alternative Physical Cultures and the New Possibilities

<Chair>

Junko Tahara (Professor, Kokushikan University, Japan)

<Panelists>

Keiko Itani (Professor/Vice President, Kyoto University of Education, Japan)

Payoshni Mitra (Independent Resarch Consultant, India)

Guylaine Demers (Professor, Laval University, Canada)

Sophie Brière (Associate Professor, Laval University, Canada)

<Commentator>

Daichi Suzuki (Commissioner, Japan Sports Agency, Japan)

Number of audiences: Session 1: 39, Session 2: 42

■ Report

3-1 (Session 1) - The Performance of Female Athletes in Olympic and Paralympic Games and Gender Equality in Society: An International Comparison

In this first part, we tried a very ambitious analysis on the relationship between the Gender Gap Index (GGI) and female athletes' performances in the Olympic and Paralympic Games in Rio de Janeiro, and looked into the linkage between the two, especially for the 5 countries which joined in this session: New Zealand, Philippines, Canada, India and Japan. As a keynote speech, Prof. Kyoko Raita delivered the unique research entitled "Another World behind the Olympic and Paralympic Games: Gender Equality in Sport and Society". In response to her analysis, the panelists gave short reports on sports policy in their own country. The audience was interested in how gender-based policy in sports is related to, and therefore should be integrated into, social

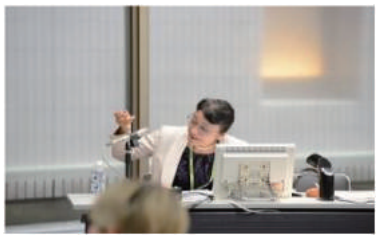
policy for promoting gender equality.

3-2 Session 2 - Alternative physical cultures and the new possibilities

Our second part searched for the possibility of an alternative physical culture which is, in a sense, the counter to the modern mainstream competitive sports, for fulfilment of the sustainable inclusive society.

Firstly, Prof. Keiko Itani delivered her paper, entitled "Reconstruction of Physical Culture: New Relations of Education, Health and Sports". Using various kinds of data and statistics, Prof. Itani insisted on the importance of diversity in sport in our coming super-aging society, asking what and how we should take care to foster female leadership in our near future. With the discussion of the court case in India and promotion policy in Canada, many of us realized the integration of diversity into sport promotion policy was to be promoted alongside gender equality.

Lastly, the Commissioner of Japan Sport Agency, Mr. Daichi SUZUKI, gold medalist of the 100 m swimming, joined the discussion, giving some comments on them, and emphasized the importance of gender in policy making in Japan.



Prof. Inose, chair of session 1

Audience

Commissioner of Japan Sport Agency, Daichi Suzuki

■ Conclusions

"Gender Dimension in Sport" deals with issues on sport policy, sport administration, sport practices in daily life and those played in stadiums or special occasions, sport for promotion of health as well as one for competition such as Olympic and Paralympic Games, from gender perspective. We are proud to say that this was the first time in the Gender Summit's history to deal with the theme of "sport and gender".

When planning the first GS in Japan, we were conscious of the 2020 Olympic and Paralympic Games in Tokyo and set up this unique session. I am grateful to all our working group members with this fruitful session, who had actively gathered together to plan, adjust, and define its contents for more than a year.

More than a century has passed since the first modern Olympic Games was held in 1896 in Athens. Since then, especially after the 1960s, human rights and equality policies in terms of ethnicity, race, religion, as well as gender, have been emphasized in the Olympic Movement as Prof. Raita mentioned in our first session. With her bold analysis on the relationship between GGI and the performances of female athletes, we could vaguely classify the relations into 4 types, but we should connect them to the making of sport policy in more detail.

In the second session, with the discussion of the participants from several countries, it was clear that the integration of diversity, as well as gender equality, into sport promotion policy would open a new door to a more sustainable, more human-centered community here in Japan. Unfortunately, the session discussion was not enough to make a worldwide model in the super-ageing society we are now facing, but we could enhance our understanding on Olympic Agenda 2020, the strategic roadmap for the future of the Olympic Movement, especially on Recommendation 39, "Foster dialogue with society and within the Olympic Movement".

Commissioner Daichi Suzuki clearly declared the need for gender equality in sport policy in Japan in perspective to Tokyo Olympic and Paralympic Games in 2020 (see also http://www3.nhk.or.jp/news/html/20170529/k10010999331000.html.

In conclusion, we should be more conscious of the possibility of the gender perspective in sports policy to improve our society.

（Kumie Inose）

3-④ Developing Evaluation Methods for Diversity in Research

■ Session Outline

Date and Time: Friday, May 26, 2017. 09:00-11:45

Speakers:

<Chair>

Ryoichi Fujii (President, Research Organization of Information and Systems, Japan)

Elizabeth Pollitzer (Director, Portia Ltd., U.K.)

<Panel>

Sonja Ochsenfeld-Repp (Deptuty Head of Division Quality and Programme Management, German Research Foundation, Germany)

Linxiu Zhang (Director, Center for Chinese Argicultural Policy, Chinese Academy of Science, China)

Kellina M. Craig-Henderson (Deputy Assistant Director, National Science Foundation, USA)

Rubiyah Yusof (Dean, Malaysia-Japan International Institute of Technology, Universiti Teknologi Mlaysia, Malaysia)

Sarah Dickinson Hyams (Head of Equality Charters, Athena SWAN, Equality Challenge Unit, UK)

Number of audiences : about 60

■ Report

In our session, we exchanged ideas about the current situation and problems for gender equality from five speakers from five different countries, considering the fact that the degree of gender equality varies among countries, depending on cultural, historical, as well as religious backgrounds. We shared best practices mainly from US and Europe, the potential interaction between gender equality and green development from China speaker, challenges to gender equality in Asian Islamic countries from Malaysian speaker.

During Q&A, we accepted several questions from the audiences as followings.

1) What action should institutions such as JSPS, JST, MEXT, AMED take
2) How are such actions to be mandated?
3) What are the gender sensitive indicators already in use by other countries/institutes?
4) How can countries in Asian-Pacific learn/adopt very good examples from elsewhere, e.g., DFG?
5) How to ensure transparency and selection of PIs?
6) How to improve understanding of gender dimensions in research content?

In the panel discussion we tried to develop an evaluation methods for Diversity in Research, which was very stimulating and interactive between our five speakers and the audiences under the strong leadership of our session chair Dr. Elizabeth Pollitzer. To find the common factors among

different assessment tools, we compared four different lists of indictors from UK, Europe, US and Japan. Also, it was discussed which factors should be more essential, effective, and influential practices to change the current situation in STEM research environment, and what is possible action to take from the side of government and national funding agencies.

Hall with full audiences

Dr. Fujii as the chair

Dr. Linxiu Zhang from China

Dr. Craig-Henderson from US

Dr. Elizabeth Pollitzer as the panel organizer

Five speakers on panel discussion

■ Conclusions

Many people agreed with the idea that the involvement of funding agencies must be one of the key factors to push forward gender equality in the STEM area in Asia-pacific countries as it was in some European countries, and thus the idea was incorporated into our recommendations from our session 4 as followings.

1) An evaluation system must be sensitive to local/national circumstances/conditions.
2) It must benefit women, men and be inclusive of all different groups.
3) It should be based on a comprehensive strategy that covers knowledge making, organizational practices and processes, human capital, and regulation, legislation and policy.
4) Accurate gender disaggregated data needs to be collected and rigorously analyzed by the institutions. Evaluation should be based on good data and indicators, focusing on research and innovation and a monitoring system.
5) It should cover 3 levels: national/legal framework, organizational, and individual.
6) It should identify clear criteria for the selection, the progression and reward of individuals and organizations.
7) Government and national funding agencies should include gender equality as one of their review considerations and should implement it in their evaluation review systems. Proposals should include previous evaluation results and trends.

(Ryoichi Fujii)

3-⑤ Gender Equality from Perspective of Men and Boys

■ Session Outline

Date and Time: Friday, May 26, 2017. 09:00-11:45

Speakers:

【Part 1 09:00-10:15】Lecture

<Chair>

Kimio Ito (Professor, Kyoto Sangyo University, Japan)

<Reporters>

Francesca Borgonovi (Senikor Policy Analyst, OECD, France)

Wayne Martino (Professor, The University of Western Ontario, Canada)

Futoshi Taga (Professor, Kansai University, Japa)

【Part 2 10:40-11:45】Round-Table Discussion

<Chair>

Keiko Ikeda (Professor, Shizuoka University, Japan)

<Commentator>

Mario Liong (Assistant Professor, Ritsumeikan University, Japan)

<Facilitator for Group Discussion>

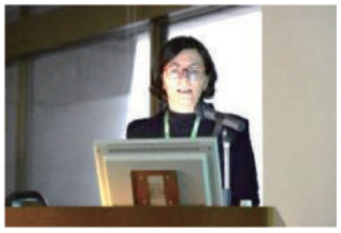
Hiroshi Yamanaka (Professor, Osaka Universty, Japan)

Reiko Motohashi (Professor, Shizuoka University, Jpan)

Yutaka Shikano (Research Associate Professor, The University of Tokyo, Japan)

Number of audiences: about 45

Prof. kimio Ito



Dr. Francesca Borgonovi

Round Table Discussion

■ Report

The session opened with a brief report about the significance of this session from Chairman Professor Kimio Ito. He mentioned that in order to realize the gender equal society, there is a need to examine men and boys, and this time was the first for a session devoted to the issue of men and boys at the Gender Summit, which discussed the problem of decline in academic ability among boys.

Part 1 started with a report about academic ability from the gender viewpoint, made by OECD Senior Policy Analyst Dr. Francesca Borgonovi. Based on recent data, she talked about the gender differences while entering a school of higher level or concerning academic abilities. Based on the PISA survey, it is clear that: in most countries there are more boys in the low academic ability layer, girls largely exceed boys in university entrance rates, the learning time of boys is shorter on average, and motivation to learn was on average lower among boys compared with girls. On

the other hand, information was shared concerning gender and academic ability, including the fact that boys on average exceed girls in the field of mathematics and that boys stand out in top groups of scientific fields.

Professor Wayne Martino, a specialist in boys' education, made clear in his presentation that despite the decline in academic ability of boys seen from the data, evidence-based analysis is still insufficient. Particularly, analysis based on more detailed information such as ethnicity, class or stratum etc. is needed, and that the discourse of pseudoscience that quotes brain science only brings about confusion. In addition, the importance of intervention from the viewpoint of gender democracy overcoming the binominal scheme of gender, rather than a boy education reform theory from essentialism-like point of view, was clarified.

In the last report, Professor Futoshi Taga made a presentation from the viewpoint of relations between boys and academic ability in the Asian region and Japan. Presently, gender difference in academic ability is attracting attention in the Asian region as well, but based on gender parity indexes of UNESCO there are variations by society. From the viewpoint of university entrance, there are boy-predominant countries (South Korea, Indonesia, Vietnam, Japan etc.), equal countries (China), and girl-predominant countries (Philippines, Thailand, New Zealand etc.). In addition, when we analyze in detail four countries such as Malaysia, Mongolia, Philippines and Thailand as societies where girls predominate, it became clear that, besides gender, there is a possibility that there are other factors such as parental income and regional disparities within respective countries, that have much influence. Looking at Malaysia, it was found that the possibility that the regional disparity in the problem of the income of the parent and each country, the factor except the gender had a big influence with the problem of the gender stereotype existed. In addition, interesting analysis has been made about Japan, such as the possibility that girls' weakness in arithmetic occurs approximately during 4-5 years of elementary school.

Part 2: Professor Keiko Ikeda explained the flow of the session and subsequent roundtables. Lecturer Mario Liong then summarized Part 1, and facilitators including presenters from Part 1 were selected based on that, and there was some time for discussions at every table. After discussion, there were reports with the outline of discussions from every table. Particularly, learning environment and gender problems that were greatly different from Europe, America and Japan were mentioned by participants from Asian and African regions. The complexity of this question was once again confirmed.

(Kimio Ito)

3- ⑥ Equal Opportunities for Women & Men in STEM Education

■ Session Outline

Date and Time: Friday, May 26, 2017. 09:00-11:45

Speakers:

<Group leader>

Chisato Miyaura (Vice President, Tokyo University of Agriculture and Technology, Japan)

<Chair>

Ginko Kawano (Yamagata University, Japan)

Masaki Inada (Tokyo University of Agriculture and Technology, Japan)

Yuko Hayashi (Yamaguchi University, Japan)

Christina Ahmadjian (Hitotsubashi University, Japan)

<Speakers>

Clem Herman (The Open University, UK)

Lakshmi Ramachandran (National University of Singapore, Singapore)

Akiko Sato (Professor, Ochanomizu University, Japan)

Wha-Jin Han (Center for Women in Science, Engineering and Technology, Korea)

Sonoko Dorothea Bellingrath-Kimura (Leibniz Centre for Agricultural Landscape Research, Germany)

Masako Ito (Nagasaki University, Japan)

Alessandro Bello (UNESCO, France)

Takakazu Yokokura (National Women's Education Center, Japan)

Miyako Asai (Shibaura Institute of Technology, Japan)

Audience: Approx. 60

Chair persons

Audience

■ Report

Gender diversity in the science field is important to industry-academia, but in the STEM field there are few woman researchers in senior positions. We invited lecturers from the UK, Germany, Singapore, Korea, France (UNESCO) and Japan to discuss the role of gender diversity in STEM education.

Firstly, Dr. Herman gave a talk on gender diversity in the STEM field from the international viewpoint. We need to recognize that the difference of employment situation by sex depends on region, organization, culture and social factors. The balance between restriction by each country and international collaboration has importance. Dr. Ramachandran explained various activities

that were conducted for female scientists at the Mechano Biology Institute for the purpose of the employment promotion of women. We discussed the effectiveness of activities to increase the number of female in the field of science as follows: 1) conscious efforts 2) female role models 3) networking skills 4) the scientific symposium "BIOS" for women. To encourage girls to choose science courses, it is effective to provide role models, education from early stage, understanding and support. Dr. Sato explained an outline about the scientific seminars and symposium that were conducted by Ochanomizu University for female students (the elementary school, junior high school and senior high school) and families.

In Korea, since 2004 a graduate student-led research team project has been carried out with the purpose of strengthening female students' ability in research and development in the STEM field. Dr. Wha-Jin Han talked about the project activities. It is a program in which female graduate students of project leaders carry out research with college and high school students for seven months. 6,441 students have participated in the program so far and have achieved significant results. Next, Dr. Bellingrath-Kimura gave a talk on the gender gap in the STEM field. There are few female activities in the STEM field and the view that STEM is not an attractive field exists among women. On the other hand, it is reported that there are definite differences between men and women in terms of their interests. She expressed her view that greater open-mindedness would expand the possibility for work and innovation, not only for women but also for men. Then, Dr. Ito presented the support programs about "Rikejo" conducted at Nagasaki University. The purpose of the Rikejo Development Program is to enhance female student's interest in science courses. She commented on the "Rikejo" support system on the basis of the participant information of various programs and questionnaire data.

Alessandro Bello is the project officer of UNESCO global project STEM and Gender Advancement (SAGA). The lack of data from which to draw useful indicators as evidence in analytical studies can obstruct the design, monitoring and evaluation of STI policies. To bridge these gaps in information and lack of tools, innovative methodologies have been used in the framework of the SAGA project. Bello showed the initial results of the SAGA project. Dr. Yokokura is a committee member of Nstsugaku, the Summer School for High and Junior High School Girls that held every summer at the National Women's Education Center. "Natsugaku" is the experience-based program for teenage girls to meet over 200 professionals in the fields of STEM. Female college and graduate students design and run activities, without direction and primed by professionals, based on their experiences to support teenage girls to set out their own career plan. Using video, Dr. Yokokura and Ms. Asai introduced an on-site report.

■ Conclusions

In this session, we discussed the problems related to gender equality in STEM education. Furthermore, we focused on the education system of junior high school, high school and university, and considered it through an international comparison. The gender difference in employment in the STEM field is caused by institutional, cultural and social factors. It is important to perform international coordination for the improvement of the working environment given such limitations. The woman ratio shows 3.5% - 6% in common in the field of Engineering and Computing. Therefore, science seminars and programs from an early stage for junior and senior high school students or primary schoolchildren are very effective. The prejudice that STEM is not an attractive field leads to a less activity by woman-it is necessary to recognize the gender consciousness and shift the way of thinking by families and teachers. Various programs in each country were presented, and we got a new perspective on gender consciousness. We concluded that sharing information would lead to positive effects and expansion to other countries and institutions. This was a very significant opportunity to think about STEM education through multilateral action.

(Chisato Miyaura)

4. Closing Session

■ Session Outline

Date and Time: Friday, May 26, 2017. 16:30-16:50

Speakers:

<Chair>

Miyoko O. Watanabe（Deputy Executive Director, Japan Science and Technology Agency, Japan）

Kumie Inose (Vice president, Science Council of Japan / Professor, Konan University)

<Speakers>

Clare Walsh（Deputy Head of Mission, Australian Embassy, Austria）

Maryse Lassonde（President, Canadian Royal Society/ Director, Quebec Natural Sciences and Technology Granting Agency, Canada）

Christine Stockins（Second Secretary and Consul, Embassy of Chile, Chile）

Elizabeth Pollitzer（Director, Portia Ltd, U.K.）

Number of audiences: About 150

■ Report

In the closing session titled "The Future of the Gender Summit", Dr. Clare Walsh (Deputy Head of Mission, Australian Embassy, Austria), Dr. Maryse Lassonde (President, Canadian Royal Society/ Director, Quebec Natural Sciences and Technology Granting Agency, Canada), Christine Stockins (Second Secretary and Consul, Embassy of Chile, Chile) and Elizabeth Pollitzer (Director, Portia Ltd, UK) spoke. The Chairs were Dr. Miyoko Watanabe (Deputy Executive Director, Japan Science and Technology Agency, Japan) and Kumie Inose (Vice president of Science Council of Japan/ Prof. at Konan University).

Dr. Walsh's presentation on "Gender equality in the European STEM field" discussed that the percentage of women researchers is sustained at 25 % even though the number of STEM researchers with a PhD and other certifications has increased. In order to promote STEM women researchers, the government paid 13 million AUD/year for 4 years based upon Athena SWAN Charter to support STEM education, venture business, and conscious reform of men. As a result, the percentage of women researchers has increased by 23% from 2006-2007.

In the message of Dr. Lassonde on "Gender summit 11 - Increasing research excellence through equity, diversity and inclusion", the contents of GS11 were presented. These included diverse perspectives through intersectionality, perspectives on gender equity and diversity within the industrial sector and academia, gender and reconciliation through research by and with indigenous peoples, and creating diverse and inclusive senior leadership teams and boards.

Dr. Stockins introduced the GS12, to be held in Santiago, Chile in Dec. 6-7, 2017, the first Gender Summit in South America, with academic societies, the government, companies, and NGO organizations.

Dr. Pollitzer summarized GS10 with “Making Bridge Together”. The more than 600 trials of “throwing a small stone into the pond” had made the collective wave and created a big impact. The 4th evolution should be promoted with gender equality. It is important to work together with researchers and government policy makers.

In the final comment, Drs. Watanabe and Inose, the chairs of GS10, mentioned that the pre-registration number was 585 and the total registration including on-site was more than 600, and appreciated that 111 government organization, companies, academic societies had supported the conference.

Dr. Clare Walsh

Dr. Maryse Lassonde

Ms. Christine Stockins

Final summary at closing session

（Hatsumi Mori）

5. Banquet

■ Banquet Outline

Date and Time: Thursday, May 25, 2017. 19:00-21:00

Speakers:

<MC>

Yukari Matsuo (Professor, Hosei University, Japan)

<Speakers>

HRH Princess Sumaya bint El Hassan (Princess, The Hashemite Kingdom of Jordan)

Yoko Kamikawa (Member of the House of Representatives of Japan)

Asako Omi (Member of the House of Representatives of Japan)

Seiichi Matsuo (President, Nagoya University, Japan)

Yuko Tanaka (President, Hosei University, Japan)

Natsumi Araki (Curator, Mori Art Museum, Japan)

Number of attendees: About 270

Prof. Yukari Matsuo

■ Report

In the evening of the first day of Gender Summit 10 (GS 10), a banquet for networking among participants was held at Tokyo Dome Hotel. From various quarters those who were very interested in but could not attend the GS 10 conference participated in the banquet and gave speeches.

Ms.Yoko Kamikawa

After the banquet opening by Prof. Matsuo, Hosei university, Ms. Yoko Kamikawa, a member of the House of Representatives of Japan, delivered an opening address. She has held many prominent positions such as former Minister of Justice, former Minister of State for Gender Equality. She has taken a leadership role in the promotion of women's participation in government, and talked about the government's effort and world wide networking on these issues.

Next, two prominent presidents of Japanese universities gave speeches on the issues of gender and diversity in universities. The first speaker was Prof. Seiichi Matsuo, the President of Nagoya university. Nagoya university is known for its assertive actions on gender equality. He introduced the "HeForShe" project in Nagoya university using impressive video films. The second speaker was Prof. Yuko Tanaka, the President of Hosei University. She is known to be the first female president in a large-scale

Dr. Seiichi Matsuo

Prof. Yuko Tanaka

university in Japan. Based on her experiences, she told that changing the concept of leadership was necessary.

It was time to toast. Dr. Miyoko O. Watanabe, Chair of the GS 10 and Deputy Executive Director of the Japan Science and Technology Agency, expressed her welcome to participants and the explanation of the special toasting ceremony, Kagami-biraki. Participants were served Japanese sake in barrels (taru-sake) and small wooden boxes (masu) that were provided by Japan Sake and Shochu Makers Association, one of the partners of GS 10. Ten international and domestic VIPs opened the top of the barrels.

Kagami-biraki

After some time of chatting over drinks and food, participants enjoyed impressive attractions. Ten students from Ochanomizu University's Dance Education course gave original contemporary dance programs. It is the only dance course among four-year universities. Then, Ms. Natsumi Araki, a curator of Mori Art Museum, one of the most famous museums in Japan, introduced modern art works by diverse people. After that Ms. Asako Omi, a member of the House of Representatives of Japan and secretary general of STS forum arrived and celebrated the success of the GS 10.

Dance performance by students of Ochanomizu University

Ms. Natsumi Araki

Ms. Asako Omi

Finally, HRH princess Sumaya bint El Hassan of The Hashemite Kingdom of Jordan proceeded to the stage. Having given an opening address at the beginning of the GS 10 conference, she celebrated the GS 10's success. She also introduced the World Science Forum 2017, to be held in November 2017 in Jordan as the President of the Forum. At the end of the banquet, Prof. Kumie Inose, Co-chair of the GS 10 and Vice-President of the Science Council of Japan gave a closing remark by expressing gratitude to participants. The number of participants in the banquet was almost 300, many more than expected. All the speeches by prominent VIPs, dynamism shown

Attendees with HRH princess Sumaya bint El Hassan

by young people, diversity in arts were strongly correlated with the message of the GS 10. Even after the official talks HRH princess Sumaya was taken photos with young people friendly. It must have been an unforgettable night for the participants, especially for young participants.

Prof. Kumie Inose

(Yukari Matsuo)

Ⅳ. Participant Data

■ Basic data

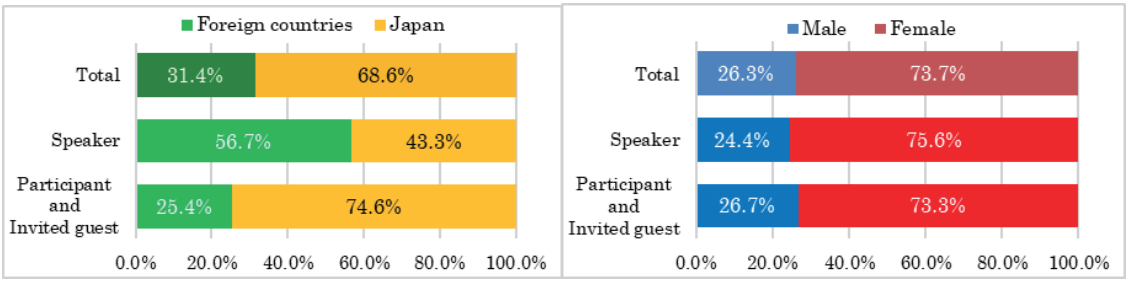
A total of 603 people from 23 countries / regions participated on both days of the Summit.

	Total	Foreign countries	Japan	Male	Female
Speaker	90	51	39	22	68
General participants	295	97	285	102	280
Invited guest	87				
Press	23	0	23	12	10
JST	108	0	108		

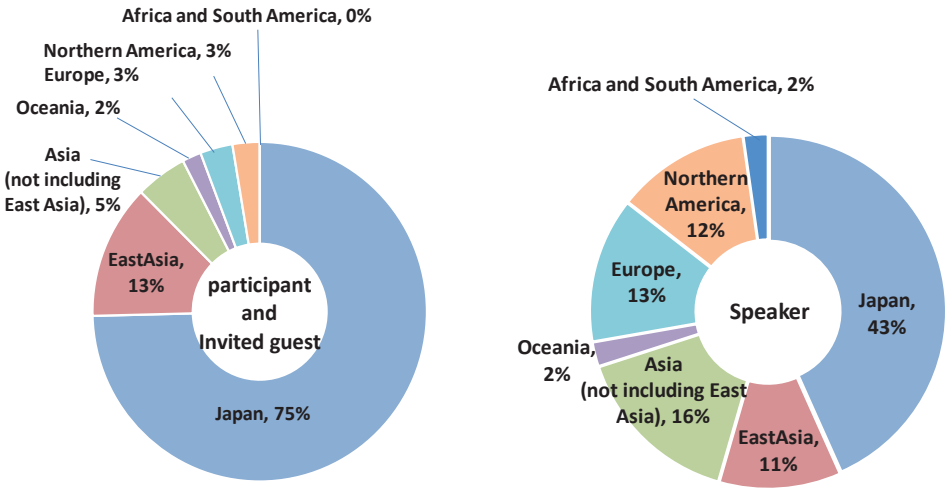
*** "Speaker" is written on the program (except for 3 facilitators of Parallel Session 5 (not all Japanese) who did not give a lecture etc). Mr. Hamaguchi and Vice Director Watanabe are included in the "speaker".**

■ Analysis by attribute

● Overseas-domestic ratio of "speakers" and "general participants + invited people" and the ratio of men and women



● Regional distribution of "speaker" and "general participant + invitee"



Ⅴ. Gender Summit Tokyo Recommendation: BRIDGE
-Better Research and Innovation through Diversity and Gender Equality-

1. The Tokyo Recommendations: BRIDGE - Better Research and Innovation through Diversity and Gender Equality - represent the core purpose of the Gender Summit 10 - Asia Pacific, held at Hitotsubashi Hall, Tokyo, Japan, on May 25-26, 2017, to advance understanding how actions to improve gender equality in science and society can produce more effective solutions to national and global societal challenges. ※ 1

2. Historically, various actions to overcome gender prejudices and inequality, socially and scientifically, have been adopted around the world, but still many serious gender issues remain that influence outcomes of research and innovation and slow down socio-economic development.

3. The Gender Summit 10 - Asia Pacific recognizes the importance of reaching the targets of the United Nation's Sustainable Development Goals (SDGs), and endorses the need and ambitions of SDG 5 to "achieve gender equality and empower all women and girls".

4. The Gender Summit 10 - Asia Pacific proposes a new concept of Gender Equality 2.0 in recognition that "gender equality" actions should also respect related sources of divergent needs in society such as age, sex, social position, economic status, education, ethnicity, race and ability. This proposal reflects the UN decision that "Systematic mainstreaming of gender perspective in the implementation of the Agenda is crucial". ※ 2

5. The Gender Summit community believes that all 17 SDGs can benefit from solutions that incorporate Gender Equality 2.0 objectives and are based on scientific research and sociotechnological innovations. This has been already pointed out at the Gender Summit 6 - Asia Pacific, 26-28 August 2015 in Seoul, Republic of Korea, through the expert report on The Role of Gender-based Innovations for the UN Sustainable Development Goals, supported by the Seoul Declaration to Advance Gender-based Research, Innovation and Socio-economic Development in the Asia Pacific, which recommends nine, evidence-based criteria for effective multi-stakeholder collaboration.

6. Today, the Gender Summit 10 - Asia Pacific urges the United Nations, the Japanese Government, as well as industry and other stakeholders in science endeavours to adopt three recommendations on gender equality as necessary conditions to accelerate progress and BRIDGE many gaps towards achieving the ambitions of the SDG targets:

※1 The Gender Summit launched in 2011 is a platform for dialogue where scientists, policymakers, gender scholars and stakeholders in science systems examine new research evidence showing when, why, and how biological differences (sex) and socio-cultural differences (gender) between females and males impact on outcomes. The aim is to reach consensus where improvements to science knowledge and science practice are needed and who should take action.

※2 UN Resolution A/RES/70/1, https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1

【Gender Summit Tokyo Recommendation: BRIDGE】

1. Gender equality is an essential determinant of societal sustainability and wellbeing and affects how science, technology and innovation can improve people's lives. It is realized through interventions to create equal opportunities between women and men; and implementing scientific understanding of gender, and of related differences, as important and intersecting factors in creating societal benefits for all.
   (Bridge Gender and STI)

2. Gender equality should be integrated into the implementation of all 17 SDGs, because gender equality within science, technology and innovation provides a BRIDGE through which targets of all 17 SDGs can be connected to enhance implementation success of the UN SDG agenda.
   (Bridge SDGs)

3. Gender equality in the context of SDG targets must recognize the influence of human and societal diversities, and, in particular, how science and societies define and BRIDGE the roles and attitudes to women, girls, men, boys, ethnicity, race, cultures etc. Gender Equality 2.0 should be adopted by all stakeholders, including industry when planning and implementing actions to achieve sustainability. **(Bridge all People)**

Ⅵ. Sattelite Events

1. GS10 Satellite Symposium by US Embassy, TITEC & NSF

Date: May 24 (Wed.), 2017
Organizer: U.S. Embassy, Tokyo Institute of Technology and National Science Foundation
Number of participants: About 100 People

On May 24th, the U.S. Embassy Tokyo, in partnership with the U.S. National Science Foundation and the Tokyo Institute of Technology (Tokyo Tech) sponsored a pre-Gender Summit 10 (GS 10) satellite symposium that was held on the campus of Tokyo Tech. The event featured Dr. Londa Schiebinger of Stanford University as well as two panelists that included Dr. Nobuko Nagase of Ochanomizu University and Dr. Akira Yamada of Tokyo Tech. The event was moderated by Dr. Kellina Craig-Henderson of the U.S. National Science Foundation (NSF) and attended by students, faculty, researchers and members of the general public.

The goal of the symposium was to further the promotion of diversity through gendered innovation. What is gendered innovation? Within the context of gender-responsible research, gendered innovation incorporates sex and gender analysis into research designs in order to bring about innovation and discovery. Identifying how gender and sex matters can sometimes be critical to the economic and practical value of research in biomedicine, health and engineering but it can also be forward thinking in enabling innovations to emerge. Dr. Schiebinger's presentation highlighted the way that incorporating sex and gender analysis into the research design can bring about innovation. Because current discussions about gender take place against a backdrop of gender inequity, the symposium also included a brief presentation by Dr. Craig-Henderson on implicit bias. In that talk, Dr. Craig-Henderson explained the way that current proscriptions against blatant discrimination give rise to subtle, more nuanced forms of bigotry reflected in the experiences of men and women in Japan, for example. Both Drs. Nagase and Yamada provided rich examples of the efforts to combat this on their respective campuses, and described the challenges to doing so.

Based on the remarks after the symposium from those in attendance and in addition to the continuing feedback from others who were there, this collaborative event resulted in increased knowledge about the importance of gender analyses in research as well as an understanding of the challenges of implicit biases. As a pre-GS 10 event this symposium provided a useful introduction to understanding the gendered landscape in all of its complexity.

Dr. Schiebinger makes a presentation on "Gendered Innovation."

The panelists listen to a question from the audience. From the left. Dr. Schiebinger, Dr. Nagase, Dr. Yamada, Dr. Craig-Henderson

(Kellina M. Craig-Henderson)

2. Symposium for Female Junior and Senior High-school Students
Theme: How will your life change depending on your future course? Science course will make you have greater choice for the future.

■ Outline of the Symposium

Date and Time: Saturday, May 27, 2017. 14:00-16:00

Place: Hitotsubashi Hall, Tokyo

Organizers: Japan Science and Technology Agency
Ministry of Education, Culture, Sports, Science and Technology
Cabinet Office

Speakers:

<Keynote Speakers>

Chiaki Mukai (Vice President, Tokyo University of Science / Technical Counselor, Japan Aerospace Exploration Agency, Japan)

Emi Tamaki (President & CEO, H2L Inc. / Ambassador, Women's Initiative in developing STEM Career (WINDS), Japan)

<Speakers>

Chisako Nakajima (Musician/Mathematician/Education Designer of 21st Century, Japan)

Yukiko Shinbo (Graduate School Student, Waseda University, Japan)

Keii Go (Student, Ichikawa Gakuen Ichikawa Senior High School, Japan)

<Panelists>

Noriko Takemura (Specially Appointed Assistant Professor, The Institute of Scientific Industrial Research, Osaka University, Japan)

Kaori Okubo (Japan International Cooperation Agency, Japan)

Sachiko Nakajima (Toyota Motor Corporation, Japan)

<Facilitator>

Sumiyo Yabe (Empublic Ltd. (Kodansha Ltd. Rikejo Project Secretariat), Japan)

Audience: Approx 300

■ Report

This symposium, with a session program of keynote speech, experiences-presentation, panel discussion and special lecture, was held not only for female junior and senior high school students but also for parents and school teachers. All the speakers gave presentations on their own experiences and hopes, how their lives changed by choosing a science course of study, their sense of fulfilment at present and perspectives for the future, bearing in mind the questions raised by the

participants at the registration in advance. These included questions such as "Although I'm not good at mathematics, may I go on to a science course ?", "Which subject should I study harder to proceed to a science course ?"

Dr. Chiaki Mukai

Panel Discussion

Dr. Chiaki Mukai, based on her own path to become the first female Asian astronaut and her experience and thoughts, emphasized to students that they should not close their own possibilities by themselves, saying "Don't put a barrier by yourself". She also appealed strongly to the importance of having a dream, saying "If you can dream, you can do it." At the experiences-presentation session, the daily life of a student studying at one of the schools designated as a Super Science High-school (SSH, an institution under which MEXT designates schools that give much importance on science technology and science / mathematics education) and an active science graduate school student were introduced. Speakers working in the STEM field suggested that students might think about their future courses flexibly, without being caught up in a stereotype. They introduced their own current lives, which are far beyond their imagination at the time when they decided on the course to take. Ms. Emi Tamaki, who is a scientist and entrepreneur,

Participants asking questionis at Poster Session

Participants in a queue for asking questions to the speakers

explained that recognizing your own desire, considering what is necessary to realize the desire and imagining it in concrete terms are important to proceed to a science course.

This symposium was very successful in that a lot more additional questions from the audience to the speakers were raised even after the program was over. There were comments from the participating high-school students, such as “I’ve never thought that the science course could give me greater choices for my future”, “This is my first time to know that there will be various opportunities for me if I choose a science course.”

At the poster session during recess and after the symposium, female junior and high-school students could exchange information directly with people from the supporting companies and universities. This symposium played an important role for the participants to know the future of “Rikejo” and the concrete outline of occupations related to science, as the participants could seriously ask the elder “Rikejo” for their experiences as well as about continuing to college and finding employment.

In addition to these participants, it became an opportunity for persons in charge from the organizations exhibiting posters to form networks by exchanging business cards, etc. There was a response from the participating universities and companies, such as "I was able to contact a lot of participants", "I want to participate once again next time”, “I was able to demonstrate diverse work in science in both sessions and posters."

There was a response also from parents and school teachers, such as "I realized that there was a fixed idea to the science", "I want an event like this to be held frequently", etc. In general terms, it was an event where both students, parents, teachers, and participating organizations could have new awareness.

Speakers

This symposium gained a very high reputation, because as a result of questionnaires to the participants, the answers by both parents, teachers and students such as “Very Good” and “Good” exceeded 80% in all items. As there are many wishes to continue to hold this symposium to concretely show course decision factors other than the deviation value and to give an attention on the life after choosing a science course, it was decided based on these reactions that this symposium would continue to be held as a new activity beyond the framework of the gender summit.

(Yuki Okubo)

3. Conference Report

Gender Summit 10 Satellite Conference in Okinawa:
Frontiers of Science in Asia Pacific
May 29-30, 2017

Organizers:
Machi Dilworth, Ph.D. (Okinawa Institute of Science and Technology Graduate University)
Sanae-I. Itoh, Ph.D. (Kyushu University)
Rieko Hanashiro, Ph.D. (University of the Ryukyus)
Miyoko O. Watanabe, Ph.D. (Japan Science and Technology Agency)

Partner:
Qwea (Women's Encouragement/Empowerment Association in Kyushu)

The Gender Summit 10 Satellite Conference in Okinawa was held at the Okinawa Institute of Science and Technology (OIST) Graduate University on May 29 - 30, 2017. The Conference was a satellite event to the Gender Summit 10 held on May 25-26, 2017 in Tokyo; and was organized by OIST (www.oist.jp), Kyushu University (https://www.kyushu-u.ac.jp/en/), University of the Ryukyus (http://www.u-ryukyu.ac.jp/en/), and Japan Science and Technology Agency (JST - https://www.jst.go.jp/EN/). Its purpose was to highlight the accomplishments of outstanding women researchers/ leaders in STEM (science, technology, engineering and mathematics) in the Asia Pacific region and to serve as a networking forum for women in science from the region. The twelve universities that belong to the Women's encouragement/ empowerment association in Kyushu (Qwea), participated as partners.

The Satellite Conference brought together 86 participants from across Japan and 11 foreign countries. The program consisted of scientific sessions including research/science talks by the invited speakers, 30 poster presentations, a panel discussion and a dinner talk on May 29, and optional tours on May 30.

The Organizers are happy to report that the Conference was a resounding success by all accounts. Participants learned the latest advances in a broad range of research areas, met accomplished women leaders representing the various countries in the Asia-Pacific region, had the opportunity to form a new network of colleagues, and most importantly, left the Conference reinvigorated, reenergized, and empowered. It is hoped that there will be many follow-up activities between and among the participants.

The GS10 Satellite Conference in Okinawa Highlight

Opening Ceremony

Dr. Peter Gruss, President of OIST, welcomed the participants. He emphasized the importance of women's participation in STEM as innovation is the bedrock on which national wealth is founded.

Dr. Miyoko Watanabe, Deputy Executive Director of JST, welcomed the participants on behalf of the organizers. She reported on the Gender Summit 10 main conference held the previous week in Tokyo. A total of 603 participants from 23 countries and regions joined the Summit. The Summit resulted in a compilation of recommendations referred to as Gender Summit Tokyo Recommendation: BRIDGE - Better Research and Innovation through

Diversity and Gender Equality. BRIDGE has already been presented to the United Nations STI Forum in May 2017. Efforts will continue to be made to realize the Tokyo Recommendations.

Summary of Talks by Invited Speakers

Seven invited speakers for the scientific talk session are all accomplished scientists in their own fields as well as recognized STEM leaders including two university presidents. While their fields of specialty ranged from astronomy and artificial intelligence to chemistry, economics, environmental health, genetics, and resilience science, they all had one common background of having international experience at some point in their professional lives. The international experience has had deep impact on their career development. What follows is a summary of each talk. After each talk, there were active questions and answers from the audience.

・"Socio-entrepreneurial Strategy to Support Society Innovation Driven by Higher Education", Dr. Dwikorita Karnawati, Rector/President & Professor of Engineering, Universitas Gadjah Mada (UGM), Indonesia

UGM is the largest university in Indonesia founded in 1949. It currently has 55,000 students and 4,000 researchers/ lecturers. Dr. Karnawati introduced an initiative that is designed to promote research-based education and technology development in rural areas, with the goal of creating a knowledge-based society. The program seeks to make citizens productive in the era of the digital revolution using social media and to educate and nurture young people. It is anticipated that this program will lead to increased competitiveness in human capacity and technology, resulting in a resilient and sustainable Indonesia.

・“Advances in Automatic Tropical Wood Recognition System”, Dr. Rubiyah Yusof, Dean, Malaysia Japan International Institute of Technology, Professor, Center for Artificial Intelligence and Robotics (CAIRO), Universiti Teknologi, Malaysia

Malaysia is one of the largest exporters of timber and timber-based products. Illegal logging is a huge problem threatening the disappearance of native tree species, such as Gonystylus or ramin. It is difficult to identify ramin from other trees, once they are cut and processed for export. Using Artificial Intelligence (AI) technologies, CAIRO has developed an automatic high-throughput system to recognize different species of trees before they are exported. Using this system, it is now possible to recognize 52 species of wood with 97.5% accuracy. It is expected that this system will contribute to the prevention of illegal timber trade and protection of the endangered tree species and the logging industry in Malaysia.

・"Do Shocks to Income Distribution Permanently Change Consumption Distribution: Time Series of Cross-Sectional Distributions with Common Stochastic Trends", Dr. Yoosoon Chang, Professor, Department of Economics, Indiana University, USA

Dr. Chang's research is on how income distribution can change consumption distribution. She has found that long-run (permanent) aggregate consumption responds little to the income shocks to the rich, while it responds negatively to those to the poor. The aggregate consumption responds significantly to the shocks to the middle-income group. Their analysis shows female earnings distributions are affected more by transitory shocks while the male earnings distributions are affected more strongly by permanent shocks. Differences in the amounts of human capital and physical capital play an important role in the society, and they explain why income inequality is rising over time beyond the degree of consumption inequality.
Dr. Chang shared her global efforts to encourage participation of women in economics through mentoring of the young generation.

・"Mapping Young, Extremely Low Metallicity Galaxies”, Dr. Yuko Kakazu, Specialist, Subaru Telescope in Hawaii, National Astronomical Observatory of Japan

Dr. Kakazu studies the history of the universe at the Subaru Telescope in Hawaii. The Subaru Telescope is 22.2m in height and weighs 555 tons, and has an 8.2m single mirror. The universe is thought to have begun about 13.7 billion years ago, with the Big Bang. As the universe cooled after the Big Bang, electrons and neutrons combined, and eventually the first generation of stars

and quasars were formed. This period in the history of the universe is called the Epoch of Reionization (EOR). It is still not understood when this cosmic reionization first occurred, which is the focus of her research.
Dr. Kakazu was born and raised in Okinawa and she was not interested in science as a child. When she was a junior high school student, she had a chance to attend a space camp organized by NASA in Alabama, which set her on the course to become an astronomer. She is active in outreach to the young students both in Hawaii and Japan.

・"Confronting Challenges of Future Environment: A Public Health Perspective", Dr. Huey-Jen Jenny Su, President, National Cheng Kung University, Taiwan

The climate change is a serious global issue. The goal of Dr. Su's research is to understand how public health efforts can be improved in the face of the unpredictable impact of climate change based on the scientific data. For example, they have analyzed the precipitation impact on eight climatic-related infectious diseases. These types of science-based studies are important in establishing a national and international adaptation plan. Based on the study, Taiwan has now established a national climate change adaptation policy for various sectors.
In terms of gender equality at universities in Taiwan, there has been a significant jump in the proportion of women faculty over the past decade. The importance of successful women in science to act as mentors and role models for the next generation is very much emphasized.

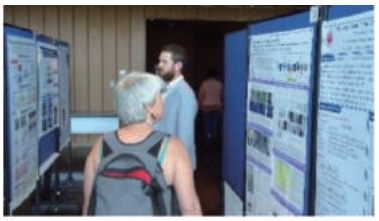
・"Hybrids, Hybrid Mimics and Food Security", Dr. Elizabeth (Liz) Dennis, CSIRO Fellow, Commonwealth Scientific and Industrial Research Organization, Australia

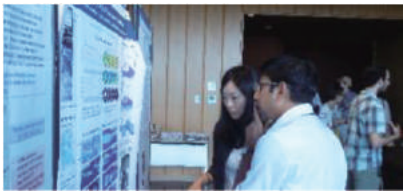
One of the biggest global challenges today is to feed the world over the next 30 years. The goal of Dr. Dennis' research is to develop new methods in plant breeding that would help in food security. She has focused on the characteristics known as hybrid vigor. Hybrids can produce large increases in yields through hybrid vigor genetic systems. However, the hybrid effect only lasts for one generation, necessitating farmers to buy expensive seed each year. It has been known that a certain percentage of the subsequent generations of hybrid plants maintain the hybrid vigor. She calls them "hybrid mimics" and through painstaking research, she found its underlying molecular mechanism. She has developed a new breeding method based on the discovery. This new technology could be a real game changer and because

it is not a GMO it should be readily accepted. It is hoped that the technology will help achieve increased food production by 2050, the year the world population is predicted to reach 9.8 billion, an increase of 2.1 billion over the current population.

・"Design and Synthesis Active Soft Materials Inspired by the Living Systems", Dr. Ye Zhang, Bioinspired Soft Matter Unit, Okinawa Institute of Science and Technology, Japan

Dr. Zang is one of five faculty members working in the field ofchemistry at OIST; four of them are women. She has studied inChina (her native country), Hong Kong, France, and US before accepting the faculty position at OIST in April 2015. Within a year of arrival at OIST, her lab became fully established and operational with five postdocs and 2 graduate students.





The key focus of Dr. Zang's research is molecular self-assembly. Nature designs complex materials with unique properties and structures that are difficult to achieve with synthetic materials. Learning from Nature, Dr. Zang creates molecules which are ruled by nature and self-assemble. Molecules being studied currently include membrane protein sorting by enzyme instructed self-assembly, and lipid proteins that can self-assemble. Another research topic is carving nanostructures by light. Light is not invasive and if a proper light source is chosen it is possible to carve nanostructures non-invasively. The self-assemblies are tailored for various applications. One of the potential applications of these molecules is nanomedicine, including treatment of cancer.

Poster Session

A poster session featured presentations by graduate students and early career scientists. Poster presenters were from the Okinawa and Kyushu area universities. All Conference participants were actively engaged in discussion with the presenters.

Panel Discussion

The Theme: "Current Status and Future Opportunities for Women in Science in Asia-Pacific"
The Moderator: Dr. Elizabeth Pollitzer, Director, Portia Ltd, UK; co-founder, Gender Summit
Panelists: Dr. Chang, Dr. Dennis, Dr. Kakazu, Dr. Su, Dr. Watanabe, Dr. Yusof, Dr. Zhang

Dr. Pollitzer opened the session with an overview of the Gender Summit - what it is, how it started, and what impact it has had in Europe where the Gender Summit originated. The idea of the Gender Summit is to have a forum where people can discuss and understand why gender issues matter to science and to the society. The purpose of our panel discussion is to be able to identify ways to move forward with ideas and initiatives.

Question to the panelists 1:
"Horizon 2020 in Europe seeks to increase the number of women in scientific roles, increasing the number of research projects that include a gender dimension, and looking at the benefit of considering gender issues as a cross-cutting benefit. Can this be achieved in your own country? What challenges are being faced? What actions need to be taken?"
Dr. Zhang: The challenge in Asia is more on a cultural level. In the field of science women are encouraged to engage in scientific research, but what holds many back are broader cultural issues, including resistance from the person's family.
Dr. Dennis: In Australia people are now very conscious of the gender issue. I am concerned with the scissors graph, where the higher you go up, the fewer women there are. A big problem for women is confidence. One possible solution is to introduce quotas, which would obviate the need for women to promote themselves.
Dr. Su: In Taiwan, the government requires a gender balance of at least one-third of either men or women. Major institutions are also required to organize gender equality committees. With regard to human capital, my feeling is that more needs to be done to develop greater numbers of women and increase capacity.
Dr. Chang: In economics, too, although there is good gender balance at the undergraduate and

PhD level, this equality decreases the higher up you go. There is evidence that it is essential to have a female presence in faculties.

Dr. Yusof: I think that efforts to increase the number of female principal investigators are important. In Malaysia, the government has drafted many policies on the empowerment of women, but implementation tends to be weak. It is important to equip ourselves, and I agree that mentoring systems are very important. It is also important to encourage women to market themselves effectively and with confidence.

Question to the panelists 2:

"Is it possible to have a Gender Summit at the national level or at the level of a specific discipline? When talking about gender issues it is important for people to be comfortable. It is therefore necessary to think about the best way to hold the summit.

Dr. Dennis: I am interested in the idea that science is not gender neutral. Also, it seems that developing and emerging economies have better gender equality measures than some developed countries. Is this because development and scientific research is relatively new, which provides opportunities to start afresh, rather than being based on existing patterns?

Dr. Su: If I were to contemplate holding a Gender Summit, I would want to consider what my goals are and give thought to how the contents should be designed to respond to those goals. In the past few years, junior high and high school students are also starting to look for more diverse options in their lives and we need to help this process.

Dr. Kakazu: Many students do not think that they are good enough to go on to study specialist subjects. It is important to reach out to teachers, not just to students. Particularly in Japan there is an ingrained view that science is for men and we need to break down this bias.

Dr. Chang: The issue is how to support women to become leaders. We need to support women from the time they are junior researchers and ensure that they are encouraged to find a mentor. I

would also like to suggest that in the future the Gender Summit holds a pre-conference mentoring event, which would help junior and senior researchers come together and network.

Dr. Yusof: I feel very motivated and excited to attend this summit. I hope that we can bring the Gender Summit to Malaysia and bring in men to also work on gender issues. Innovation in science by implementing research projects that include a gender dimension is a very exciting challenge.

Question from the audience:
"Have you considered what policies at your institutions could be put in place to encourage women to return to their positions after childcare leave or other reasons."

Dr. Su: It is important to provide both financial support and mechanisms for women who return to work. There are also societal issues that need to be overcome, in addition to institutional issues.

Dr. Chang: Coming back to research can be very difficult as research moves on. One of the major difficulties for women seeking to return to work is the effort needed to catch-up with research advances. This is another area where mentoring can be helpful.

Dr. Yusof: Recently in Malaysia there have been moves to extend maternity leave to three months with pay for up to the fifth child. Women returning to work after three months still struggle to balance child-raising and work and we are calling on the government to support the development of childcare centers.

Dr. Watanabe: Another key issue is to promote innovation and change in industry. Traditional patterns of work are changing and it is important to harness such changes to empower women to return to work. In Asia, a great deal of science has been driven by advances in Europe and North America, but increasingly Asia-focused efforts are being developed and these need greater support.

Dr. Pollitzer concluded that it is important we not postpone action. We need solutions now to bring women into education and the economy. It is also important to act, as policymakers are looking for solutions. In situations where young people do not see a future for themselves, this is an area where gender equality could step in. We must accept that we need different ways of creating knowledge and the gender lens has the tools to bring in societal issues.

Conference Dinner

All participants continued their conversations with their table-mates during the dinner. They also enjoyed a dinner talk and the performance of the local Okinawan dance and music group with additional participation by the OIST employees.

・Dinner Talk entitled "Advancing Gender Equality in STEM through Design and Assessment" was given by Dr. Lily Yu, Sasakawa Peace Foundation (SPF)

Dr. Yu provided a brief introduction of the SPF. The SPF's mission is to promote international cooperation to address key social issues. In recent years, they have been working on a wide range of societal challenges in Asia, including a project on tri-sector collaboration for gender equality in STEM, gendered innovation and research excellence.

Working with prominent researchers in the US, the SPF has recently published a report entitled "Why women aren't where they are needed in the workplace: Putting the pieces together." The report provides an overview of the status of women in STEM in Asia. The report concludes that "It is particularly urgent to have more women participate fully in the workplace in Japan and parts of Asia due to the demographics and the comparative lack of natural resources. The importance of STEM workers to the knowledge-based economy means that there is an immediate return on investment in increasing the number of women." The report recommends that "Foundations and government agencies consider designing programs and policies to increase women's participation in the workforce, and to promoting gender equality in all sectors and industries."

Optional Tours on May 30, 2017

The tours for the Churaumi Aquarium and the Bashofu House of Textile were fully subscribed. Each tour was accompanied by a knowledgeable local guide. OIST campus tour was led by the OIST staff and participants visited the Child Development Center and other campus facilities for employees and their family, and the research laboratories and classrooms. They had the opportunity to talk with the researchers during the tour.

Acknowledgement

The Organizers credit the success of the Conference to the outstanding teamwork and exceptional organizational skills of Mr. Mitsuhiro Abiko (JST), Dr. Eriko Jotaki (Kyushu University), Dr. Ikue Kina (University of the Ryukyus), and Ms. Akiko Mizukoshi (OIST).

(Machi Dilworth)

4. Nordic Science, Technology and Innovation (NORSTI) Seminar Series #1 - Women in renewable energy and development, the Nordic experience

Date: 31 May, 2017
Organizers: Embassies of Denmark, Finland, Norway, Iceland and Sweden in Japan
Co-orginzers: Japan Science and Technology Agency (JST)

Program

14:00 Opening and welcome
14:10 Keynote speech by Dr. Irma Erlingsdottir "Gender and Sustainability: The Role of Women in the Energy Sector"
14:30 Presentation by Dr. Miyoko Watanabe "Gender equality in Japan and Gender Summit 10 in Tokyo"
14:50 Presentation by Ms. Suiri Takizawa "Decision of S&T female students - Perspective through my experience in Japan and Denmark"
15:10 Presentation by Ms. Mika Ohbayashi "Female involvement in transforming energy markets"
15:30 Discussion; moderated by Dr. Anders Karlsson, Vice President, Global Strategic Networks, Elsevier
16:00 Networking session

SUMMARY

The seminar was organized as a satellite conference to the Gender Summit 10 in. The prominent speakers highlighted the importance of female participation in the STEM fields with examples from R&D and energy sector. Transition to a sustainable society, underlined through the UN's SDGs requires inclusion and diversity. The speakers interacted with an active audience to discuss existing hurdles and how to promote easier participation for women also in the decision making positions. Here are some take aways:

- Even though Nordic countries are ranked as top in obtaining gender equality, there is still a long way to go. There is a range of measures required to close the gap. Femail role models, quata systems (temporarily tools) etc
- The recruitment process to education is crucial to secure a better gender balance in traditionally men-dominated professions like STEM. In Japan, the role of the mother is particularly important, often influencing daughters on traditional choices
- The Gender Summit 10 specified a "Gender Equality 2.0", including a wide range of important factors in diversifying the society at large.
- A comparison of roles of women in working life and studies in Japan and Denmark emphasized the importance of young generation to challenge new environments
- The promotion of renewable energy requires a broad committment among many stakeholders. The revolution of renewable energy will bring forward a chance in gender balance.
- Acceptance of a changing working style, particularly for men is important to go through the required transformation in work-life balance, introducing a more dynamic, flexible working system.
- UN GEST was encouraged to take their activities within geothermal energy also to Japan.
- Gender balance in evaluation committee for funding, recruitment etc is important seeing the impact on research activities.

The Nordic Embassies in Tokyo are planning holding more joint events within science, technology and innovation under the umbrella "The Nordic Experience" in the time to come.

Photos:

(Yumi Murakami, Teppo Turkki, Halldor E. Olafsson,
Svein Grandum, Niklas Kviselius,)

Ⅶ. Media Posting Information

□ Before the event □

	Posting date		Publication magazine	Publication surface	Article Headline
1	February 27, 2017	Monday	Chemical Industry Daily	1	Gender Summit Japan held for the first time in May
2	February 22, 2017	Wednesday	My navi news (net)	—	Recommend to SDGs deepening debate on the tenth "Gender Summit" in Tokyo in May
3	February 27, 2017	Monday	Bunkyo news	46	Gender Summit 10 held in May
4	February 27, 2017	Monday	Bunkyo news	40＆57	Regular briefing session of the president and a lecture "Evaluation method of diversity promotion" etc.
5	March 2, 2017	Thursday	Nikkan Kogyo	24	Gender Summit May held in Tokyo
6	March 3, 2017	Friday	Science newspaper	1	Gender Summit Japan First held
7	April 10, 2017	Monday	Nikkei Business (net)	—	Consider gender difference during development to realize innovation
8	April 13, 2017	Thursday	Lyceum (net) ※	—	Ms. Chief Mukai also enters the stage, Riquewio support event for junior high and high school students
9	May 3, 2017	Wednesday	NEWSALT (net)	—	Junior high school girls in "Rikejyo" gather! Held a career event to know the future
10	May 19, 2017	Friday	Science newspaper	2	Gender Summit 10
11	May 22, 2017	Monday	Bunkyo news	50	Gender Summit 10 held

eprinted to multiple news sites including Yahoo!, Livedoor, Infoseek

☐ After the event ☐

	Posting date		Publication magazine	Publication surface	Article Headline
1	May 25, 2017	Thursday	Nikkan Kogyo Shimbun	23	Gender Summit starts
2	May 25, 2017	Thursday	Science portal		Gender Summit 10, Held in the Tokyo Metropolitan Government "Gender Equality" Aiming to Recommend SDGs
3	May 25, 2017	Thursday	My navi news (net) Reprinted from science portal	—	Gender Summit 10, Held in the Tokyo Metropolitan Government "Gender Equality" Aiming to Recommend SDGs
4	May 25, 2017	Thursday	Chemical Industry Daily		「Gender Summit 10」
5	May 29, 2017	Monday	Science portal		「Gender equality is indispensable for a sustainable society and people's happiness」 Gender Summit 10 proposed to the world and closed
6	May 29, 2017	Monday	My navi news (net) Reprinted from science porta	—	「Gender equality is indispensable for a sustainable society and people's happiness」 Gender Summit 10 proposed to the world and closed
7	June 1, 2017	Thursday	Science portal		Gender equality from the viewpoint of diversity Looking back on 「Gender Summit 10」held for the first time in Japan
8	June 1, 2017	Thursday	Mechanobiology Institute		Small steps to Big Changes towards Gender Equality in Science
9	June 3, 2017	Saturday	Yomiuri Shimbun Evening Paper	3	A thing that hinders the activity of women
10	June 5, 2017	Monday	Nikkan Kogyo	17	Researchers' gender difference attention
11	June 5, 2017	Monday	New switch (net)	—	What kind of gender difference is there in research and innovation
12	June 5, 2017	Monday	Bunkyo news	48＆49	「Gender Summit 10」 held, 600 participants
13	June 5, 2017	Monday	Bunkyo news	49	Think about the course in Rikhejo's experiences
14	June 6, 2017	Tuesday	Twitter		3 ways the EU is committed to making science gender equal. My welcome address at 10th @gendersummit in Tokyo #GS10
15	June 9, 2017	Friday	Science newspaper	2	Gender Summit 10 held More than 600 people from 23 countries and regions participated
16	June 9, 2017	Friday	Yamaguchi newspaper	4	Point of View Issues = Gender Equality Respect for Gender
17	June 12, 2017	Monday	ELSEVIER(net)	—	Asia-Pacific Gender Summit aims to boost innovation in research through diversity
18	June 30, 2017	Wednesday	Sakura Science Club Members address mail magazine	—	「The importance of gender equality and diversity」
19	-/06/2017	-	Rikejo46号2017JULY (Kodansha)	7	Rikejo news of this month
20	July 6, 2017	Thursday	Asahi Shimbun	23	「To strengthen diverse gender science」
21	July 18, 2017	Monday	WEBRONZA (Asahi Shimbun's speech site)	—	World trend that 「I will not let go of motivation and talent deadly」
22	-/08/2017	-	Joint participation (Cabinet Office publication)	P9	Rikejyo satellite article 1P
23	August 31, 2017	Monday	Yomiuri Shimbun Issue	11 sides	Let's increase women's perspective in technology development
24	August 31, 2017	Monday	Asahi Shimbun (Asahi Children's Newspaper)	1 sides	6/12 Asahi Shimbun news reporter coverage

Ⅷ. Summary and Future Challenges

GS10 was the 10th Gender Summit to be held, and the second in Asia Pacific. The features of the content discussed at this summit are as follows.

1. Emphasizing Asian perspective and disseminating to the world

As the Gender Summit began in Europe, many previous conferences and discussions concerning gender equality began and developed mainly in Europe and the United States. Comparing countries through the use of unified European and American intelligible expressions and basic indicators has been standard practice to date, and the indicators - such as the Global Gender Gap Index (GGI) by the World Economic Forum - have clearly shown the result of how the Asian region is behind in gender equality. It can be said that this represents a form of gender equality seen from one side. However, many discussions raised doubts about whether it is always possible to properly express the circumstances of each country with this index alone. For example, the proportion of females makes great sense under the premise that women and men are all the same in quality. If each individual person has different value, the importance of simply comparing female ratios will be diminished. Also, it was made clear at the summit that women make great contributions to addressing serious problems in Asia that are hardly revealed. Furthermore, diverse ethical perspectives, regional characteristics and culture play a major role in Japan and other Asian regions. Indeed, the importance of considering gender equality and advancing it was discussed in many sessions in consideration of such a complicated background and became a common conclusion.

2. Redefinition of gender equality

Although we have discussed gender equality so far giving much importance to women and girls. However, the relationship with various factors including men's and boys' problems and cultures cannot be ignored. Although it is far from the situation that gender equality for women and girls has been sufficiently achieved, at the summit we discussed that it is necessary to consider relationships with other factors in order to solve the problem of women and girls. At GS 10, we also set up sessions on men's and boys' falling academic achievement and gender issues in sports to air these issues. In these sessions, similarities with the problems of women and girls were discussed. In other words, it can be said that the various problems surrounding gender equality have the same essential problems. It is necessary to grasp the problem comprehensively from a broader perspective and to set a theme, rather than discussing these individual problems respectively, which in turn can lead to essential problem solving. In order to develop these discussions, during the Summit we defined gender equality targeting women and girls thus far as Gender Equality 1.0, and defined the gender equality including

regional characteristics, ethical perspectives, culture, religion, each individual's ability etc. in consideration of the diversity point of view as Gender Equality 2.0.

3. Collaboration with many organizations

Gender equality makes sense only when many organizations and many stakeholders understand and share its value. In order to make gender equality meaningful, therefore, it is necessary that more institutions and organizations as well as organizers and co-organizers participate in the conference on their own initiative. This time, in addition to JST as an organizer, Science Council of Japan and Portia Ltd. joined as co-organizers, 111 institutions and organizations participated in the summit as associates, partners and sponsors, and as a result 114 institutions and organizations were able to cooperate to plan and operate the summit. The 23 organizations including 9 ministries and agencies involved in science and technology as associates, 9 organizations with the most direct involvement as partners, and 74 organizations which consisted mainly of private companies and universities as sponsors cooperated with together to operate the GS 10 successfully. Due to the high number of institutions and organizations that actively participated in the summit, a means to develop the future movement has been established.

Given the question of what is important for gender equality, it is to realize a sustainable society where everyone can live safely, which is the same as the UN Sustainable Development Goals (SDGs). All stakeholders involved in GS 10 shared a common recognition that science and technology can play an essential role that can contribute to all people by considering gender. To that end, we believe it is the above-mentioned three concepts developed at GS 10 that can contribute to the resolution of the UN SDGs and the global challenges they seek to address.

Furthermore, the following are listed as future challenges.

1. Developing the results

At this Summit we were able to produce results, including the Gender Summit Tokyo Declaration:BRIDGE. But how to develop these results for the future and embed them in society is our biggest challenge. It is necessary to continuously discuss with a variety of different organizations in each country and to develop the contents and execute it reliably. Also, we must actively participate in international networks, disseminate strongly to the world, and promote gender equality together with wider society. It is necessary that JST as an organizer and Science Council of Japan as a co-organizer play a leading role in developing the results, giving much importance to cooperative relations with the institutions and organizations as associates, partners and sponsors of the Summit.

2. Promoting science and technology by considering gender as a factor

It was commonly recognized at the summit that gender is an important factor in science and technology, which is necessary for science and technology to provide value to all people and to minimize losses. One of the reasons why this issue progresses only slowly is that gender balance in the engineering field is weak. Therefore, it is necessary to promote research and development in engineering that recognizes and embeds gender as a factor, in addition to promoting gender equality in the engineering field. At the same time, it is necessary to seriously think about increasing women's opportunities to participate in every field and to implement it.

3. Responsible implementation by related institutions and organizations

At the summit, the importance of considering gender in science and technology and promoting gender equality was discussed from various perspectives. As a result, it was recognized that utilizing the characteristics and abilities of each organization and each individual and sharing each method with respect should be significant rather than promoting gender equality in a uniform way. At the same time, we discovered that talented personnel of our country succeed overseas because there are no domestic places for them to be successful. It is an urgent task to realize innovation that can provide an environment and places where talented personnel who are our country's valuable assets can play an active part and can develop from domestic to the world. For that purpose, it is strongly desired that related institutions and organizations design responsible strategies and measures and implement them.

(Miyoko O. Watanabe)

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Gender Summit 10 (GS10) Report

March 2018

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一般社団法人 日本生態学会 The Ecological Society of Japan
名古屋大学 NAGOYA UNIVERSITY
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RIKEN
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JAIST
HOSEI University
中央大学 CHUO UNIVERSITY
JAXA
KOBE UNIVERSITY
AIST ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY (AIST)
الجمعية العلمية الملكية Royal Scientific Society
TAISEI For a Lively World
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KOSEN
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日本科学協会 The Japan Science Society
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Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering
日本商工会議所 The Japan Chamber of Commerce and Industry
AMED 国立研究開発法人 日本医療研究開発機構 Japan Agency for Medical Research and Development
UEC 電気通信大学 The University of Electro-Communications
Keidanren Policy & Action
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METI
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外務省 Ministry of Foreign Affairs of JAPAN
東京工業大学
山形大学 Yamagata University
厚生労働省 Ministry of Health, Labour and Welfare
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