

Institution representing 850,000 scientists across Japan

## Science Council of Japan



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## **Science Council of Japan**

In 1949, Science Council of Japan was established as a "Special Organization," of the Cabinet Office, to represent the country's scientists both domestically and internationally, as well as to independently discharge its duties under the jurisdiction of the Prime Minister.

Science Council of Japan consists of 210 Council Members and some 2,000 Members, elected as representatives of the approximately 850,000 scientists nationwide.



Juichi Yamagiwa
President of Science Council of
Japan 24th Term

#### **Message from President**

Science has long been a major force for giving Japanese people pride and dreams, supporting creative living and peaceful exchanges with other countries. Especially in the Edo era during the policy of isolation, science and technology unique to Japan prospered such as "Wasan". In the Meiji era, there was growing momentum to absorb and utilize the excellent Western academics, knowledge and technology, and to harmonize them with Japanese academics for further development. Science Council of Japan was founded in 1949 when Dr. Hideki Yukawa won the Nobel Prize.

Its role is to deliberate on and realize important science matters independently from the government, promote communication of scientific research, and improve its efficiency. Today as we celebrate the 24th term as a representative of 850,000 scientists with Japanese nationality, 210 Council Members and 2,000 Members carry out various activities in the three disciplines of Humanities & Social Sciences, Life Sciences, and Physical Sciences & Engineering.

So far, we have made many recommendations and statements on important issues. For this term, we will work closely with each academic society so that our recommendations, etc. can be further enhanced and reflected in policy for enrichment of living founded on social safety and security. The common goal for this term is "dialogue". Dialogues will be promoted not only with Japanese institutions and organizations, but also with overseas scientists and their communities. We very much look forward to seeing you in international conferences and symposiums. They will be announced on our website and through public relations, so we would appreciate your attention and active participation.

President of Science Council of Japan 24th Term Juichi Yamagiwa

#### **Profile**

Born in 1952 in Tokyo. In 1980, completed Doctoral Program at Graduate School of Science, Kyoto University. Doctor of Science.

In October 2014, appointed the President of Kyoto University. In October 2017, appointed the 24th President of Science Council of Japan. In 1978, became engaged in research of wild gorillas in Africa as a graduate student. Restoring the lives of early humans based on the behavior and ecology of the apes, President Yamagiwa is a leading expert on primate research that continues to explore the origins of social characteristics unique to humankind.

## **Key Activities**

Direct recommendations of opinions by Japanese scientists to the government and society

While the "Council for Science, Technology and Innovation" is a government-led top-down organization and acts as a control tower for Japan's science and technology policy, Science Council of Japan is a bottom-up organization, which presents or advises expert and reliable opinions from a neutral perspective.

Contribution to academic promotion in local communities and enhancement of academic societies

As regional activities, we hold conferences with local scientists and symposiums for community residents and contribute to the promotion of academics in local communities. From FY2018, "Regional Science Council" is organized to further strengthen efforts in regions.

 Deepen mutual understanding of science through dialogue with civil society

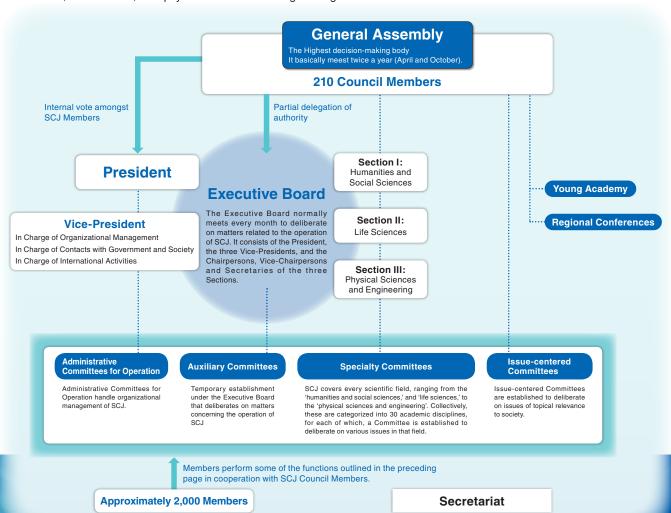
We organize symposiums and science cafes, earnestly conduct activities to deepen mutual understanding of science and exchange opinions with citizens through dialogue between scientists and society.

4. Promotion of international academic exchanges as a leading science academy in Japan

Science Council of Japan is a leading Japanese academy of science for the international community, conducting various international activities such as exchange with academies of various countries and regions and holding international symposiums, and also playing a role as a trusted international partner. It is also engaged in organization of the important International Science Council to be held in Japan.

## **Organization of Science Council of Japan (SCJ)**

SCJ consists of 210 Council Members and some 2,000 Members, elected as representatives of the approximately 850,000 scientists nationwide. It conducts activities from a universal perspective and a comprehensive and multifaceted point of view, taking advantage of the fact that it is comprised of scientists from a broad-range of fields spanning over 'humanities and social sciences,' 'life sciences,' and 'physical sciences and engineering.'



## **Representative Members of SCJ**



President

Juichi Yamagiwa



Vice-President (Organizational Management **Miho Mitsunari** 



Vice-President (Contacts with Government and Society Miyoko Watanabe



Vice-President (International Activities) **Kazuhiko Takeuchi** 



(Section I: Humanities and Social Sciences)



Chairperson (Section II: Life Sciences) Fuyuki Ishikawa



Chairperson (Section II: Physical Sciences and Engineering) Hideo Ohno

# Promotion of international academic exchanges as a leading science academy in Japan

## G-Science Academies

G-Science Academies are academic science meeting bodies launched in 2005 with the purpose of having scientists from the G7/G8 Summit member countries make policy recommendations to their respective leaders. Policy recommendations will be submitted to national leaders in the form of a joint statement towards the Summit through coordination among academies. In Japan also, the President of Science Council of Japan delivers the statement personally to the Prime Minister every year. For 2018, it was compiled in Canada, which was the host country of the Summit.

#### Membership and contribution to international academic groups

Representing Japan, Science Council of Japan is a member of key international academic groups, such as International Science Council (ISC\*) and InterAcademy Partnership (IAP). By dispatching delegates of Science Council of Japan to the international conferences organized by those key international academic groups, it deepens the partnership with academic societies across the world and promotes communication of international academic research in order to contribute to the development of academia.

\* Founded in July 2018 by the merger of International Council for Science (ICSU) and International Social Science Council (ISSC).

#### **Affiliated International Academic Organizations**

- International Science Council
- International Union of Pure and Applied Chemistry
- International Union of Biological Sciences
- Pacific Science Association
- International Union of the History and Philosophy of Science and Technology/Division of History of Science and Technology
- Committee on Space Research
- International Union for Pure and Applied Biophysics
- International Union for Quaternary Research
- International Federation of Automatic Control
- International Economic History Association
- International Union of Pharmacology
- International Council for Laboratory Animal Science
- nternational Union of Microbiological Societies
- IAP for Research (former: InterAcademy Council)
- International Social Science Council
   International Astronomical Union
- International Union of Pure and Applied Physics
- International Geographical Union
- International Union of Crystallography Science and Technology/Division of Logic, Methodology and Philosophy of Science and Technology
- International Union of Biochemistry and Molecular Biology
- Scientific Committee on Oceanic Research
- Committee on Data for Science and Technology

- International Mineralogical Association
- International Union of Nutritional Sciences
- World Climate Research Programme
- International Federation of Social Science Organizations
- Association of Asian Social Science Research Councils
- Commission Internationale du Génie Rural
- International Union of Soil Sciences
- The Association of Academies and Societies of Sciences in Asia
- International Union of Geodesy and Geophysics
- Union Radio-Scientifique Internationale
- International Mathematical Union
- International Union of the History and Philosophy of
- International Union of Physiological Sciences
- International Commission for Optics
- Scientific Committee on Antarctic Research
- International Union of Geological Sciences
- International Economic Association
- Scientific Committee on SolarTerrestrial Physics
- World Federation of Engineering Organizations
- Le Comité International des Sciences Historiques
- International Cartographic Association
- International Arctic Science Committee
- IAP for Science (former: InterAcademy Panel on International Issues)

## **Science Council of Asia (SCA)**



Science Council of Asia (SCA) was established in 2000 advocated by Science Council of Japan, with its secretariat located in Science Council of Japan, for the purpose of exchanging information on the current state of science among Asian countries, promoting cooperation in a wide range of scientific fields in the Asian region, gaining mutual understanding among Asian scientists and deepening trust.



- •Members: 31 academic institutions across 18 Asian countries and regions
- •Secretariat: Science Council of Japan
- •Since its establishment in 2000, each member country/region holds international symposiums, General Assemblies, and Board meetings every year in turn. (In 2018, organized in Tokyo, Japan)

The 17th SCA Conference in Philippines.

## International expansion of Future Earth



Future Earth is a global collaborative research initiative that aims at realizing a sustainable global society promoted by the International Science Council (ISC) and others. Under the Vision of "for people to thrive in a sustainable and equitable world", advocated by the United Nations Conference on Sustainable Development (UNCSD) in 2012 (Rio+20), it is a framework

aiming for more innovative research by promoting cooperation between the research communities and various stakeholders in society and connecting the world-leading laboratories and experts with an open network. Science Council of Japan is a member of the Governing Council and forms a federation of distributed coordination secretariats with Canada, France, Sweden and the United States and plays an integral part in the international development of Future Earth.

#### Sponsoring international conferences and symposiums

#### International Conference on Science and Technology for Sustainability

Since 2003, Science Council of Japan has held an annual international symposium, "International Conference on Science and Technology for Sustainability" to solve global issues and compiled recommendations.

#### Co-hosted international conferences

Of the international conferences organized by academic research organizations held in Japan, Science Council of Japan obtains verbal agreement from the Cabinet and co-hosts important meetings conducive to solving scientific issues, etc. in order to contribute to the development of academic research and promotion of exchange among researchers. Imperial family members are present at some of the international conferences.



International Conference on Science and Technology for Sustainability 2017 –Global Forum on Science and Technology for Disaster Resilience 2017–





His Imperial Highness the Crown Prince making an address at "the 18th International Association for the Study of Lung Cancer" held in October 2017 and President Yamagiwa giving a greeting message as a host of the conference.

## International Activities of Young Academy

Science Council of Japan has Young Academy of Japan under its wing consisting of 63 members under the age of 45. Young Academy of Japan studies the role of the Science in Japan and global society in the eyes of young scientists who will be leading science over the next 20 years.

Specifically, an international subcommittee is established for solving global issues to collaborate with Young Academies in various countries and regions and participate in international conferences, as well as to engage in activities that promote globalization of university research institutions in Japan. In the past, six members, and now four members are currently participating in the international academic organization for young scientists, Global Young Academy. Focusing on activities to strengthen cooperation especially in Asia while deepening global exchanges, it has founded the Asian Meeting of Young Scientists. Today, in collaboration with JST and INGSA, it is engaged in planning international workshops for young researchers.



Members of the Young Academy of Japan, 2018.

#### **SDGs in SCJ activities**



Science Council of Japan recognizes the UN sustainable development goals (SDGs) as a solution for the social issues in the world, and addresses the science in society and the science for society. We discuss relations between academics and SDGs from the viewpoint of the humanities, social sciences, life sciences, natural science and engineering with the young academy, emphasizing the balance of economics, society and the environment in the discussion on SDGs. Our discussion includes both promotion to achieve SDGs and criticism to provide recommendations for SDGs

in the future beyond 2030. We have interactions between SCJ and SDGs so that it will be beneficial for SCJ and SDGs. The recommendations and reports made by SCJ are also presented so that we can see how they are connected in relation to SDGs.

## Direct recommendations of opinions by Japanese scientists to the government and society

We present or advise policy-makers and civil society with expert and reliable forward-looking views as scientists.

Our recommendations are reflected in various policies, such as the establishment of an important research institution.

In the 23rd term (\*), 71 recommendations were announced, and each committee has actively deliberated on the direction of future academic activities and new areas required.

\*The 23rd Term: Three years from October 2014 to September 2017



## **Recent key activities**

#### Military security research

Science Council of Japan announced two statements in the past reflecting on cooperation on war by the scientific community and concerning the repeat of a similar situation. ("Statement on our determination to not succumb to scientific research for the purpose of war", 1950; "Statement to not engage in scientific research for military purposes", 1967)

In recent years, it has become difficult to have a demarcation between civilian and military purpose technology and knowledge. On the other hand, fears that academia deepening ties with the military might compromise the essence of academia are widely shared. Based on the circumstances, "Committee on National Security and Scientific Research" of Science Council of Japan deliberated and released the following statement and report.



March 2017

Statement on Research for Military Security: (1) Adherence to the past statements "to not engage in scientific research for military purposes"; (2) Seeking universities and research institutions to create a system to review research proposals for their appropriateness, both technologically and ethically; and (3) Seeking academic societies and other communities to develop guidelines depending upon the characteristics of their respective disciplines and fields.

April 2017

Report on Research for Military Security: Results of the deliberations at the committee were reported from six aspects, including (1) autonomy of the scientist community, and (2) academic freedom and military security research.

#### Response to the Great East Japan Earthquake

After the Great East Japan Earthquake occurred on March 11, 2011, in order to make recommendations from academic standpoints concerning future measures, the "Committee on Response to the Great East Japan Earthquake" was established on March 23 of the same year. In addition to publishing emergency recommendations for the response to the Fukushima Daiichi Nuclear Power Plant accident, relief of the victims and restoration of affected areas, we also provided information on protection from radiation, presented opinions and reported to the overseas academies.

Since then, in deliberating on reconstruction after the Great East Japan Earthquake, we have conducted field surveys in the afflicted areas and other activities according to the situation in addition to academic recommendations. Also, based on the experience of the Great East Japan Earthquake, we have actively engaged in disaster preparedness and mitigation in collaboration with many academic societies and international organizations.

#### <Examples of recommendations related to recovery from the Great East Japan Earthquake>

April 2012 "Recommendation from Science Council of Japan - Taking Confident Steps towards Reconstruction-" and four other recommendations

September 2017 "Recommendations on the status as municipality residents of evacuees of the nuclear disaster caused by the Great East Japan Earthquake"

#### SCJ large-scale facility and research project plan

In research projects requiring large-scale facilities, budgets, and massive data collection, coordination among multiple fields and international cooperation are required.

Science Council of Japan, as a representative of the scientist community, has continuously developed a master plan for large-scale facilities and research projects since the 21st term for the purpose of looking into the holistic future of the academy and giving certain guidelines for the vision of a large-scale research plan in our country.

Mar 2010 Japan's first major master plan across all disciplines and fields of SCJ, "Large-Scale Facilities and Research Projects Master Plan"

"The 23rd Term Japanese Master Plan of Large Research Projects (Master Plan 2017) -Approach to planning and promotion measures and development of the Master Plan" was officially announced (revised in September 2011)

\* It has been revised almost every three years since then.

Feb 2017 "The 23rd Term Japanese Master Plan of Large Research Projects (Master Plan 2017)"

Master Plan 2017 has greatly influenced policies. For example, following the announcement, the Ministry of Education, Culture, Sports, Science and Technology has developed Road Map 2017 in light of clarifying priorities in promoting large projects.

#### Genome editing technology in medical sciences and clinical application in Japan

At present, the application of "genome editing", a new genetic engineering technology, in reproductive medicine addresses safety and ethical concerns, while giving hope that it will lead to the treatment of genetic disorders. Based on these circumstances, Science Council of Japan announced the recommendation "Genome Editing Technology in Medical Sciences and Clinical Application in Japan" on September 27, 2017.

On November 26, 2017, we organized a symposium with the topic, "Citizens and Reproductive Medicine in the Era of Genome Editing" with participation of citizens. Discussions were held with multifaceted perspectives on the future vision of Japan. Many participants shared their opinion that it is not a simple problem that will immediately have answers. From now on, active discussions will be held from the scientists' perspective.

#### <Summary of recommendations>

- •Seeking national regulations to prohibit genome editing for reproductive medicine for the time being due to concerns about the health of children who would be born.
- •Even in basic research, with the belief that we should refrain from those that evidently aim for the application to reproductive medicine, seeking that the government develop an appropriate review system and guidelines for the country.

## Deepen mutual understanding of science through dialogue with civil society

### Organization of SCJ forums, symposiums, etc.

In order to give back scientific and academic research results to citizens, deepen mutual understanding of science, and exchange opinions with citizens and other stakeholders at large, academic forums and science cafes are organized by Science Council of Japan.

In addition, Specialty Committees are active in organizing around 100 symposiums a year to capture various academic issues and exchange opinions with young generations including junior and senior high school students. Talks with media are also actively engaged in.



Open Symposium "Consideration for Education and Research at National Universities and Government Support in light of Academic Promotion"

## Contribution to academic promotion in local communities and enhancement of academic societies

## **Regional Conferences and Regional Science Council**

For the purpose of contributing to the academic promotion in the community, as well as to communicate with local scientists, Science Council of Japan has organized seven blocks of Regional Conference and has been carrying out activities such as open symposiums with themes that are relevant to the local communities.

From FY2018, "Regional Science Council" has been organized to further strengthen efforts in regions. Contributions are made to solve communal issues through exchange of opinions not only with scientists but also community leaders. In addition, events are planned for exchange of opinions on science with young generations in various communities.



#### Functional reinforcement of academic societies

Academic research organizations (so-called "academic societies") are composed of experts in respective fields. As a place for presentation of research results, exchange of knowledge, and coordination between researchers and academic research organizations both in Japan and abroad, academic societies support research activities in Japan beyond the boundaries of universities and other research institutions.

Regarding the issues that extend to the researcher community in general, Science Council of Japan is engaged in activities that are conducive to strengthening functions of academic societies by collecting information and opinions from academic societies, deliberating countermeasures, bridging society and researchers and disseminating information.

## Partnership with academic societies

Among the academic research organizations and the federation of academic research organizations, approximately 2,000 organizations that have requested cooperation with the activities of Science Council of Japan and been approved by the Executive Board are designated as "Cooperative Academic Research Organization of Science Council of Japan", with whom close partnerships are formed.





### Science Council of Japan

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