Table of Contents

What is Miraikan?

Miraikan - The National Museum of Emerging Science and Innovation is a place where we can understand the things happening in our world today from a scientific point of view, and have discussions while considering the future that awaits us.
In addition to permanent displays and exhibitions that provide people with a chance to enjoy hands-on contact with science and technology, Miraikan's colorful line-up of offerings includes experienced based classes, and talks. While exchanging opinions and ideas with Science Communicators, visitors can experience the technological progress of today, from simple day-to-day questions, to the latest technologies, the global environment, and space exploration.

Name	Miraikan - The National Museum of Emerging Science and Innovation
Chief Executive Director	Asakawa Chieko, Ph. D.
Operated by	Japan Science and Technology Agency (JST)
Location	2-3-6, Aomi, Koto-ku, Tokyo 135-0064, Japan
Opened on	July, 2001
URL	http://www.miraikan.jst.go.jp/en/

Founding Principle

We believe that science and technology are part of our culture. We provide an open forum for all to ponder and discuss the future roles of science and technology.

Symbol mark

Design: Hiromura Masaaki

The symbol mark is made of a circle inscribed with arcs. This suggests an image of satellites orbiting the globe, cell division, various terrestrial networks (people and people, information) and the motion of electrons.

Official Partner

AsahiKASEI

Asahi Kasei Corporation

History

Miraikan is a national science museum that opened in Tokyo Academic Park in 2001 as a base for deepening the understanding of science and technology. This is pursuant to the aims of the Basic Law on Science and Technology passed in 1995, and the 1996 Science and Technology Basic Plan.

December 1998	**Decided on the construction of the "Tokyo Academic Park."** Three ministries and agencies, the Ministry of Education, the Ministry of International Trade and Industry, and the Science and Technology Agency*1 jointly decided on the construction of the "Tokyo Academic Park" at the center of the Metropolitan Waterfront Subcenter. The Japan Science and Technology Corporation affiliated with the Science and Technology Agency*2 then decided to create a facility for providing scientific and technological information through exhibitions of the latest science and technology, development of exhibition techniques, exchanges among researchers and the like. *1 In January 2001, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Economy, Trade and Industry (METI) were established through the Central Government Reform. *2 In April 2015, became the Japan Science and Technology Agency (JST).
March 2000	**General Supervising Committee was established.** The committee was established by the JST in order to deliberate on the direction of the National Museum of Emerging Science and Innovation. Many discussions concerning details of exhibition plans, direction of activities, etc., were exchanged before December 2000 and, based on the concepts determined, the construction of the museum proceeded. (Renamed "Advisory Committee of Miraikan" in 2022)
September	**"National Museum of Emerging Science and Innovation (Miraikan)" was selected as the official name since it succinctly captures the motivating concept.**
October	**Mohri Mamoru appointed as the first Chief Executive Director of Miraikan (Currently the Chief Executive Director Emeritus)**
July 9th, 2001	**Miraikan opened.**
July 2004	**Establishment of Honorary Membership of Miraikan**
2006	**Formulated the slogan "Science Changes People ; People Change Worlds"**
October 2010	**Change in Miraikan's management system** By taking the result of the Government Revitalization Unit' s budget screening which was held in November 2009 into consideration, the museum went under the direct management of JST while further cost reduction strategies were implemented.
April 2016	**Major renewal of the permanent exhibitions**
November 2017	**"Science Centre World Summit 2017" was held in Miraikan. Signed "Tokyo Protocol".**
April 2021	**Asakawa Chieko was appointed as the position of the Chief Executive Director. Announced Miraikan Vision 2030.**
July 2022	**Formulated the slogan, "Mirai can __! The future is ours to fulfill."**
November 2023	**Major renewal of the permanent exhibitions**
April 2025	**Partial renewal of the permanent exhibitions**

Miraikan Vision 2030

Statement

At Miraikan,
together with you,
we “Open the Future”

“The world in flux, and the future uncertain.”
What is the role of a science museum?

We share the latest science, technology, and knowledge,
then transcend that to create, with you, a better future.

Each voice, each action changes the world, and builds our future,
for example, to the Moon, to Mars, a 100-year life span,
smarter people, robots, and cities, and a beautiful Earth forever.
Such a dreamlike future only exists with your involvement.

Miraikan will develop to be where all humans,
from different places, with different perspectives
connect, become excited, and pioneer the future.

In the next 10 years, Miraikan will exceed the museum concept.

The time is now. Let’s get started, together!

Slogan

Mirai can __!
The future is ours to fulfill.

This is our slogan to become a place that gathers the many futures, dreamed by many people, and transform those dreams into reality, through the help of an all inclusive, diverse group of people. The blank that follows “Mirai can” represents our hope that you will imagine the future you want to achieve.

Five initiatives to achieve Miraikan's Vision 2030

We will bring together diverse people and utilize cutting-edge science and technology to make a future that each of us envisions come true. In order to become such a "platform for creating the future," we will work on the following five initiatives.

1. Envisioning People's Future
We will develop science communication activities such as exhibitions and events to encourage people to think about the future as their own. Our starting points will be the four themes of 'Life,' 'Society,' 'Earth,' and 'Frontier,' which explore the future, brought about by advanced science and technology.

2. Shaping the Future
In addition to exhibitions and events, visitors at Miraikan can experience cutting-edge research and development, and demonstration experiments for future society. Our aim is to become a 'testing ground for the future society' by promoting collaboration and co-creation with various stakeholders, including researchers, companies, and local governments.

3. Creating Together
We aim to create a system that allows people from all walks of life to connect and participate in creating the future. We do this through our membership program and digital platforms such as apps and the web. By building an ongoing relationship with Miraikan, we hope to promote proactive engagement.

4. Cultivating Future Creators
Science communicators have the role of 'People who Create the Future' by fostering interest in science and technology through explanations and dialogues. They also coordinate demonstration experiments and problem-solving activities where stakeholders from a variety of backgrounds can gather and co-create.

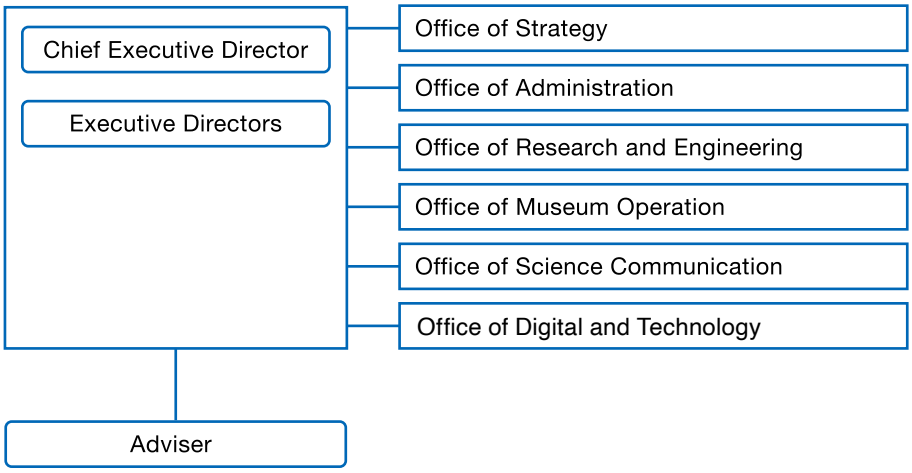
5. Sustainability and Accessibility
We believe it is our social responsibility to reduce our environmental impact and improve accessibility. Additionally, we will actively experiment with new technologies to promote innovative practices. As a role model museum, we aim to contribute to society by practicing, communicating, and disseminating our activities in both areas.

Organization Outline

Executive Board

Chief Executive Director: Asakawa Chieko, Ph.D.
Executive Director: Ito Yoichi
Executive Director: Takagi Hironobu, Ph.D.
Adviser: Sakaki Hiroyuki, Ph.D.

Organization Outline



Last Update: April 2025

Management Operation of Miraikan

To ensure appropriate management operations of Miraikan, the “Advisory Committee of Miraikan” has been established, consisting of external experts as listed below. The Advisory Committee evaluates and advises on Miraikan’ s activities, achievements, and operational policies.

Advisory Committee of Miraikan

Chairman
Murai Jun (Keio University)

Committee members
Emori Seita (The University of Tokyo)
Hayakawa Shigeru (Toyota Motor Corporation)
Inami Masahiko (The University of Tokyo)
Kataoka Mami (Mori Art Museum)
Matsunaga Michitaka (Japan Broadcasting Corporation Kyoto Station)
Shibasaki Atsuko (Fuji Television Network, Inc.)
Shinoda Kenichi (National Museum of Nature and Science)
Somekawa Kasumi (Hands-On Planning)

Last Update: March 2025

Honorary Members of Miraikan

This Honorary Membership was established in July 2004 as it commemorated the museum's 3rd anniversary. It was established to show respect and reward researchers who were awarded with internationally recognized awards such as the Nobel Prize and the Fields Medal through great contributions towards the development of science and technology, while supporting our activities with understanding.

Honorary Members (random order, title abbr.)

Noyori Ryoji (The Nobel Prize in Chemistry 2001)
Tim Hunt (The Nobel Prize in Physiology or Medicine 2001)
Tanaka Koichi (The Nobel Prize in Chemistry 2002)
Esaki Leo (The Nobel Prize for Physics 1973)
Rudolph A. Marcus (The Nobel Prize in Chemistry 1992)
Kobayashi Makoto (The Nobel Prize in Physics 2008)
Suzuki Akira (The Nobel Prize in Chemistry 2010)
Yamanaka Shinya (The Nobel Prize in Physiology or Medicine 2012)
Barack Obama (The Nobel Peace Prize 2009)
Brian Schmidt (The Nobel Prize in Physics 2011)
Dan Shechtman (The Nobel Prize in Chemistry 2011)
Shirakawa Hideki (The Nobel Prize in Chemistry 2000)
Sir John B. Gurdon (The Nobel Prize in Physiology or Medicine 2012)
Kajita Takaaki (The Nobel Prize in Physics 2015)
Omura Satoshi (The Nobel Prize in Physiology or Medicine 2015)
Muhammad Yunus (The Nobel Peace Prize 2006)
Yoshino Akira (The Nobel Prize in Chemistry 2019)
Honjo Tasuku (The Nobel Prize in Physiology or Medicine 2018)
Amano Hiroshi (The Nobel Prize in Physics 2014)
Ohsumi Yoshinori (The Nobel Prize in Physiology or Medicine 2016)

As of April 2025

Permanent Exhibition Supervisors 1

List of the supervisors (random order, title abbr.)

Explore the frontiers

■ The Universe: Unread Messages
Kajita Takaaki
Ishihara Aya
Tanaka Masaomi
Nakayama Hiroyuki

■ Planetary Crisis
- To Continue Living on This Earth
Takeuchi Kazuhiko
Emori Seita

■ This is ISS, go ahead
Mohri Mamoru

■ Earth Environment and Me
Funaoka Masamitsu
Iida Tetsunari
Kudoh Akihiko
Taguchi Seiichi
Tajika Eiichi
Taniguchi Masatsugu
Tsunematsu Toshihide
Fujino Jun' ichi
Matsumoto Ken' ichiro
Motojima Osamu
Yasui Itaru

■ Stories of One, Everyone, and You
Matsuzawa Tetsuro
Hironaka Naoyuki

■ CELLS in Progress
Asashima Makoto
Yamanaka Shinya
CiRA
Okano Hideyuki
Saitou Mitinori
Sakurai Hidetoshi
Nakauchi Hiromitsu
Nakagawa Masato
Yamada Shigehito

■ Mission Survival: 10 Billion
Mohri Mamoru
Oshitani Hitoshi
Kishimoto Atsuo
Tajika Eiichi

Create your future

■ Quantum Computer Disco
Fujii Keisuke
Shimada Yoshi-aki
Takahashi Hiroki
Takeda Shuntaro
Tabuchi Yutaka
Tomita Takafumi
Mizuno Hiroyuki
QunaSys Inc.

■ Nanairo Quest
— The Stories of the Future of Living with Robots
Ando Takeshi
Shiose Takayuki

■ Hello! Robots
Motegi Tsuyoshi

■ Park of Aging
Arai Hidenori
Inatomi Tsutomu
Uchida Yasue
Sakurai Takashi

■ Digitally Natural - Naturally Digital
Ochiai Yoichi
Ito Asa
Kato Shinpei
Goto Masataka
Sugiyama Masashi
Nobori Daiyuu

■ The tearoom going from zero to one
The Passage of Ra
Immersive NFT - From ephemeral moment to digital eternity
Ito Junji

As of April 2025

Permanent Exhibition Supervisors 2

List of the supervisors (random order, title abbr.)

Curiosity Field

Shiose Takayuki
Nishida Yoshifumi
Kurata Arata

Dome Theater

■ INHERIT - Dream and Challenge in HAYABUSA2 -
Yoshikawa Makoto

■ The Man from the 9 Dimensions
Ooguri Hirosi

■ BIRTHDAY - What Links the Universe and Me -
Taniguchi Yoshiaki

As of April 2025

List of Facilities

Exhibition Facilities

			Floor Space
Symbol Zone	1F	Six story open zone where the Geo-Cosmos floats.	600㎡
Permanent Exhibition	3, 5F	Permanent Exhibition space for two themes: “Create your future” on 3F, and “Explore the frontiers” on 5F.	3F: 2874㎡ 5F: 2213㎡
Dome Theater	6-7F	Hemisphere dome theater where All Sky images and planetariums can be enjoyed.	234㎡
Special Exhibition Zone a, b	1F	It is a space where large-scale events and Special Exhibitions can be held. It is possible to hold two events simultaneously by dividing the space in half.	1,510㎡ [a:720㎡, b:790㎡]
Communication Lobby	3F	“Curiosity Field” is made of five activity areas for children to enjoy experiments and creating, as well as a space for parents.	600㎡
Curiosity Field	1F	This is a multi-purpose space where we show a variety of videos. Events are also held here on some days. It is a perfect meeting spot.	300㎡

Facility Rentals

Miraikan Hall	7F	It is a space that can hold 292 people and it is suitable for symposiums, etc.	400㎡
Conference Rooms	7F	Our meeting rooms include rooms that can be flexibly shifted between a classroom format and a theater format, as well as the Jupiter Room and Neptune Room with a nice view.	Jupiter : 180㎡ Uranus : 110㎡ Saturn : 160㎡ Mercury : 55㎡ Mars : 60㎡ Venus : 80㎡ Neptune : 105㎡
Innovation Hall	7F	It is a space that can hold up to 103 people with retractable seats and 240-inch screen.	195㎡
Waiting Rooms	7F	It can be used as a waiting space when using the facility rentals.	Moon : 19㎡ Phobos : 21㎡ Deimos : 22㎡ Io : 22㎡ Europa : 12㎡ Ganymede : 22㎡ Titan : 14㎡ Triton : 14㎡

Other Facilities

Multipurpose Room a・b	1F	The space can be divided and used for multiple purposes.	[a:64㎡ , b:64㎡]
Viewing Lounge (Restaurant)	7F	Resting space where you can enjoy the view of Odaiba and the Tokyo Tower.	480㎡
Museum Shop	1F	Sells scientific goods and Miraikan original goods.	105㎡

Permanent Exhibition “Explore the frontiers” 5F

Why are we here now? This zone explores, on a variety of scales, the construction of the world around us, the Earth’ s environment and all the life nurtured within, as well as our solar system, and the universe. Looking back on the universe’ s history that spans 13.8 billion years, how did humans begin, and how are we living and interacting with the world around us? By taking a scientific viewpoint, we can think from a broad perspective on which path we should follow to the future.

The Universe: Unread Messages

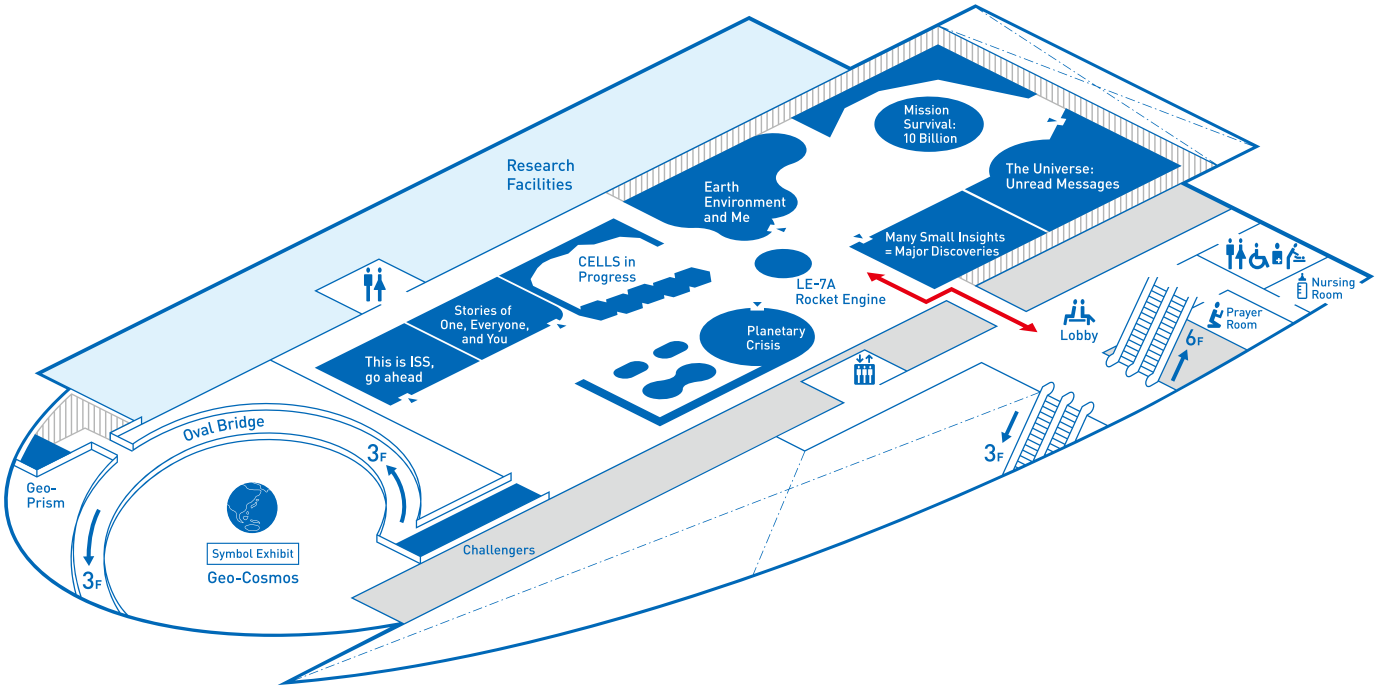
This is ISS, go ahead

Planetary Crisis
- To Continue Living on This Earth

Mission Survival: 10 Billion

Many Small Insights = Major Discoveries

Stories of One, Everyone, and You



5F Exhibition Zone: Total floor space: 2,213.34 m²

Permanent Exhibition “Create your future” 3F

How should humans apply and evolve sustainable prosperity? This zone illustrates desirable societies and lifestyles, and considers ideas we can use to achieve them. What science and technology is needed, and how should we use it to develop a society that can sustain a world population in excess of seven billion? This space provides a projection of a future society as we search for knowledge that will enable us to continue our prosperous lives.

Quantum Computer Disco

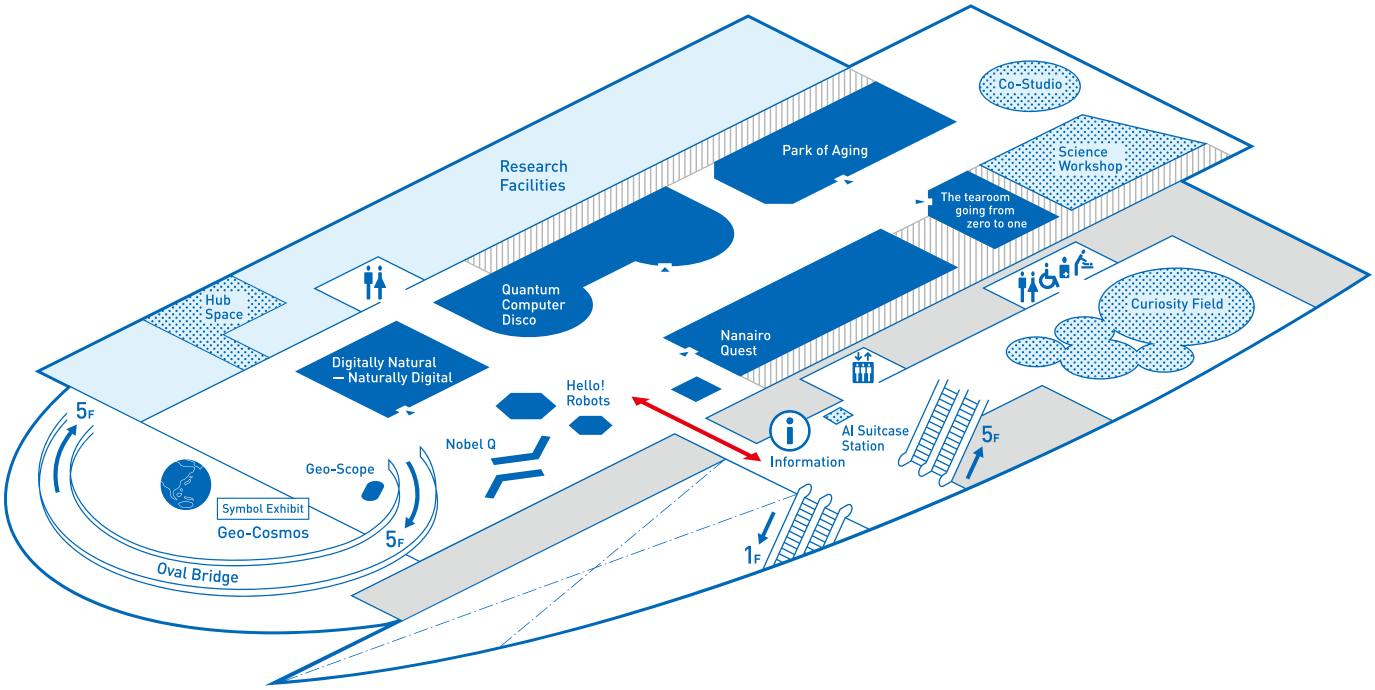
Nanairo Quest — The Stories of the Future of Living with Robots

Hello! Robots

Park of Aging

Digitally Natural - Naturally Digital

Nobel Q
— Questions from Nobel Laureates



3F Exhibition Zone: Total floor space: 2,874.80 m²

Permanent Exhibition “Discover your Earth” (1,3,5F)

How much do we know about the Earth? This exhibition offers experience, understanding and sharing the links between life and the Earth environment, through cutting edge technology. Geo-Cosmos which is the symbol exhibit of Miraikan, as well as Geo-Scope, Geo-Prism, and Geo-Palette, offer visitors the opportunity to view a diverse range of scientific information related to the Earth. By examining the “tsunagari” (connections) among the various lifeforms in the Earth’ s ecosystem, as well as the “tsunagari” that has developed between human beings and the Earth through the Earth’ s 4.6 billion years of history, attempt to position the existence of human beings, and of ourselves, within the framework of the Earth’ s large-scale “tsunagari.” This concept encompasses all the permanent exhibitions of Miraikan.

Symbol Exhibit Geo-Cosmos

The Geo-Cosmos is the symbol exhibit of Miraikan that realistically projects the figure of the Earth shining in space, with a pixel resolution that exceeds 10 million. Upgraded with the latest LED panels, the Geo-Cosmos creates a fresh, even more realistic vision of our Earth. The HDR (High Dynamic Range) panels and wider color gamut deliver richer, deeper color and light expression.

—Main Specifications
Size: Diameter 6 meters(Approx. 1/2 millionth the size of the Earth)
Weight: Approx. 13 tons
Inner structure: Geodesic octahedral model
Number of pixels:10 million pixels and over
Luminescence device: LED (10,362 panels (96 mm x 96 mm))

—Example of Contents
90-day Earth

Geo-Scope

This is an exhibition that allows free access to a variety of Earth observation data collected from domestic and international scientists and research institutions. With simple touch panel operations, you can freely explore information on a global scale. One of the five units is equipped with “Enjoy Geo-Scope by sound,” which expresses scientific data through sound.

Geo-Prism

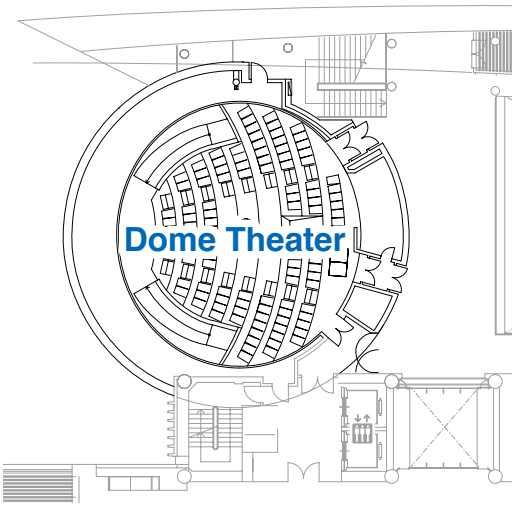
This system uses AR (augmented reality) technology to display data and simulations overlaid on the Geo-Cosmos. Touchscreen terminals in the 1F Symbol Zone and on the Oval Bridge offer a 360° view of visualized data displayed on Earth via dynamically interwoven CG and video images from multiple cameras.

Geo-Palette

This digital content allows you to draw your own world map based on a host of information related to the countries and regions of the world. You can uncover many aspects of the Earth’s environment and human activities.

Dome Theater

The Dome Theater on the 6F is a hemispherical theater for image projection.
The theater presents various programs, including large scale images, by utilizing the immense screen made up of the entire hemisphere, and planetarium presentations using Japan’s first All Sky super high precision 3D image system.




Exterior


Interior

Dome diameter: 15.24 m
Inclined angle of the dome: 23.5 degrees
Number of seats: 121 (all reclining seats)
Sound: 7.1 channel surround system

Image system

• **Image system 1: All Sky super high precision 3D image system**
A visual experience that allows you to feel the presence of the vibrant atmosphere is made possible by projecting bright and super high definition images with 2 high intensity, 4K RGB laser projectors onto a dome-shaped screen. Enjoy natural and breathtaking imagery in full-dome 3D, with this active shutter 3D system.

• **Image system 2: Planetarium Projector “MEGASTAR-II cosmos”**
It is a projector that projects 10 million fixed stars. Feel a sense of the scale of space through this realistic starry sky.

Major programs

[As of March 2025]

PLAY DOME 01 “Animation Carnival”

PLAY DOME 02
“Space Explorers ISS : Advance”

“The Man from the 9 Dimensions”

©Miraikan

“BIRTHDAY – What Links the Universe and Me –”


©4D2U Project, NAOJ

How to view

Ticket fees
Adult: 310 yen
18 years old or under: 100 yen

Activities

We provide talks and tours on a variety of science & technology topics. These activities include workshops where participants can deepen their thinking, and discussion events involving experts and the general public.

Regular Activities

Held regularly are talks, workshops, experiment labs, exhibition tours, and programs for schools.

Seasonal Activities

The museum holds events on the latest topics in science and technology,
as well as themes currently in the spotlight

Activities in collaboration with researchers

Miraikan holds talks and events with researchers and specialists from a wide range of fields,
including on current projects at Research Facilities.

Online Contents

We provide free official apps to enhance your enjoyment of Miraikan, as well as online exhibitions that give access to scientific data provided by research institutes.

Apps

“Miraikan App”

An app that provides access to information about Miraikan events, exhibition explanations, and useful information for your visit such as ticket availability status. It also aggregates links to Miraikan’ s online content, allowing you to enjoy Miraikan content even without visiting.

To be released in 2025 / Free / Available on: App Store and Google Play

“Miraikan Assist App”

An app developed by Miraikan primarily aimed at supporting visitors with visual impairments. By reading AR markers installed at approximately 50 locations throughout the permanent exhibition zone, the app provides audio explanations of exhibits and guidance on how to experience them. Additionally, there is an experimental app called “Miraikan Assist App+” that complements the Assist App. It captures audio from exhibits, as well as signals embedded in frequencies inaudible to humans, and uses them to provide audio explanations to users at the necessary timing during their experience.

To be released in 2025 / Free / Available on: App Store and Google Play

Geo Online

Online versions of the “Geo-Cosmos” and “Geo-Scope” permanent exhibitions. Also includes the “Geo-Scope for Inquiry-based Learning” mode, which can be used for inquiry-based learning in junior high and high schools. (Japanese only)

To be released in 2025 / Free / https://gs-online.miraikan.jst.go.jp

Online Exhibition Experience Site “MIRAI-Bit”

You can experience portions of content related to three permanent exhibitions released in 2023 (Japanese only).

Released in 2024 / Free / https://mirai-bit.jst.go.jp

Archive of Special Exhibitions 1

We hold Special Exhibitions which utilize diverse methods for expression and communication in collaboration with a number of external organizations. We do so while focusing on changes and new perspectives of the world which are brought about by cutting-edge science and technology.

"Robot Meme"
2001/12/1 ～ 2002/2/11

"Sound Bum Project"
2002/10/2 ～ 10/21

"Exploration of Time"
2003/3/19 ～ 6/30

"Beyond Fibers"
2004/6/30 ～ 8/31

"F.C.R.B. Stadium Project"
2005/4/23 ～ 8/15

"LOVE STORIES"
2005/4/23 ～ 8/15

"SCIENCE TUNNEL"
2005/9/16 ～ 11/17

"science + fiction"
2005/12/10 ～ 2006/2/27

"Brain!"
2006/3/18 ～ 5/31

"Warnings from Mammoth"
2006/7/1 ～ 9/3

"6.5 billions' Survival"
2006/10/29 ～ 2007/2/5

"Science News! from Asia"
2007/6/2 ～ 9/2

"UNDERGROUND"
2007/9/22 ～ 2008/1/28

"The Science of Aliens"
2008/3/20 ～ 6/16

"Pterosaurs"
2008/6/28 ～ 8/31

Science in "Haunted House"
2009/4/22 ～ 6/22

"It's a Tasty World"
2009/11/21 ～ 2010/3/22

"Your Future, Your Future Self"
2010/3/20 ～ 5/10

Science in "Haunted House" 2
2010/3/10 ～ 5/31

"DORAEMON' s Scientific Future"
2010/6/12 ～ 9/27

"Theo Jansen"
2010/12/9 ～ 2011/2/14

"Making of Tokyo Sky Tree®"
2011/6/11 ～ 2011/10/2

"UMESAO Tadao"
2011/12/21 ～ 2012/2/20

"The End of the World"
2012/3/10 ～ 2012/6/11

"The World of Manga Experienced Through Science"
2012/7/7 ～ 2012/10/15

As of April 2025

Archive of Special Exhibitions 2

We hold Special Exhibitions which utilize diverse methods for expression and communication in collaboration with a number of external organizations. We do so while focusing on changes and new perspectives of the world which are brought about by cutting-edge science and technology.

"It's All about Money!"
2013/3/9 ～ 6/24

"Thunderbirds Expo"
2013/7/10 ～ 9/23

"The SEKAI-ICHI"
2013/12/7 ～ 2013/5/6

"Toilet!? —Human Waste & Earth's Future"
2014/7/2 ～ 10/5

"Dance! Art Exhibition! and Learn and Play! teamLab Future Park"
2014/11/29 ～ 2015/5/10

"Pokémon Lab"
2015/7/8 ～ 2015/10/12

"GAME ON"
2016/3/2 ～ 2016/5/30

"The NINJA
- who were they?"
2016/6/2 ～ 2016/10/10

"The Art of Disney -
The Magic of Animation"
2017/4/8 ～ 2017/9/24

"MOVE! into the wildlife"
2017/11/29 ～ 2018/4/8

"Detective Conan:
Scientific Investigation"
2018/4/18 ～ 2018/7/8

"Design Ah! Exhibition in TOKYO"
2018/7/19 ～ 2018/10/18

"The 'Under Construction'
- Is It Safe to Enter!? Heavy Machinery in Use!"
2019/2/8 ～ 2019/5/19

"The Mammoth"
2019/6/7 ～ 2019/11/4

"Disaster and Future
- 10 Years after the Great East Japan Earthquake -"
2021/3/6 ～ 2021/3/28

SuperHuman
"This is my body"
2021/7/17 ～ 2021/9/5

"You and Robots
- What is it to be Human?"
2022/3/18 ～ 2022/8/31

Online Video Creators
2022/10/8 ～ 2023/4/2

NEO Life on the Moon
– A New Era of Space Exploration
2023/4/28 ～ 2023/9/3

Discovering Treasures from Japanese Sword and Future Exhibition with TOUKEN RANBU
2024/7/10 ～ 2024/10/14

NOTRE-DAME DE PARIS
THE AUGMENTED EXHIBITION
2024/11/6 ～ 2025/2/24

Orb: On the Movements of the Earth -an act of planet-
2025/3/14 ～ 2025/6/1

As of April 2025

Distribution of large-scale images

Distribution/production of large scale images

With the cooperation of external organizations such as research institutes and image production companies, Miraikan has originally created many large-scale images which are being shown in domestic and international science museums.

● **"FURUSATO**
- World Heritage Sites Viewed From Space-" (2010)
Distribution: TBS SPARKLE,Inc.

@Miraikan/TBS-VISION, Inc.

● **"The Man from the 9Dimensions" (2016)**
Distribution: GOTO INC
Konica Minolta Planetarium Co.,Ltd.

@Miraikan

● **"INHERIT**
- Dream and Challenge in HAYABUSA2 -" (2022)
Distribution: RIGHT PLANE, Inc.
Konica Minolta Planetarium Co.,Ltd.

@Miraikan

For further details please visit our website.
https://www.miraikan.jst.go.jp/en/resources/movie/

Science Communicators

The Science Communicators of Miraikan come from many backgrounds. Their role is to communicate information and ideas about science and technology in an easy-to-understand manner, and to consider issues such as the state of science and technology and how to build a future, while engaging in dialogue with people from many areas of society.

Engaging in dialogues and conducting demonstrations on the exhibition floors

Science Communicators engage in dialogue with visitors and conduct talks on the latest topics in the field of science. In addition to communicating knowledge on the exhibition floors, they also engage in in-depth conversations with visitors while, together, thinking about various issues. By listening to views from a wide range of people, SCs gain new insights that are shared with scientists in the field, resulting in the creation of innovative solutions.

Planning and production of exhibitions and events

Science Communicators tailor cutting-edge science and technology research to fit a permanent exhibition or special exhibition format, in order to create an enjoyable experience for everyone. SCs also organize events where researchers on the forefront of their fields and other experts converse with the general public. SCs also create opportunities for the general public to participate in research and to develop projects.

Collaboration with society, and dissemination of scientific information

The work of Science Communicators is not confined to the premises of Miraikan. They collaborate with people of all backgrounds from Japan and abroad, create spaces for dialogue and cooperation, and engage in scientific communication activities to contribute to a future society. They also disseminate scientific information through TV and other media appearances, and write articles for publication on the Internet, newspapers, magazines, and blogs.

Volunteers

Volunteers at Miraikan have various background who are active in various ways such as from the explanation of exhibits to the support in science workshops, etc.

Contents of Activities

As mentioned below, there are various sites of activities for volunteering. Activities are possible whether you have or do not have knowledge on science and technology.

1. Giving explanations on the exhibits
2. Experiment support at the Science Workshop
3. Holding of original planned events by volunteers
4. Support for Events, etc.
5. Playing an active role in other various activities

Research Facilities

Miraikan also has Research Facilities under the same roof, and are located behind the exhibition zones on the 3rd to 5th floors. These labs feature a number of projects that conduct research on cutting-edge science and technology. Using Miraikan as an experimental base, together with visitors, research activities involves future-facing research and development, and including demonstration experiments and exchange events.

The introduction of ongoing projects	Research Director
Avatar Symbiotic Society Project By using Cybernetic Avatars (CAs) technologies, this project focuses on expanding peoples physical, cognitive, and perceptual abilities, and create a society where everyone will be able to recognize and connect with each other and live better, together.	**Ishiguro Hiroshi** Graduate School of Engineering Science, Osaka University
xDiversity Project This project intends to overcome physical and mental disabilities through the combination of man and machine, using AI technology to integrate personal optimized technology and technologies relating to space, sight, sound, and tactile feedback.	**Ochiai Yoichi** Research and Development Center for Digital Nature, University of Tsukuba
Unveil & Upgrade Human Movement Performance Project This project aims to elucidate the mechanism of human body movement, build science to develop potential physical abilities, and propose concrete methodologies.	**Kawakami Yasuo** Faculty of Sport Sciences; Human Performance Laboratory, Comprehensive Research Organization, Waseda University
Exploring the Wonderful World of Children Project This project discovers the world of children through experiments, and reconsider what environment is the best for children to support the diverse development of each child who will be adapted to the future society.	**Yamaguchi K. Masami** Department of Psychology, Chuo University
Cyber Living Lab — Embodied Media Project This project aims to create future media technologies that record, share, enhance, and even create the kind of experiences that we have through our bodies.	**Minamizawa Kouta** Keio University Graduate School of Media Design
Sustainable Biotechnology Project This project conducts research for the development of bioprocesses to produce clean hydrogen energy from food wastes as a representative of sustainable biotechnology, and advances outreach activities to enhance social awareness of sustainable biotechnology.	**Watanabe Kazuya** Laboratory of Bioenergy Science and Technology, School of Life Sciences, Tokyo University of Pharmacy and Life Sciences
Project toward Smart Soft-Manufacturing Revolution This project is advancing “material and process innovation” research to realize the concept of a Convenience Factory where materials and processing are directly connected to digital manufacturing.	**Furukawa Hidemitsu** Soft and Wet matter Engineering Laboratory (SWEL), Yamagata University
Human Organoid Project Using miniature organs, aka “organoids,” from human stem cells such as iPS cells, this project aims to, understand the mechanism of organogenesis, develop models that reflect real organs, and translate technologies into biomedical application.	**Takebe Takanori** Osaka University & Cincinnati Children’ s Hospital Medical Center

As of April 2025

*Please visit our website (https://www.miraikan.jst.go.jp/en/research/facilities/) for more details.

Open Call for Field Trials

This program invites researchers and developers to submit Field Trials for advanced technologies and services that aim to be implemented into society in the future. By conducting experiments at Miraikan that involve visitor participation, diverse perspectives can be incorporated into research and development.

FY2025 Implementation - First Round of Open Call: Selected Field Trials	Project Leader (Affiliation)
Field Trial of Universal Guide App Using Generative AI for Optimal Exhibition Experience Service for All Universal guide app using generative AI to provide optimized information through multilingual text, audio, and images tailored to users'ages, disabilities, and language differences. It demonstrates assured information services in exhibition experiences.	**Kitamura Yukihiro** Universal Center Director, NHK Global Media Services, Inc.
Field Trial of Pedestrian Flow Control Using Spatial, Immersive Visual Presentation on Multiple Digital Signages We will conduct an experiment to evaluate the effectiveness of visual presentations in controlling pedestrian flow using multiple digital signages installed in an urban area. The results will contribute to facilitating evacuation guidance and alleviating congestion in public spaces.	**Mikawa Yuri** Research Associate, Sensory Representation Research Group, Human Information Science Laboratory, NTT Communication Science Laboratories
Field Trial of a New Interpersonal Service by a Robot Using Generative AI Technology and Image Recognition Demonstrates a human-interaction guidance service using an autonomous mobile robot. Evaluates AI-driven natural conversation and service provision and the effectiveness of image recognition technology, and verifies the enhancement of convenience and comfort for facility users, as well as the potential for a new workforce.	**Takehara Hisao** JAL Digital Co.,Ltd.
Field Trial for the Value Validation and Social Acceptance of Hanamoflor: A Child-Type Attentive Presence Robot for Children Conducting a field trial focusing on childcare and education use cases, primarily targeting preschool children, using a child-type attentive presence robot "Hanamoflor". In addition to evaluating user value through experience, verifies social acceptance of a robot symbiotic society.	**Sodeyama Yoshinao** Project Leader, Hanamoflor PJ, Motion AI Development, Technology Development Division, Business Development Platform, Sony Group Corporation
Construction and Field Trial of a Co-Creative Science Communication Model between Human and AI Using AI Clone Technology Develops an AI clone of a science communicator to conduct field trials on new dialogue methods beyond physical and temporal constraints. Constructs a co-creative communication model between humans and AI by feeding back the dialog experiences of the AI clone to the individual.	**Kasahara Shunichi** Researcher, Sony Computer Science Laboratories / Visiting Researcher, Okinawa Institute of Science and Technology (OIST)/ JST PRESTO Researcher
Field Trial of Art Methods Connecting Diverse People and Society Using Smartphone Software "Ku-kan Gakki (Spatial Instruments)" Demonstrates musical sessions in which various unspecified people participate by scanning QR codes from their smartphones using audio-synchronizing software "Ku-kan Gakki (Spatial Instruments)". It verifies the potential of technology + art to overcome "undesired loneliness and social isolation."	**Furukawa Kiyoshi** Professor, Department of Intermedia-Art, Tokyo University of the Arts
Scaling of Service Robotics Combining Teleperation and Robot Foundation Models Conduct field trials of services provided by robot teleoperation and automation technology. Participants' experiences and teleoperation data will be used as learning data for the robot foundation model, leading to improvements in usability and advances in automation research and development.	**Matsushima Tatsuya** Project Assistant Professor, Graduate School of Engineering, The University of Tokyo / CTO, AI Robotics Association

Research & Development and Social Implementation

Miraikan actively leads unique research and development projects, as well as co-creation projects in collaboration with local municipalities, openly promoting them together with various partners including companies and universities.

Miraikan Accessibility Lab.

“Miraikan Accessibility Lab.” is a consortium-style laboratory. It creates technologies to enable the visually impaired to live independently, such as being able to move freely about a city and recognize the information around them.
Together with companies and universities boasting advanced AI and robotics technologies, Miraikan Accecibility Lab. conducts research and development of products such as the “AI Suitcase” — an autonomous navigation robot that safely guides users to their destinations while avoiding obstacles. “Touchable” 3D Exhibits have been produced, which automatically provide audio commentary in conjunction with hand movements.
By allowing visitors to experience technologies like these at Miraikan and consider the possibilities and challenges of new technologies, we facilitate their implementation in society in the near future.

Participating Organizations:
IBM Japan, Ltd., Faculty of Science and Engineering Waseda University, Keio Leading-edge Laboratory of Science and Technology

AI Suitcase

“Touchable” 3D model of the Miraikan building

Tokyo Mirai Park

The Tokyo Metropolitan Government and Miraikan have collaborated to establish “Tokyo Mirai Park” within the museum as a hub for promoting innovation and implementing advanced technologies together with local communities, with the aim of co-creating the future of Tokyo.
The “Lab” installed in the 3rd floor research area brings together companies and research institutions with advanced technologies and ideas to conduct research and development toward social implementation. In the “Park” on the 1st floor, anyone can enjoyably experience these cutting-edge technologies and services, and the feedback from visitors is conveyed to developers and administrators. By connecting research and development with citizens in this way, the aim is to collectively envision and realize the future of Tokyo.

Partner Organization: Tokyo Metropolitan Government

User Guide 1

Opening Hours	**10:00 - 17:00** **(Admission ticket sales end 30 minutes before the closing time of the museum.)**
Closed	**Every Tuesday (Open on national holidays), December 28 to January 1.** *Miraikan may be temporarily closed due to facility maintenance. *Miraikan may be open on Tuesdays during spring, summer and winter vacation seasons.
Admission Fees	**●Permanent exhibitions** Adults 630 yen / Child (up to age 18) 210 yen / Preschool child Free Groups (8 or more people): Adults 500 yen/Child (up to age 18) 160 yen *Admission is free for children (up to the age of 18) on Saturdays. *Admission is free for holders of a disability certificate, and for their companion (one per certificate holder). The disability certificate app Mirairo ID is also accepted. *Separate admission is required for special exhibitions. **●Permanent Exhibitions + Dome Theater** Adults 940 yen / Child (up to age 18) 310 yen / Preschool child 100 yen *Those visiting the Dome Theater may also visit the permanent exhibitions. *Admission is 100 yen for children (up to the age of 18) on Saturdays. *If viewing more than one film at the Dome Theater per day, each additional session is 310 yen for adults and 100 yen for children (schoolchildren and those up to the age of 18). *Admission is free for holders of a disability certificate, and for their companion (one per certificate holder). The disability certificate app Mirairo ID is also accepted.
Facilities	**●Parking area** Operating hours: 7:00 AM to 11:00 PM Fees: 440 JPY/hr, One-day max.: 1,650 JPY No. of spaces: 167 (incl. 4 disabled spaces) *20 spaces for large buses (3,150 JPY per visit, advance booking not required) **●Electric Vehicle (EV) Charging Service** ・Normal charging stations Usage hours: 7:00 AM to 11:00 PM (same as the underground parking area) Location: Underground parking area Fee: Free *Separate parking fees apply No. of stations: 18 Specifications: 6 kW/200 V ・Rapid charging stations Usage time: Up to 30 min. per use Location: Underground parking area Fee: Fees apply No. of stations: 2 Specifications: 50 kW/200 V **●Restrooms for visitors** 1F: 2 areas / 3F: 2 areas / 5F: 2 areas / 6F: 1 area / 7F: 1 area * There are restrooms for the disabled on each floor and multipurpose restrooms available for ostomate on the 1, 3 and 5Fs. * There are diaper changing tables (adult size) in the restrooms on the 1 and 7Fs. **●Stroller, nursing room** We lend out strollers. There is a nursing room(for female visitors use only) at the back of the 5F Café. **●First-aid office** A registered nurse is permanently positioned in Miraikan. **●Lockers** 1F Coin lockers　128 lockers (100 yen: Money will be returned.)

User Guide 2

Facilities	**●Eating spaces** Eating is possible on the 7F Viewing Lounge. 7F Beverage section (Food is not allowed.) There are drinking water coolers next to the "1F Multipurpose Room a" and the 7F Beverage section. 1F Multipurpose room can be used as a dining place for visitors in groups (advanced reservation necessary).
Accessibility	**●For wheelchair users** Wheelchair rental service / Multi-purpose restroom / Wheelchair accessible seating in Dome Theatre / Parking spaces for wheelchair users **●For visitors with hearing loss** Writing instruction devices / Subtitles for videos of the permanent exhibition provided (Not yet available for some videos) / **Glasses with subtitle display function for Dome theater** **●For visitors with visual impairments** English and sub-audio (Japanese) in Dome Theatre **●For visitors with an infant** Nursing room behind the café on the 5th floor / Changing table / Stroller rental service **●Multi-language services** Multi-language labels and subtitles for movies of the permanent exhibition: Japanese, English / Floor Guide: Japanese, English, Chinese, Korean / Audio guide of Dome theater: English / Audio guide of the permanent exhibition: Japanese, English, Chinese, Korean **●Toilets** Toilets for ostomates / Changing table (Adult size) **●Others** Visitors can enter the facility with their guide dogs, service dogs and hearing assistance dogs / First-aid office: permanently-stationed a nurse / AED (automated external defibrillator) / Prayer rooms
Others	**●Camera Shooting** Taking photographs and images only for individual purposes is allowed with the exception of certain exhibits.(* Prior permission is required for photography/filming for the purpose of commercial use/duplication/broadcasting.) **●Group reservation desk** For information on group reservation, preliminary inspection, information materials, please contact the following. Tel: 81-3-3570-9188 (reservation desk is open 10:00 - 17:00 during museum hours)

Miraikan ID

Miraikan ID is an account necessary for using the services provided by Miraikan.

● Benefits

・ E-mail magazine “Miraikan News”
Announcements and latest event information will be delivered on the 2nd and 4th Friday of every month.

・ Annual Passports
A free pass plan gives members unlimited free admission to the permanent exhibitions for one year from the date of joining.
Anuual Fee: 1,250 yen (Renewal Fee: 1,050yen)
Aged 18 or under: 410 yen (Renewal Fee: 310yen)

・ Event
icipation in general and members-only events.

Shop/Viewing Lounge

Experience automated AI checkout, product descriptions from digital personas, and more. In addition to unique Miraikan goods, you’ ll find experiment kits, books on science, and science-related items for purchase. Some items are also available at our online shop.

Museum Shop (1F)

Experience automated AI checkout, product descriptions from digital personas, and more. In addition to unique Miraikan goods, you’ ll find experiment kits, books on science, and science-related items for purchase. Some items are also available at our online shop.

Opening hours: 10:00-17:00
Closed: Every Tuesday *Same as Miraikan’ s closed days
Online shop : https://www.miraikanmuseumshop.jp/
Operated by NOMURA MEDIAS Co.,Ltd.

Viewing Lounge / Restaurant (7F)

This is a resting space, where you can see all the way from Odaiba’ s surroundings to Tokyo Tower. It also includes a self-service cafeteria.

Opening hours: 10:00-17:00
Closed: Every Tuesday *Same as Miraikan’ s closed days
Seats 255 (Terrace seats 24)
Operated by FOODWORKS.INC

Design and Characteristics

Miraikan is designed based on the concept of creating a place for exchanges between people, and also between people and science and technology. To enhance this exchange, various measures were implemented in terms of technique and design.

Sleek glass that symbolizes a facility opened to everyone

A transparent exterior is created as transparent reinforced glass is used for the east to north side which is less influenced by direct sunlight. Heat resistant semi-transparent glass is used for the west side which faces the sunset.
(Photo depicts the front.)

Dynamic space

The entrance and Symbol Zone bathed in natural light is a vaulted open zone. Escalators and successive flights of stairs naturally join the floors from the entrance to the 6th floor.

Flexible exhibition space

The exhibition space is wide while columns are situated at 30 m intervals. The front on the east side is an atrium from the 1st to the 6th floor while the areas from the 3F to the 5F are connected by a gently sloping ramp.

Through-holes

Ten towers have been inserted as if they were vertically piercing the building. There are “Light Towers” that receive light from rooftop sunlight autoguider and “Wind Towers” that supply fresh air and provide ventilation.

Architecture/Equipment Specification

Architectural Specification

Facility Name:	Miraikan
Address:	2-3-6, Aomi, Koto-ku, Tokyo 135-0064
Designer's supervision:	Nikken Sekkei/Kume Sekkei design joint-venture group
Design cooperation:	Landscape: George Hargreaves (only basic plan), Sign: Hiromura design office, Lighting: LPA
Term of construction:	December 1999 - March 2001
District:	Fireproof district, light-industrial district
Building-to-land ratio:	46.51% (Standard 60%)
Floor-area ratio:	177.71% (Standard 200%)
Road width:	West 40m, North 20 m
Area:	Site area: 19,636.65 m² Building area: 9,133.59 m² Floor space: approx. 40,744.03 m² (including parking area)
Parking Area:	Area: 5,737.84 m² / Number of cars that can be parked: 175 cars (2 car spaces for the disabled)
Height:	Eave Height: 42 m, Height at highest point: 45 m, Standard floor height: 4.5 m, Ceiling height: 8.0 m (standard exhibition room), 3.0 m (Research room), Entrance vaulted space: 25 m (partial 39 m), Exhibition space standard ceiling height: 8 m (subcallosal area 6 m)
Measurement:	Major span 30 m x 6 m
Number of floors:	2 underground, 8 above ground, 1 penthouse
Structure:	Steel construction partially steel concrete
Pile/foundation:	Rotation steel-pipe pile/non-land removal press-in method

Facility/equipment Specification

Air conditioning:	Air-conditioning system: single duct system, single duct + FCU system, air cooled package method Heat source: District heating and cooling
Sanitary installation:	Water supply: pressure water service system (Clean water/gray water) Hot-water supply: Central method (District heating and cooling), individual method combined Water discharge: General sewage water/gray water, experiment-related water discharge
Electric installation:	Power receiving system: 22 kV 50 Hz 3 lines SNW method Installed capacity: 2,000 kVA x 3 Contract electric power: 1,700 kW Standby power supply: Gas turbine generator 6.6 kV 50 Hz 1,250 kVA
Fire-prevention equipment:	Direct-current power-supply system, alarm system for fire/smoke/gas leak, emergency broadcasting system, lightning protection system, space lighting system for emergency/rescue use, fire extinguishing sprinkler system (closed type/discharge type/pre-action type), foam extinguishing system, nitrogen gas extinguishing system/smoke exhaust: natural smoke exhaust, mechanical smoke exhaust
Others:	Waste treatment system, district heating and cooling receiving system
Elevators:	Passenger elevator (exhibition zone): can hold 24 people x 2 Passenger elevator (backyard/emergency use) can hold 17 people x 2 Passenger/loading elevator (backyard/emergency use) can hold 17 people x 2 Loading elevator (backyard): Load capacity 6,000 kg x 1 Passenger elevator (parking area): Can hold 11 people x 1 Escalator (introduction zone): Width 1,200 mm 10 escalators
Disposal of goods:	Equipment hatch valid open space: W 5,250 mm x H 4,000 mm or W 3,750 mm x H 4,000 mm
Room temperature/humidity:	Temperature: Constantly 17°C - 28°C, Humidity: Constantly 40% - 70%
Security precaution:	TV monitor: Situated everywhere (including the parking area, etc.)
	Monitoring place: 1F Disaster control center Security guards: Stationed 24 hours

Location & Directions

From the Airport

From the Tokyo International Airport(Haneda Airport)
By train I about 50min.
By car I about 20min.

From Narita Airport
By train I about 100min.
By car I about 60min.

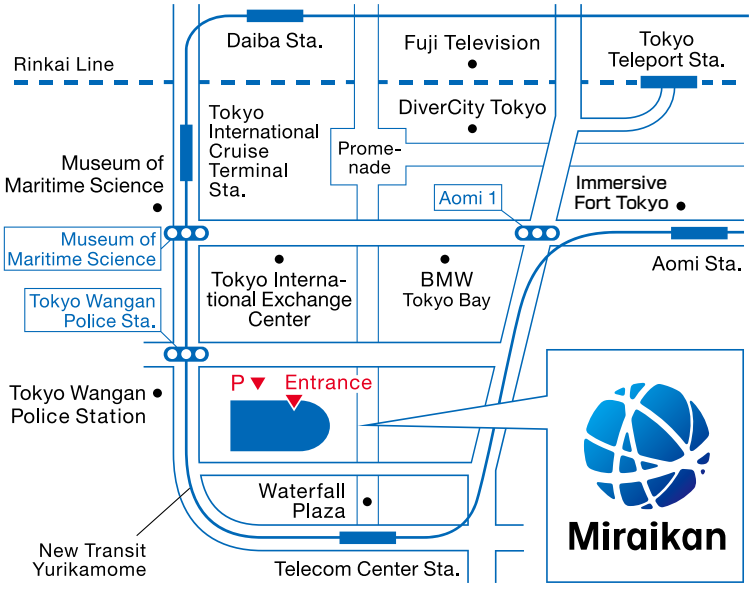
Train

Tokyo Waterfront New Transit YURIKAMOME:
5 minute walk from “Tokyo International Cruise Terminal station” /4 minute walk from “Telecom Center station”

Tokyo Waterfront Area Rapid Transit RINKAI LINE:
15 minute walk from “Tokyo Teleport station”

Car

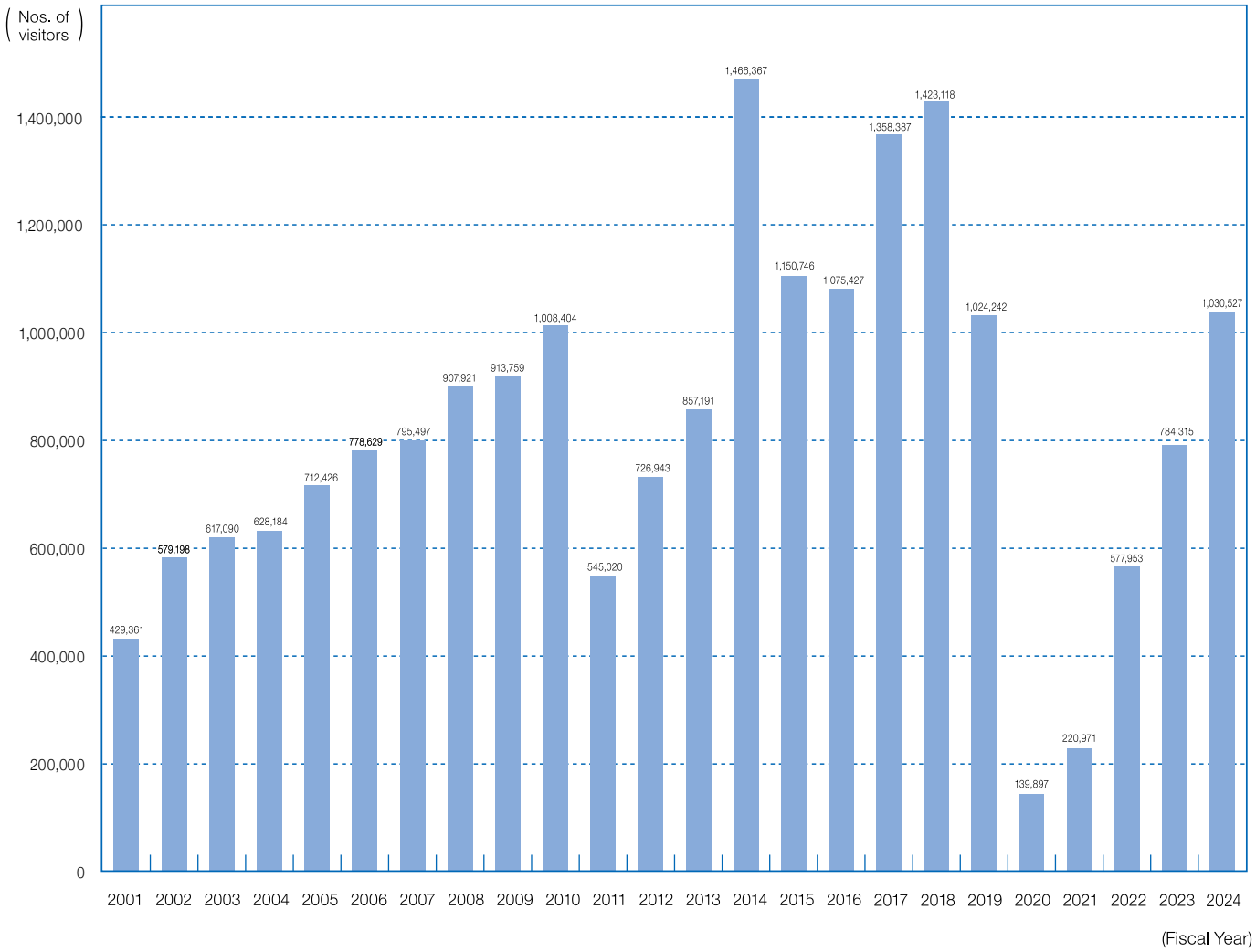
By Metropolitan Expressway
・5 minutes to Miraikan from the Daiba Ramp exit on the Route No. 11 of the Metropolitan Expressway
・4 minutes to Miraikan from the Rinkai-fukutoshin Ramp exit on the Bay Shore Route of the Metropolitan Expressway
・7 minutes to Miraikan from the Ariake Ramp exit on the Bay Shore Route of the Metropolitan Expressway



Miraikan - The National Museum of Emerging Science and Innovation
2-3-6 Aomi, Koto-ku, Tokyo, Japan / Tel: +81-3-3570-9151

Data of Visitors

Transition in the numbers of visitors



Breakdown by age (FY2024)