Joint Statement between the Ministry of Education, Culture, Sports, Science and Technology of Japan, the Ministry of Education and Research of Sweden and the Ministry of Enterprise and Innovation of Sweden on the Strengthening of Japan-Sweden Science and Technology Cooperation on the Occasion of the 150th Anniversary of the Establishment of Diplomatic Relations between Japan and Sweden

Japan and Sweden have maintained exchanges and cooperation in various fields over many years. Known as leading nations in science and technology, Japan and Sweden have formed important partnerships in science, technology and innovation.

Exchanges have steadily advanced between both countries' researchers, universities, and research institutes and promoted mutual understanding and cooperation.

To mark the 150th anniversary of the establishment of Japan-Sweden diplomatic relations, we, the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT), the Ministry of Education and Research of Sweden (MER) and the Ministry of Enterprise and Innovation of Sweden (MEI) are celebrating this commemorative year by reaffirming the importance of, and potential for, Japan-Sweden cooperation in science and technology. As both countries are advanced nations in tackling societal challenges, Japan-Sweden cooperation in science, technology and innovation this century will take on increasing importance.

On this occasion, we welcome anew the exchanges and cooperation between Japanese and Swedish researchers, universities, and research institutes that have been carried out in diverse fields and through various channels, and encourage these exchanges and cooperation to continue to develop. With the opportunity provided by the 150th anniversary of the establishment of diplomatic relations, we have discussed the further strengthening of science and technology cooperation, and are pleased to be able to highlight the following efforts and developments for this.

University exchanges

Japan and Sweden have a long and rich history of academic cooperation based on both individual researchers and strategic university initiatives. In October 2015, the Japan-Sweden University Presidents' Summit was held in Tokyo, and with that opportunity, the MIRAI Project comprising eight Japanese universities and seven Swedish universities was launched. To date, the project has initiated activities for promoting bilateral joint research and exchanges of young researchers in the following four areas of common interest: Aging, Materials Science, Sustainability, and Innovation.

Another example of strategic cooperation is between the University of Tokyo and the three Stockholm institutions: Karolinska Institutet, KTH Royal Institute of Technology, and Stockholm University. In September 2017 they signed "Agreement concerning Strategic Partnership between the University of Tokyo and Karolinska Institutet, Kungliga Tekniska Högskolan, Stockholms universitet" with the conviction that mutual benefit can be achieved from academic exchange and collaboration in research and education, for added value to society.

In October 2018, a renewed Summit was held in Kyoto, in which research funding organizations also participated, to promote sustainability in exchanges, broader participation of universities and impact of the exchanges.

These and other cooperation based on bottom-up discussions among the universities are invaluable. We welcome the building of the exchanges between universities in both countries, and hope that these exchanges will continue to be fruitful.

International joint research and innovation through funding agencies

Based on a commitment reached in 2015, Japan Science and Technology Agency (JST) and Swedish Governmental Agency for Innovation Systems (Vinnova) are jointly promoting a Japan-Sweden international collaborative program to fund bilateral joint research and innovation projects. In 2016 they conducted a joint call and are now funding projects under "Japan–Sweden Academia-Industry International Collaboration Program on Innovative Solutions, Community Design and Services for Elderly People", developing solutions for the societal challenge of an ageing society.

The current cooperation model developed by JST and Vinnova is believed to be applicable to address other societal challenges of common interest, or for appropriate thematic or crosscutting themes, for which new and innovative solutions are of key importance.

From recent development of bottom-up discussions through exchanges between the universities in both countries, new and potentially important themes of common interest are likely to arise. These outcomes could be important as input when funding agencies on both sides are planning for future bilateral joint programs or calls for research and innovation.

Cooperation through large scale facilities

Both countries have world-class synchrotron radiation facilities, and these facilities are utilized by researchers in a wide range of fields, from materials science to life science. In Sweden, the next generation "MAX-IV" facility was inaugurated in Lund in June 2016, and the user program opened in 2017. The laboratory has collaboration on technical projects with other facilities including SPring-8, the leading synchrotron and x-ray laser laboratory in Japan.

SPring-8 and MAX-IV have initiated consultations aiming to establish a collaborative program that may include the exchange of expertise and beam-time, for possible launch in 2020. The program will include access to the facilities, and encourage and implement bilateral joint research between both countries.

In addition, regarding neutron facilities, Japan and Sweden host two of three MW spallation sources in the world. European Spallation Source (ESS), is under construction in Lund, Sweden, with the aim of starting its user program in 2023 and J-PARC is operating the leading neutron facility in Japan. J-PARC and ESS promote technological exchanges based on "Arrangement on Cooperation in the field of Spallation Neutron Source Development between European Spallation Source ERIC and the High Energy Accelerator Research Organization and the Japan Atomic Energy Agency" which was exchanged in July 2017 in the presence of the Japanese and the Swedish Prime Ministers.

Exchanges and cooperation through science promoting organizations

In fiscal 2010, Japan Society for the Promotion of Science (JSPS) and Vinnova started their support for bilateral joint research networks based on "Memorandum of Understanding on Scientific Cooperation between Japan Society for the Promotion of Science and Swedish Governmental Agency for Innovation Systems". In continuation of this cooperation, since 2013, JSPS and Swedish Foundation for International Cooperation in Research and Higher Education (STINT) have been supporting bilateral joint research based on the Memorandum. JSPS and STINT are striving to enhance academic cooperation between both countries in various ways.

JSPS and Nobel Media AB have held the "Nobel Prize Dialogue" since 2015, which has elevated public interest in and deepened their understanding of science and thus contributed to the promotion of science. Following the Dialogue in March 2018, held as an event celebrating the 150th anniversary of the establishment of diplomatic relations between Japan and Sweden, the next Dialogue is planned to be held in 2019.

MEXT, MER and MEI welcome the development of Japan-Sweden cooperation in science, technology, innovation and higher education as illustrated by the examples above. We hope that these above-mentioned efforts and developments will act as further catalysts for promoting greater exchanges and cooperation in research, education and innovation between various Japanese and Swedish agencies, organizations, and other entities.

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For Ministry of Education, Culture, Sports,
Science and Technology of JapanFor Ministry of Education and Research of
SwedenFor Ministry of Enterprise and Innovation

of Sweden