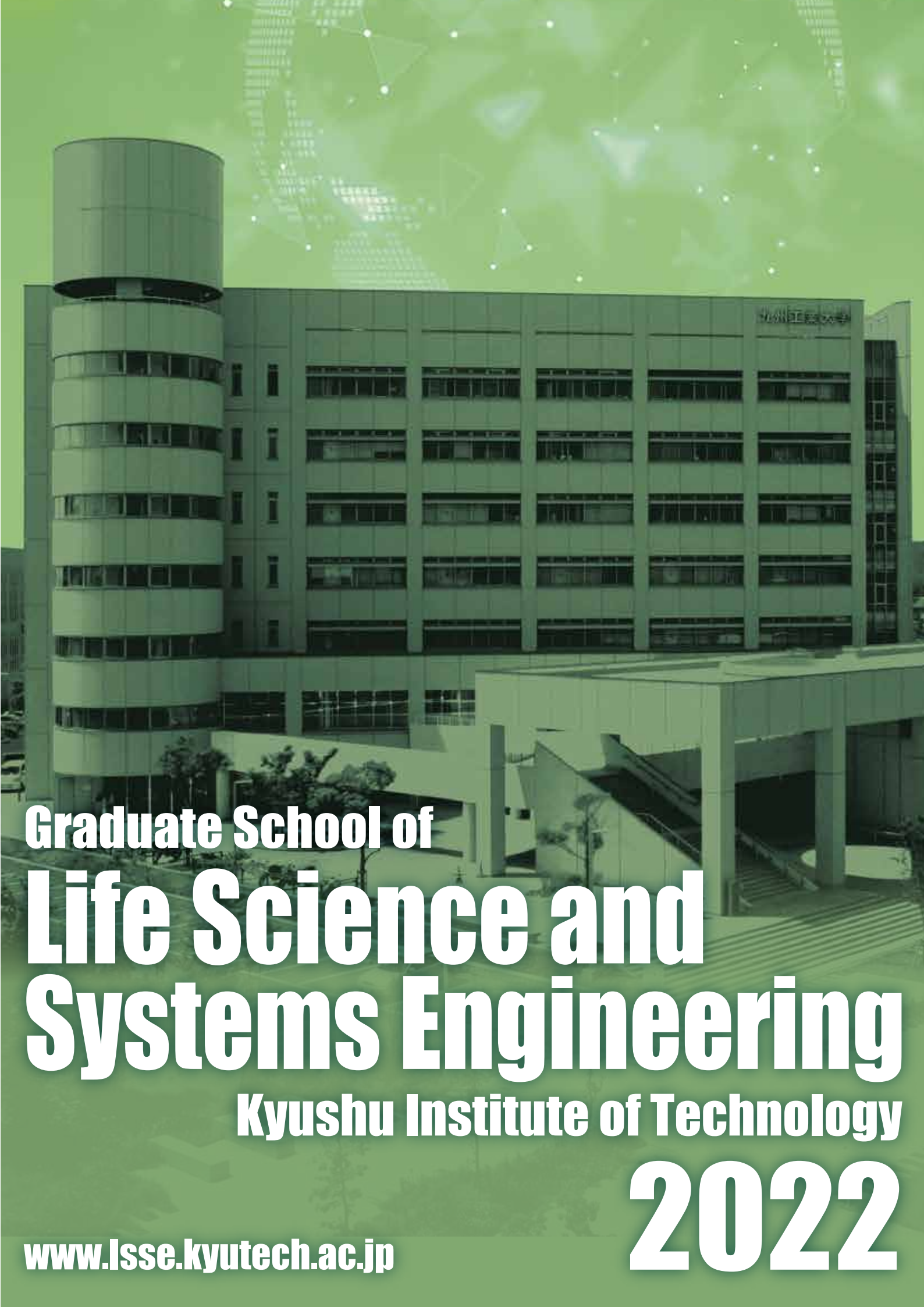


Graduate School of

Life Science and Systems Engineering

Kyushu Institute of Technology

2022

www.lsse.kyutech.ac.jp

MESSAGE FROM DEAN

Invitation to Life Science and Systems Engineering

Dean

Takashi YASUDA

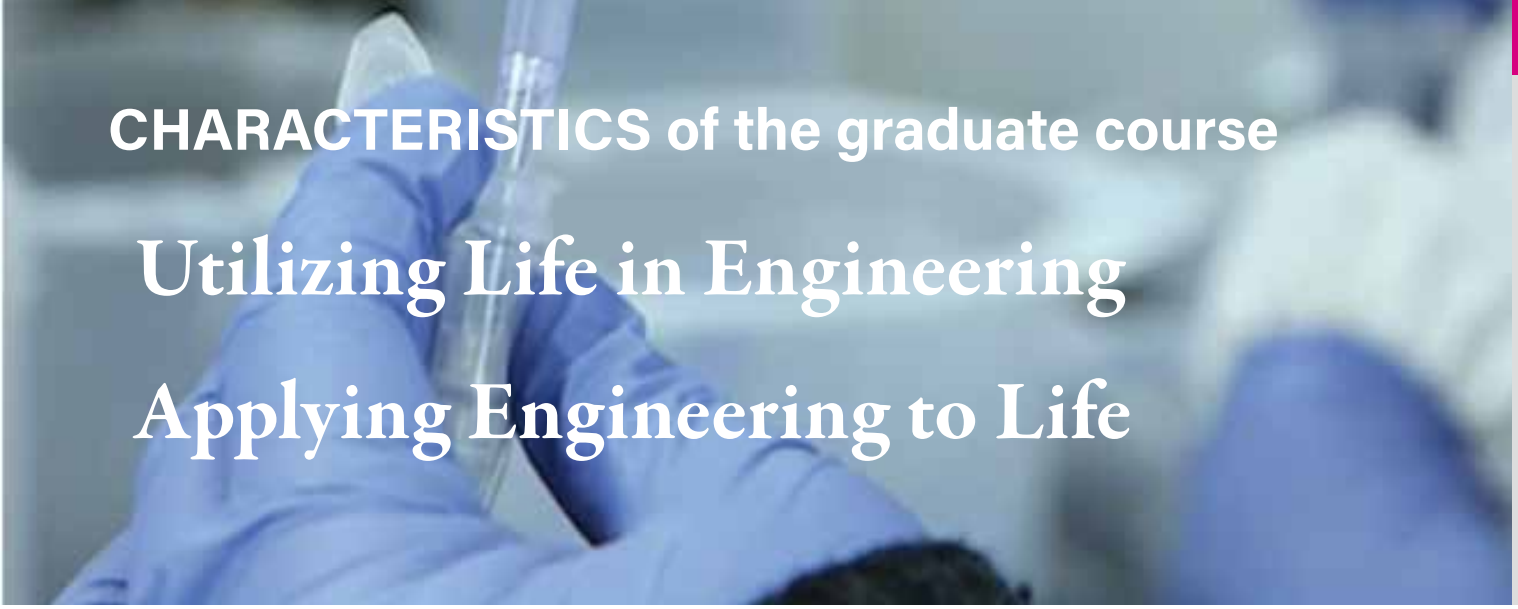
Graduate School of Life Science and Systems Engineering (LSSE) was established in 2000 at Kitakyushu Science and Research Park to promote advanced research based on superior biological functions and implement them into practical engineering technology. LSSE has succeeded in creating frontier technologies for meeting social needs in broad technical fields related to environment/energy, robot/artificial intelligence, medical application, etc.

Diversity in students is a big feature of LSSE. In addition to students from two undergraduate schools of Kyushu Institute of Technology, many students gather from domestic universities and colleges of technology throughout Japan and from various overseas universities. Collaborative works among these students with different experiences and values generate fresh ideas leading to technical innovation as well as fostering communication ability with recognition of diversity.

LSSE has educational programs and research projects in collaboration with universities and companies within Kitakyushu Science and Research Park. Also, LSSE is offering study abroad programs with overseas partner universities, and conducting many international joint research projects with them. Through these programs and projects students can strongly enhance their global perspectives.

We invite you to LSSE to immerse yourself in a cutting-edge education and research environment and to launch your promising career on an international stage.

INDEX



CHARACTERISTICS of the graduate course

Utilizing Life in Engineering

Applying Engineering to Life

Distinctive Educational Objectives

The underlying goal is to develop new areas of advancement in the fields of mechanical, electronic, and chemical engineering, information technologies, life sciences, and other disciplines, through applying technologies derived from the superb structures and functions of a range of natural organisms. Education and training at this graduate school focused on development and mastery of the following areas.

1. *Achieve high levels of expertise and knowledge, together with a strong awareness of their important roles as leaders in life science and systems engineering.*

2. *Understand the role of each specialized area of life science and systems engineering to meet the needs of society.*

3. *Demonstrate capability and competence in logical analysis to solve problems and attain objectives.*

4. *Exhibit the skills and competence necessary for effectively presenting and introducting new technologies and innovations.*

5. *Show skill and competence in accurate communication based on logical thought.*

6. *Demonstrate the ability to independently and collaboratively examine proposals and implement solutions to problems and tasks in our fields of specialization.*

SPECIAL COURSES FOR INTERNATIONAL STUDENTS

The following courses are special courses for international students, such as classes in English. Please check the website for details on each course.

Advanced Assistive Robotics (Global AAR) Course

This course is an international course operated by our institute since 2015, and consists of Japanese and international students in the Department of Human Intelligence and Systems Engineering (masters course) and the Department of Life Science and Systems Engineering. We have accepted students from diverse fields such as integrated circuits, control, sensing, nanosystems, artificial intelligence, LOT systems, behavioral science, and neuroscience.

The course is designed to accommodate international students by using English as the language for slide presentations and Q&A sessions. Besides, the course provides opportunities for English presentation and communication training through journal clubs where students read and understand the latest papers, AAR seminars with top-notch lecturers, and the practicum in Robot Operating System.

https://www.brain.kyutech.ac.jp/global_aar/

Global Green Energy and Electronics (G2E2) Course

This course provides advanced education and research, which demands for the realization of green, clean, and sustainable growth. One of the main aims of this course is to nurture global leaders, who can become a bridge between techno-scientific societies of Japan and abroad in the future. Education and research on green electronics will not only contribute to the development of peaceful, safe, and secure societies but also step forward towards achieving the Sustainable Development Goals (SDGs).

Courses are conducted in English in order to cater to the need for the international students.
"G2E2 Seminar" provides state-of-the-art technologies and research topics. "Exercises on Measurement Control Systems" aims at cooperative and active learning opportunities between Japanese and foreign students.

http://www.life.kyutech.ac.jp/~g2e2/en/

Exercises on Measurement Control Systems

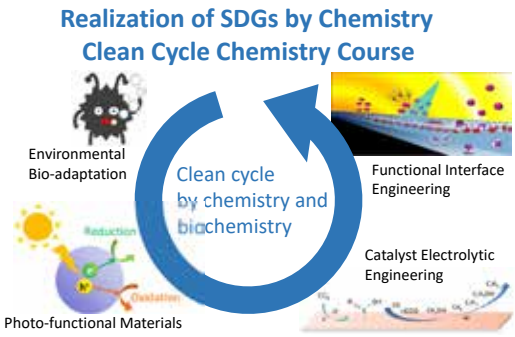
- Printable photovoltaic cells
- Functional materials and their electrochemical devices
- Organic electronic devices
- Highly efficient and flexible energy-conversion
- Motor-drive system
- Next-generation power semiconductor devices and their applications

G2E2 Seminar

MAIN PROJECTS

Clean Cycle Chemistry Course to learn SDGs realized by chemistry

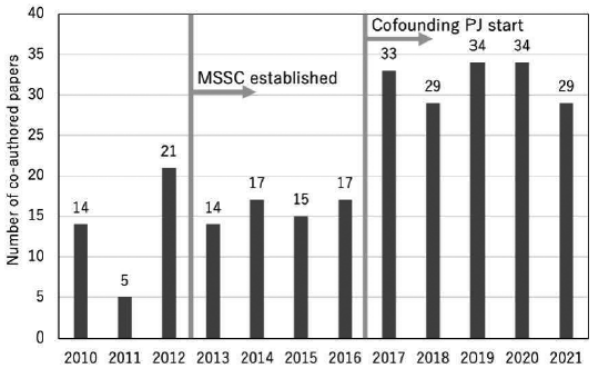
The SDGs are the "17 goals set by 193 UN member states to achieve in the 15 years from 2016 to 2030" adopted at the 2015 UN Summit. The "Clean Cycle Chemistry Course" is an active learning program with the theme of research and development aiming at the goals that can be achieved by chemical technology among the 17 goals and the establishment of the chemical technology. Professors in charge of this course are advanced researchers who promotes green chemistry research and green biogeochemical research to make elements a recyclable resource. The professors not only gives lectures, but also conducts active learning as a FACILITATOR of "cultivation of creativity". As a result, students will be able to develop the ability to achieve the SDGs and contribute to a sustainable society as a chemical engineer. In the Clean Cycle Chemistry Course, graduate students will learn advanced research contents of chemical elemental circulation and biological elemental circulation in the research fields of “Functional Interface Engineering”, “Environmental Bio-Adaptation”, “Photo-functional Nanomaterials”, and “Catalytic Electrolysis Engineering” through a bird's-eye view and highly specialized lectures. In one of the compulsory subjects, "Circulation Chemistry Collaboration Storming," students will plan and present concept and chemical methods that students can contribute to achieving their goals in their respective research fields. Excellent Presentation Prize will be awarded to excellent proposal, and in addition, feasible collaboration proposals will be developed into cross-disciplinary cyclical chemistry research by conducting collaboration demonstration experiments between the students and Professors in charge of this course. This course is intended for graduate students in the master's program, and takes and masters the designated 5 compulsory subjects (The language used for all curriculums is Japanese). Those who complete the course will be received a "Certificate of Completion of the Clean Cycle Chemistry Course".



MSSC

Ten years have passed in 2022 since MSSC overseas education and research base was established. MSSC is operated jointly with University of Putra Malaysia (UPM). MSSC is an international center promoting education and research along with supporting various activities such as short-term study programs, research programs at UPM, corporate internships with Japanese companies in Malaysia, and alumni associations with Malaysian graduates. The most representative program between the two schools is SAES, which is held alternately every year at each university. The number of participants, which initially started in 2013, was about 100 but has grown to more than 500 in 2021 even though both countries under the COVID-19 pandemic.
These our activities have also greatly spread on the outcome of the research of both schools. Compared with MSSC before established, the number of papers co-authored by the University and UPM is increasing as shown in the figure. The research fields of papers to be published are also expanding due to increase collaboration groups. The new joint research which is cofounded by both universities that began in 2017 seemed to significantly contribute to the results. And the double-degree program also started in 2020. Both universities expect to become more active in a wider range of fields.

Online symposium SAES2021



The number of papers co-authored by the University and UPM

Join Robot Competitions!!

The Kyutech Home Service Robot team Hibikino-Musashi@Home (HMA) won the first prize two years in a row in Domestic Standard Platform League (DSPL) of RoboCup 2017 and 2018, and Partner Robot Challenge (Real Space) in World Robot Summit 2018 and 2020 (held in 2021). HMA also won the first prize six times in RoboCup JapanOpen.

Achievements

RoboCup 2017 Nagoya, @Home DSPL first place.
RoboCup 2018 Montreal, @Home DSPL first place, P&G Dishwasher Challenge Award
World Robot Challenge 2018, 2020 (held in 2021), Service Robotics Category Partner Robot Challenge Real Space first place. METI Minister's Award. RSJ Special Award.
RoboCup 2019 Sydney, @Home DSPL third place.
RoboCup 2021 Worldwide (Online), @Home DSPL second place.
RoboCup Asia-Pacific 2021, @Home OPL first place, DSPL first place, Simulation first place.

RoboCup JapanOpen 2018, @Home Open Platform League (OPL) first place. JSAI Award.
RoboCup JapanOpen 2019, @Home OPL first place, DSPL first place.
RoboCup JapanOpen 2020, @Home OPL first place, DSPL first place, OPL Technical Challenge first place.

https://www.brain.kyutech.ac.jp/~hma/

Team introduction!

Team KUROSHIO, the allied team of 8 institutions including Kyutech, won the second place and 1 million US dollars in Shell Ocean Discovery XPRIZE, the international competition of autonomous ocean exploration technologies.

The Kyutech Underwater Team won in the AUV League of Underwater Robotics Competition in Okinawa URC in 2020. As the URC is held in the sea, AUVs are required to be highly autonomous and completeness.

Agricultural robots must work in the actual field and need AI, gentle mechanism to living things. Kyutech "Tometoers" join the Tomato-Harvesting-Robot competition and show good results (Winner in 2019, 3rd in 2020).

The Kyutech Robo Cup MSL team Hibikino-Musashi won the championship more than 10 times in Japan Open and one of veteran teams in World Cup. Each team joins with 5 soccer robots which act autonomously with mounted sensors only.

DEPARTMENT OF BIOLOGICAL FUNCTIONS ENGINEERING

Graduate School of Life Science and System Engineering

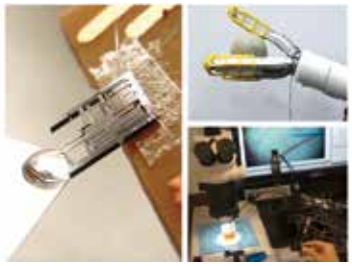
Division Overview

The research and education in this department deals with the realization of materials, structures and energy conversion functionalities of nature/organisms along with their utilization in engineering. The main objective of this department lies in discovering solutions to social issues like the global environment and human health to promote the creation of new industries, by integrating the fields of the environment, energy, materials, and bioengineering. Apart from this, global education such as international internship has been performed at our international research bases.

Divisions

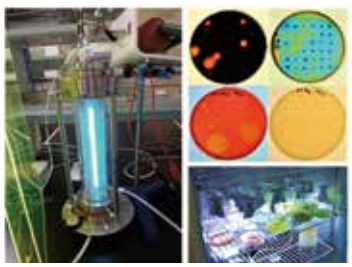
Division of Green Electronics

This division is devoted to the investigation of "green electronics technology," such as the fabrication and evaluation of printable solar cells, new functional materials, and their application to electrochemical devices, organic photo-electronic devices, construction of flexible and efficient power conversion and motor control systems, development of energy production systems utilizing renewable energies and environmentally friendly devices with carbon materials. The teaching curriculum is provided under the research themes outlined above.



Divsion of Biological Mechanics

The research and education in this division are conducted based on mechanical engineering such as the mechanics of materials, fluid and thermodynamics, the dynamics of machinery and micromachining, and the materials science of metals and ceramics. These activities contribute to the following area of industrial/medical applications: (i) the maintenance and recovery of bio-functions, (ii) medical and welfare support, (iii) development of biocompatible materials and medical devices, and (iv) design and development of biomimetic materials and intelligent machines.



Division of Environment Conscious Chemistry and Bioengineering

The goal of this division is to re-vitalize the engineering technologies responsible for the sustainable development of industries and society with environmental consciousness. The academic field of this division includes chemical and biological research and technologies that are learned from the highly efficient reactions of biological systems. Environmentally conscious chemistry and bioengineering may lead to innovations in chemical and biological technologies. This division strives to globalize our graduate program through the development of frontier research in environmentally conscious chemistry and bioengineering.

FACULTY MEMBER

Division of Green Electronics

Research Area: Power Electronics

Professor, Ph.D. **Tsuyoshi HANAMOTO**

Study on power electronics and its application. Development of motor controls and power conversion systems

E-mail: hanamoto@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~hanamoto/

Keywords

- Power electronics
- Motor control
- Hardware control
- High efficiency power conversion
- Environmentally friendly control

Research Overview

Development of Human-friendly and environmentally friendly electrical power conversion systems and application for motor control systems.

Division of Green Electronics

Research Area: Power Semiconductors, Power Electronics

Professor, Dr. Eng. **Ichiro OMURA**

Power semiconductors, power electronics and their system.

E-mail: omura@life.kyutech.ac.jp

URL: http://power.kyutech.ac.jp/

Keywords

- Power Device
- Power Erectonics
- Carbon Neutral
- Silicon Wefer
- Condition monitoring

Research Overview

Development of ultimate power semiconductor devices to atcheve carbon neutral. Power semiconductors are key device for xEVs, PVs and wind firm for the energy efficiency.

Division of Green Electronics

Research Area: Nanomaterials,solar cells, Metal ion batteries

Professor, Ph.D. **Tingli MA**

Development of nanomaterials and application for solar cell,metal ion batteries, metal air batteries.

E-mail: tinglima@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~tinglima/

Keywords

- Design and synthesis of Nano material
- Li ion battery
- Na ion Battery
- Metal air battery
- Perovskite solar cell
- High performance
- Low cost
- Application

Research Overview

Design and syhthesis of nanomaterials and their characterization. Development of new materials for stable perovskite solar cells. Development electrode materials with high performance and low cost for application to Li-ion batteries and Na-ion batteries, as well as metal-air batteries.

Division of Green Electronics

Research Area: Functional Materials and Devices

Professor, Ph.D. **Shyam S.PANDEY**

Synthesis and Characterization of Photo-functional Materials for Advanced Device Applications

E-mail: shyam@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~shyam/

Keywords

- Molecular design
- Solar cells
- Organic semiconductors
- Organic devices
- Photo-functional materials
- Smart materials

Research Overview

Design and development of photo-functional materials for energy harvesting and organic electronic devices.

Division of Green Electronics

Research Area: Power semiconductor, Semiconductoer material

Associate Professor, Dr. Eng. **Akihiko WATANABE**

Development of diamond power devices to realize the next generation power society

E-mail: watanabe@life.kyutech.ac.jp

Keywords

- Diamond
- Power semicnductor
- Ultra high voltage power device

Research Overview

Research on ultra-high performance power devices that apply the excellent semiconductor characteristics of a diamond. The realization of diamond power devices will enable the highly efficient use of electric energy and the construction of energy grids by direct current transmission, and will contribute to the realization of a carbon-free society.

Division of Biological Mechanics

Research Area: Biomechanics

Professor, Dr. Eng. **Hiroshi YAMADA**

Biomedical Engineering and Biomechanics for Life-Sustaining Technologies

E-mail: yamada@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~yamada/

Keywords

- Biomedical engineering
- Microbiomechanics
- Mechanical testing
- Finite element method
- Sensor device development
- Vascular diseases
- Pressure injury
- Endodontic instruments

Research Overview

Medical diagnosis assistance and prevention of diseases and injuries through measurement-device development, mechanical testing, constitutive modeling and computational analysis, focusing on mechanics of diseased arteries, endodontic treatments, prevention of pressure injury

Division of Biological Mechanics

Research Area: Biofluid Engineering

Professor, Dr.Eng. **Masaaki TAMAGAWA**

Biofluid Engineering for Advanced Medicine and Development of Medical Devices

E-mail: tama@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~tama/

Keywords

- Computational Fluid Dynamics (CFD)
- Flow visualization
- Blood flows
- Hemolysis and Thrombus formation
- Shock wave drug delivery systems
- Micromachine with concentration Marangoni effect engine
- Fractal analysis and network of arterials
- Biomechanical Analysis of Brain Injury by Fall

Research Overview

1.Computational and experimental studies of Hemolysis and Thrombus formation in blood flows, 2. Application of Shock Waves and Ultrasonic to Drug Delivery Systems, Water treatment, Tissue Engineering, 3.Development of driving force of micromachines by investigating chemotaxis of neutrophile, Keyword:Bio-fluid dynamics, Bio Medical Engineering,CFD, Shock Wave

Division of Biological Mechanics

Research Area: Bio-microdevices

Professor, Ph.D. **Takashi YASUDA**

Study on Bio-microdevices for Medical Research and Drug Development

E-mail: yasuda@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~yasuda/

Keywords

- Micromachine
- MEMS(Micro Electro Mechanical Systems)
- Micro-nanofabrication
- Surface modification
- Cell culture
- Cell analysis
- Biosensing
- Microliquid handling

Research Overview

Using microfabrication and surface modification, we are developing biomedical microdevices such as microfluidic devices for single-cell analysis, microelectrode array devices for extracellular potential measurement, microhole array devices for production/ separation of extracellular vesicles, etc.

FACULTY MEMBER

Department of Biological Functions Engineering

Division of Biological Mechanics

Research Area: Functional Biomaterials

Professor, Ph.D. Toshiki MIYAZAKI

Development of novel biomaterials for tissue repair

E-mail: tmiya@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~tmiya/

Keywords
- Biomaterial
- Biocompatible material
- Ceramics
- Hybrid material
- Artificial bone
- Artificial joint
- Cancer treatment

Research Overview

Development of biocompatible materials for repair and regeneration of bone, tooth and nerve
Development of ceramic processing with low energy consumption inspired by the biological system
Development of microparticles for cancer treatment.

Division of Biological Mechanics

Research Area: Intelligent machine

Associate professor, Ph.D.(Eng.) Kazuto TAKASHIMA

Study on soft sensors and actuators, and applications to medical, welfare and industrial technologies

E-mail: ktakashima@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~ktakashima/

Keywords
- Smart soft materials
- Soft actuator
- Endovascular treatment
- Tactile sensor
- Surgical simulator
- Stiffness control
- Biomimetics
- Biotribology

Research Overview

Applications of shape-memory materials and artificial muscle to a human-interactive robot. Development of soft tactile sensor. Development of device placement simulator for endovascular treatment.

Division of Biological Mechanics

Research Area: MEMS-based biomedical engineering

Associate Professor,Dr.Sci. Momoko KUMEMURA

MEMS, Microfluidics for oncological studies

E-mail: momo@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~yasuda/

Keywords
- MEMS
- Micro Total Analysis Systems
- Micromachining
- Mechanical characterization
- Real-time measurement
- DNA
- Tumor cell
- On-chip analysis

Research Overview

Applying MEMS (Micro Electro Mechanical Systems) technology to biological research at the molecular, cellular, and tissue level. Development and characterization of novel microfluidics for mechanical, chemical, and genetic assays for oncological studies.

Division of Biological Mechanics

Research Area: Harmonic Functional Materials

Associate professor, Ph.D. Jin NAKAMURA

Development of harmonic functional materials towards medical and environmental applications

E-mail: jin@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~jin

Keywords
- Functional materials
- Ceramics
- Metals
- Organic molecules
- Tissue regenerative medicine
- Environmental purification

Research Overview

Development of composite materials (ceramics, metals, and organic molecules) that exhibit multifunctions in response to stimuli emitted by living organisms. Development of synthetic processes for composite materials with controlled structures at molecular order. Development of materials for tissue regeneration medicine and environmental purification.

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Functional Interface Engineering

Professor, Ph.D. Tetsuya HARUYAMA

Establishing technology from elucidation of interface functions: leading to solutions to social issues

E-mail: haruyama@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~haruyama/

Keywords
- Functional interface
- New energy
- CO_2 fixation
- Radical chemical process
- Phases and Interfaces

Research Overview

We are developing research to realize various functional interfaces (reaction fields) by elucidating the functions of heterogeneous interfaces. "Chemical resource conversion of nitrogen, oxygen, and water (phase interface reaction technology)", "interface that converts CO2 into resources", "process technology with low environmental load", "safe decomposition of harmful substances", etc.

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Microbial Biotechnology

Professor, Ph. D. Toshinari MAEDA

Advanced Biotechnologies using Unique Microbial Functions

E-mail: toshi.maeda@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~toshi.maeda/

Keywords
- Metabolic Engineering
- Protein Engineering
- Genetic Engineering
- Environmental Biotechnology
- White Biotechnology
- Bioremediation
- Environmental Bio-adaptation
- Bacterial interaction

Research Overview

Unique microbial functions can be elucidated and improved using biotechnologically-engineered approaches to construct an innovative technology which should be useful to the environment and human society.

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Biopolymers, Structure and Function

Associate Professor, Ph. D. Tamaki KATO

Design, synthesis, and conformational analysis of functional biomolecules

E-mail: tmkato@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~tmkato/

Keywords
- Peptide
- Protein
- Enzyme
- Amino acids
- Molecular design
- Organic Synthesis
- SAR

Research Overview

Design, synthesis, and conformational analysis of peptide-based artificial functional molecules(Peptide nanostructures, peptide-based drug design, etc).

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Biological Recycling

Associate Professor, Ph. D. Minato WAKISAKA

Sustainable Utilization of Biomass

E-mail: wakisaka@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~wakisaka/

Keywords
- Biomass
- Sustainability
- Recycle

Research Overview

Research interests are on biomass resources and waste utilization towards sustainable circular economy. Ongoing topics are bioenergy production from microalgae, composites using nano/microfiber from plant biomass such as bamboo, and upgrade recycling of waste plastics.

FACULTY MEMBER

Department of Biological Functions Engineering

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Photo-functional nanomaterials

Associate Professor, Ph.D. **Naoya MURAKAMI**

Spectroscopic analysis on semiconductor photocatalyst and development of photocatalytic system for light-energy conversion

E-mail: murakami@che.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~murakami/

Keywords	Research Overview
● Photocatalyst ● Photoacoustic spectroscopy ● Nanomaterial ● Photoelectrode	Analysis of photo functional material using photoacoustic spectroscopy, Development of photocatalytic system for light-energy conversion.

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Biomolecular Engineering

Associate Professor, Ph. D. **Shinya IKENO**

Development and application of functionalized nanomaterials using biomolecular

E-mail: ikeno@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~ikeno/

Keywords	Research Overview
● Functionalized peptide ● Bioprocess ● Genetic engineering ● Recombinat protein ● Biopesticide ● Drug screening ● Biosensor ● Nanoparticle	I have been studying the development of functionalized nanomaterial combined with biomolecule and nanoparticle, and application of functionalized biomolecular to bioprocess such as the production of recombinant protein.

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Environmental-Benign Functional Materials

Associate Prof, Ph.D. in Engineering **Yoshito ANDO**

Design and evaluation of functional materials based on biomass and/or waste with a high-added value forward to sustainable society

E-mail: yando@life.kyutech.ac.jp

URL: https://www.life.kyutech.ac.jp/~yando/wp/?page_id=34

Keywords	Research Overview
● Biomass ● Sustainable Society ● Additional value ● Material Recycling ● Malaysia ● Global Issue ● Polymer Materials ● Organic Synthesis	We aim to realize a material cyclical society based on both environmental preservation and economy. Highly value-added functional materials based on characteristics of waste and biomass are established and evaluated.

Division of Environment Conscious Chemistry and Bioengineering

Research Area: Catalyst Electrolytic Engineering

Associate Professor, Ph. D. **Yoshiyuki TAKATSUJI**

Efficient and selective electrochemical conversion of substances

E-mail: takatsuji@life.kyutech.ac.jp

Keywords	Research Overview
● Catalytic metal electrode ● Plating technology ● CO_2 fixation ● Energy and environment ● Electrochemistry	Our research has committed to solving environmental and energy problems with the catalytic a metal electrode that can produce the efficiency substance. The catalytic metal electrodes have been developing and also analyzing the reaction mechanism and the produced substance. We will pursue research in the field of clean cycle chemistry (Tri-C) and achieve the goals of the SDGs.

Division of Green Technology

Research Area: Micro-Technology

Professor, Ph.D. **Iwao SASAKI**

The research on the upgrading of the materials for Mechatoronics equipments

E-mail: sasaki@life.kyutech.ac.jp

Keywords	Research Overview
● Functional Thin Film ● Solid Lubrication Bearing ● Vapor Deposition ● Magnetic Material ● Sensor	Research on functional materials utilizing the unique phenomena, which are prominent in a micro/nanometer scale.

Division of Green Technology

Research Area: Mechatronics

Visiting Professor, Doctor of Engineering **Hideki HONDA**

Mechatronics Control to fit in human society

E-mail: honda@life.kyutech.ac.jp

URL: http://www.life.kyutech.ac.jp/~honda/

Keywords	Research Overview
● Mechatronics ● Control Theory ● Motion Control	As robots are good examples, mechatronic devices are now used in various fields as well as in the industry. Therefore, in addition to research on the high-speed and high-accuracy performance required by the industry, we also study mechatronics technology that is kind to people and supports them.

Division of Green Technology

Research Area: Energy

Visiting Professor, Dr.Eng. **Tohru KATO**

Research on hydrogen production technology by steam electrolysis, high-efficiency fuel cell technology, etc.

Keywords	Research Overview
● Fuel Cell ● Hydrogen production ● High temperature steam electrolysis ● Electrochemistry ● Ceramics	Research on electrochemical device technology such as high-temperature steam electrolysis cells that realize high-efficiency conversion of renewable energy to hydrogen, high-efficiency fuel cells and batteries used for conversion and storage between secondary energies such as electric power and hydrogen.

Division of Plant Life-cycle Engineering

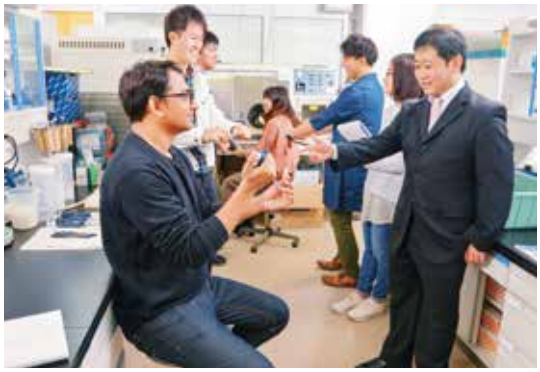
Research Area: Plant Life Cycle Engineering

Special Appointment Associate Professor **Masahiro NAKANO**

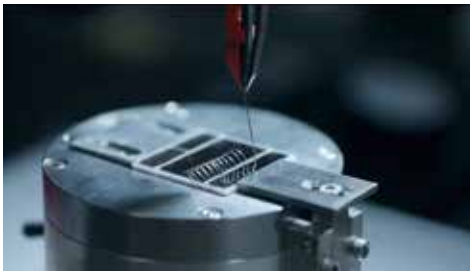
Plant Life Cycle Engineering

E-mail: nakano@life.kyutech.ac.jp

Keywords	Research Overview
● Plant Life Cycle ● Robot welding ● Image analysis ● Thermal elasto-plastic analysis ● AI ● Equipment diagnosis ● Welding repair	Plant Life Cycle Engineering (Research on autonomously controlled robot welding, and Research on thermal elasto-plastic analysis of welds and optimization of welding order)



Department of Biological Functions Engineering



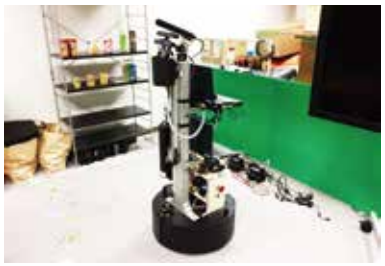
DEPARTMENT OF HUMAN INTELLIGENCE SYSTEMS

Graduate School of Life Science and System Engineering

Division Overview

Department of Human Intelligence Systems aims to incorporate the principles of human intelligence into intelligent information processing platforms and artificial intelligent systems, as well as to actively contribute to the development in the industry.
The research and education in this department covers but is not limited to (i) advanced development of mechanical systems and devices such as intelligent autonomous robots, (ii) intelligent information system development and artificial intelligence algorithms design that incorporates the principles of human reasoning, (iii) scientific analysis of social activities and human intelligence by using mathematical modeling, brain science and cognitive science in general.

Divisions

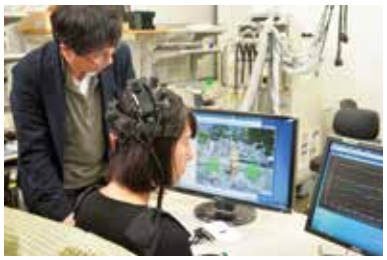


Division of Human Intelligence and Machines

Division of Human Intelligence and Machines is teaching and researching in the fields of robotics and devices, which could realize human-like intelligence by utilizing rational and significant structures as well as functions of biological organisms to achieve low-energy consumption, harmony with the environment, and human-friendly behavior. Through the teaching and research, we will bring students up to be persons and professionals who are actively involved in the global world with to create new public services, new business, and new social value.

Division of Intelligence Systems and Emergent Design

The division is engaged in the design of new technologies and theories that are inspired by human intelligence. It is a form of societal engineering focusing not only on cognitive functions of recognition, learning, and reasoning, but also on social abilities with emotions, Kansei, and communications. This field requires the study of mathematical modeling, informatics, and systems engineering toward a comprehensive understanding of computation in brain-body-environment interaction and an advanced development of intelligent partners and platforms.



Division of Human Interaction and Brain Functions

It is important to study the relationship between the function of the brain, and the nature of society made by humans to clarify human intelligence. In this division, we study the characteristics of neurons of which the brain consists, the information processing in which many neurons are involved, behaviors as results of the processing, and the communication mechanism of humans in a society.

Cooperative Divisions

The Division of Human Behavioral Sciences specializes in teaching and researches for explicating emergent mechanisms and building explanatory models of interactions between cognitions/emotions and actions, of innateness and constraints, in sports activities and of language, both rule-based cognitive behaviors unique to humans.

Division of Human Intelligence and Machines

Research Area: Field Robotics

Professor, Ph.D **Kazuo ISHII**

Research on field robotics and their applications to social problems

E-mail: ishii@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~ishii/

Keywords

- Wheeled mobile robot for rough terrain
- Underwater robot
- Omni-directional mobile robot
- Sewer pipe inspection robot
- Motion control system
- Neural networks

Research Overview

Development of mobile robots for outdoor environment, irregular terrain, underwater, sewer pipe. Environment recongnition system, self-localization system, adaptive learning system, motion control system, bio-inspired information processing, etc.

Division of Human Intelligence and Machines

Research Area: Intelligence Emerging Nanosystems

Professor, Dr.Eng. **Hirofumi TANAKA**

Design, development, and integration of nanodevices for artificial intelligence hardware devices.

E-mail: tanaka@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~tanaka/

Keywords

- Intelligent information processing nanodevices
- Artificial intelligence nanodevices
- Neuromorphic nanodevices
- Integrated circuits for nonlinear dynamical nanosystems and nanostructure device design

Research Overview

Research and development of electric nanodevices for artificial intelligence hardware, whose target is to generate new electrical functionalities by using the circuit of the nanodevices.

Division of Human Intelligence and Machines

Research Area: Human function substitution systems

Professor, Ph.D.(Eng.) **Chikamune WADA**

Research on developing functional substitution system for the disabled/the elderly people based on human sensory/motor characteristics

E-mail: wada@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~wada/

Keywords

- Human interface
- Assistive technology
- Functional substitution
- Biological information
- Biological data measurement
- Rehabilitation engineering

Research Overview

Research on developing human-friendly assistive device/substitution system for the disabled/the elderly people based on psychophysical analysis of human sensory-motor systems.

Division of Human Intelligence and Machines

Research Area: Brain-like Computer System

Professor, Ph.D. **Hakaru TAMUKOH**

Realization of a brain-like computer system and its application to human-friendly systems

E-mail: tamukoh@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~tamukoh/

Keywords

- Brain-like computer
- Softcomputing
- hw/sw complex system
- Digital hardware design
- Home service robotics

Research Overview

A brain-like computer system laboratory aims to realize a brain-like computer based on a hardware/software complex system and its application to embedded systems on home-service robots.

Division of Human Intelligence and Machines

Research Area: Brain-Like Intelligent Machines

Associate Professor, Ph. D. **Hiroyuki MIYAMOTO**

Development of brain-like intelligent machines based on computational neuroscience, with emphasis on construction of self-learning robots

E-mail: miyamo@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~miyamo/

Keywords

- Learning by watching
- Skill acquisition
- Motor learning
- Autonomous robots
- Image processing
- Neural network

Research Overview

Development of learning by watching robot, skill acquisition robot, motor learning robot, welfare robot.

Division of Human Intelligence and Machines

Research Area: Bio-inspired artificial vision

Associate Professor, Ph.D **Shinsuke YASUKAWA**

Information processing in biological sensory systems and their applications in field robotics.

E-mail: s-yasukawa@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~s-yasukawa/

Keywords

- Bio-inspired system
- Visual information processing
- Robot vision
- Embedded system

Research Overview

Development of living creature observation/manipulation technique using robot, Simulation of the visual nervous system, Development of Bio-inspired robot vision system, Trials of their techniques in field, etc...

Division of Human Intelligence and Machines

Research Area: Field Robotics

Associate Professor, Dr.Eng. **Yuya NISHIDA**

Development of control system and technology for field robot

E-mail: y-nishida@brain.kyutech.ac.jp

Keywords

- Field robot
- Autonomous underwater robot
- Motion control
- Motion analysis

Research Overview

To reliably accomplish the mission, our laboratory develops robot that robustly navigates in actual environment, and its elemental technology. We survey actual environment using developed robot and system to benefit society.

Division of Human Intelligence and Machines

Research Area: Nanomaterial Intelligence

Assistant Professor, Dr. Sci. **Yuki USAMI**

Creation for brain-inspired information processing system by nanomaterial

Keywords

- Nanomaterial
- Hybrid material
- Mesoscopic physics
- Neuromorphic computing
- Nanostructure analysis
- Molecular electronics
- In-materio reservoir

Research Overview

Research and development of nanoscale various basic physical properties of organic/inorganic materials for extracting flexible bio-inspired function. Creation of unconventional nanodevices by circuitization and deviceization from nanomaterial function.

FACULTY MEMBER

Division of Human Intelligence and Machines

Research Area: Brain-like AI Systems

Specially Appointed Professor **Osamu NOMURA**

Research and development of brain-like AI models and circuit architectures.

E-mail: nomura@brain.kyutech.ac.jp

Keywords

- AI
- Brain-like information processing
- Analog integrated circuits
- Robot control
- Reinforcement learning

Research Overview

Research and development of integrated circuit models of brain functions to achieve extremely low energy consumption, targeting service and assistive robots.

Division of Human Intelligence and Machines

Research Area: Brain-like Integrated Systems

Specially Appointed Professor, Dr.Eng. **Takashi MORIE**

Design and development of integrated circuits, devices and systems for brain-like artificial intelligence

E-mail: morie@brain.kyutech.ac.jp
URL: http://www.brain.kyutech.ac.jp/~morie/

Keywords

- Brain-like artificial intelligence
- Vision and image recognition model
- Integrated systems for robots
- Integrated circuit for nonlinear dynamical system
- Analog integrated system

Research Overview

Research and development of brain-like processing models, new functional devices and digital/analog integrated circuits (VLSI) and systems mainly targeted to service robots toward achieving brain-like artificial intelligence.

Division of Human Intelligence and Machines

Research Area: Brain-like Integrated Circuit, and Nonlinear Dynamical Systems

Assistant Professor, Dr.Eng. **Seiji UENOHARA**

Design and development of integrated circuits, devices and systems for brain-like artificial intelligence

Keywords

- Brain-like artificial intelligence
- Integrated circuits for nonlinear dynamical systems
- Mixed signal integrated circuits
- Nonlinear time-series data analysis

Research Overview

Research of brain-like processing models, integrated circuit (VLSI) design toward high efficiency brain-like artificial intelligence and its social implementation.

Division of Intelligence Systems and Emergent Design

Research Area: Learning theory of brain-like artificial intelligence

Professor, Ph.D. **Tetsuo FURUKAWA**

Learning theories of brain-like artificial intelligence and mathematical modeling of behavior development

E-mail: furukawa@brain.kyutech.ac.jp
URL: http://www.brain.kyutech.ac.jp/~furukawa/

Keywords

- Brain-like artificial intelligence
- Self-organizing systems
- Neural networks
- Machine learning
- Behavior development

Research Overview

Our destination is to develop the learning theory and its algorithms, which enable us to discover general rules and intrinsic information underlying the given datasets. Typical themes are higher-order modeling through meta-learning and multi-task learning. Besides, we also challenge to model children's behavior and development.

Division of Intelligence Systems and Emergent Design

Research Area: Human and Social Intelligence Systems

Professor, Ph.D. **Tomohiro SHIBATA**

Science and Engineering Understanding of Humans and Societies, Assistive System Development and Social Implementation

E-mail: tom@brain.kyutech.ac.jp
URL: http://www.brain.kyutech.ac.jp/~tom/

Keywords

- Robotics
- Soft robotics
- Artificial intelligence
- Biomechanics
- Biological signal processing
- Brain science
- Medical welfare
- Low-cost signal monitoring equipment
- Control
- Social implementation

Research Overview

We are promoting the development of prototypes and performance evaluation of assistive robots in collaboration with a variety of players, including the elderly, the disabled, and medical, nursing, and care workers, with the primary goal of applying them to medical and welfare applications.

Division of Intelligence Systems and Emergent Design

Research Area: Intelligent Information Processing Systems

Professor, Ph.D. **Keiichi HORIO**

Development of fundamental technology of intelligent information processing system aiming at modeling and analyzing behavior of human beings

E-mail: horio@brain.kyutech.ac.jp
URL: http://www.brain.kyutech.ac.jp/~horio/

Keywords

- Behavior analysis
- Communication analysis
- Estimation of personality
- Intelligent data analysis
- Intelligent image processing
- Learning system

Research Overview

The Research aimed at estimating and classifying individual characteristics by measuring and analyzing human behavior. Besides, we pursue optimization of the intervention method based on analysis results and aim to apply it to real-world society, especially data analysis involving humans.

Division of Intelligence Systems and Emergent Design

Research Area: IoT / Big Data

Professor, Doctor of Engineering **Sozo INOUE**

Human Activity Recognition and Future Disease Prevention

E-mail: sozo@brain.kyutech.ac.jp
URL: http://sozolab.jp

Keywords

- Human Activity Recognition
- Web / Ubiquitous
- Application of Machine Learning
- Big Data
- Application for Healthcare/ Nursing
- Behavior Change

Research Overview

We develop human activity recognition from smartphones and sensors, and their services. We also cultivate AI by collecting medical and nursing care big data.

Division of Intelligence Systems and Emergent Design

Research Area: Brain-Inspired Robotics and Intelligence Dynamics

Professor, Ph.D. **Hiroaki WAGATSUMA**

Investigating principles of neural dynamics, body kinetics/morphology and societal abilities to understand biological intelligence

E-mail: waga@brain.kyutech.ac.jp
URL: http://www.brain.kyutech.ac.jp/~waga/

Keywords

- Nonlinear dynamics
- Emergent intelligence
- Episodic memory and emotion
- Societal robot
- Computational neuroscience
- Neuroinformatics
- Sport biomechanics
- Rehabilitation support

Research Overview

We explore systems design inspired by biological emergent intelligence, through an understanding of what makes us human (intelligence), how we are embodied in the environment (body kinetics/ morphology), why emotional and social aspects are so important to us (sociality). Our mathematical modeling and investigation are applied to the design of an artificial intelligence, robot development, and rehabilitation tools.

Division of Intelligence Systems and Emergent Design

Research Area: Kansei Information Processing,Soft Computing

Associate Professor, Dr. (Eng.) **Kaori YOSHIDA**

Designing information system based on Kansei Information Processing

E-mail: kaori@brain.kyutech.ac.jp

URL: https://www.brain.kyutech.ac.jp/~kaori/

Keywords

- Kansei Information Processing
- Human-Computer Interaction
- Soft Computing
- Cognitive Psychology
- Intelligent Image Processing
- Information System Design

Research Overview

We study on Kansei Information Processing as one of Human-Computer Interaction research. The research aims to design appropriate information system based on psychological, social, and technical analysis. Research topics include human-centered design, soft computing, usability, and affordances, conceptual models and interface metaphors, human cognitive models, information, and interactivity structures.

Division of Intelligence Systems and Emergent Design

Research Area: Statistical learning theory

Assistant Professor, Ph.D. **Hideaki ISHIBASHI**

Learning theory of information geometrical meta-modeling

E-mail: ishibashi@brain.kyutech.ac.jp

Keywords

- Meta-modeling
- Multi-task learning
- Meta-learning
- Bayesian inference
- Machine learning
- Stocastic process
- PAC learnin
- Information geometry

Research Overview

The aim of our research is to develop the learning theory and its algorithms for meta-modeling, which enables to discover meta-knowledge by modeling a set of knowledges or models. The proposed framework is applied to cognitive science and robotics.

Division of Human Interaction and Brain Functions

Research Area: Team Management

Professor, Ph.D. **Doosub JAHNG**

A Story of diverse individuals becoming one as a team

E-mail: jahng@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~jahng/

Keywords

- Team Communication
- Occupational Health Marketing
- Key Words Meeting®
- Versatile Educational Tools
- Comprehensive Health Resources Integrated Solution

Research Overview

For diverse individuals to agree with each other and become one as a team, innate needs, learned knowledge/skills acquired needs from personal/environmental circumstances, self-action, health resources and communication become essential. We conduct research on the factors above by utilizing both people's conceptual needs and experimental/statistical designs to further our study on team management.

Division of Human Interaction and Brain Functions

Research Area: Neuroscience

Associate Professor, Ph.D. **Yoshitaka OTSUBO**

Taste transduction mechanisms

E-mail: otsubo@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~otsubo/

Keywords

- Patch-clamp
- Ca^{2+}-imaging
- Immunohistochemistry
- Single cell RT-PCR
- Action potentials
- Confocal laser microscope
- Signal transduction

Research Overview

We investigate the cellular and molecular mechanisms underlying the signal processing occurred in mammalian taste buds and we contribute to develop a new signal processing based on features of taste buds.

Division of Intelligence Systems and Emergent Design

Research Area: Bioinspired Intelligence Systems

Associate Professor, Ph.D. **Shuhei IKEMOTO**

Robots/Algorithms inspired from biological systems

E-mail: ikemoto@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~ikemoto/index.html

Keywords

- Bioinspired robot
- Bioinspired algorithm
- Learning control
- Stochastic resonance

Research Overview

Behind sophisticated abilities of living organisms are the mechanisms that exploit demerits, e.g., complexity/flexibility of body and unignorable noise, as merits. Toward understanding and applying the mechanisms, academic studies about biologically inspired systems based on robotics have been conducted.

Division of Human Interaction and Brain Functions

Research Area: Neuronal rhythm and Brain Machine Interface (BMI)

Professor, Ph.D. **Kiyohisa NATSUME**

The relationship between the generation of neuronal rhythm and memory process

E-mail: natume@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~natume/

Keywords

- Neuronal rhythm
- EEG
- Circadian rhythm
- Hippocampal
- Brain machine interface
- L2 English learning
- Music rhythm
- esports

Research Overview

We study experimentally on the generation of neuronal rhythm and compute the rhythm on the computer. We also developed the e-learning system for Japanese English learners using BMI technology.

Division of Human Interaction and Brain Functions

Research Area: Mathematical Neural Network

Associate Professor, Ph.D. **Katsumi TATENO**

Neural coding and Neurodynamics

E-mail: tateno@brain.kyutech.ac.jp

URL: http://www.brain.kyutech.ac.jp/~tateno/

Keywords

- Neural coding
- Hippocampus
- Medial entorhinal cortex
- Memory
- Learning
- Glass catfish
- Electroreceptor

Research Overview

Our interests are complex behavior of neural activity and theoretical investigation on neural coding in the brain. Specifically, we are currently researching neural network models of the medial temporal lobe.

Division of Human Technology

Research Area: Systems Intelligence

Visiting Professor, Ph.D. **Hiroshi NAKAJIMA**

Basic and applied research on intelligent system development

Keywords

- Intelligent system
- Soft computing
- Computational intelligence
- Causal analysis
- Social intelligence
- Systems healthcare
- Health management
- Machine learning

Research Overview

Research and development on algorithms of intelligent systems by studying soft computing, statistical analysis, and social intelligence in human-machine collaboration systems with application studies.

FACULTY MEMBER

Division of Human Technology

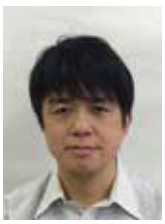
Research Area Vision Sensing

Visiting Professor, Ph.D. **Masaki SUWA**

Basic and applied research on intelligent vision system

Keywords	Research Overview
● Vision Sensing ● 3D Sensing ● Physics-based Vision ● Pattern Recognition	Research and development on vision sensing technologies such as object detection, 3D surface reconstruction and reflectance property analysis, for applications in factory automation or society's infrastructure.

Division of Human Technology



Research Area Biomimetic Robot System

Visiting Associate Professor, Ph.D **Takayuki MATSUO**

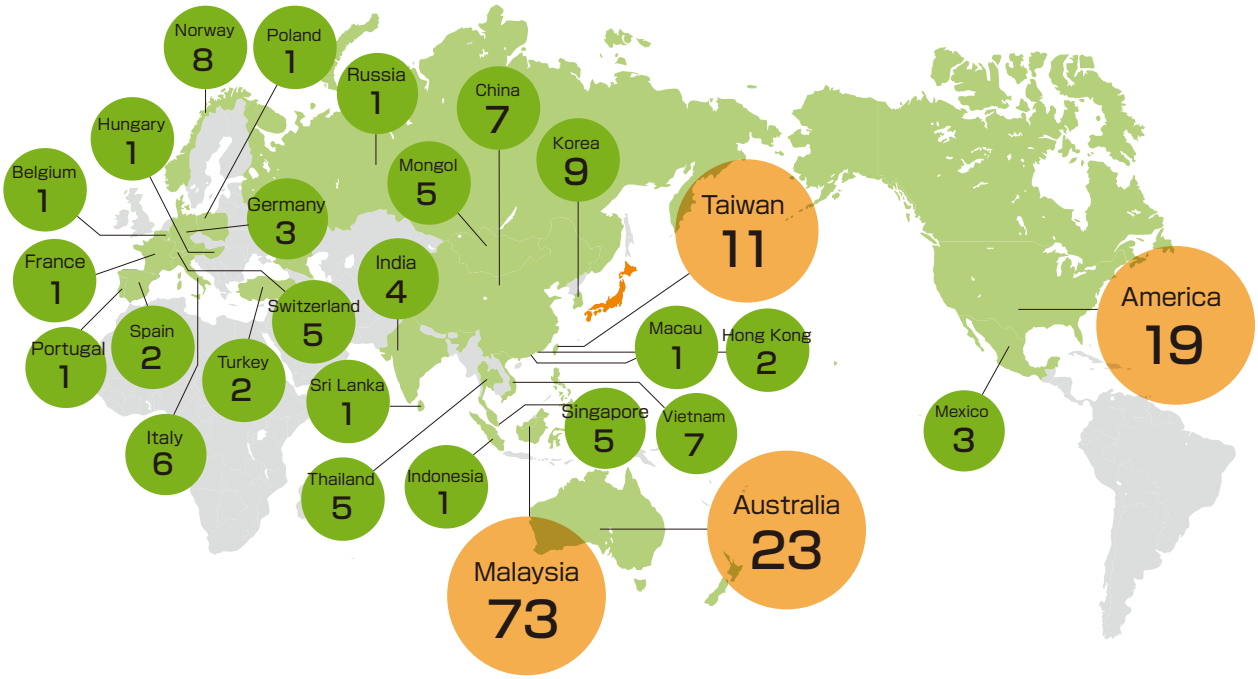
Development of Robot Systems based on motion control and information processing system of animals

Keywords	Research Overview
● Biomimetic robot ● Adaptive control ● Nonlinear oscillator ● Neural network	Development of mobile robot systems inspired by mechanisms of animals for irregular terrain, underwater and so on.

Department of Human Intelligence Systems

INTERNATIONAL EXCHANGES

List of overseas dispatched students in FY2019 (by country)



Tuition and other fees, and exemption	The tuition and other fees are shown below. Only a limited number of students can get exemption of full or half of fees through a selection procedure. **Application fee: ¥30,000** **Enrollment fee: ¥282,000** **Tuition fee: ¥267,900 per half year**
Scholarship, research assistant and living cost	Students can apply for various scholarships financed by our university and other foundations. The monthly stipend is from ¥20,000 to ¥140,000. Doctoral course students may get about ¥45,000 per month as a professor's assistant. The monthly cost of living in Kitakyushu city is approximately from ¥60,000 to ¥80,000 including house rent and utilities.
Accommodation	Students can apply to stay in the international student housing (Sakura House) in Wakamatsu campus. However, as we have limited rooms available, not all students will be able to stay at Sakura House. The rent of Sakura House is from ¥11,800 to ¥18,100 per month.
Tutor	A tutor, who is current student in the laboratory, can help you with your study and daily life in Japan. This tutor system is available for the first three months after enrollment.
Japanese language class	Students can take the appropriate Japanese language class.

English Information for international students in our web site is as follows.

http://www.kyutech.ac.jp/english/

LSSE STUDENTS

Department of Life Science and Systems Engineering
Pandey Lab.

Ms. Suraya SHABAN

Why Kyutech?
I joined an exchange program of UPM-Kyutech back in Autumn 2017, where I visited Pandey Laboratory for the first time. Then due to this collaboration, I came Kyutech again as JASSO supported student for the short internship in Summer 2019 by the end of my Master at UPM. I saw the potential of continuing my PhD in the area of dye-sensitized solar cell research with Dr. Shyam D. Pandey, which led me to apply for the MEXT Scholarship.

About Research
Currently, I am continuing my research on the Bifacial and colorful Dye-Sensitizer Solar Cells, which is an improved version of transparent solar cells with capability of the light harvesting from both of the front and rear sides of the solar cells. Such kind of solar cells not only provide an amicable solution for solar tracking of the solar cells but also harvest more light energy per unit installation area.

Best point of Kyutech
Collaborations within Kyutech and universities worldwide gives opportunity to students for exploring the possible research around the globe and expand the horizon of the research through the mutual scientific and cultural exchange.

My recommended place from Kyutech
You should try to go to the library with the lake view. So relaxing and I enjoy a lot there.

What surprised me most in Japan
Japanese, who can speak Bahasa fluently. Surprisingly, I met most of them in Kitakyushu area. Most of them went to South East Asia for logistic.

What kind of life
I speak English in campus and Japanese, when I am outside. The language barrier is not so huge. I enjoy meeting new friends and I am now in a community of Japanese, where they invite me to join party and travel together when they celebrate any events. I feel so much welcomed here.

My future dream
I want to pursue my dream becoming a lecturer in electronics specialized in Renewable Energy.

Department of Human Intelligence Systems
Yoshida Lab.

Ms. Dian Christy SILPANI

Why Kyutech?
To be in a good and supportive research environment is very important for me and Kyutech have it. I was introduced to Yoshida sensei before I actually selected as a student in Kyutech. She really understand about my gap year. She directs but at the same time gives me the opportunity to explore many things independently.

About Research
I always feel that doing research is like riding on a roller coaster. Hard to start, getting harder during the process, but there is always a finish line. Currently I'm on a roller coaster of studying the concept of Human Robot Interaction with focus on human and Robot behavior based on gesture and image recognition. :)

Best point of Kyutech
Yoshida Laboratory is like a family, where everybody live in a friendly environment including Sensei along with all lab members.

My recommended place from Kyutech
There is a circular room on each floor near the elevator, which is excellent for wide and pleasant view outside. If you want to relax for a while from research and small refreshment it is best place. Nevertheless, it is beside my laboratory.

What surprised me most in Japan
Very good in terms of customer service.

What kind of life
Almost three years in Japan. I start from Japanese language school then enter master degree, and still enjoy to living here. I live in an apartment with tatami, I love to travel, a big fan of Ramen and Japanese culture.

My future dream
I want to be someone who is an expert in the field. I am studying and working in an International based Technology Company.

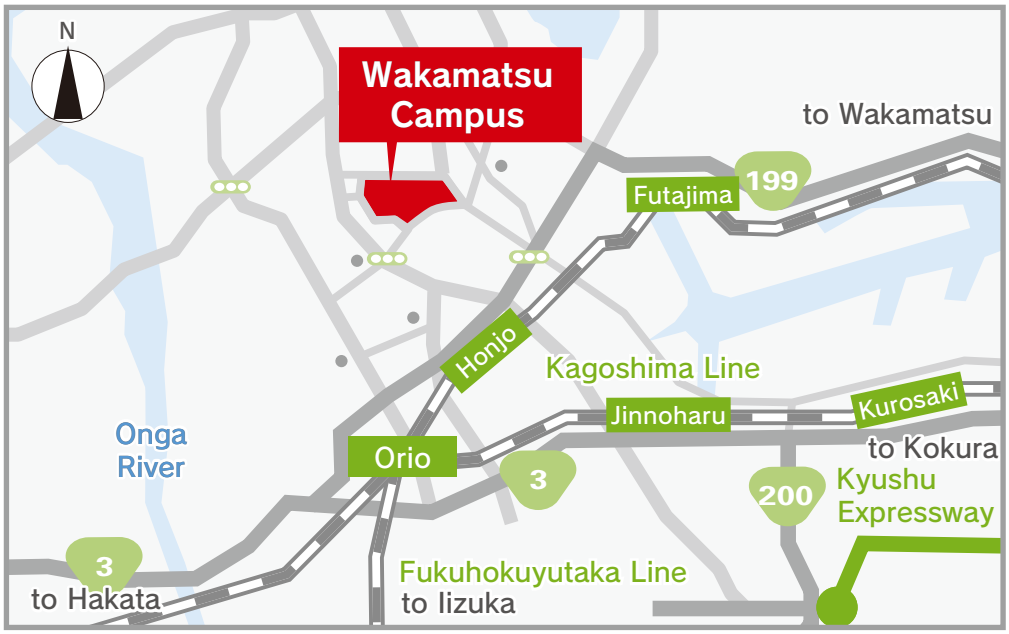
ACCESS

Wakamatsu Campus in Kitakyushu Science and Research Park

Graduate School of Life Science and Systems Engineering

Cafeteria

Kitakyushu Science and Research Park



Transportation

Fukuoka Airport	Airport Line About 5 minutes	Hakata Station	Rapid Train About 45minutes Express About 30 minutes	Orio Station	Nishitetsu Bus, Kitakyushu Municipal Bus Orio Bus Stop	Bus About 15 minutes	Gakken-toshi Hibikino Bus Stop	Kitakyushu Science and Research Park
Kitakyushu Airport	About 33minutes by bus	Kokura Station	Rapid Train About 20 minutes Express About 15 minutes					
Kitakyushu Airport Access Bus About 73 minutes								

Commute Time From Major Cities

Shinkansen (Nozomi)

Tokyo — Kokura	About 4H45M
Shin Osaka — Kokura	About 2H
Hakata — Kokura	About 17M

Airline

Tokyo — Kitakyushu	About 1H35M
Tokyo — Fukuoka	About 1H40M
Seoul — Fukuoka	About 1H10M
Beijin — Fukuoka	About 2H15M
HongKong — Fukuoka	About 2H50M

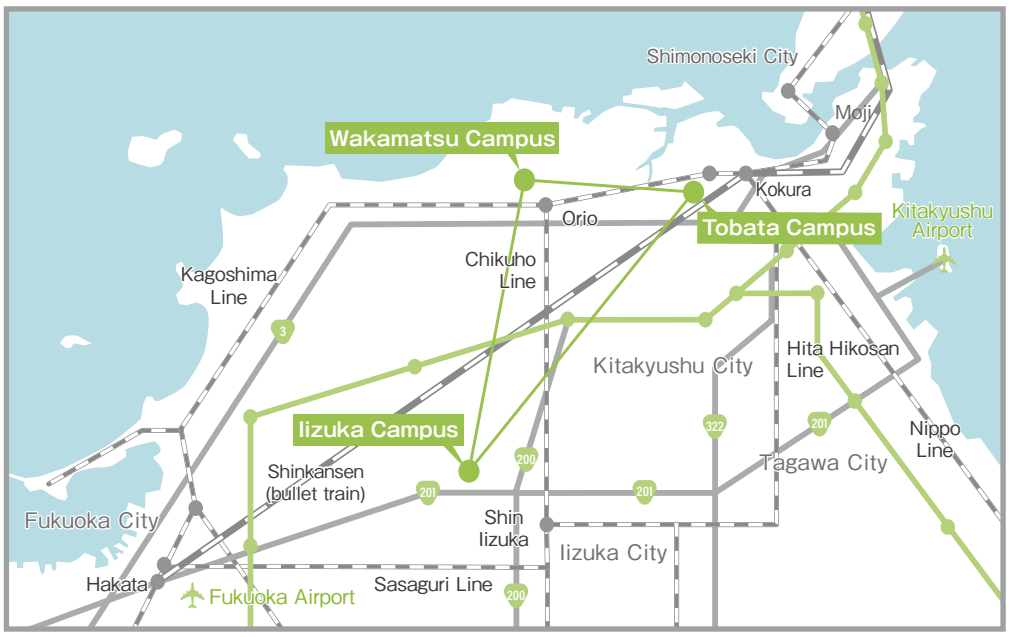
Car Time Required From airport or station to Kitakyushu Science and Research Park

From Kitakyushu Airport	About 60M
From Fukuoka Airport	About 70M
From Kokura Station	About 35M
From Orio Station	About 10M

Other Campuses of Kyushu Institute of Technology

Tobata Campus

Iizuka Campus



ADMISSIONS

	Examination Date	Application period
The 1st selection	July 2, 2022	May 31 – June 9, 2022
The 2nd selection	August 28, 2022	July 25 – August 5, 2022
The 3rd selection	October 8, 2022	September 7 – 21, 2022
The 4th selection	February 4, 2023	December 30 – January 12, 2023

※For interview and oral examinations will be conducted through the Internet.

How to apply

Contact
1 Find a laboratory in your desired field and contact the faculty member.

Access
2 Access the online registration website and read the guidance.

Password to apply
3 Send the requesting email to the admission section

Apply
4 Enter your information.

Submit
5 Print and mail the application documents.

Online Registration Website

http://www.guide.52school.com/guidance/net-kyutech-g/eng/

Admission Application Guidance

http://www.lsse.kyutech.ac.jp/english/admission/information.html