北九州学術研究都市 2019-2020

KSRP Kitakyushu Sience 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)

[Schematic drawing of land use plan (draft)]



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, 2019) Approximately 3,500





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 (12 research institutes)
- Companies involved in research and development (50 companies)

(As of August 2019)

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 Intelligent Car, Robotics & AI

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

Operation and management of the Kitakyushu Science and Research Park

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

FAIS Organizational Structure	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.		
President Vice President	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.		
Managing Director	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.		
FAIS Kitakyushu <u>F</u> oundation	 Information Industry Promotion Center 	The Kitakyushu e-PORT Initiative 2.0 is being promoted to create new business and help local industries move to the next level. New systems are being developed to formulate projects on improving productivity by mobilizing the know-how of the Kitakyushu Foundation for the Advancement of Industry, Science and Technology and the Human Media Creation Center, taking advantage of the merger of these organizations in FY 2018.		
for the <u>A</u> dvancement of <u>I</u> ndustry, <u>S</u> cience and Technology President: Morio Matsunaga	─ ● 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."		
 Board of Directors, etc.: [Academia] Vice President of Kitakyushu Science and Research Park participating universities Presidents of Science and Technology universities in Kitakyushu City 	 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 to universities and robot-related companies participating in KRSP. In addition, the center actively serves to support the introduction of robots and develop human resources for promotion of widespread use in local companies.		
[Industry] The Chamber of Commerce and Industry, and other business organizations [Administration] Kitakyushu City, Fukuoka Prefecture	 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.		

Research Institute



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, 12 venture companies have been established utilizing research *seeds of the universities of KSRP.

	As of August 1					
	Name of Research Institution	Location	Research Content			
1	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.			
2	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.			
З	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.			
4	Kyushu Institute of Technology	Collaboration Center	Research on robotics and Al			
5	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.			
6	Academic,Industrial and Govenmental 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.			
7	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.			
8	Behavior Assessment Systems Laboratory	IT Advancement Center	Development of application to check the mental conditions of athletes.			
9	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.			
10	Fukuoka Research Commercialization Center for Recycling Systems	Collaboration Center	Supporting R&D and business development by industries, academia, government and the public that are engaged in the development of recycling technologies and the establishment of social systems to build a resource-recycling society.			
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.			



	Resident Location		Company Name	Current Business Content				
1			INFOGRAM Inc., Kitakyushu Branch Office	System development, computer educational services, internet services, and all incidental work related to the preceding items				
2	u	I ISHIDA PALENT UFFICE		Proxy for application procedures for patents and registration of utility models, designs, and trademarks, consulting services on filing patent applications				
3	Collaboration Center	KOA CORPORATION		Information collection and information exchange on electronic parts, sensor elements, and sensor modules, joint industry-academic development				
4	Colla	PLANTMAKE RISE		Development of coating agents for incinerator facilities, development of structural calculation software using 3D scanner				
5	Ũ		KOISHI CO., LTD	Experiments and measurements				
6			AIM QEL WIZBL JAPAN CO.,LTD	Development and research on blockchain technology and information systems that use this technology				
7	7 8 Security Information Laboratory Systems development and maintenance (24 hours a day, 365 days a year) 8 K2R Inc. Research and development on water generation equipment containing radical species using							
8	Semico Cer		K2R Inc.	Research and development on water generation equipment containing radical species using catalytic reactions				
9			Windy Co.,Ltd.	Development of software used at hospitals and pharmacies, development of work analysis software used at automobile plants				
10	t		Mishimakosan Co.,Ltd.	Development and manufacturing of automatic drug dispensers to remove wrappers and pharmaceutical-related equipment				
11	Advancement Center		Health Resources Research and Consulting Inc.	Research and development of educational systems				
12	tvancer Center		OHG Institute Co.,Ltd	Research and development of clinical tests and clinical testing technology, analysis of biological samples				
13	IT Ad		Meiryo CO.,Ltd.	Joint research with the Kyushu Institute of Technology on functional resin materials				
14	-		RoboPlus Hibikino Co.,Ltd.	Design, manufacturing, and sales of mechatronics, consulting services				
15			ITS Inc.	Research and development on electronic parts, such as semiconductor integrated circuits				
16			BE Corporation	Research and development on image processing systems and software				
17		•	Technology for Laboratory Inc.	Development and sales of clinical engineering educational equipment and optical transmission bio-signa measuring devices				
18			BraTech Co.,Ltd.	Development of web systems, academic solution programs				
19			sMedio,Inc.	Research and development of systems in next-generation broadcasting (advanced band satellite broadcasting)				
20			HAKUTSU TECHNOLOGY Corporation.	Development of illuminated, energy-saving control systems using wireless sensor networks				
21		Hibikino Accounting Office		Yamaguchi Certified Public Accountant and Tax Accounting Office (certified public accounting services)				
22			AKSystem Co.,Ltd	Research and development on applications for new industrial fields, such as techniques to fabricate manufacturing equipment for semiconductors				
23		Calsonic Kansei Corp.		Joint research with the City of Kitakyushu (Green Electronics Research Institute)				
24	enter	•	Artix,inc	Research and development on FinTech and artificial intelligence, research and development on computer software				
25	D T C	٠	CCAS Co.,Ltd.	Research and development on manufacturing systems for modified fly ash concrete				
26	Suppo	Artix,inc Artix,inc CCAS Co.,Ltd. HOKOSYA Co., Ltd. KAEI TRADING CO.,LTD TuSimple JAPAN Mirai Work System,LLC Organization for Career I		Research and development on curved surface wiring technologies using molecular adhesion technologies and high-luminance, highly-reliable LED lighting				
27	nture	•	KAEI TRADING CO.,LTD	Research and development on environmental technologies and environmental products for application in China				
28	s Ver		TuSimple JAPAN	Research and development, design, and sales of autonomous driving technology for vehicles				
29	ines	•	Mirai Work System,LLC	Development of tools to reduce labor and work and related business				
30	Bus		Organization for Career Education & Support (OCES)	Career guidance in secondary education, career education, and education for career counseling				
31			Hibito Design	Research on impacts and effects influencing a child's future by digitalizing drawings and art created by children and storing them in combination with designs				
32			ON GRIT ENGINEERING, Inc.	Studies on social infrastructure(structures) and development of diagnostic equipment				
33			ENVIRONMENT ENERGY CO.,LTD	Development and practical applications of bio-jet fuel, development of high-quality bio-diesel fuel				
34			J.A.Mengineering Institute	Joint research with Nagasaki University's Graduate School of Engineering and Yawata Electric Machinery Mfg Co., Ltd. on motor drive technologies and business development based on research results				
35		٠	Hibikino electronic corporation	Development of electrical field resonance-type bio-sensing and sensing data analysis systems				
36			Kankyou Photonics Co.,Ltd.	Research, development, and sales of LED light sources for plant growth				
37			MATERIAL NETWORK ENGINEERING Co., Ltd.	Research and development on plating processes for reed switch parts				
38			Q-Cul LLC.	Research and development on embedded software				
39			Shikino High-Tech Co.,LTD	Design/manufacturing/control of semiconductor equipment, LSI circuit design/layout, other				
40			YOSHIKAWA KOGYO RF SOLUTION CENTER	Research and development projects on RF-ID				
41			C&G SYSTEMS INC.	Development of CAD/CAM software for mold design and processing				
42	ter		Shabondama Soap Co.,Ltd.	Manufacturing and sales of additive-free cosmetic soap, household cleaners, fire retardants, other				
43	Cen	-	TORICO LTD	Development and repair of electrical parts				
44	Dev	•	FILTOM, INC.	Development, manufacturing, and sales of cosmetics using placenta extract (placenta fluids from pigs)				
45	AISIN SEIKI CO., LTD. Development of elemental technologies, such as image recognition/spatial recognition			Development of elemental technologies, such as image recognition/spatial recognition, and vehicle control				
46	hnol nd E	 Shabondama Soap Co.,Ltd. Manufacturing and sales of additive-free cosmetic soap, household cleaners, fire retardants, other TORICO LTD Development and repair of electrical parts FILTOM, INC. Development, manufacturing, and sales of cosmetics using placenta extract (placenta fluids from pi AISIN SEIKI CO., LTD. Development of elemental technologies, such as image recognition/spatial recognition, and vehicle KYOTO ELECTRONICS MANUFACTURING CO., LTD. Development of prototypes and evaluations to establish technical elements for the manufacturing of new sense Japan unmanned vehicle exploration agency Advancement and dissemination of research on unmanned aircraft as a site for the exchange of know provision of information on studies, research, and technology improvement for all unmanned aircraft 						
47	Tec							
48				Development of general platforms for behavior recognition technologies and security				
49			YASKAWA ELECTRIC CORPORATION	Robot tests and imitation of human movement				
50			Other, 1 company					

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

1 The University of Kitakyushu

Faculty of Environmental Graduate School of Engineering

Student capacity: 1005 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**

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



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:Administratoin Office.School Affairs Divison +81-93-695-6003

3 Waseda University



Graduate School of Information, **Production and Systems**

Student capacity: 460 Information Architecture **Production Systems** Integrated Systems Contact:Administratoin 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:Administratoin Office +81-92-871-6631



Numbers of students and professors

As of May 1, 201					May 1, 2019		
University	Undergraduate	Postgraduate	PhD	Research students	Special research students	Total number of students	Number of professors
The University of Kitakyushu Faculty of Environmental Engineering	1,108 (26)	_	_	5 (5)	0 (0)	1,113 (31)	87
The University of Kitakyushu Graduate School of Environmental Engineering	-	317 (70)	96 (81)	0 (0)	0 (0)	413 (151)	-
Kyushu Institute of Technology Graduate School of Life Science and Systems Engineering	-	254 (27)	146 (57)	4 (4)	4 (4)	408 (92)	45
Waseda University Graduate School of Information, Production and Systems	-	444 (412)	71 (55)	2 (2)	0 (0)	517 (469)	39
Graduate School of Engineering, Fukuoka University	-	4 (4)	1 (0)	0 (0)	0 (0)	5 (4)	2
Total	1,108 (26)	1,019 (513)	314 (193)	11 (11)	4 (4)	2,456 (747)	173

number in () indicates the number of foreign students

*Inside collaboration center

mia cooperation in KSRP

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)



Media Center





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/m² per month (Common fees : 500 yen/m² per month) (Example: In the case of a laboratory that is 50 m² the approximate fee is 1.5 million yen per year (common fees are not included))

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.

_aboratories (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.)

Collaboration Center Building 3 **IT Advancement Center**



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 (33 rooms) Facilities for R&D of semiconductor design

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) Share office

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)

*FAIS is solely responsible for the comprehensive management and operation of all its joint-use facilities designated by the City of Kitakyushu.



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

[Kitakyushu Science and Research Park website] https://www.ksrp.or.jp/ [Kitakyushu FAIS website] https://www.ksrp.or.jp/fais/

General information for the Kitakyushu Science ar	E-mail / info@ksrp.or.jp		
Campus Administration Center	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	E-mail / iac@ksrp.or.jp		
Collaboration Coordination Center	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 a	and semiconductor companies, inquiries on other R&D projects, other	E-mail / iac@ksrp.or.jp	
Manufacturing Innovation Center	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	
Information Industry Promotion Center Planning Section, Information Industry Promotion Department	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	
FAIS Higashida Office	Kyushu Human Media Creation Center 1-5-7 Higashida, Yahatahigashi-ku, Kitakyushu 805-0071	TEL +81-93-663-2950	
Inquiries related to research and development, hur	E-mail / car@ksrp.or.jp		
Car Technology Center	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, hu	man resources development, etc., in the robotics field	E-mail / robotics@ksrp.or.jp	
Robotics Technology Center	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 developm	ent related to support for the development of nursing care robots	E-mail/robocare@ksrp.or.jp	
National Strategic Special Zone Line	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 a	E-mail / k_info@ksrp.or.jp		
SME Support Center	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	



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