

# 北九州学術研究都市 2018-2019

**KSRP**

Kitakyushu Science and Research Park



Kitakyushu Foundation for the Advancement of Industry,  
Science and Technology (FAIS)

## About Kitakyushu Science and Research Park

Kitakyushu Science and Research Park (KRSP) opened in April 2001, aims to "further the development of technology and the creation of new industries" and "Technologies research center open to Asia" through a single campus integration of national, municipal and private universities that specialize in science and engineering. The four universities (and 1 undergraduate program) already based at the park are engaged in the training and research of cutting-edge science technologies, in particular, IT and biotechnology under the common philosophy of KSRP.

## Objectives of the Kitakyushu Science and Research Park

Utilizing the "intelligence" of universities to promote local industries and science

Technologies research center open to Asia

Promoting the creation of new industries and the further development of technology

Construction of a cutting-edge industrial city in Asia

that creates new technology and enriches lives

Strategic objectives of new growth in Kitakyushu

## Kitakyushu Science and Research Park Project

### Fundamental policy

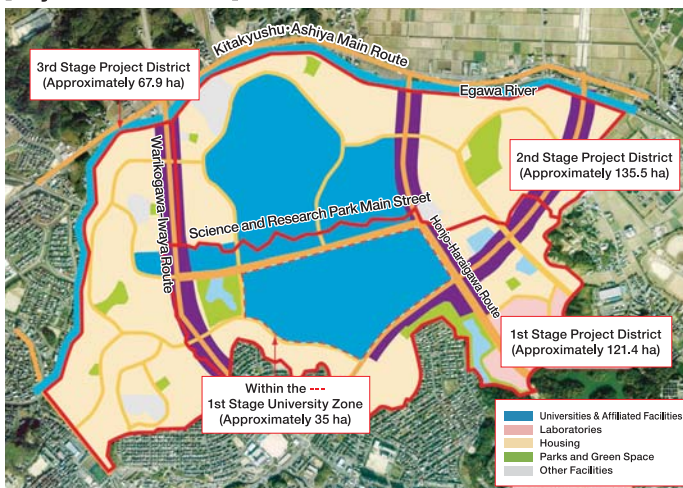
Taking advantage of both natural and urban environments, besides hosting educational and research institutes related to cutting-edge science technology, the facility also provides a comfortable residential environment. The science and research park is being developed based on the concept of "multi-perspective town planning."

**Development areas :** Western section of Wakamatsu,  
Northwestern section of Yahatanishi

**Total development area :** Approximately 335 ha

**Planned population :** 12,000 (Daytime population)

### [Layout of Land Use]



### Construction schedule :

1st Stage Project (Approximately 121 ha)

1995 - 2006 ※Project completed

Developer : Urban Renaissance Agency

2nd Stage Project (Approximately 136 ha) 2002 - 2018

Developer : City of Kitakyushu

3rd Stage Project (Approximately 68 ha)

Under Consideration

River improvement (Approximately 10 ha)

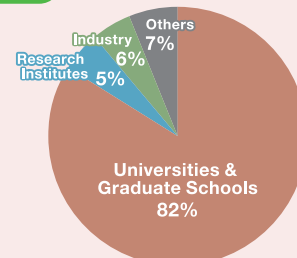
### Daytime Population of Kitakyushu Science and Research Park (As of May 1, 2018)

## Approximately 3,500

**Students** 2,466 (including 712 foreign students)

**Faculty members** \*Only full-time faculty 166 (including 32 from industry)

**Researchers** 234 (including 69 foreign researchers)





# Features of Kitakyushu Science and Research Park

## Universities and Research Institutes Related to Science, Engineering, and Research Departments of Companies Located on Campus

- National, municipal, and private universities (1 faculty, 4 graduate schools)  
Faculty and Graduate School of Environmental Engineering, The University of Kitakyushu  
Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology  
Graduate School of Information, Production and Systems, Waseda University  
Graduate School of Engineering, Fukuoka University
  - Public and private research institutions (13 research institutes)
  - Companies involved in research and development (48 companies)
- (As of August 2018)

## Common Educational and Research Principles among Universities on the Campus

- Conducting advanced education and research in the fields of cutting-edge science technology
- Promotion of collaboration between industry and academia
- Nurturing an entrepreneurial spirit
- Establishing a center for academic research in Asia

## Cooperative Campus Management & Common Use of Facilities

- The Kitakyushu Science and Research Park steering committee is composed of representatives from universities within the campus, and plans for joint endeavors
- Common use of libraries, information processing facilities, convenient facilities, and others

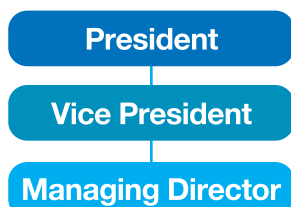
## Exchange and Collaboration among Researchers, Staff, and Students

- Joint research and faculty exchanges among participating universities
- Transferable credits to other universities
- Operating joint graduate school programs of participating universities on the campus  
Joint Graduate School in Car Electronics course  
Joint Graduate School in Intelligent Car & Robotics Program

# Operation and management of the Kitakyushu Science and Research Park

## Kitakyushu Foundation for the Advancement of Industry, Science and Technology (FAIS)

### FAIS Organizational Structure



# FAIS

**Kitakyushu Foundation  
for the Advancement  
of Industry, Science and Technology**

● **President** : Morio Matsunaga

● **Board of Directors, etc.** :

#### [Academia]

Vice President of Kitakyushu Science and Research Park participating universities  
Presidents of Science and Technology universities in Kitakyushu City

#### [Industry]

The Chamber of Commerce and Industry, and other business organizations

#### [Administration]

Kitakyushu City, Fukuoka Prefecture

### Campus Administration Center Administration and Planning Department

This center carries out joint operations of the Kitakyushu Science and Research Park. It administers shared usage of facilities within KSRP, and promotes partnerships and exchanges among universities participating in KSRP.

### SME Support Center SME and Business Venture Support Development

This center offers a one-stop service system for small and medium-sized enterprises (SME) and businesses. The center provides research and development support, consultation, and technical expert dispatch services to support individuals and SMEs planning to start businesses or innovate and improve their management and technology. The SME Support Center also operates the Kitakyushu Intellectual Property Support Center.

### Collaboration Coordination Center Collaboration Department Management Support Department

The Collaboration Coordination Center also promotes industrial advancement and the creation of new industries by encouraging local companies and mainly SMEs to improve productivity and promoting new styles of manufacturing through open innovation.

### Manufacturing Innovation Center

Strengthening industrial competitiveness of companies in Kitakyushu city through "innovative manufacturing" support activity. In fiscal 2018, the Manufacturing Innovation Center incorporated the semiconductor and electronics sector into its activities and provides support to local companies to promote this industry.

### Information Industry Promotion Center

The Information Industry Promotion Center is engaged in the promotion of local industries through the (1) creation of new business, (2) advancement of local industries and development of information industries as part of the second phase of the e-PORT Initiative 2.0, taking advantage of the concentration of information and telecommunications industries and the know-how on new business creation that has been built-up over the past years.

### Car Technology Center

This center focuses on automotive electronics and the increasing importance of next-generation automobiles. Based on research group activities coordinated by company engineers and university researchers, the center promotes collaborative research and development as well as development of professional human resources including support of the Joint Graduate School by three KSRP universities: "Automotive Electronics Program" and "Intelligent Car & Robotics Program."

### Robotics Technology Center Robotics Development Support Department

This department operates the Kitakyushu Robot Forum for the purpose of industrial development of robots in the Kitakyushu region. The department also focuses on the technical development and demonstration of robots through coordination from investigation and development to demonstration of robot technology and collaborative research and development by universities and robot-related companies participating in KSRP. In addition, the center actively serves to support the introduction of robots and develop human resources for promotion of widespread use in local companies.

### National Strategic Special Zone Line

In response to the designation of the City of Kitakyushu as a National Strategic Special Zone, this line oversees the Nursing Care Robot Development Consortium and provides support for the development and improvement of nursing robots to reduce the burden of care on nursing personnel and improve the quality of nursing services through robot technologies.

Promotion of excellent joint research facilities of KSRP attracts not only universities to the campus, but also companies related to semiconductor design and research institutes. In addition, 18 venture companies have been established utilizing research \*seeds of the universities of KSRP.

As of August 1, 2018

	Name of Research Institution	Location	Research Content
1	Information, Production and Systems Research Center, Waseda University	Information, Production and Systems Research Center, Waseda University	World-class, advanced research and human resources development in the fields of automotive electronics and LSI.
2	Kitakyushu Research Laboratory, Shanghai Jiao Tong University (China)	Information, Production and Systems Research Center, Waseda University	Research on ubiquitous advanced information processing technologies, industrial robots and control systems, and ambient SoC technologies, other.
3	Kitakyushu Research Laboratory, Korea Advanced Institute of Science and Technology (KAIST) - Pusan National University	Information, Production and Systems Research Center, Waseda University	Research and development on advancements in the robotics, energy, and automobile industries.
4	Research Center for Solar Light Energy Conversion, Kyushu Institute of Technology	Kyushu Institute of Technology	Research and development on the direct conversion of solar light energy into electric energy or chemical energy, and storage materials and devices to store energy.
5	Kyushu Institute of Technology, Research Center for Next-Generation Power Electronics	Kyushu Institute of Technology and Semiconductor Center	Research on next-generation power electronics focusing on power semiconductors that can contribute to the development of a low-carbon society, such as the promotion of energy savings and the application of advanced technologies for electric power and natural energy.
6	Institute of Environmental Science and Technology, The University of Kitakyushu	The University of Kitakyushu	Strategic promotion of research and technology development in the fields of the environment, energy, biomaterials, information, robot technologies, and others to respond to changes in the global environment and the needs of local society.
7	Fukuoka Research Commercialization Center for Recycling Systems	Collaboration Center	Research bringing together environmental and recycling technologies and social systems with joint action by industries, academia, and the public and private sectors to create a material-cycle society.
8	Academic, Industrial and Governmental Liaison Center, Fukuoka University Kitakyushu Industry-Academia Cooperation Promotion Office	Collaboration Center	Expansion of the promotion of environmental industries through industrial, academic, and government collaboration to match corporate needs of environmental industries and the policies and seeds of municipal governments.
9	HiBD Laboratory Association	Collaboration Center and Business Venture Support Center	Research and development on the manufacturing of liquid fuel from renewable resources and carbon dioxide.
10	Fuzzy Logic Systems Institute Imasato's Laboratory	Semiconductor Center and Technology Development and Exchange Center	Test studies on information processing systems that apply fuzzy logic.
11	Center for Contemporary Art, CCA Kitakyushu	IT Advancement Center	Research and development on expression technologies through information and communications to create multimedia contents and develop human resources in cooperation with universities.
12	Green Electronics Research Institute, Kitakyushu	Business Venture Support Center	Research on the design of next-generation power semiconductors, credibility studies, and development of compact power sources. Collaborative research with universities and companies and development of human resources.
13	Behavior Assessment Systems Laboratory	Business Venture Support Center	Development of application to check the mental conditions of athletes.

# Companies

As of August 1, 2018

	Resident Location	Company Name	Current Business Content
1	Collaboration Center	INFOGRAM Inc., Kitakyushu Branch Office	System development, computer educational services, internet services, and all incidental work related to the preceding items
2		ISHIDA PATENT OFFICE	Proxy for application procedures for patents and registration of utility models, designs, and trademarks, consulting services on filing patent applications
3		● Ra.Stedeas Co.,Ltd	Research and development on LED lighting
4		KOA CORPORATION	Information collection and information exchange on electronic parts, sensor elements, and sensor modules, joint industry-academic development
5		PLANTMAKE RISE	Development of coating agents for incinerator facilities, development of structural calculation software using 3D scanners
6	Semiconductor Center	Security Information Laboratory	Systems development and maintenance (24 hours a day, 365 days a year)
7		K2R Inc.	Research and development on water generation equipment containing radical species using catalytic reactions
8	IT Advancement Center	Windy Co.,Ltd.	Development of software used at hospitals and pharmacies, development of work analysis software used at automobile plants
9		Mishimakosan Co.,Ltd.	Development and manufacturing of automatic drug dispensers to remove wrappers and pharmaceutical-related equipment
10		Health Resources Research and Consulting Inc.	Research and development of educational systems
11		OHG Institute Co.,Ltd	Research and development of clinical tests and clinical testing technology, analysis of biological samples
12	Business Venture Support Center	● BE Corporation	Research and development on image processing systems and software
13		● Technology for Laboratory Inc.	Development and sales of clinical engineering educational equipment and optical transmission bio-signal measuring devices
14		● BraTech Co.,Ltd.	Development of web systems, academic solution programs
15		sMedio,Inc.	Research and development of systems in next-generation broadcasting (advanced band satellite broadcasting)
16		● RoboPlus Hibikino Co.,Ltd.	Design, manufacturing, and sales of mechatronics, consulting services
17		HAKUTSU TECHNOLOGY Corporation.	Development of illuminated, energy-saving control systems using wireless sensor networks
18		Hibikino Accounting Office	Yamaguchi Certified Public Accountant and Tax Accounting Office (certified public accounting services)
19		AKSystem Co.,Ltd	Research and development on applications for new industrial fields, such as techniques to fabricate manufacturing equipment for semiconductors
20		Calsonic Kansei Corp.	Joint research with the City of Kitakyushu (Green Electronics Research Institute)
21		ITS Inc.	Research and development on electronic parts, such as semiconductor integrated circuits
22		● Artix,inc	Research and development on FinTech and artificial intelligence, research and development on computer software
23		● CCAS Co.,Ltd.	Research and development on manufacturing systems for modified fly ash concrete
24		HOKOSYA Co., Ltd.	Research and development on curved surface wiring technologies using molecular adhesion technologies and high-luminance, highly-reliable LED lighting
25		Lab Co., Ltd. (plan to start a business)	Research and development on unmanned robot factories connecting design and manufacturing facilities with the cloud
26		● KAEI TRADING CO.,LTD	Research and development on environmental technologies and environmental products for application in China
27		TuSimple JAPAN	Research and development, design, and sales of autonomous driving technology for vehicles
28		● Mirai Work System,LLC	Development of tools to reduce labor and work and related business
29		Organization for Career Education & Support	Career guidance in secondary education, career education, and education for career counseling
30		SEI (plan to start a business)	Development and research on data management systems for 3D shipbuilding
31	Technology Development and Exchange Center	Shikino High-Tech Co.,LTD	Design/manufacturing/control of semiconductor equipment, LSI circuit design/layout, other
32		YOSHIKAWA KOGYO RF SOLUTION CENTER	Research and development projects on RF-ID
33		C&G SYSTEMS INC.	Development of CAD/CAM software for mold design and processing
34		Shabondama Soap Co.,Ltd.	Manufacturing and sales of additive-free cosmetic soap, household cleaners, fire retardants, other
35		TORICO LTD	Development and repair of electrical parts
36		● Kankyou Photonics Co.,Ltd.	Research, development, and sales of LED light sources for plant growth
37		● FILTOM, INC.	Development, manufacturing, and sales of cosmetics using placenta extract (placenta fluids from pigs)
38		AISIN SEIKI CO., LTD.	Development of elemental technologies, such as image recognition/spatial recognition, and vehicle control
39		Nisshinbo Holdings Inc.	Research and development on sensors in Advanced Driving Assistance Systems (ADAS) and fusion
40		● Hibikino electronic corporation	Development of electrical field resonance-type bio-sensing and sensing data analysis systems
41		KOISHI CO., LTD	Experiments and measurements
42		● EnH Japan Co. Ltd.	Research and development on new bio-environmental nanomaterials and measuring instruments
43		KYOTO ELECTRONICS MANUFACTURING CO., LTD.	Development of prototypes and evaluations to establish technical elements for the manufacturing of new sensors
44		Japan unmanned vehicle exploration agency	Advancement and dissemination of research on unmanned aircraft as a site for the exchange of knowledge and provision of information on studies, research, and technology improvement for all unmanned aircraft
45		Estate. One Co.,Ltd.	Research on eco-friendly housing products and AI housing
46		● Secure Cycle Inc.	Development of general platforms for behavior recognition technologies and security
47		YASKAWA ELECTRIC CORPORATION	Robot tests and imitation of human movement
48		Other, 1 company	

\* ● Indicates new business from KSRP ventures (14 companies)



# Universities, research institutes, companies, and facilities for industry-acade

## 1 The University of Kitakyushu

### Faculty of Environmental Engineering

■ Student capacity: 1000  
 Department of Chemical and Environmental Engineering  
 Department of Mechanical Systems Engineering  
 Department of Information and Media Engineering  
 Department of Architecture  
 Department of Life and Environment Engineering

### Graduate School of Environmental Engineering

■ Student capacity: 336  
 Graduate Programs in Environmental Systems  
 Graduate Programs in Environmental Engineering  
 Graduate Programs in Information Engineering  
 Contact: Press Department  
 +81-93-695-3311



## 2 Kyushu Institute of Technology



### Graduate School of Life Science and Systems Engineering

■ Student capacity: 352  
 Department of Biological Functions Engineering  
 Department of Human Intelligence Systems  
 Department of Life Science and Systems Engineering  
 Contact: Administration Office, School Affairs Division +81-93-695-6003



## 3 Waseda University



### Graduate School of Information, Production and Systems

■ Student capacity: 460  
 Information Architecture  
 Production Systems  
 Integrated Systems  
 Contact: Administration Office +81-93-692-5017

## 4 Fukuoka University

### Graduate School of Engineering

■ Student capacity: 32  
 Graduate Program of Recycling and Eco-Technology  
 Energy and Environment Systems  
 Contact: Administration Office  
 +81-92-871-6631

## Numbers of students and professors

As of May 1, 2018

University	Undergraduate	Postgraduate	PhD	Research students	Special research students	Total number of students	Number of professors
The University of Kitakyushu Faculty of Environmental Engineering	1,134 (25)	— —	— —	6 (5)	0 (0)	1,140 (30)	87
The University of Kitakyushu Graduate School of Environmental Engineering	— —	306 (61)	77 (65)	2 (1)	0 (0)	385 (127)	—
Kyushu Institute of Technology Graduate School of Life Science and Systems Engineering	— —	266 (22)	146 (55)	2 (2)	1 (1)	415 (80)	44
Waseda University Graduate School of Information, Production and Systems	— —	468 (434)	49 (33)	2 (2)	1 (1)	520 (470)	33
Graduate School of Engineering, Fukuoka University	— —	5 (5)	1 (0)	0 (0)	0 (0)	6 (5)	2
<b>Total</b>	<b>1,134 (25)</b>	<b>1,045 (522)</b>	<b>273 (153)</b>	<b>12 (10)</b>	<b>2 (2)</b>	<b>2,466 (712)</b>	<b>166</b>

number in ( ) indicates the number of foreign students

\*Inside collaboration center



## A Collaboration Center

Collaboration Center  
Building 1



### Core facilities for pursuing research among industry, academia and government

The Fukuoka Research Commercialization Center for Recycling Systems and other research institutes, companies conducting cutting-edge research, and Graduate School of Engineering, Fukuoka University are located in the Center. In addition, the Collaboration Center is also equipped with a conference room and seminar room that can accommodate up to 100 visitors.

- Laboratories (31 rooms)
- Conference room, Seminar room (S, M)



## F Media Center

Library,  
Information Processing Facility



### Multimedia station, integration, and transmission of Information

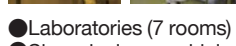
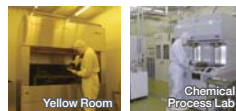
In addition to the collection and provision of scientific information (library) and education for students in information processing, the Media Center manages the on-campus broadband information network and provides various communications services.

### Laboratory Rental Fees

©2,000 yen/m<sup>2</sup> per month (Common fees : 500 yen/m<sup>2</sup> per month)  
(Example: In the case of a laboratory that is 50 m<sup>2</sup> the approximate fee is 1.5 million yen per year (common fees are not included))

## B Semiconductor Center

Collaboration Center  
Building 2



### Facilities to support research and development of semiconductor microfabrication technology

This facility is for research and development of semiconductor manufacturing related fields by companies and universities. The facility offers use of high-precision machinery for research and development related to trial manufacturing of ICs and MEMS and is equipped with laboratories. The practical experiments on trial manufacturing of ICs (CMOS process) are also available.

- Laboratories (7 rooms)
- Shared micromachining devices for ICs and MEMS (Electron beam drawing apparatus, ion implanters, double-sided exposure apparatus, rapid heat treatment apparatus (RTA), dicing saw, bonding equipment, etc.)

## C IT Advancement Center

Collaboration Center  
Building 3



### Facilities for conducting research and development on networks and semiconductor design

This facility is for research and development related to semiconductor design technology and advanced information and communication technology by companies and universities.

- Laboratories (32 rooms)
- Conference room
- Facilities for R&D of semiconductor design

## D Business Venture Support Center

Collaboration Center  
Building 4



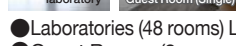
### Facilities to support R&D and commercialization for starting up new businesses from campus ventures

This facility provides general office clerical, mechanical and chemical laboratories and small booth units are available in the joint laboratory.

- Laboratories (36 rooms) Large Laboratories, Chemical Laboratories
- Conference room (S,M)
- Collaborative Laboratory (10 booths)

## E Technology Development and Exchange Center

Collaboration Center  
Building 5



### Facilities to support new technology development in fields such as robotics and automotive electronics

This facility supports new technology development in the fields of robotics and automotive electronics by utilizing the achievements of the Kitakyushu Science and Research Park. Guest rooms are furnished for visitors who come to KSRP for the purpose of research.

- Laboratories (48 rooms) Large Laboratories, Chemical Laboratories
- Guest Rooms (9 rooms) 8 single rooms, 1 twin room
- Conference room (S,M)
- Collaboration rooms (2 rooms)



## Contact Information: Kitakyushu Foundation for the Advancement of Industry, Science and Technology (FAIS)

【Kitakyushu Science and Research Park website】 <http://www.ksrp.or.jp/>

【Kitakyushu FAIS website】 <http://www.ksrp.or.jp/fais/>

General information for the Kitakyushu Science and Research Park		E-mail / info@ksrp.or.jp
<b>Campus Administration Center</b>	Kitakyushu Science and Research Park, Collaboration Center 1st Floor, 2-1 Hibikino, Wakamatsu-ku, Kitakyushu 808-0135	TEL +81-93-695-3111 FAX +81-93-695-3010
Inquiries related to research content of universities and collaboration between industry and academia		E-mail / iac@ksrp.or.jp
<b>Collaboration Coordination Center</b>	Kitakyushu Science and Research Park, Collaboration Center 2nd Floor, 2-1 Hibikino, Wakamatsu-ku, Kitakyushu 808-0135	TEL +81-93-695-3006 FAX +81-93-695-3018
Support for "innovative manufacturing" activities and semiconductor companies, inquiries on other R&D projects, other		E-mail / iac@ksrp.or.jp
<b>Manufacturing Innovation Center</b>	Kitakyushu Science and Research Park, Collaboration Center 2nd Floor, 2-1 Hibikino, Wakamatsu-ku, Kitakyushu 808-0135	TEL +81-93-695-3007 FAX +81-93-695-3667
Inquiries on new business creation in the ICT field		E-mail / iipc@ksrp.or.jp
<b>Information Industry Promotion Center</b>	Kitakyushu Science and Research Park, Collaboration Center 2nd Floor, 2-1 Hibikino, Wakamatsu-ku, Kitakyushu 808-0135	TEL +81-93-695-3077 FAX +81-93-695-3667
e-PORT Cluster Promotion Section, Information Industry Promotion Department		Kyushu Human Media Creation Center 1-5-7 Higashida, Yahatahigashi-ku, Kitakyushu 805-0071
		TEL +81-93-663-2950 FAX +81-93-663-2955
Inquiries related to research and development, human resources development, etc., in the car field		E-mail / car@ksrp.or.jp
<b>Car Technology Center</b>	Kitakyushu Science and Research Park, Technology Development and Exchange Center 1st Floor, 8-1 Hibikino-kita, Wakamatsu-ku, Kitakyushu 808-0138	TEL +81-93-695-3685 FAX +81-93-695-3686
Inquiries related to research and development, human resources development, etc., in the robotics field		E-mail / robotics@ksrp.or.jp
<b>Robotics Technology Center</b>	Kitakyushu Science and Research Park, Technology Development and Exchange Center 1st Floor, 8-1 Hibikino-kita, Wakamatsu-ku, Kitakyushu 808-0138	TEL +81-93-695-3085 FAX +81-93-695-3525
Inquiries on R&D and human resources development related to support for the development of nursing care robots		E-mail/robocare@ksrp.or.jp
<b>National Strategic Special Zone Line</b>	Kitakyushu Science and Research Park, Technology Development and Exchange Center 1st Floor, 8-1 Hibikino-kita, Wakamatsu-ku, Kitakyushu 808-0138	TEL +81-93-695-3046 FAX +81-93-695-3525
Inquiries related to establishing new businesses and management of SME		E-mail / k_info@ksrp.or.jp
<b>SME Support Center</b>	Kitakyushu Techno Center, 1st Floor, 2-1 Nakabarushin-machi, Tobata-ku, Kitakyushu City 804-0003	TEL +81-93-873-1430 FAX +81-93-873-1450



### ACCESS

By Public Transportation  
By Car

●Bus stop at JR Orio Station West Exit → City Bus → Gakkentoshi(KSRP) Hibikino \*Approx. Time : 15 min.  
●Bus stop at Kitakyushu Airport → Nishitetsu Bus → Gakkentoshi(KSRP) Hibikino \*Approx. Time : 80 min.  
●Kitakyushu Urban Expressway Kurosaki Ramp \*Approx. Time : 20 min. from the Kitakyushu Urban Expressway, Kurosaki Ramp  
●Center of Kokura → Kitakyushu Urban Expressway Higashida Ramp → Kurosaki Bypass Kogasaki Ramp → Gakkentoshi(KSRP) Hibikino  
\*Time required: Approx. 30 min. from the center of Kokura