UNION OF KANSAI GOVERNMENTS







Kansai's Industrial
Potential Pioneers the Future

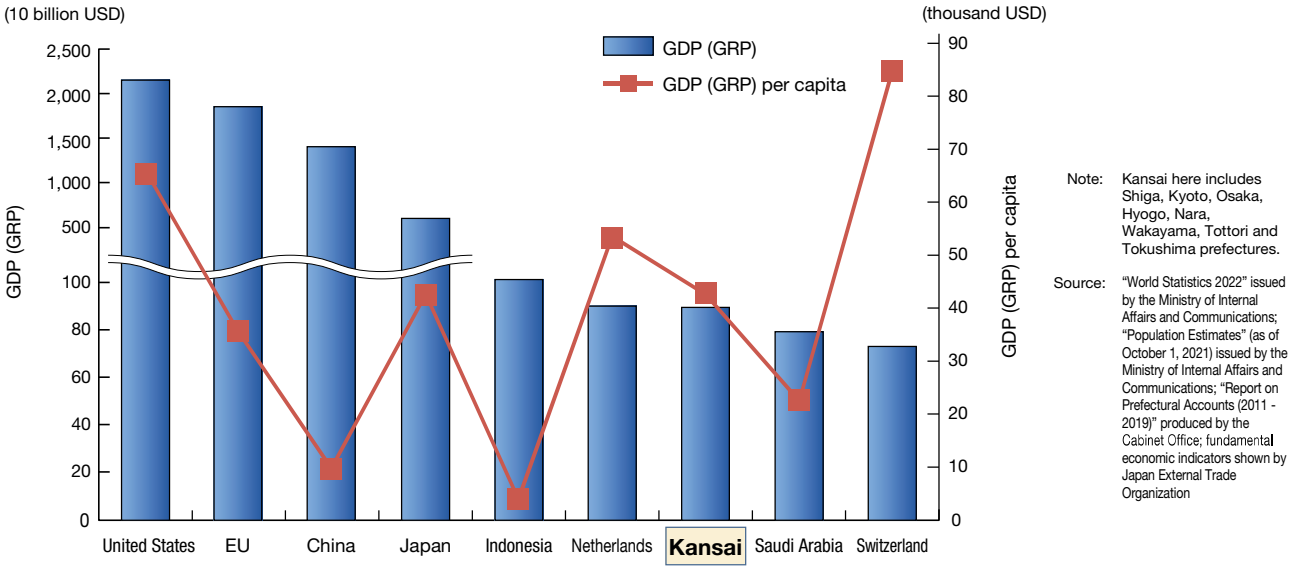
Innovative Kansai

Characteristics and Potential of Kansai's Economy

◇Size of Kansai region's economy

The Kansai region produces some 94 trillion yen (16.2% share of national total in 2019) in added-value, and has an economy the size of the Netherlands. It is also a huge consumer market with its 22 million population (17.3% of national total in 2021).

GDP comparison between Kansai and major countries



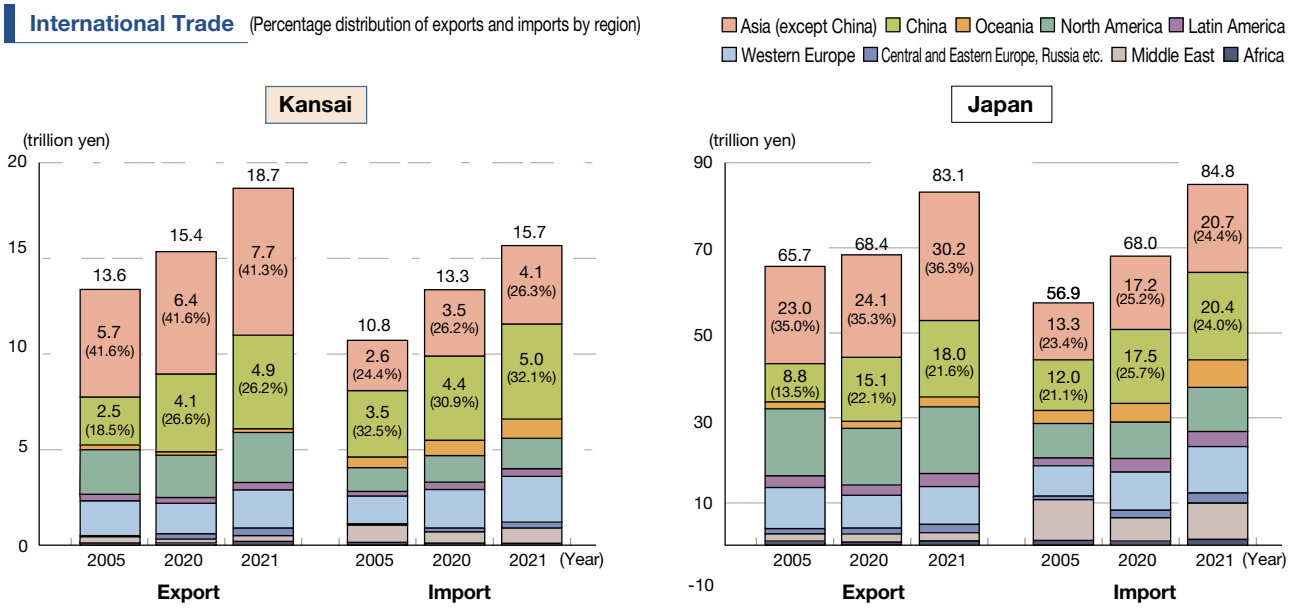
Note: Kansai here includes Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama, Tottori and Tokushima prefectures.

Source: "World Statistics 2022" issued by the Ministry of Internal Affairs and Communications; "Population Estimates" (as of October 1, 2021) issued by the Ministry of Internal Affairs and Communications; "Report on Prefectural Accounts (2011 - 2019)" produced by the Cabinet Office; fundamental economic indicators shown by Japan External Trade Organization

◇Strong ties with Asian countries

Looking at Kansai's trade with foreign countries, in terms of the proportion of exports to Asia, Kansai is much higher than other regions in Japan. In 2021, Asia accounted for approx. 70% and 60% of Kansai's exports and imports, respectively, on a value basis.

International Trade (Percentage distribution of exports and imports by region)

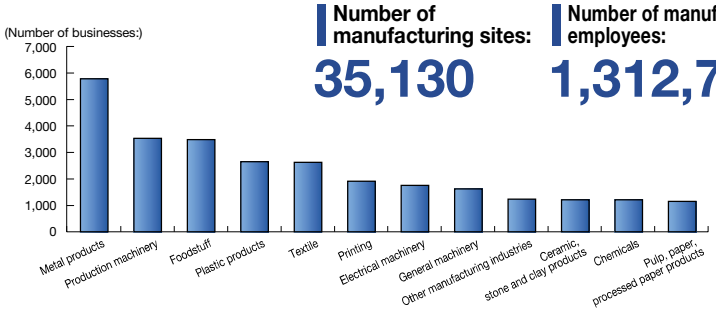


Note 1: Kansai here includes Osaka, Kyoto, Hyogo, Shiga, Nara, Wakayama prefectures, which are under Osaka Customs jurisdiction, and Tokushima and Tottori prefectures, which are under Kobe Customs jurisdiction.
Note 2: The amounts and breakdowns of import/export monetary values are not shown for smaller regions (in the Kansai: less than 1 trillion yen; nationwide: less than 5 trillion yen).
Source: Trade Statistics by Osaka Customs; Trade Statistics by Kobe Customs; Trade Statistics of Japan by the Ministry of Finance

◇Concentration of Diverse Industries

The Kansai region is endowed with a concentration of a wide variety of industries such as diverse manufacturing sectors ranging from traditional crafts to the sectors with leading-edge technology, their supporting industries with core technologies, and various service industries such as design, content and other creative fields.

Industries of the Kansai region



Number of manufacturing sites:
35,130

Number of manufacturing employees:
1,312,737

Value of manufactured goods shipments etc.:
54,368.7 billion yen

Note1: Kansai here includes Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama, Tottori and Tokushima prefectures.

Note2: This graph shows the top 12 industries in the Kansai region.

Source: "Census of Manufactures, 2020" by the Ministry of Economy, Trade and Industry (METI)

◇Hosting the Expo 2025 Osaka, Kansai, Japan

In 2025, Osaka and the Kansai region will host the World Exposition with the theme "Designing Future Society for Our Lives." Reflecting the event's concept of serving as a laboratory for a future society, Expo 2025 Osaka, Kansai, will function as a venue of co-creation dedicated to contributing to the achievement of the U.N.'s Sustainable Development Goals (SDGs) and realizing Japan's national strategy Society 5.0. It is expected to bring together leading technologies from around the world in Osaka and the Kansai region to foster the creation of innovation, for example in the form of new ideas.


Courtesy of: Japan Association for the 2025 World Exposition

◇New Products/Services Developed in Kansai

1902: Spiral mosquito coil (Dainihon Jochugiku, Osaka)

The company has greatly contributed to the prevention of malaria and other diseases from mosquitoes. The spiral-shaped product was a revolutionary design by the company.

1912: Making comedy performances a business (Yoshimoto Kogyo, Osaka)

Comedy performances were turned into a business for the first time in Japan by a pioneer female entrepreneur. It has grown to be an entertainment conglomerate with business widely across Asia now.

1958: Sushi-go-round (Genroku Sushi, Osaka)

Sushi, a representative Japanese food, became available at a sushi-go-round. This has made it possible for people all over the world enjoy sushi.

1958: Chicken Ramen
1971: Cup Noodles (Nissin Foods, Osaka)

People in many countries still eat Cup Noodles, and this product contributes to improvement in diet.

1967: Automatic ticket gate system (Tateishi Denki (now Omron), Kyoto)

The automatic ticket gate system is a product of Japan's machine technology born from the fusion of electrical and electronic technology and mechanical devices, which allowed for mass transit and has greatly contributed to the modernization of urban cities.

2002: Kindai tuna (A-marine Kindai, Wakayama)

A-marine Kindai – the first company in the world that succeeded in the complete farming of bluefin tuna. This allows the mass production of tuna that are in popular demand, thus contributing to preventing decrease in the number of tuna.

Source: "2021 INVEST JAPAN,INVEST KANSAI" formed by the Kansai Bureau of Economy, Trade and Industry

◇Some Foreign Affiliates Located in the Kansai

Company Name	Parent Company Registration	Business Activities
AstraZeneca K.K.	United Kingdom	Development, manufacturing and marketing of prescription medicines
SCHOTT AG	Germany	Development, manufacturing and marketing of electronic and electrical parts such as hermetically sealed terminals and thermal fuses, and marketing of special glass materials and glass products
DyStar Japan Ltd.	Singapore	Manufacturing, marketing, import and export of paint
Eli Lilly Japan K.K.	United States	Manufacturing, import, marketing, R&D and other related activities of pharmaceuticals

Company Name	Parent Company Registration	Business Activities
Nestle Japan Ltd.	Switzerland	Manufacturing and marketing of beverages, food, confectionery, pet food and other products
Bayer Yakuhin, Ltd.	Germany	Development, import, manufacturing and marketing of pharmaceuticals, medical devices
P&G Co. of Japan Ltd.	United States	R&D, marketing, and import/export of wide ranging products in Japan including laundry and cleaning products, paper products, quasi-medical products and cosmetics
USJ LLC	United States	Planning and operation of Universal Studios Japan, as well as sales of merchandise, food and beverage, etc.

Source: "List of Foreign Affiliated Companies, 2022"

In addition to various networks between academia and industries and matching systems for them to promote R&D, the Kansai region has established platforms to assist smooth and rapid commercialization, providing an excellent business environment with high-level industrial infrastructure supporting industrial activities, as well as specific incubation facilities corresponding to the purposes and growth levels of bio ventures, etc.

◇Excellent Business Environment

Providing advice on medical device (Union of Kansai Governments)

Counselors provide consultation for various issues such as pharmaceutical affairs to encourage manufacturing and venture companies to enter the medical equipment industry, develop, manufacture, and sell them.

Medical Device Industry Forum (The Osaka Chamber of Commerce and Industry)

The Osaka Chamber of Commerce and Industry established the Medical Device Industry Forum in 2003 to promote collaborative activities between medical institutions and industries, and support commercialization. It is also taking advantage of its network connections in Europe, the Americas and Asia to look beyond the domestic market and promote the future development and commercialization of medical devices for overseas markets.

Communal constant temperature warehouse for medical products (KIX-Medica) (Kansai International Airport)

This warehouse is Japan's first-ever constant temperature warehouse exclusively for pharmaceutical products. It was constructed on the airport premises, completely away from other warehouses. The use of refrigerated dollies ensures that the temperature of pharmaceutical products is properly controlled during transportation between aircraft and the warehouse even on hot summer days.

Japan Agency for Medical Research and Development (AMED) Department of Innovative Drug Discovery and Development, West Japan Office (iD3)

The Project for Supporting Innovative Drug Discovery and Development (Drug Discovery Booster) provides comprehensive and continuous support for HTS, structure optimization, nonclinical laboratory studies, etc. by utilizing the drug discovery technologies and facilities of the institutions in the Drug Discovery Support Network, such as RIKEN, the National Institutes of Biomedical Innovation, Health and Nutrition, and the National Institute of Advanced Industrial Science and Technology, in line with the intellectual property strategies and research strategies formulated by the Department of Innovative Drug Discovery and Development (DIDDD). The DIDDD assists with licensing project achievements to pharmaceutical companies, etc. so that they are assuredly put to practical use as pharmaceutical products.

AMED

Drug Seeds Alliance Network Japan (DSANJ) (Osaka Chamber of Commerce and Industry)

Drug Seeds Alliance Network Japan (DSANJ) is a program that promotes drug discovery in Japan. DSANJ independently collects, evaluates, and compiles results of drug research and development of and basic technology obtained by academia and biotech venture companies throughout Japan, and shares the data with pharmaceutical companies.

DSANJ

Support services for strategic intellectual property management The National Center for Industrial Property Information and Training, KANSAI office <INPIT-KANSAI>

INPIT-KANSAI is dedicated to supporting business development and growth by utilizing the intellectual property of small and medium enterprises as well as venture companies and helping companies meet customers' multifaceted needs, for example by (1) providing advanced, expert support for intellectual property, (2) offering information about industrial property rights via terminals with sophisticated search functionality, and (3) hosting on-site interviews and video meetings.

INPIT National Center for Industrial Property Information and Training

Pharmaceuticals and Medical Devices Agency (PMDA) Kansai Branch's consultation service for pharmaceutical affairs, etc.

Pharmaceuticals and Medical Devices Agency (PMDA)

Kansai Branch's initial consultation service

For the purpose of mainly supporting universities, research institutes, and venture companies, PMDA provides guidance and advice on development, strategies and other aspects of commercializing pharmaceutical products and new business seeds (RS general advice and RS strategic advice through preliminary meetings and face-to-face advice). RS: Regulatory Science

■Of the various forms of guidance and advice, general and strategic advice (preliminary meeting) in RS are provided in response to the initial consultation by the Kansai Branch.

▶In addition to the Kansai Branch (located in GRAND FRONT OSAKA), the PMDA Cooperation Center for Regulatory Science Strategy Consultation (located in Kobe City) also provides general advice on RS monthly.

▶Both the general advice and strategic advice are free.

A video conference system (described on the right) is available if you want expert advice outside the scope of the above advice.

Kansai Branch's video conference system

■By utilizing the video conference system connected to the headquarters in Tokyo, you can obtain expert advice related to pharmaceutical affairs, post-marketing issues, etc. (see the type of consultation shown in the table below) through the Kansai Branch.

■Although utilization of this system requires payment of the system usage fee in addition to the consultation fee, the usage fee of all the users is reduced as follows.

Consulter	Type of consultation	Usage fee
Universities, research institutes, small and medium-sized companies and venture companies*	◦ RS strategic advice (face-to-face advice) ◦ Advice related to clinical trials ◦ Initial meeting for approval examination, etc.	280,000 yen → 0 yen
Other than above		280,000 yen → 140,000 yen
Regardless of the type of consulter	◦ Advice related to safety measures	70,000 yen → 35,000 yen

*Small and medium-sized companies and venture companies: Companies having 300 million yen or less in capital or 300 or less employees

◇Loading Air and Sea Infrastructures in Japan

The Kansai region boasts one of the most highly developed industrial infrastructures (airports, ports, railways, etc.) in Japan.

Kansai International Airport

International Flight Network

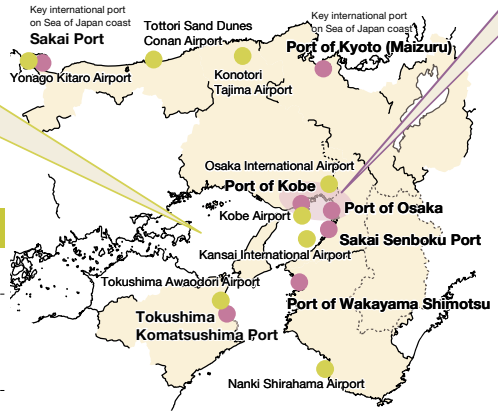
- Number of airline companies: 72
- Number of destination countries/regions: 24
- Number of destination cities: 92
- Total number of flights a week: 1,553

Advantages of Kansai International Airport

4,000-meter class runways + 24-hour operation

Communal constant temperature warehouse for medical products on airport premises. Refrigerated dollies are available to maintain a constant temperature of pharmaceutical products during transportation within the airport.

Number of international LCC flights:
462 per week by 21 companies 29 cities.



Strategic International Container Port

Hanshin Port (Port of Osaka, Port of Kobe)

- Regular container routes: 150.3/week
  Nearby countries, including China, and South Korea: 141/week
  North America: 6/week
  Europe: 1/week
  Oceania etc.: 2.3/week

"Strategic International Container Port"

In August 2010, as part of its efforts to strengthen the international competitiveness of Japan's industries, the Japanese government designated the Hanshin Port and Port of Keihin as international strategic ports in order to further improve their port functions.

Key international port on Sea of Japan coast **Sakai Port**	●Regular container routes South Korea (Busan): 4/week South Korea (Busan, etc.)/China (Qingdao, etc.): 1/week
Key international port on Sea of Japan coast **Port of Kyoto (Maizuru)**	●Regular container routes South Korea (Busan): 3/week
Sakai Senboku Port	●Regular container routes China (Qingdao): 1/week Southeast Asia (Thailand): 1/week
Port of Wakayama Shimotsu	●Regular container routes South Korea (Busan): 2/three week
Tokushima Komatsushima Port	●Regular container routes South Korea (Busan): 2/week

Note: Data presented in "Kansai International Airport – International Flight Network" section is from the 2019 winter peak schedule.
Source: Documents created by Kansai Airports

Source: Website of the Ministry of Land, Infrastructure, Transport and Tourism, websites of each port.

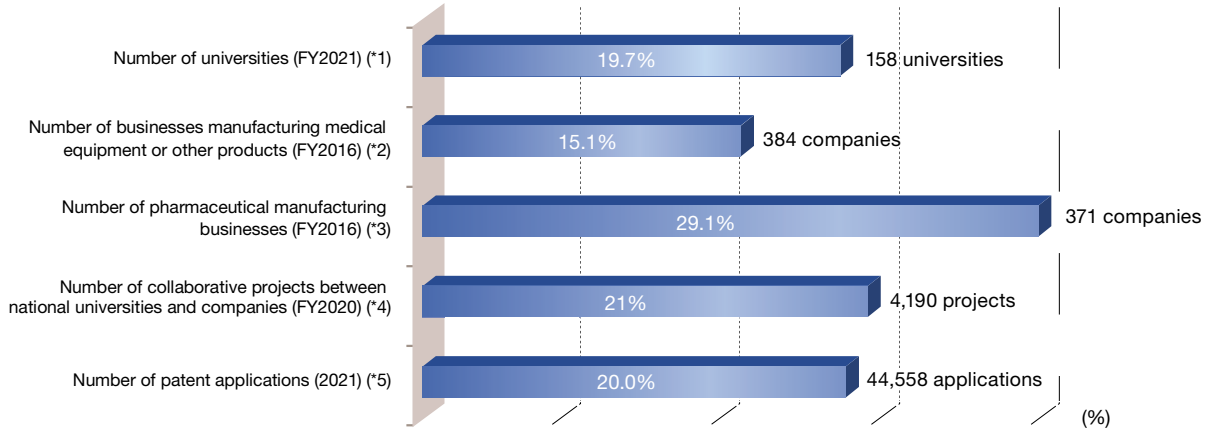
◇Incubation Facilities Related to Biotechnology

Facility name	Location	Number of facility rooms	Operating body	Contact
Nagahama Bio Incubation Center	Nagahama City, Shiga Prefecture	Laboratories: 17	Association of Bio Business Creation	TEL: +81-749-65-8808 E-Mail: info@biobiz.jp
Keihanna Venture Center, Kyoto	Seika-cho, Soraku-gun, Kyoto Prefecture	Office rooms and laboratories: 31	Keihanna Interaction Plaza, Inc.	TEL: +81-774-95-5117 E-Mail: labo@ml.keihanna-plaza.co.jp
Saito Bio Incubation Facilities	Ibaraki City, Osaka Prefecture	Wet labs (can also be used as offices): 62, animal house	Bio-sight Capital Inc.	TEL: +81-72-640-1060 E-Mail: support@bs-capital.co.jp
Amagasaki Research Incubation Center	Amagasaki City, Hyogo Prefecture	Laboratories: 49 Office rooms: 22 Rooms for Small Office: 40	ARIC	TEL: +81-6-6415-2500 E-Mail: info@aric-ama.co.jp
Wakayama Business Square	Wakayama City	Office rooms: 25 Meeting room: 1	Wakayama Prefecture	TEL: +81-73-441-2760 E-Mail: e0610001@pref.wakayama.lg.jp
Tottori Bio Frontier	Yonago City, Tottori Prefecture	Open laboratories: 1 Office rooms: 4 Laboratories: 4 Animal breeding rooms: 4	Tottori Prefecture (Designated administrator: Tottori Industrial Promotion Organization)	TEL: +81-859-37-5131 E-Mail: tbf@toriton.or.jp
Tottori Pharmaceutical Innovation Center	Yonago City, Tottori Prefecture	Open laboratories: 1 Office rooms: 9 Laboratories: 5 Meeting room: 1	Tottori University	TEL: +81-859-38-6219
Fujii Memorial Institute of Medical Science, Tokushima University	Tokushima City, Tokushima Prefecture	Open laboratories: 2 BUS equipment rooms: 8 Lab support rooms: 6 Seminar rooms: 2 Meeting room: 1	Tokushima University	TEL: +81-88-633-9420 E-Mail: m.iwata@tokushima-u.ac.jp
Creation Core Kyoto Mikuruma	Kyoto City, Kyoto Prefecture	Laboratories: 21 Office: 15	Organization for Small & Medium Enterprises and Regional Innovation, JAPAN	TEL: +81-75-253-5242 E-Mail: cckm-info@smrj.go.jp
Osaka Metropolitan University Incubator	Osaka City, Osaka Prefecture	Private rooms: 12 Joint laboratories: 2 Meeting room: 1 Meeting area	University Public Corporation Osaka	TEL: +81-6-6605-3468 E-Mail: gr-knky-sangaku@omu.ac.jp
Sakai Business Incubation Center (S-Cube)	Sakai City, Osaka Prefecture	Multi-labs (with an office room each): 4 R&D labs: 8 Office rooms: 47 Booths for preparation for start of business: 8	Sakai Business Incubation Center	TEL: +81-72-240-3775 E-Mail: info@s-cube.biz
Kobe Business Support Center for Biomedical Research Activities	Kobe City, Hyogo Prefecture	Wet labs: 17 rooms Cell processing centers, etc.: 7 rooms	Kobe Urban Promotion Service	TEL: +81-78-306-2540 E-mail: info@kups.jp

World Class Intellectual Resources

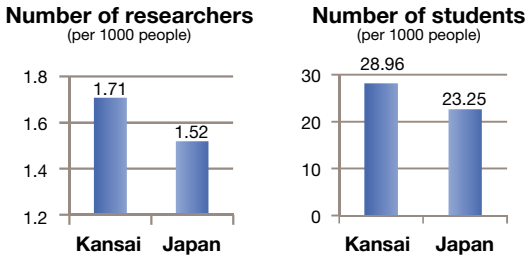
The Kansai region offers an ideal environment for innovation with world class research being carried out in the life science, material science, electronics, environmental science and energy science fields, and also having researchers who are recipients of the Nobel Prize or other prestigious prizes, and active academic-industry collaboration.

◇Clusters of intellectual resources (Domestic share)



Source: (*1) "School Basic Survey, 2021" by the Ministry of Education, Culture, Sports, Science and Technology
(*2) and (*3) "Economic Census for Business Frame, 2016" by the Ministry of Economy, Trade and Industry
(*4) "Industry-Academia Collaborative Research at Universities, etc., 2020" by the Ministry of Education, Culture, Sports, Science and Technology
(*5) "Japan Patent Office Annual Report 2022" by Japan Patent Office

◇Number of researchers and students per population

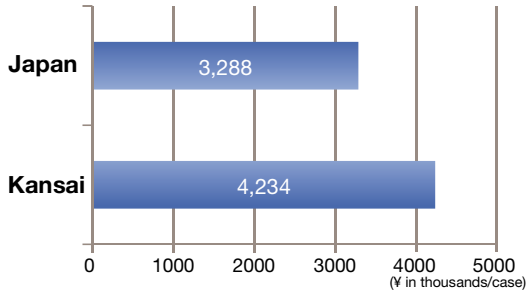


Source: "FY2021 School Basic Survey" by the Ministry of Education, Culture, Sports, Science and Technology "Demographic Statistics" (as of Oct. 1, 2021) by the Ministry of Internal Affairs and Communications

◇Value of academic-industrial joint study

Almost one-fourth of academic-industrial joint studies (on a monetary basis) in the nation are performed in the Kansai region, and research funds per case are also higher than the national average.

Amount received per application:



Source: "Industry-Academia Collaborative Research at Universities, etc., 2020" (track record of collaborative research at national and public universities) by the Ministry of Education, Culture, Sports, Science and Technology

The Kansai region has turned out many Nobel Prize awardees (16 of total 29 awardees in Japan)

○Nobel Prize for Physics

Name	Year	Academic background / Reason for award
Shuji Nakamura	2014	Finished the doctoral course (engineering) of the Graduate School after graduated from the Faculty of Engineering, Tokushima University
		Invented/Developed the manufacturing methods of high-brightness blue light-emitting diode and the blue violet semiconductor laser for practical use for the first time in the world
Isamu Akazaki	2014	Faculty of Science, Kyoto University
		Invented the blue light-emitting diode, enabling a high-brightness energy-saving white light source

○Nobel Prize for Chemistry

Name	Year	Academic background / Reason for award
Koichi Tanaka	2002	Senior fellow of Shimazu Corporation (Kyoto Prefecture)
		Developed the methods for identifying biopolymer and its structure analysis
Osamu Shimomura	2008	Comes from Fukuchiyama City, Kyoto Prefecture
		Discovered green fluorescent protein (GFP) and contributed to life science
Akira Yoshino	2019	Finished the doctoral course (engineering) at Osaka University' s Graduate School of Engineering after graduating from the Faculty of Engineering, Kyoto University
		Developed the lithium-ion battery

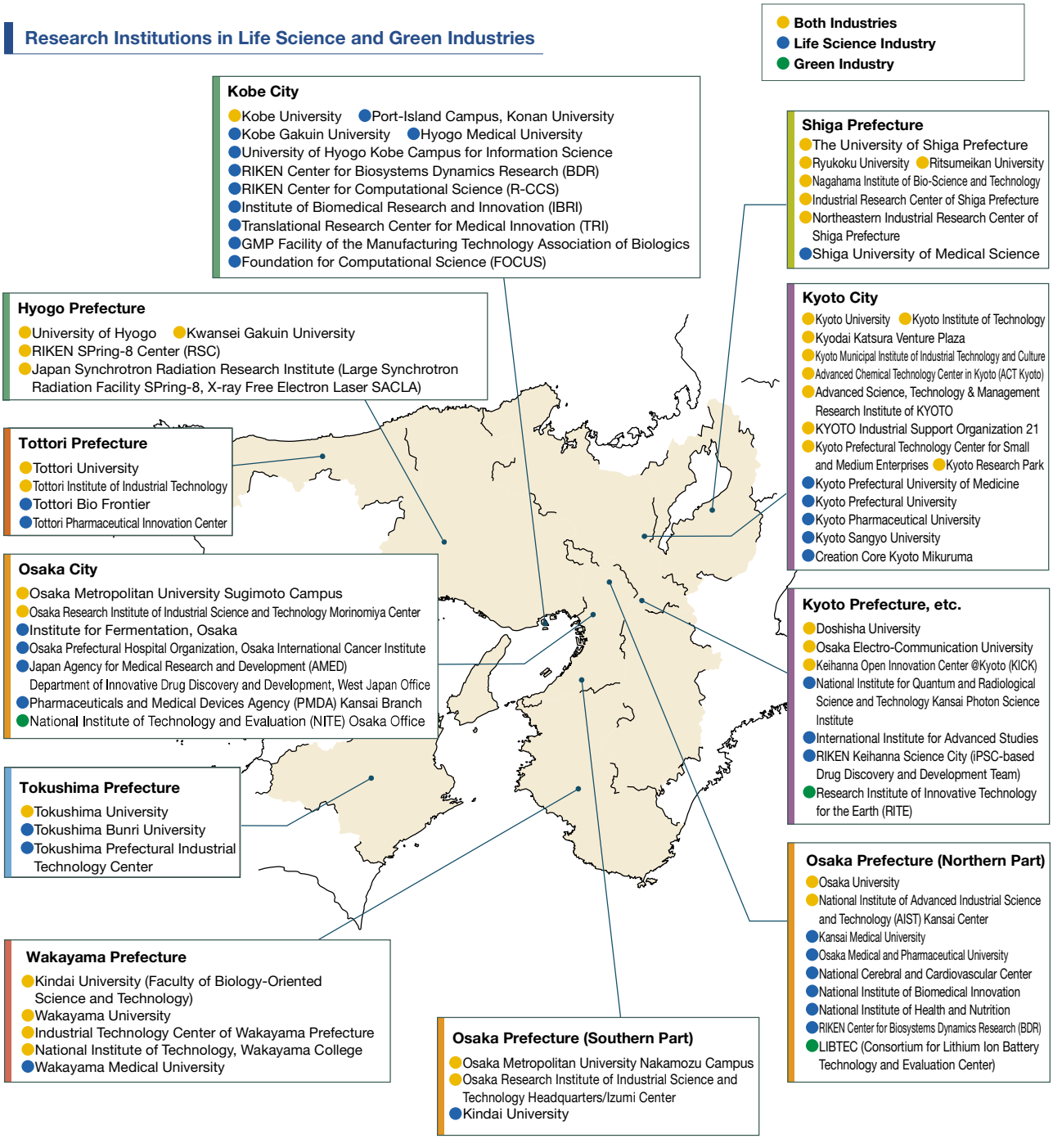
○Nobel Prize for physiology or medicine

Name	Year	Academic background / Reason for award
Shinya Yamanaka	2012	Institute for Frontier Medical Sciences, Kyoto University Finished the doctoral course of the Graduate School of Osaka City University after graduating from the Faculty of Medicine, Kobe University
		Formed iPS cells with the ability to grow various kinds of cells
Tasuku Honjo	2018	Completed the Physiological-System Doctoral Course at Kyoto University' s Graduate School of Medicine after graduating from the Faculty of Medicine at that same university
		Identified the immunoregulatory molecule PD-1 and successfully applied it to cancer treatment

◇Converging of Research Institutions in the leading Life Science and Green Industries in Japan

With a high concentration of leading universities and research institutions in the life science field and pharmaceutical/biotech companies, the Kansai region is a hub for life science innovations, as exemplified by research on iPS cells. Many research projects are underway in fields ranging from healthcare through drug development, clinical trials, and regenerative medicine.
Green Industry holds promise as a growth industry of the future. Many businesses, from industry leaders to companies newly investing in the field, are located here. To support these businesses, there are research institutions geared towards industry-academia partnerships in basic and applied domains, ready to engage in joint development and other activities.

Research Institutions in Life Science and Green Industries



◇World-leading scientific platform and advanced research institutes

Center for iPS Cell Research and Application (CiRA),Kyoto University CiRA Foundation(CiRA_F) (Kyoto City, Kyoto Prefecture)	The world' s first advanced research institute dedicated to iPS cell research, CiRA is engaged in development of regenerative medicine techniques and new drugs for intractable diseases, and clarification of disease mechanisms, using iPS cells. A separate corporation, the CiRA Foundation, was established in 2019 in an effort to spin off functionality such as cell production and stock and quality evaluation. The Foundation has been active since April 2020.
RIKEN BioResource Research Center (BRC) iPSC-based Drug Discovery and Development Team (Seika-cho, Kyoto Prefecture)	BRC is a platform for promoting the utilization of disease-specific iPSC and providing resources and technological support for drug discovery research and development to universities, pharmaceutical companies, etc. In collaboration with the Kyoto Prefectural Government and Center for iPS Cell Research and Application, Kyoto University, BRC is guiding research and development to support drug discovery and pathological research in Japan.
RIKEN Center for Biosystems Dynamics Research (BDR) (Kobe, Hyogo Prefecture; Suita, Osaka Prefecture, etc.)	The BDR views the lifecycle of an individual from generation/birth to death as a dynamic system across a hierarchy of molecules, cells and organs. The research they do contributes to the elucidation of development, maturation and aging phenomena, and, through the application of their findings, to the development of regenerative medicine and diagnostic techniques, as well as a longer healthy life expectancy.
RIKEN Center for Computational Science (R-CCS), Supercomputer "Fugaku" (Kobe, Hyogo Prefecture)	For two years from June 2020, the Fugaku supercomputer took first place in the four main categories of the world supercomputer rankings. Fugaku was made available to a broad range of users from March 2021. Fugaku is a world-leading supercomputer in terms of its all-round capabilities across power performance, computational performance, ease of use, creation of innovative outputs, and the ability to accelerate big data and artificial intelligence (AI). In the 2020s, it will contribute to Japan's growth by addressing increasingly-complex social issues and scientific exploration, and will produce world-first achievements.
RIKEN SPring-8 Center (RSC) Large Synchrotron Radiation Facility SPring-8 (Sayo-cho, Hyogo Prefecture)	SPring-8 is a large synchrotron radiation facility that delivers the most powerful synchrotron radiation currently available in the world. As a communal facility open to researchers from industries, academia, and government agencies from both Japan and abroad, Spring-8 enables a wide range of research projects to be carried out in the fields of nanotechnology, biotechnology, and industrial applications, and contributes to national projects, as well as new technological and product development.
RIKEN SPring-8 Center (RSC) X-ray Free Electron Laser SACLA (Sayo-cho, Hyogo Prefecture)	The X-ray Free Electron Laser (XFEL) of X-ray wavelength is a "dream" light with excellent characteristics resulting from highly brilliant synchrotron radiation. It is expected to be used to analyze the structural details of proteins to help develop drugs for incurable diseases, as well as to develop innovative materials.

Center for iPS Cell Research and Application (CiRA), Kyoto University, and the CiRA Foundation (CiRA_F)

RIKEN Center for Computational Science (R-CCS)

RIKEN Center for Biosystems Dynamics Research (BDR)

SPring-8, SACLA

Outline of Special Zone in Kansai

◇Outline of Kansai Innovation Comprehensive Global Strategic Special Zone

Policy issues to be addressed in Kansai

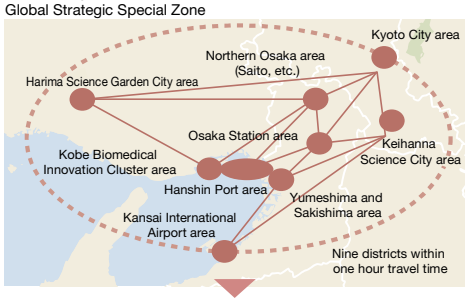
Establishment of "innovation platform" to improve international competitiveness

(Mechanism for continuous development of innovations for commercialization and market creation)

- ○Work together across the entire Kansai region, beyond prefectural boundaries, to problems that cannot be solved by a single company or local government address
- ○Link regional resources organically and utilize them in a concentrated manner.
- ○Attract internal and external knowledge and resources through extensive networks.

Six local governments that applied for a comprehensive special zone designation (Kyoto Pref., Osaka Pref., Hyogo Pref., Kyoto City, Osaka City and Kobe City), economic organizations, universities and research institutions will work together to achieve these objectives.

Nine strategic bases in the Kansai Innovation Comprehensive Global Strategic Special Zone



Establishment of an integrated Kansai Innovation Platform

Strategies to be implemented

1. Enhance international competitiveness by accelerating processes from R&D through practical application to performance evaluation.
2. Increase international competitiveness with the best mix of various industrial resources and technologies.
3. Reinforce the foundations for boosting innovation.

Full use of Kansai's potential

Accumulation of world-leading companies
Accumulation of world-renowned universities, research institutions, and science and technology infrastructures

Create innovations through focusing on six targets

-- Anticipate markets of the future and concentrate resources on the six strong target areas --

❶Pharmaceuticals ❷Medical devices
❸Advanced medical technology (regenerative medicine, etc.)
❹Preemptive medicine ❺Batteries ❻Smart communities

▶▶▶ Bring innovations to life in Japan and abroad!

Numerical targets (Life Science Industry)

- ○Capital investment relating to pharmaceuticals and medical equipment utilizing the special zone support system [Total of 61.9 billion yen in 2011–2026]
- ○R&D costs of pharmaceutical companies located in the special zone [877.6 billion yen (FY2017) to 1,013.5 billion yen (FY2026)]
- ○Number of applications for pharmaceutical affairs of pharmaceuticals and medical equipment utilizing the special zone support system [Total of 63 cases in 2011–2026]
- ○Production value of pharmaceuticals and medical equipment in Kansai [1.42 trillion yen (2014) to 1.81 trillion yen (2026)]

◇Outline of Kansai National Strategic Special Zones

The entire areas of Kyoto Prefecture, Osaka Prefecture, and Hyogo Prefecture were designated as Kansai National Strategic Special Zones in May 2014. We are working to improve our global competitiveness in healthcare, urban revitalization, and urban development, and to become an international economic hub.

- ●To create an international innovation hub for the healthcare and medical care industry, to promote the development and commercialization of state-of-the-art pharmaceutical products and medical equipment including regenerative medicine, and to develop an international business city that attracts human resources seeking challenges.
- ●Major approved projects (as of the end of October 2022)

Projects in the medical field

The program for allowing easier use of positron emission devices of computerized tomography in special zones

For the purpose of promoting the development of portable PET (positron emission computerized tomography) systems, Kyoto University Hospital (Sakyo Ward, Kyoto City) is allowed to use a portable PET scanner in its MRI (magnetic resonance imaging) room on patients injected with the PET agent, a radioactive material.

Consultations regarding pharmaceutical strategy and medical equipment in special zones

Osaka University Hospital and Kyoto University Hospital are strongly promoting medical innovation and encouraging the development of cutting-edge medical equipment from Japan, utilizing consultations regarding the pharmaceutical strategy and medical equipment in special zones so as to shorten the duration of treatment and expedite the procedure from development to sale to approval.

Acceleration of the development of innovative medical products

Osaka University Hospital and Kyoto University Hospital act as a link between the discovery of promising drug seeds and clinical trials in the development of innovative medical products. The hospitals expedite the development to approval and marketing process, promoting Japan's development of innovative medical products, and strongly supporting its medical innovation efforts.

National Strategic Special Zone Advanced Medical Care Project
(Provisions of hospital beds based on special measures of the Medical Service Act)

1. Kobe City Hospital Organization will open the Kobe Eye Center with an ophthalmic hospital (30 beds) to accelerate practical realization of front-line medical technologies including the world's first iPS cell-based regenerative therapy for retinal degeneration.
2. The Nakanoshima Eye Center Promotion Council will open an ophthalmic clinic (19 beds) in the "International Hub for Medical Innovation (provisional name)" in Kita Ward, Osaka for the purpose of providing integrated clinical studies, outpatient treatment, surgery and rehabilitation tied to frontline medical technologies, which will include transplantation of the world's first iPS cell-derived corneal epithelial cells and endothelial cells.

Measures to Provide Tax Incentives

1. Megakaryon Corporation is researching technology for producing high-quality platelets from human iPS cells systematically in large quantities.
2. Daiken Medical Co., Ltd. develops disposable medical equipment using high-performance and low-cost micropumps.
3. Sumitomo Pharma Co., Ltd. builds production facilities for the purpose of commercializing regenerative medical products using allogeneic iPS cells.
4. GeneDesign, Inc. is researching new technology for mass-producing nucleic acid therapeutics.

Kansai's Growth Sector: Clusters of Life Science & Green Industries

6 Kobe Biomedical Innovation Cluster (KBIC)

https://www.fbri-kobe.org/kbic/

Kobe Biomedical Innovation Cluster started as a project aiming to rebuild the Kobe economy, which was severely damaged by the Great Hanshin (Kobe) Earthquake in 1995, to protect the lives of the city's people, and to contribute to the international community. Over the 20+ years since the project was launched in 1998, nearly 380 companies, research institutes for advanced medicine, and highly-specialized medical institutions have joined the cluster. Over 12,400 people work in the cluster, and with an economic effect and tax revenue effect in Kobe City of 156.2 billion yen and 6.9 billion yen respectively (FY 2020), it has grown into one of the largest biomedical clusters in Japan. The cluster has also been designated as part of the Kansai Innovation International Strategic Comprehensive Special Zone and the National Strategic Special Zone. Building on this recognition, the cluster's members are working to develop innovative medical technologies that will change the world, focusing on pharmaceuticals, medical devices, regenerative medicine, and healthcare. The environment surrounding and components of the Kobe Biomedical Innovation Cluster are also undergoing significant changes, including progress in world-first clinical research using iPS cells, the supercomputer "Fugaku", which took top spot in five global supercomputer performance rankings in November 2021, and verification tests of remote surgery using "hinotoriTM", Japan's first surgical robot. In 2020, the Kobe Vision for the Healthcare of Tomorrow initiative was approved by the Cabinet Office and implementation began. In order to form an ecosystem for medical device development in Kobe Biomedical Innovation Cluster, the Vision will promote the establishment of a verification hub through industry-academia-government collaboration, research and development of medical devices utilizing future medical technologies, and the development of human resources through medical-engineering collaboration. Doing so will foster regional growth by promoting the further development of the medical industry and the local employment and retention of talented young people.

7 Harima Science Garden City

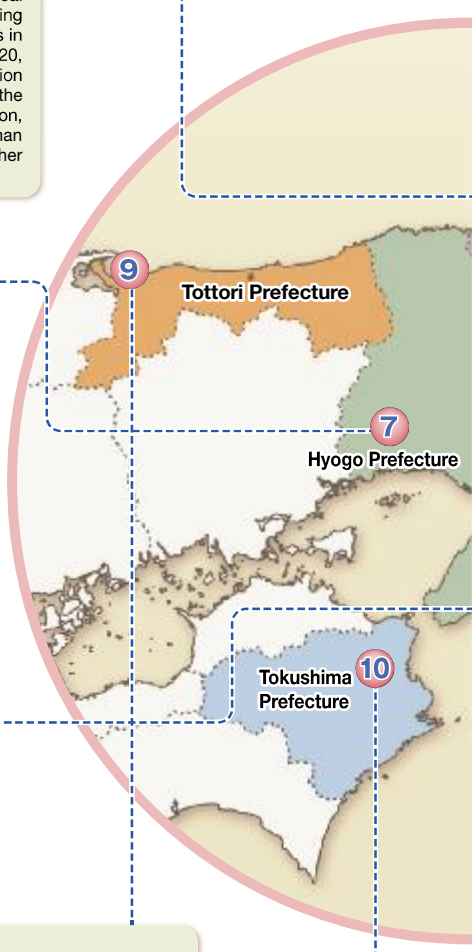
http://web.pref.hyogo.jp/ea03/harima.html

Harima Science Garden City has clusters of academic and research institutes that support the development of 21st century science and technology and the manufacturing industry, including the nanotechnology industry. With the use of the SPring-8 large synchrotron radiation facility, SPring-8 Angstrom Compact Free Electron Laser (SACLA), and New Subaru synchrotron radiation facility, they are expected to achieve innovations in various fields ranging from basic research to industrial applications ahead of the rest of the world.

8 Healthcare Industries and Innovation Promotion Region Promoting Local Produce of Wakayama Prefecture

http://www.yarukiouendan.jp/research/tiikiinnovation/index.html

In an effort to revitalize the local food industry based on the Basic Industrial and Technological Plan of Wakayama Prefecture, the Wakayama Industry Promotion Foundation (WIPF) is analyzing nutritional values and constituents, accumulating evidence and searching for ways to increase the added-value of locally produced fruits, by utilizing new processing technologies. This effort is being developed under the innovation strategy of Wakayama Prefecture to re-energize local core industries and create a healthcare industry off the increased added-value of local agricultural products, processed products and by-products. At the same time, the WIPF aims to improve the health of residents and realize a society where people live healthy and long, by developing programs for developing human resources in the food, exercise and health fields, establishing health management systems, raising health awareness amongst the general public, and promoting the proper use of health foods (implemented through the Ministry of Education, Culture, Sports, Science and Technology's Regional Innovation Strategy Support Program for 2012 - 2016).



9 Main projects of bio innovation from Tottori in collaboration between industry, academia and government

http://www.bio-frontier.jp/

Tottori Bio Frontier (TBF) was established on Tottori University's Yonago Campus in April 2011 as a base for joint research by industry, academia and government. They are using Tottori University's chromosome engineering technology to develop practical applications of biotechnology. The Tottori Pharmaceutical Innovation Center, which was established at Tottori University (in April 2018), is working towards the drug discovery commercialization phase.TBF aims to promote local industries by developing a cluster of biotech companies while helping to improve public health and re-energize local communities by accelerating bio-innovations through industry-academia-government collaboration and developing medical and pharmaceutical products.

10 Initiatives to conquer diabetes through industry-academia-government collaboration

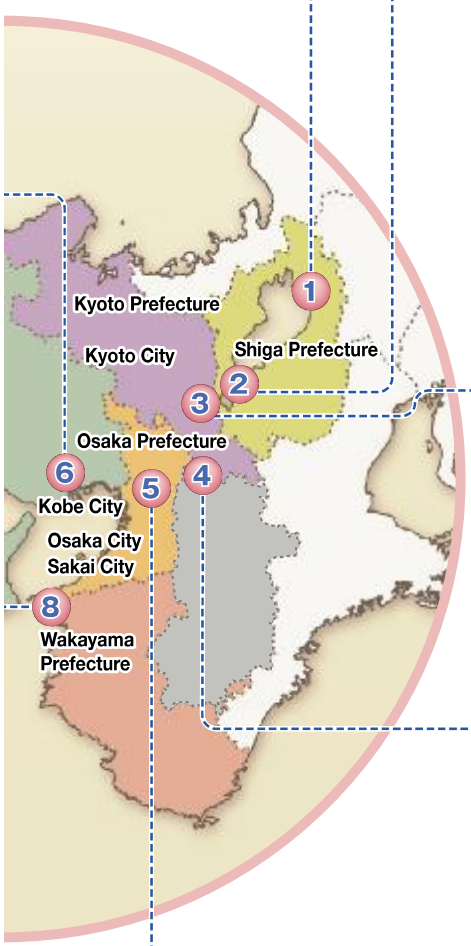
In Tokushima prefecture, cross-sectoral research and development of diabetes from the onset to the treatment stage is carried out under the Tokushima Health-and-Happiness Innovation Program, led by the Faculty of Medicine at the University of Tokushima, which has a unique R&D system involving collaboration among clinical departments and close working relationships between clinical and research departments. The Diabetes Research and Development Cluster helps encourage the creation of innovative ideas in areas including the control of diabetes progression, development of breakthrough diabetes treatment-related technologies, medical equipment, drug discovery, introduction of health foods and other products, and development of diabetes control models.

Life Science Industry

- Medical products/Medical devices
- Regenerative therapy
- Clinical trials and research
- Medical/nursing-care robots
- Medical information systems
- Medical facilities/organizations
- Health-related industries, etc.

Green Industry

- Environmentally-friendly automobiles
- Storage battery - related
- Smart communities
- Hydrogen-related
- Energy-conserving devices
- Environment-related
- Solar/wind power, etc.



1 Nagahama Bio Cluster

http://www.biobiz.jp/n-cluster/

With the goal of revitalizing the local economy, Nagahama Bio Cluster is working to create new businesses in collaboration with local companies, while making efforts to utilize the technologies possessed by universities and companies in the Nagahama Science Park.

2 Shiga Open Innovation Forum

https://www.shigaplaza.or.jp/openinobe/

In addition to manufacturing companies, we are working to strengthen the competitiveness of small- and medium-sized enterprises in Shiga Prefecture through a wide range of initiatives to create new business opportunities by accelerating open innovation. These include providing attendance support by coordinators, providing platforms to promote cross-company matching, and creating "meeting places" that bring together companies with various technological seeds - such as agriculture and ICT - as well as companies from outside the prefecture and major companies.
One of the workshops held at the forum, the Shiga Medical Device Business Study Group, supports companies aiming to develop new technologies and products in the medical field by holding seminars, exhibitions, tours of hospitals, and other events in cooperation with stakeholders such as universities and hospitals.

3 Initiatives in the life sciences field through industry-academia-government collaboration in Kyoto

http://www.astem.or.jp/lifeinov/

Initiatives are underway to contribute to the development of life science-related industries through industry-academia-government collaboration. These programs aim to promote the creation of new industries that will lead the next generation by leveraging Kyoto's cutting-edge capabilities in the life sciences field. Our focus in this industry creation is on the three fields of next-generation medical care, health, welfare, and nursing care, and revitalization of local resources. The initiatives specifically work to promote research and development, train engineers, and support site setup.

4 Kansai Science City (Keihanna Science City)

https://www.kri.or.jp/

Kansai Science City (known also as Keihanna Science City), located in the lush green hills of Keihanna extending across Kyoto Prefecture, Osaka Prefecture and Nara Prefecture, is one of the world's leading science cities. It is promoted as a national project through the collaboration of industry-academia-government and local residents. Currently, the site is occupied by more than 150 research, university, and cultural facilities that are developing a track record of success in fields such as telecommunications, environment and energy, and bioscience.
Among the mid- and long-term projects are the “Kansai Innovation International Strategic Comprehensive Special Zone” in which proactive efforts are being made on green innovation and life innovation.

5 Principal innovation-oriented initiatives of the Osaka Bio Headquarters

https://osaka-bio.jp/

Osaka is home to not only a number of pharmaceutical companies but world-leading universities and research institutes like Osaka University. Various initiatives are underway to further develop the life science industry.
As one of the initiatives, an environment for fully using the strengths of growing fields in the life sciences is being established. For example, official support organizations for drug discovery such as the Japan Agency for Medical Research and Development (AMED) that is leading the “All-Japan” approach for promoting R&D in the medical field, the Pharmaceuticals and Medical Devices Agency (PMDA) for approval review for drugs are gathered in the Umekita Area near Osaka Station.
The “All-Osaka” approach of collaboration among industry, academia, and government will lead to strategic innovations through cluster initiatives like Saito, where the National Institutes of Biomedical Innovation (NIBIO) and numerous drug discovery venture companies are concentrated; Kento (Northern Osaka Health and Biomedical Innovation Town), which is under construction and which will feature the National Cerebral and Cardiovascular Center and the National Institute of Health and Nutrition; and Nakanoshima (International Hub for Medical Innovation), which will promote an integrated approach to the industrialization of advanced medicine based on regenerative medicine.

Innovation on Life Science Industry

◇Hub of Pharmaceutical and Medical Devices Industries

A hub of pharmaceutical and medical devices companies has formed out of major pharmaceutical companies located in Doshomachi (known as “medicine town”) of Osaka City in the Kansai region. Four out of the top 10 ranking pharma companies in sales in Japan are located in the Kansai region, including Takeda Pharmaceutical Company Limited. Kansai has the largest output of pharmaceuticals in Japan.

◇Cluster of leading companies

Domestic pharmaceutical company ranking by sales, 2021

Ranking	Company name	Sales (100 million yen)
1	Takeda Pharmaceutical Company Limited	35,690
2	Otsuka Holdings Co., Ltd.	14,983
3	Astellas Pharma Inc.	12,962
4	Daiichi Sankyo Co., Ltd.	10,449
5	Chugai Pharmaceutical Co., Ltd.	9,998
6	Eisai Co., Ltd.	7,562
7	Sumitomo Pharma Co., Ltd.	5,600
8	Mitsubishi Tanabe Pharma Corporation	3,859
9	Ono Pharmaceutical Co., Ltd.	3,614
10	Kyowa Kirin Co., Ltd.	3,522

* ☐ Companies headquartered in the Kansai region

Source: AnswersNews

Medical equipment manufacturers headquartered in the Kansai region

- Nipro Corporation[5]
- Kaneka Corporation[17]
- Sysmex Corporation[6]
- Takara Bio Inc.[19]
- OMRON Corporation[9]
- Shofu Inc.[23]
- Shimadzu Corporation[12]
- Daiken Medical Co., Ltd.[30]

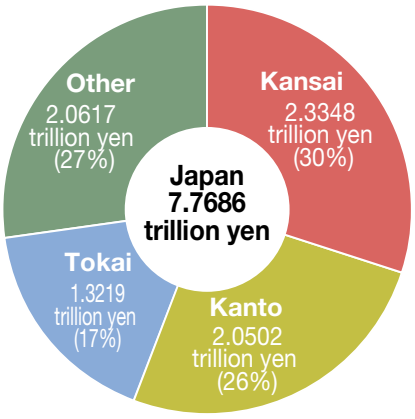
*The number in [ ] denotes domestic ranking by sales.
Source: “Industry Trend Search” by Nikkei Inc.

Leading electrical appliances and electronics-related companies headquartered in the Kansai region

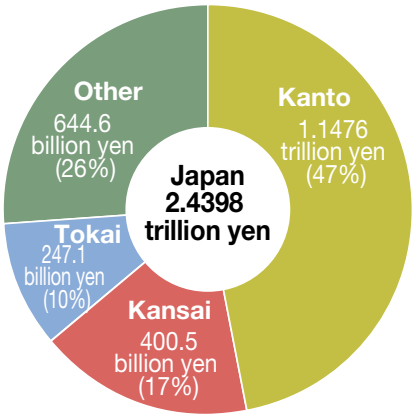
- Sharp Corporation
- KYOCERA Corporation
- OMRON Corporation
- Murata Manufacturing Co., Ltd.
- ROHM Co., Ltd.
- Nidec Corporation
- KEYENCE Corporation
- Sumitomo Electric Industries, Ltd.
- GS Yuasa Corporation
- Nissin Electric Co., Ltd.

◇Share of pharmaceutical and medical device related product shipment in Japan

Pharmaceuticals



Medical equipment



Source: “Census of Manufactures, 2019” by the Ministry of Economy, Trade and Industry (METI)

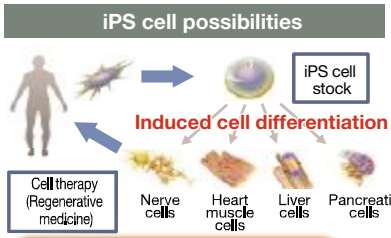
◇The World's Top-level Research Institutes and Results

In Kansai, there are a large number of world-leading scientific and technological platforms and advanced research institutes for innovation in the life sciences field. Networking of synchrotron radiation facilities and supercomputers enables simulation, verification and reproduction of enormous quantities of data, as well as research and development of innovative drugs. In addition, Kansai leads the world in research on iPS cells, which is being carried out at Center for iPS Cell Research and Application, Kyoto University, RIKEN, and Osaka University, etc.

◇World-leading iPS cell research

① iPS cell stock for regenerative medicine [CiRA Foundation]

Cells provided by healthy donors are used to produce and stock iPS cells for regenerative medicine, saving more time and money than transplanting the patient' s own cells.
An initiative known as "my iPS" is also underway to reduce the time and expense of autologous transplants by automating cell production, with the goal of supplying cells by 2025.



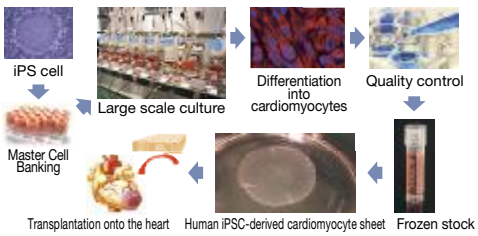
Prof. **Shinya Yamanaka**
Representative Director, Kyoto University iPS Cell Research Foundation

*Photograph courtesy of the Center for iPS Cell Research and Application (CiRA), Kyoto University

② Myocardial regenerative medicine using iPS cell-derived cardiac cell sheet [Osaka University and its collaborators]

The Department of Cardiovascular Surgery at Osaka University's Graduate school of Medicine is developing a new treatment for severe heart failure using iPS cells prepared by Kyoto University's CiRA (currently CiRA_F). Using the differentiation inducting method, iPS cells are differentiated into myocardial cells, which are then synthesized into myocardial cell sheets. When the myocardial cell sheets are transplanted to the surface of a damaged heart, physiologically active cytokines are produced and released, resulting in the promotion of angiogenesis and tissue repair. As they also aid pulsation of the heart, an improvement in heart function is expected. Clinical application of this treatment method was approved in 2018, and a patient suffering from serious cardiomyopathy received the world's first transplant using it in January 2020. By the end of 2021, the transplantation to 3 patients completed, and development for industrialization is currently underway.

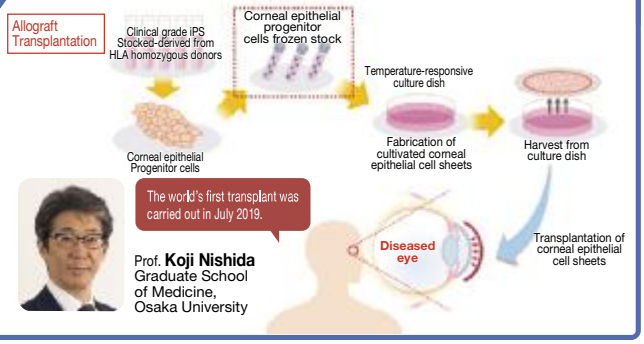
Prof. **Yoshiki Sawa**
Professor Emeritus, Graduate School of Medicine, Osaka University



In January 2020, the world's first transplantation of iPS cell-derived myocardial sheet for heart disease patients was performed.

③ Corneal epithelial regenerative medicine using human iPS cells (allograft transplantation) [Osaka University and its collaborators]

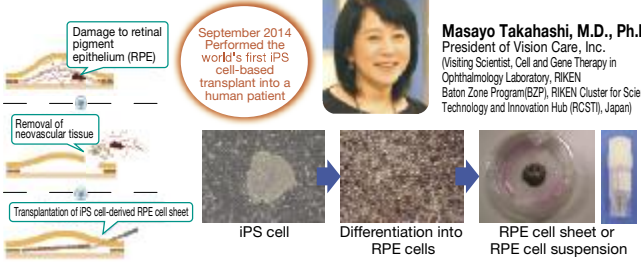
The Department of Ophthalmology, Graduate School of Medicine, Osaka University is working on developing of corneal regeneration medicine using iPS cells.
Corneal epithelial progenitor cell stocks are produced using allogeneic HLA homozygous iPS cells provided by Kyoto University CiRA (currently CiRA_F).
The use of corneal epithelial progenitor cell stocks makes it possible to produce corneal epithelial cell sheets in a short period of time and to transplant them into many patients with fewer immune-rejection.



Prof. **Koji Nishida**
Graduate School of Medicine, Osaka University

④ Regenerative therapy for retinal diseases using iPS cells [RIKEN, Kobe City Eye Hospital, etc.]

As part of its clinical research into exudative age-related macular degeneration, in 2014 RIKEN conducted (in collaboration with partners including what was then the Center for Advanced Medicine, etc.) the world's first operation to transplant retinal pigment epithelium (RPE) cells made from patient-derived iPS cells. In 2017, RIKEN conducted a transplant "beyond the family group" using healthy subject-derived iPS cells in conjunction with the Kobe City Medical Center General Hospital and other institutions. At present, beyond the family group iPS cell-derived transplants are being advanced, mainly at Kobe City Eye Hospital, including retinal sheet transplants for retinal pigment degeneration (2020) as well as RPE cell transplants (2021) for retinal pigment epithelial deficiency (a broader group of retinal degenerative diseases including atrophic age-related macular degeneration and pigmentary retinal dystrophy).



*Photographs courtesy of RIKEN

Masayo Takahashi, M.D., Ph.D.
President of Vision Care, Inc.
(Visiting Scientist, Cell and Gene Therapy in Ophthalmology Laboratory, RIKEN Baton Zone Program(BZP), RIKEN Cluster for Science, Technology and Innovation Hub (RCSTI), Japan)

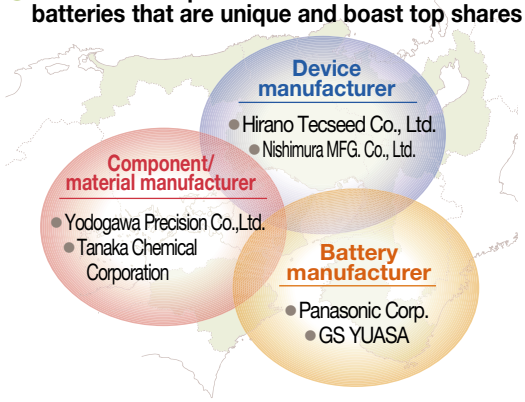
Innovation on Green Industry

◇Green Industry, Promising Growth

The Kansai region is one of the biggest cluster of Battery and Hydrogen Fuel cell–industry with cutting-edge technologies, including “only-one” top share companies. In the sector great amount of future growth is promised. In 2016, the NLAB (National Laboratory for Advanced Energy Storage Technologies, the world’s largest class testing and evaluation center for large storage batteries) was established, further enhancing the infrastructure for creating new business innovation. Meanwhile, hydrogen research is ongoing to pave the way for a switch to a hydrogen-powered economy.
Research is being actively pursued into increasing hydrogen demand and finding more ways of use in the initial stages to make hydrogen more widely accepted. Kansai is swiftly becoming a center for hydrogen-related industries.

◇Cluster of companies related to lithium-ion batteries

Cluster of companies related to lithium-ion batteries that are unique and boast top shares



Source: “2021 INVEST JAPAN, INVEST KANSAI” formed by the Kansai Bureau of Economy, Trade and Industry

◇Major companies related to fuel cells in Kansai

Fuel cell manufacturers

●Panasonic ●KYOCERA ●Hitachi Zosen Corporation

Fuel cell-related equipment and parts manufacturers

●Fujikin Incorporated ●Samtec ●Nissha FIS, Inc. ●Takaishi Industry Co., Ltd.
●Techno Takatsuki Co., Ltd. ●Yamato H2 Energy Japan
●Kaji Technology Corporation ●TOYOBO ●NIPPON SHOKUBAI

Hydrogen manufactures and storage companies

●Iwatani Corporation ●Kawasaki Heavy Industries ●AIR WATER INC.
●KOBELCO ECO-SOLUTIONS

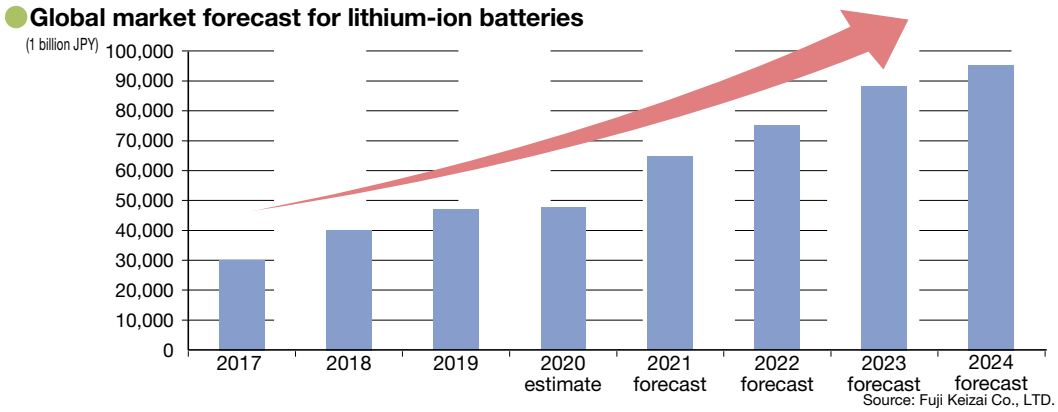
Inspection and evaluation related

●Shimadzu Corporation ●HORIBA, LTD. ●Kobe Material Testing Laboratory

Source: “2021 INVEST JAPAN, INVEST KANSAI” formed by the Kansai Bureau of Economy, Trade and Industry

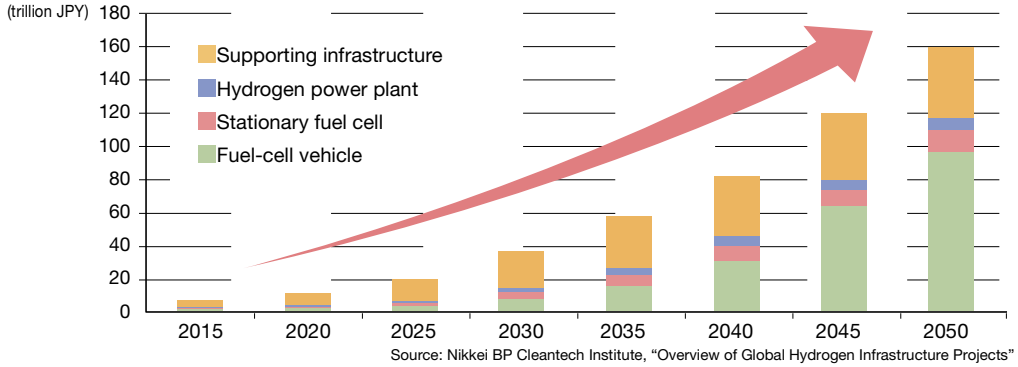
◇Green Innovation Sector Market Forecast

Global market forecast for lithium-ion batteries



Source: Fuji Keizai Co., LTD.

Global market forecast for hydrogen-related industries



Source: Nikkei BP Cleantech Institute, “Overview of Global Hydrogen Infrastructure Projects”

◇Leading Research Institutions in Kansai

National Institute of Technology and Evaluation (NITE) Osaka Office (Osaka City, Osaka Prefecture)

NITE is operating the National Laboratory for Advanced Energy Storage Technologies (NLAB) in the Cosmo Square area on Sakishima, Nanko.
The laboratory has the world's largest fire-proof, blast-proof temperature-controlled chamber. At NLAB, tests for evaluating safety, performance, etc. are conducted jointly with companies, etc. for large-scale storage batteries and other products. Results of the tests are contributing to Japan's industrial advancement as they are used to develop products and determine safety standards.

Photo credit: National Institute of Technology and Evaluation (NITE)

National Institute of Advanced Industrial Science and Technology (AIST) Kansai (Ikeda City, Osaka Prefecture)

We are promoting R&D focusing on the fields of batteries, biomedicine, and materials for daily life - industries which are highly clustered in the Kansai region - aiming through the results to link technologies and contribute to solving social issues. In addition to technological development, we are actively engaged in human resource development, industry-academia-government collaboration, cross-industry and cross-sector collaboration, regional collaboration, and international collaboration.

LIBTEC (Consortium for Lithium Ion Battery Technology and Evaluation Center) (Ikeda City, Osaka Prefecture)

LIBTEC owns the facilities for the production of trial batteries and the evaluation as well as battery-manufacturers. The facilities enable the highly reliable evaluation, including safety evaluation, for the preproduction batteries of practical size, while these evaluations are often difficult for the member material companies of LIBTEC to carry out solely. We support promotion of new materials development by domestic battery material manufacturers. We are also developing evaluation technologies for fully solid-state batteries through industry-academia-government collaboration on behalf of New Energy and Industrial Technology Development Organization (NEDO).

◇Leading Hydrogen Sector Projects in Kansai

❶ Kansai International Airport (KIX) Hydrogen Grid Project

- Currently operating the first demonstration of the fuel cell-powered forklift / hydrogen supply infrastructure at an Asian airport.
- In 2017, we built Japan's first large-scale airport hydrogen infrastructure for industrial vehicles in the international freight zone, achieving a reduction in CO_2 emissions and a significant improvement in the working environment through fuel cell forklifts.
- Built in 2016, this hydrogen station supplies hydrogen to fuel cell vehicles.

Fuel-cell forklifts and large-scale infrastructure for supplying hydrogen to industrial vehicles

Fuel-cell vehicle and hydrogen station
Photo credit: Kansai Airports

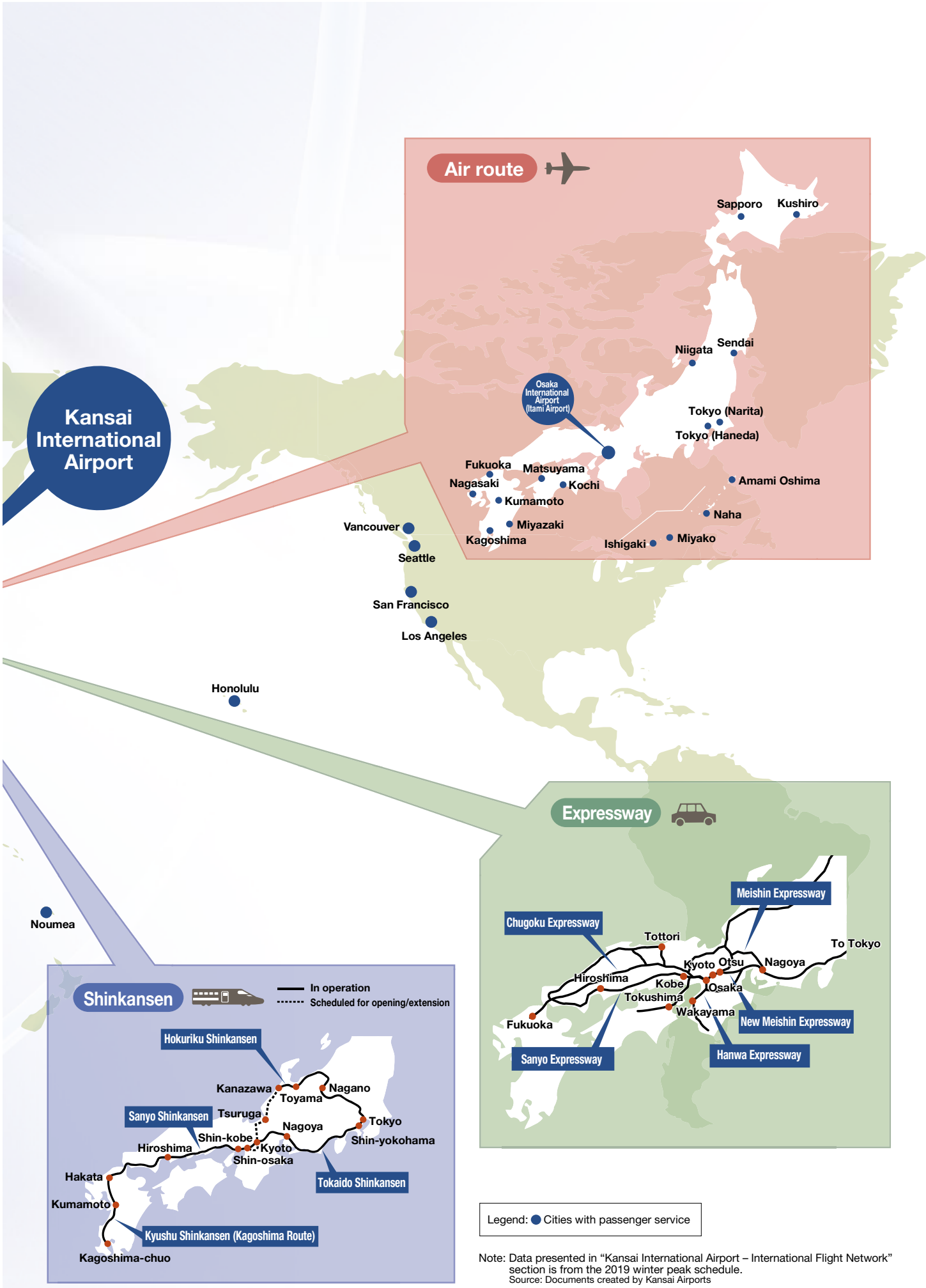
❷ Hydrogen Smart City Kobe Initiative

- The demonstration project has been promoting, on the cutting edge of the world-wide innovation, for establishment of mass hydrogen marine transportation supply chain. (subsidized by NEDO)
- To promote the demonstration project of a hydrogen and natural gas fueled cogeneration system development, the project integrates efforts of public, private and academic sectors in constructing electricity and heat supply system for public facilities. (subsidized by NEDO)
- The project promotes the installation of more hydrogen stations and the use of fuel cells.

Photo credit: HySTRA

Transport and Access in Kansai

The Kansai region is a transport hub linked to major cities around the globe by land, air and sea.
This excellent transport infrastructure is the foundation of the smooth flow of people and goods for the region.



Legend: ● Cities with passenger service

Note: Data presented in "Kansai International Airport – International Flight Network" section is from the 2019 winter peak schedule.
Source: Documents created by Kansai Airports

Aiming to form a global Biocommunity

Biocommunity Kansai (BiocK)

BiocK - a global bio-community recognized by the Cabinet Office - promotes innovation, encourages network formation, and disseminates information both in Japan and overseas in order to create a high-performing biotechnology sector ecosystem based in the Kansai.
The Kansai attracts people, products, investment, and information not only from within Japan but around the world. As a region where innovation is born, it aims to shine on the world stage, leading the future of Japan.
The Kansai region has a long history of biotechnology industries, such as brewing and pharmaceuticals. In recent years, Kansai organizations have been leading the world in biotechnology research and practical applications, such as iPS cells and cancer immunotherapy.

In order to confront global-scale social issues such as environmental problems, energy, healthcare, and sustainable primary production systems in the future, it is essential to promote the concept of bio-first which utilizes the inherent power of living organisms, and networked open innovation.
BiocK aims to concentrate the potential of bio-related companies, new ventures, academia, research institutions, financial institutions, governments, and a wide range of projects to create a needs-driven flow to address social issues in Japan and around the world.
BiocK's role is to create the community at the heart of this new era of collaboration.
Building on our slogan "From clustering to collaboration: A diversity of connections", BiocK aims to make Kansai a generator of biotechnology which is helpful to society all over the world.


Environmental energy


Healthcare


Food / Agriculture


Medical care


Startup

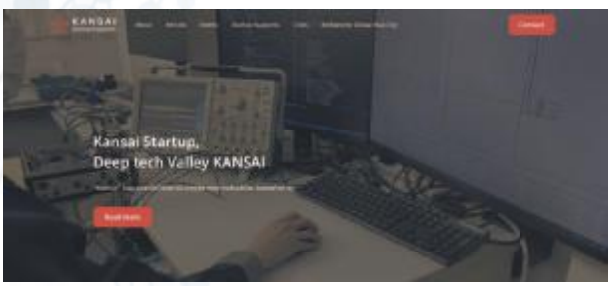

Bioplastic

One of Japan's Leading R&D Startup Regions

Deep Tech Valley "KANSAI"

With its cluster of leading universities, research institutes, companies, and supporting organizations driving world-class research across a diverse range of fields, the Kansai region has outstanding potential to create world-class innovation. The Kansai attracts people, products, investment, and information not only from within Japan but around the world. As a region where innovation is born, it aims to shine on the world stage, leading the future of Japan.

In particular, the Kansai is ideally positioned in the field of "Deep Tech," which aims to solve global issues through innovative technologies generated by advanced R & D capabilities. Powered by its robust cluster of universities, companies, and human resources, the Kansai region is rapidly developing technological seeds across a wide range of fields such as biotechnology, healthcare, life sciences, manufacturing, data, AI, and robotics.




Bio

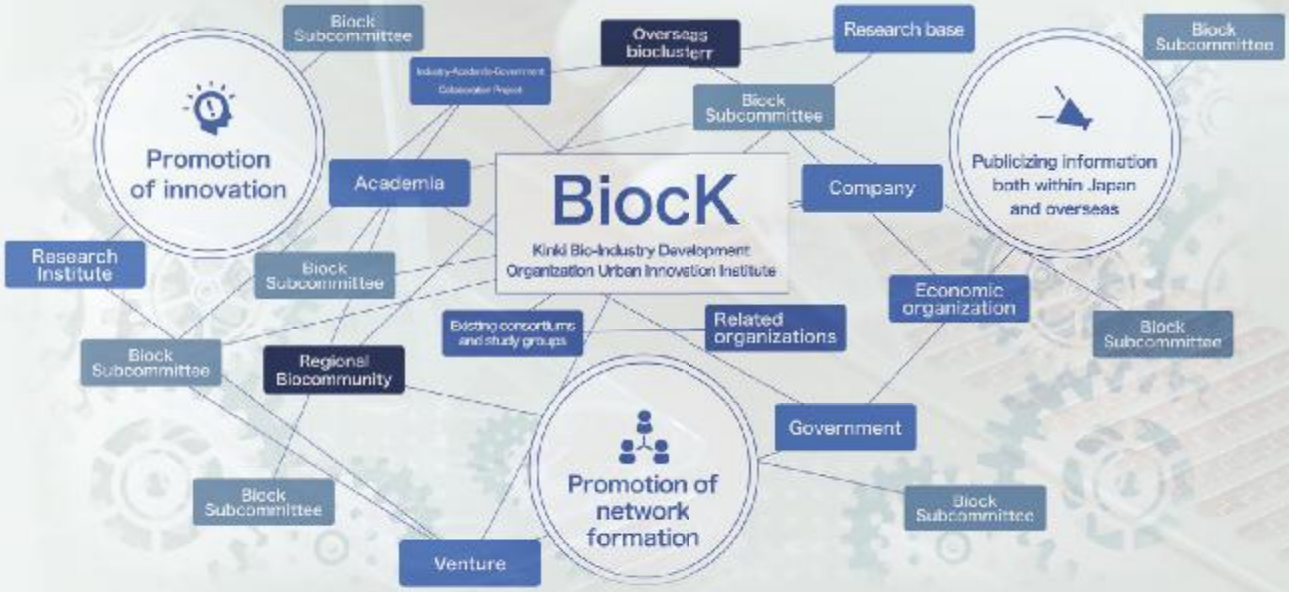

Healthcare


Life science


Manufacturing


Information / AI / Robotics

From clustering to collaboration: A diversity of connections



"Kansai" has possibilities to create new industries based on it.

Point

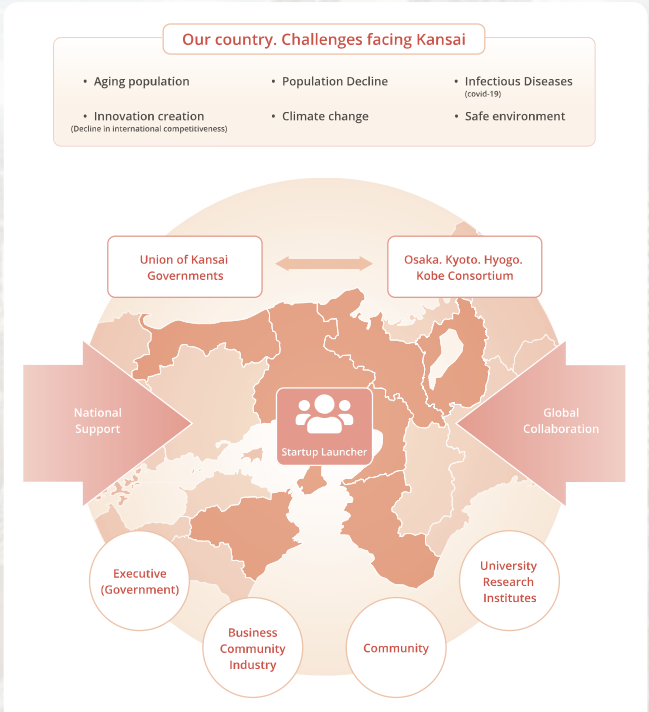
This initiative aims to revitalize the Kansai economy by showcasing the attractiveness, potential, and future prospects of the Kansai Startup Ecosystem within Japan and overseas, creating clear differentiation from other areas, and building a brand that enables the clustering of various domestic and overseas resources (such as startups, companies, human resources, investors, and venture capital).

KANSAI
Startup Ecosystem

Detail

The Kansai Startup Ecosystem Communications Project has formulated a strategy for conveying information, based on which it operates the Kansai Startup Ecosystem web portal to provide a first point of contact. The site provides a wide range of content - such as electronic brochures introducing the respective member prefectural and city governments, startup support information, and event information - to enhance the communication of information to Japanese and overseas media.

KANSAI Startup Ecosystem portal site



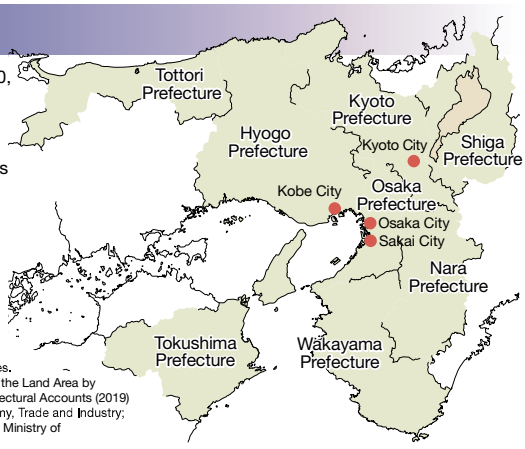
Contact List of Member Prefectures and Cities

Member	Name	Contact details URL
Shiga Prefecture	Department of Commerce, Industry, Tourism and Labor Commerce and Industry Policies Division	TEL: +81-77-528-3712 E-mail: fa0001@pref.shiga.lg.jp https://www.pref.shiga.lg.jp/kensei/gaiyou/soshiki/shoukoukankouroudoubu/shoukouseisakuka/index.html
Kyoto Prefecture	Industry and Labor Affairs Division Department of Commerce, Labor and Tourism	TEL: +81-75-414-4820 E-mail: sanroso@pref.kyoto.lg.jp https://www.pref.kyoto.jp/info/gyosei/soshiki/081/index.html
Osaka Prefecture	Department of Commerce, Industry and Labor General Affairs Division	TEL: +81-6-6210-9294 E-mail: sangyo@kouiki-kansai.jp https://www.pref.osaka.lg.jp/shokosomu/
Hyogo Prefecture	General Affairs Division, Industry, Employment and International Affairs Department	TEL: +81-78-362-3351 E-mail: sangyou_soumu@pref.hyogo.lg.jp https://web.pref.hyogo.lg.jp/org/sangyo-somu/index.html
Wakayama Prefecture	Commerce, industry, tourism and labor department Commerce, industry and labor policy bureau Commerce, industry, tourism and labor general affairs division	TEL: +81-73-441-2725 E-mail: e0601001@pref.wakayama.lg.jp http://www.pref.wakayama.lg.jp/prefg/060100/
Tottori Prefecture	Department of commerce, Industry, and Labor Commerce, industry and labor policy division	TEL: +81-857-26-7538 E-mail: shoukou-seisaku@pref.tottori.lg.jp http://www.pref.tottori.lg.jp/shoukouseisaku/
Tokushima Prefecture	Commerce, industry, labor and tourism department Commerce and industry policy division	TEL: +81-88-621-2315 E-mail: syoukouseisakuka@pref.tokushima.jp http://www.pref.tokushima.lg.jp/kenseijoho/soshiki/shoukouroudoukankoubu/syoukouseisakuka/
Kyoto City	Industry Planning Office Industry and Tourism Bureau	TEL: +81-75-222-3325 E-mail: sangyokikaku@city.kyoto.lg.jp https://www.city.kyoto.lg.jp/sankan/soshiki_list.html
Osaka City	Industrial Promotion Department Industrial Promotion Division Economic Strategy Bureau	TEL: +81-6-6615-3761 E-mail: ga0006@city.osaka.lg.jp http://www.city.osaka.lg.jp/keizaisenryaku/index.html
Sakai City	Industry Planning Division Commerce Strategy Department Industrial Promotion Bureau	TEL: +81-72-228-7414 E-mail: sanki@city.sakai.lg.jp http://www.city.sakai.lg.jp/shisei/gaiyo/annai/gyoseikiko/sangyo/shoko/sansei.html
Kobe City	Economic Policy Division Economic and Tourism Bureau	TEL: +81-78-984-0330 E-mail: etb_kikaku@office.city.kobe.lg.jp https://www.city.kobe.lg.jp/a31812/shise/about/construction/soshiki/1400/1400/1403.html

Union of Kansai Governments

The Union of Kansai Governments is a special local government established on Dec. 1, 2010, as Japan's first regional government association extending beyond prefectural territories. We strive to make Kansai a region that leads the creation of a decentralized society with a two-perspective structure, encourages the free flow of people with unique qualities and strengths to ensure prosperity in the whole region, and serves as a new capital that functions as an Asia hub.

- **Population:** 21.70 million (17.3% of Japan's population)
- **Area:** 35,006 km^2
- **GRP:** 93.9 trillion yen (16.2% of Japan's GDP)
- **Offices:** 1,147,613
- **Trade value:** 34.4 trillion yen
- **Universities:** 158



Note: The above figures show aggregated data of Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama, Tottori and Tokushima Prefectures.
Source: Population Estimates (as of Oct. 1, 2021) by the Ministry of Internal Affairs and Communications; 2022 Statistical Reports on the Land Area by Prefectures and Municipalities in Japan by the Ministry of Land, Infrastructure, Transport and Tourism; Annual Report on Prefectural Accounts (2019) by the Cabinet Office; 2019 Economic Census by the Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry; Trade Statistics (2021) by Osaka Customs; Trade Statistics (2021) by Kobe Customs; 2021Basic Research on Schools by the Ministry of Education, Culture, Sports, Science and Technology

Region-wide Industrial Promotion Office, Union of Kansai Governments

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Website of the Region-wide Industrial Promotion Office

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