

Interview with Kazuki Okimura, Counselor to the President, Japan Science and Technology Agency

Embracing the Future with Prosperity in Asia Through Sakura Exchange Program in Science

By Japan SPOTLIGHT

The best foreign policy is often to create friendship between the young people among nations. Lifelong friendships can contribute to international peace, and exchanges among young students of science could lead to innovation as well as peace, since young people will be intellectually stimulated by the exchange programs and more innovative than ever.

Kazuki Okimura, a former vice minister as well as president of the Japan Science and Technology Agency (JST), founded the Sakura Exchange Program in Science in 2014. Absorbed in a China-Japan exchange program in science for many years and fascinated by the significant potential of China as a power in science, he noted the need to establish the Sakura Exchange Program in Science to create win-win bilateral relations. The program was eventually expanded to cover all Asian nations. He has been awarded a couple of distinguished prizes by the Chinese government for his invaluable contributions to scientific cooperation between the two nations. He is currently counselor to the president of the JST and director of the Japan-Asia Youth Exchange Program in Science Promotion Office. We held the following interview with him.

(Interviewed on June 15, 2017)

Introduction

JS: Could you briefly tell us about yourself, and in particular your relations with China?

Okimura: I was a government official working for the Science and Technology Agency (STA) of the Japanese government. Since retiring from the STA, I have been working for the JST, first as executive managing director and then as president. I am now counselor to the president of the JST and working at the China Research and Communication Center (CRCC) as well as with the Japan-Asia Youth Exchange Program in Science Promotion, called the Sakura Exchange Program in Science.

I became interested in China when I visited there to sign an agreement on a program of the JST as executive managing director with the Chinese Science Academy. I was intrigued by the strength of contemporary Chinese science and became convinced of the need for Japan to establish a deeper channel for scientific exchanges with China.

As China and Japan are geographically close to each other, Japan has been strongly influenced by China in various areas, such as literature, culture, religion, etc. Besides that, Chinese and Japanese are also racially very close. Chinese science and technology is making significant progress day by day and I believe its level exceeds



Kazuki Okimura, Counselor to the President, Japan Science and Technology Agency

that of Japan today. There are even some Japanese think tanks saying that economic growth and progress in Japanese science and technology will be only one-tenth of what it is today in 2050.

Though China is a gigantic military and technological power within only a few hours' flight, we cannot easily access any information on Chinese science and technology. I thought then we should create more channels for communication with China on science and technology. This was my starting point towards creation of the Sakura Exchange Program in Science. With this conviction, we founded a JST office in Beijing in 2006 and also the CRCC. With these two

organizations as platforms, we have been engaged in many communication programs with China, and have also been working on research concerning Chinese science and technology.

JS: What kind of specific activities has the CRCC been working on?

Okimura: I believe we have been working on all that we would need for communication on science and technology. We have been working not only on research but also on running websites such as "Science portal China" to introduce information on Chinese science and technology in Japanese for Japanese readers, and "Reality of

Japan” to present Japanese science and technology information in Chinese for Chinese readers. In particular, the latter issues all kinds of information on Japanese universities, such as science and technology developed in the universities or information on available academic programs or university faculties, as well as facilities for the interest of Chinese students studying in Japan or interested in studying at a Japanese university.

I believe it is not only information provision but also exchange of human resources that is crucial for achieving progress on mutual understanding. So far, there have been only a few exchange programs between some specific universities in China and Japan, such as the one between the University of Tokyo and Qinghua University.

Twice in 2010 we organized an event called “Fair and Forum between Japanese and Chinese Universities”, an attempt to achieve matching between 50 Chinese universities that we invited to Japan and Japanese universities. Unfortunately, we could not organize this event in Japan again in 2012 due to the territorial dispute between China and Japan. But I thought if Chinese universities could not come to Japan, then Japanese universities should go to China, and after having consulted with the Chinese Education Department, we joined their event in China to promote studying abroad for Chinese students together with the major Japanese universities. We have continued this project until now and in 2017 we will hold this exchange program in Shanghai with 45 Japanese universities joining it. In this program, both nations’ students and the presidents of the participating universities discuss the ideals of university education or introduce their developed technologies to each other. We feel the project is having a positive outcome as quite a number of the participants are interested in joining the event again.

Sakura Exchange Program in Science

JS: We have heard that you are working hard on youth exchanges between Japan and other Asian countries. Could you explain about the Sakura Exchange Program in Science?

Okimura: The Sakura Exchange Program in Science is an exchange program inviting young people in Asia to Japan and providing them with opportunities to learn about our advanced science and technology. This was started in 2014.

When the territorial dispute between Japan and China flared up in 2012, about 90% of Japanese responded negatively when asked in an opinion poll if they like China, and the same percentage was recorded among the Chinese regarding Japan. Such a situation could result in a deeply rooted cause of conflict in the future, and so

I thought we should do whatever we could to mitigate this difficulty. I made a plan to invite 10,000 Chinese to Japan and talked with Dr. Akito Arima, former president of the University of Tokyo, and then Education and Science Minister Hakubun Shimomura about this plan. With Shimomura’s advice to create an exchange program with the whole of Asia rather than just China, the Sakura Exchange Program in Science was born.

The origin of this idea was the youth exchange program between France and Germany after World War II. Both nations continued with a number of their youth exchange programs in which eight million young people participated in 50 years following the war, and these two nations which have fought each other many times in the past are now core partners in the European Union. I thought Japan and China should follow in their footsteps and having considered a youth exchange program as the most effective way to achieve such a productive relationship, started the exchange program by inviting 3,000 young Chinese to Japan in the first fiscal year.

Believing that a grassroots exchange program can create real friendships, the JST invites many proposals for week-long exchange programs from a wide range of educational institutions and after examining them, the JST adopts some of the programs and finances them. It invites collaboration between Japanese educational institutions and those overseas. With this, I believe that good networks among universities or research institutes can be created. In such a bottom-up method rather than a top-down one, we can increase the number of organizations involved in this exchange program. I hope all educational organizations such as high-schools, universities, and research institutes all over Japan will take advantage of this program eventually, if we continue it.

So far, 286 Japanese institutes have invited young people from 608 Asian institutes. In our experience, those Japanese institutes that have once acted as a hosting organization do not hesitate to do so again. So we are running this program in the belief that all the Japanese institutes would be friends with all the Asian institutes.

At the beginning, we went to China to look for overseas participating institutes and visited more than 10 to promote our program. But given the intensified political tension between China and Japan at that time, we had no positive response. Only the Chinese Science and Technology Department kindly said they would be happy to collaborate with us, regarding our program as an excellent one.

JS: In this program, do the young people from Asia go to a Japanese university or research institute and join the classes there?

Okimura: Yes. They are invited to join a one-week program in Japan

Special Interview 2

planned and scheduled in advance. Our spoken language is English. I have found this program in which Japanese and Asian students work together to be instrumental in creating friendship among them. When the program has finished and people are saying farewell, there are always tears. According to our follow-up study on the outcome of this program, 40% of the participants come back to Japan. I am very impressed by this number. Participants have shared their enjoyment of this program through SNS and thus the program has become widely known not only in Japan but around the world, and it has been referred to in 1,520 media outlets, including China's *People's Daily*.

High-school Version of Sakura Exchange Program in Science

JS: We have heard that a different program has been created for high school students. What does this high-school version of the Sakura Exchange Program in Science look like?

Okimura: High-school students obliged to devote much of their time to preparing for university entrance exams cannot spare time to create their own program. So the JST does this by asking our partner country's government to select the smartest students from the best schools as participants in the program. Therefore, so far, the best and the brightest students such as those awarded gold medals at the International Science Olympiads have joined our program.

The participants join an observation tour of the best research facilities in Japan, such as the National Research Institute of Fisheries Science or the High Energy Accelerator Research Organization, and also visit a university campus and attend a lecture given by a Japanese Nobel Prize winner. Dr. Hideki Shirakawa, who won the Nobel Prize for Chemistry, has become increasingly devoted to this program and he is planning in this year's program to invite all the eight teams of participants to join in his experiments. For this purpose, he has done a rehearsal twice with the participation of two assistants, one from Shibaura Institute of Technology and the other from the National Museum of Emerging Science and Innovation. A notebook with guidance on experiments in English with his autograph is prepared for each participant and they can make notes in this and take it back home.

The young participants can meet a Nobel Prize winner in person for the first time in their life and learn directly from him. They can write their impressions, and when reading them the professors would be increasingly enthusiastic about teaching them. The Nobel Prize winners would be highly motivated in encouraging the students to become Nobel Prize winners too. This is how we can expect their

full support for our program. Our program for high-school students has won a good reputation as a means of promoting science among the best and brightest students in Asia.

JS: Are the participants generally all happy with the program?

Okimura: Yes. Almost 100% of them responded to our survey that they were happy with the program and also their impression of Japan became better than before and they wanted to come back. Among the 3,000 participants in the first year of our program, 292 students came back to Japan afterwards for study or research. This is one important outcome.

To tell the truth, the best and brightest Asian students are in general more interested in the United States or Europe as places for studying abroad. But after joining this program and getting to know better about Japan, an increasing number of students are thinking about Japan as their choice for studying abroad. They often change their minds after experiencing the kindness of the Japanese and the general safety of society in Japan. They may also find that US and European university tuition fees are more expensive than here. In Japan, they could also find a part-time job easily and return to their own country more often as it would be nearer by. Many Asian students find these points attractive, so our program will continue to contribute to an increase in Asian students coming to Japan to study.

Another positive effect of this program would be to provide the hosting Japanese universities with an opportunity to work out a program in English. For example, Tokyo University of Science is now not only hosting the program but also creating its own program for sending students abroad. This is how a more internationally minded attitude is expanding in Japan, thanks to our program. I believe this is very important for diversifying Japanese innovation. Japan is far behind other Asian countries in terms of global outlook, so I hope our program will contribute further to raising more broad-minded attitudes in Japan.

JS: In this regard, will your program help stop the decrease in the number of Japanese students studying abroad?

Okimura: I think we can expect a variety of good impacts from our program, including the one you mentioned. As you know, Asia is the center of global economic growth and thus deepening the exchange of people within Asia and promoting a global mindset among the young would be the best strategy in the long run for Japan. The JST must make a good contribution to achieving this goal.

Relations with Business

JS: Can business firms join your program?

Okimura: Yes, we are open to private business. Sixteen companies have joined so far. In our program for business firms, while the JST pays for traveling expenses, business corporations pay for accommodation expenses while staying in Japan. We are telling Japanese business firms that they could be a beneficiary of this program, since they could have an opportunity to share technology information with the best universities in Asia, and this could be useful for their own development of new technologies. I hope in the future that Japanese firms interested in employing capable young people from other Asian nations will join our program. I am sure they will find many students with great potential.

Further Networking

JS: You have organized an alumni association of this program. What is this association planning to do?

Okimura: Our alumni association has 12,690 members. The first reunion took place in Tokyo and next year we will have the second one in Beijing. The members all share information on the association's activities by a mail magazine. We would like to increase the members by 30,000 a year as soon as possible. Thus we could reach one million members in 30 years. As I told you, all the participants are capable young people, so I guess among them a certain percentage will become leaders all over Asia. This would be a means of Japan exercising its soft power through a human network.

JS: What do you think would be necessary to achieve this goal?


Okimura: I think it would be important to follow up the participants after the program. Our Japanese alumni in the Fulbright Scholarship Program are all saying they were happy with the program in the US. I would like to make our program as popular as the Fulbright program. I am sure it is possible. It would help us maintain a Japanese presence in the world even though the Japanese economy may shrink in the future. In order to make this happen, I would say it is important to follow up the needs of our alumni. The percentage of participants in our first year program coming back to Japan is 7%, but we presume that this percentage as well as the total number of participants in our program will continue to increase hereafter. If any of our alumni want to come back to Japan to study or work, we will need to take care of them. We often hear that they cannot find a

relevant program in Japan even though they want to come back to Japan to study. In a Japanese university, it is true that there are still very few courses available in English, which means the facilities for accepting foreign students coming from abroad are not well equipped. If they take courses in Japanese, there must be good language schools where they can learn Japanese before starting to study in Japanese universities. We should strongly encourage the Japanese government and the universities to meet these needs of students coming from abroad. With this follow-up, we could accept an increasing number of our alumni who want to come back to Japan and after their studying in Japan they would be happy to work here.

Two Concerns

JS: In expanding this program for the future, we think there are two concerns to be addressed. The first is the possibility of sensitive Japanese technological information leaking to overseas. Asian students may not necessarily all be devoted to Japanese interests and overseas business could be the largest beneficiary of the program by acquiring key technology information of Japanese industries from those alumni who may get a good job in a foreign company after quitting working for a Japanese firm. The second is whether the JST continues to be provided a sufficient budget for this program in the future.

Okimura: I think we should be tolerant of such a technology information leakage. Apart from defense technology, we should be lenient towards the Asian students. I hope that young people can learn about top-level Japanese technology and take it back to their home country and contribute to their home country's prosperity. I do not want them to contribute to Japanese economic prosperity. Japan should, if necessary, redouble its R&D efforts to excel in technological capacity over other Asian nations.

As for the budget, the size of the budget for the program in 2017 is around 1.8 billion yen. The cost per participant has been lowered as much as possible, thanks to the universities' or high-schools' involvement on a voluntary basis. I believe if we can invite 30,000 participants at a cost of 10 billion yen that would be very cost effective, since the program would lead to developing a sound basis for a globalized mindset in Japan, which is today a key to achieving innovation. 

Written with the cooperation of Naoko Sakai who is a freelance writer.