< Press release > February 12, 2016

Holding of the Symposium on Science, Technology and Innovation for 2020

Time: 1:00 - 5:30 PM, March 10 (Thurs.), 2016; Place: 2F, Keidanren Kaikan

Including a keynote speech by an expert, a panel discussion, and an exhibition on nine projects A venue for information-sharing and interchange with companies involved in each project

The Japanese Cabinet Office organized the Task Force of Science, Technology and Innovation for the Tokyo 2020 Olympic and Paralympic Games. It is the mission of this organization to engender Japanese-born science, technology and innovation capable of practical application by 2020. Under its basic philosophy that scientific and technical innovation are major forces of worldwide advancement, it is promoting nine related projects in fields such as the environment-friendly hydrogen society, next-generation transport systems applying automated driving technology, and the forecasting of and response to sudden natural disasters.

In this connection, to spread knowledge of these projects, the Cabinet Office is going to hold the **Symposium on Science, Technology and Innovation for 2020** at Keidanren Kaikan on March 10 (Thurs.), 2016.

Besides a keynote speech by an expert and a panel discussion, the Symposium is scheduled to include an exhibition profiling the technologies in the nine projects. For details on how to participate and other matters, please see the official Symposium website (http://2020tf.jp).

Official website, keynote speech and panel discussion will be in JAPANESE. If you have any inquiries in English, please email us at (info@2020tf.jp)

Title: Symposium on Science, Technology and Innovation for 2020

Time: 1:00 – 5:30 PM, March 10 (Thurs.), 2016

Place: 2F, Keidanren Kaikan (1-3-2 Otemachi, Chiyoda-ku, Tokyo)

•International Conference Hall: keynote speech and panel discussion

•Keidanren Hall: technical exhibition on the nine projects

Organizer: Cabinet Office

Sponsored by: Japan Business Federation (Keidanren)

Nikkei Inc.

< Part 1 >

12:45 PM ~ Opening of the reception counter for participation in the Symposium

2:00 PM ~ Opening of the venue

2:15 PM ~ Opening remarks by the organizer – Aiko Shimajiri, Japanese Minister of State for Science and Technology Policy

2:20 PM ~ Keynote speech – Dr. Yoshiyuki Sankai

Impulsing Paradigm Change through Disruptive Technologies (ImPACT) Program Manager Professor, University of Tsukuba Graduate School/ Director, Center for Cybernics Research President and CEO, CYBERDYNE Inc.



Dr. Sankai will speak about simultaneously advancing the research and development of innovative cybernic systems like the cyborg-type robot HAL, the generation of new industries, and the cultivation of future pioneers, toward the realization of a zero-intensive-nursing-care society, as well as about the promotion of innovations that drive a positive cycle from R&D to their application in society, and the challenges of shifting social and industrial paradigms.

2:50 PM ~ Description of the Task Force mission – Cabinet Office representative

3:10 PM ~ Break (20 minutes)

< Part 2 >

3:30 ~ 4:30 PM - Panel discussion

◆ Moderator: Morinosuke Kawaguchi

Founder & CEO, Morinosuke Co., Ltd. Advisor, Nikkei BP Future Laboratory Innovation & Technology Expert, Futurist



Mr. Kawaguchi provides consulting services on matters such as strategy for R&D and product development at the invitation of governmental institutions in Japan and other Asian countries.

His book "MeGaTReNDs 2014 – 2023" has been given high ratings in various circles for its precise and wide-ranging future analyses based on forecasts elicited with a unique methodology. He is also involved in a project promoted by the Ministry of Education, Culture, Sports, Science and Technology to draft a vision of tomorrow's society based on the world view in this book, and the formulation of a vision in the National Vision Project Headquarters of the Liberal Democratic Party of Japan.

◆ Panelists: project personnel, etc. (three or four tentatively scheduled)

■ Exhibition on the nine projects:

1:00 ~ 5:30 PM

Outline of the technologies in each project

Venue access map

< Symposium on Science, Technology and Innovation for 2020 >

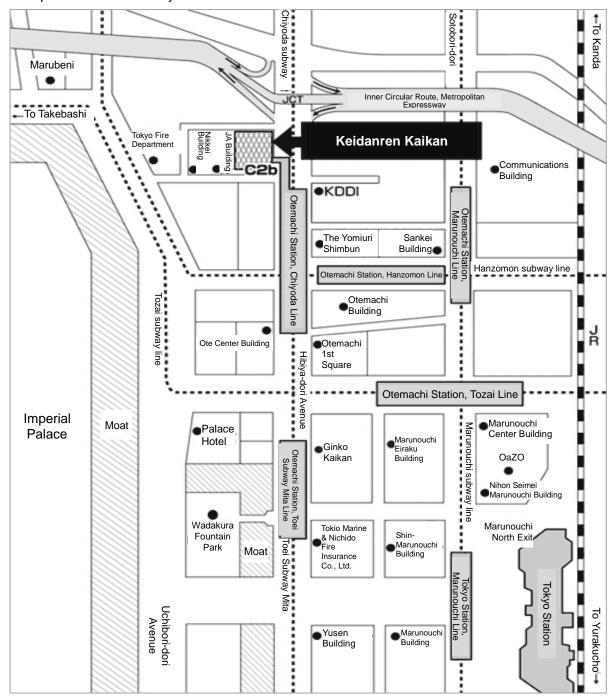
Time: 1:00 - 5:30 PM, March 10 (Thurs.), 2016

Place: 2F, Keidanren Kaikan (1-3-2 Otemachi, Chiyoda-ku, Tokyo, 100-0004)

TEL: (03) 6741-0222 FAX: (03) 6741-0233

Exit at Otemachi Station, Tokyo Metro (directly connected to Exit C2b)

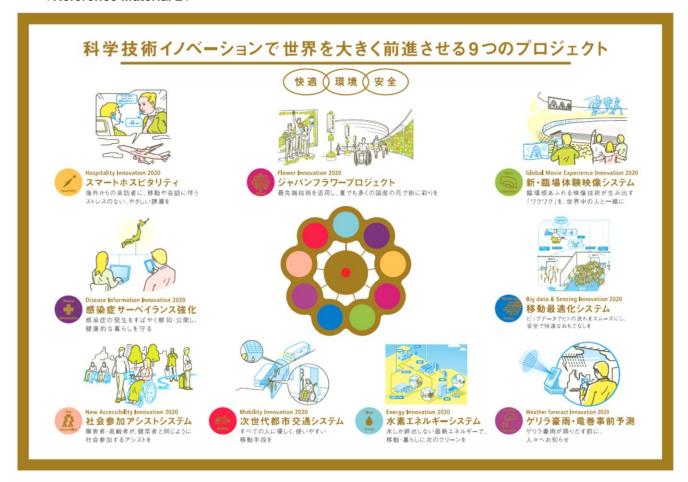
Map of the venue vicinity



Key points and requisite major technologies in the nine projects

< Reference Material 1 >

| Projects | Points of benefit and appeal for society | Major technologies in each project |
|---|---|--|
| Hospitality Innovation 2020 | Delivery of stress-free communication with even visitors from other countries, and linkage to promotion of in-bound tourism. Emergence of a society in which telecommunications devices, positioning technology, robots, and other technologies casually assist transportation and conversation | Multilingual voice translation system High-precision positioning technology applying quasi-zenith satellites and indoor positioning technology Platforms for regional sharing of data assisting improvement of services based on the history of customer purchase, movement, etc. |
| Disease Information Innovation 2020 | Sure action against infectious diseases Importance of ascertaining the trend of outbreak and constructing an information chain extending from the boarder to the general public | Research on total initiatives for infectious diseases caused by insect-borne viruses Research for improvement of diagnostic capabilities for infectious diseases |
| New Accessibility Innovation 2020 | Delivery of support for disabled, aged, and paralympic sports, toward the dissemination of a vibrant society attracting participation by diverse people Construction of the universal healthy longevity society offering pleasant and comfortable living for all members | Support for movement & ability Support for sports (including active use of support for movement and ability by the disabled and aged) Support for communication |
| Mobility Innovation 2020 | Provision of means of transportation that are gentle to all and easy for all to use Aiming for a high-safety and security, and stress-free system Packaging for expansion into regional areas and overseas | Automated driving (precision docking) control (automated pulling over, adjustment of vehicle height, and smooth acceleration/deceleration of speed) Public Transportation Priority System (PTPS) Control of ART vehicles using inter-vehicle & roadsite-vehicle communications, etc. |
| Energy Innovation 2020 | Construction of a CO ₂ -free hydrogen value chain Contribution to the building of resilient cities with high security and low carbon emissions | Development of technology for manufacture of hydrogen derived from renewable energy Development of technology for energy carriers (liquefied hydrogen, organic hydride, and ammonia) Development of technology for hydrogen utilization Development of technology for ammonia utilization |
| Weather Forecast Innovation 2020 | Development of sophisticated forecasting for torrential rains and tornadoes, and provision of accurate disaster information with ample temporal margin Contribution to safe and secure operation of events and guidance for evacuation of visitors | Research concerning the enhancement of forecasting information for torrential rains and tornadoes and effective use of the same, based on development and application of multi-parameter phased array radar, etc. Development and input of technology for disaster observation, analysis, and forecasting |
| Big Data and Sensing Innovation 2020 | For stress-free monitoring Optimization (streamlining) of the flow of people and placement of personnel | Data processing, analysis, and security technology needed for optimization (streamlining) of monitoring, flow of people, and placement of personnel Technologies for data storage, high-speed data processing, security, and low-power-consumption devices to construct platforms for the collection and use & application of data |
| Global Movie Experience Innovation 2020 | Easy sharing of the excitement of sports with the whole world, transcending space and time Ability for others anywhere in the world to experience events exactly as if they were on the spot Application in areas such as remote education and remote medicine | Spatial imaging technology overcoming the barrier of distance Development of technologies for next-generation devices that enable innovative image display |
| Flower Innovation 2020 | Improvement of supply stability and keep (duration of freshness) Improvement of international competitiveness | Technology for stable production of flowers in summertime, based on control of the cultivation environment Technology to improve the keep of cut flowers |



9 projects for great strides forward worldwide through science, technology and innovation



<PROJECT 1>



Hospitality Innovation 2020 Smart Hospitality

Stress-free, people-friendly guidance accompanied by transportation of and conversation with visitors from other countries

<PROJECT 2>



Disease Information Innovation 2020 Reinforced surveillance for infectious diseases

Early detection and disclosure of the outbreak of infectious diseases, for protection of healthy living

<PROJECT 3>



New Accessibility Innovation 2020 Social participation assistance system

Supply of assistance to enable the disabled and aged to participate in society in the same way as younger people and people without disabilities

<PROJECT 4>



Mobility Innovation 2020 Advanced Rapid Transit (ART)

Provision of means of transportation that are gentle to all and easy for all to use

<PROJECT 5>



Energy Innovation 2020 Hydrogen energies system

Graduation to the next stage of cleanliness in transportation and living through new energy whose consumption entails only emission of water

<PROJECT 6>



Weather forecast Innovation 2020

Advance forecasting of torrential rains and tornadoes

Public notification of torrential rains before they start to fall

<PROJECT 7>



Big data & Sensing Innovation 2020 Movement optimization system

Use of big data for a smooth flow of people and provision of safe and pleasant hospitality

<PROJECT 8>



Global Movie Experience Innovation 2020 New virtual experience video system

Sharing the excitement generated by high-presence video technology with people around the world

<PROJECT 9>



Flower Innovation 2020 Japan flower project

Application of cutting-edge technology to decorate streets with plenty of domestically grown flowers even in summer