

Kyushu Institute of Technology

Graduate School of Life Science and Systems Engineering



Message from Dean



Shuzi HAYASE

Dean,
Graduate School of Life
Science and Systems
Engineering

The 21st century is the age of biology. Focusing on the many remarkable features of living organisms—minuteness, energy efficiency, the ability to transform matter, cognition, language—in other words, the life principle, we developed a new field “Life Science and Systems Engineering.” The Graduate School of Life Science and Systems Engineering (LSSE) is an independent entity with its own campus but without affiliated undergraduate divisions. The goal of LSSE is the application of the superior functions of living organisms and the brain to engineering.

The Graduate School of Life Science and Systems Engineering has two departments. The Department of Biological Functions and Engineering examines the mechanical, electrical, and material functions of living things, while the Department of Brain Science and Engineering examines the information processing functions of the brain. At LSSE, we examine diverse functions from a systems viewpoint, and LSSE is the first institution to dedicate itself to engineering applications of brain functions, the final human frontier. Techniques developed from examining living organisms will bring about tremendous change not just in today’s key industries—power, electronics, machine, and information industries—but in all industries.

The Graduate School of Life Science and Systems Engineering is located in The Kitakyushu Science and Research Park, a new campus inaugurated in April 2001 that houses facilities of the University of Kitakyushu, Waseda University, Cranfield University from the United Kingdom, and many private companies. Advanced education and research is conducted at LSSE in collaboration with these institutions.

Since April 2001, LSSE has accepted students from diverse fields, ranging from engineering and information technology to biology. Research fields at LSSE are related not only to various engineering and information technology fields, as well as the fields such as psychology, linguistics, and philosophy, from the perspective of living organisms and the brain. For this interdisciplinarity, we admit potential students with diverse backgrounds, and provide “immigrant” courses to help students deal with other fields after entering LSSE.

In addition to promoting collaboration between industry and academia, we actively accept professionals who seek the higher training and degrees. By doing so, we hope to stay abreast of the latest industrial technology and also discover social needs, and then utilize this information in our education and research. We also actively accept students from abroad, with many courses conducted in English to support those who are not proficient in Japanese.

The unique curriculum at LSSE fosters engineers who understand biology and information technologists who understand the brain. Graduates who can think in such multifaceted ways will contribute significantly in the age of technology combination and integration—the age of biology. We invite you to come to Kitakyushu Science and Research Park and soar into the 21st century as a pioneer in life sciences and systems engineering.



General Features

Characteristics of Our Education

Through technological applications of the superior structures and functions of living organisms, we shall pioneer new academic fields within conventional academic areas such as mechanics, electronics, chemistry, computer science and life science. Our education at this graduate school has the following characteristics:

- 1 "Immigrant" education
- 2 Practical English education
- 3 Nurturing of entrepreneurs through business management studies and internship
- 4 Acquisition of cutting-edge brain-like information processing machines in addition to conventional types
- 5 Possible completion of courses at an accelerated pace

In other words, we offer "immigrant" education classes as a basic and/or introductory education to enable students from a wide range of fields to easily learn the basics of life science and systems engineering. Through practical English education, through internships made possible by enthusiastic partnerships among industry and academia, and through the acceptance of working people and foreign students, every day one can experience a practical education and an international feeling. The acquisition of data processing technology and the completion of courses at an accelerated pace are also major characteristics of the school. And through renowned professors from within the country and abroad as well as through reciprocal credit acceptance with other educational research institutions, students are able to receive lectures that are advanced and wide-ranging.

Principal Areas of Research and Education

To adapt abilities and mechanisms of living organisms into engineering technologies, the wisdom of conventional life sciences on the molecular/cellular level is not sufficient. What is required is an understanding of the higher-order aspects, in other words, integrated systems of the relevant biological entities. The fields of research and teaching that are covered in this context are material-energy conversion, sensory integration, motor control, neural information processing and so on.

Department of Biological Functions and Engineering

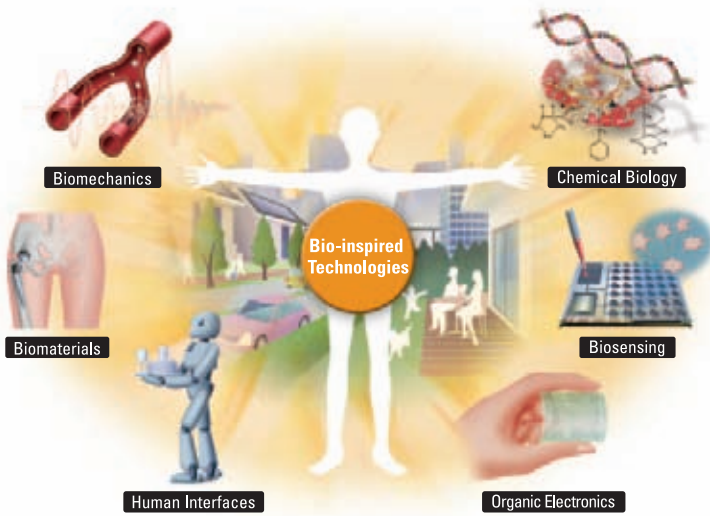
Biological functions of various levels are the targets of research and teaching, with an eye on almost all areas of engineering applications. The fundamental part of these consists of biomechanics, biofluid dynamics, material-energy conversion, electronic control of biokinetics, and systemization of metabolic reactions and regenerations. More application-oriented subjects include the development of zero-emission biosystems and environmental recycling as well as medical/pharmaceutical technologies such as biomimetic devices, artificial organs, nursing and ergonomic aids for the handicapped.

Department of Brain Science and Engineering

The major areas of brain science such as neural sensory processing, memory, learning and motor control are the principal subjects of the department, with perspectives of engineering applications. The department also conducts theoretical as well as experimental research on the integrated higher-order cognitive functions of brain, such as memory, learning, and language, of the primate including humans. Their mathematical theorizing and the related discipline of soft-computing represented by "neuro, fuzzy, chaos" are within the scope of research as well. These activities are integrated toward the ultimate goal of the department, namely, hardware realizations of prototype intelligent devices ranging from neural ICs, to brain-like computers and environment-adaptive robots with self-learning capabilities.



Department of
Biological Functions and Engineering
 Division overview



The organic world constitutes a closed system of highly efficient material/energy conversions and recycling. Besides efficiency, the system is highly adoptive to the natural environment. Accordingly, environmentally safe, human-friendly, material/energy saving technologies can be reengineered by deepening our understandings of these aspects of life science. This is exactly what this department is aiming at. As such, the repertoire of research and teaching encompasses a wide spectrum of disciplines. These include biological structures, ergonomic kinetics, sensory mechanisms, material/energy conversion as well as systemizations of all this. On the basis of these, the department seeks to advance new technologies, from the perspective of the industrial applications of biomimetic micro-machines, human-like robotics, biological recycling, zero-emission systems and so forth.

Divisions	Division of Biofunctional Mechanisms Biomechanics / Biofluid Engineering / Biothermal Engineering / Bio-Microdevices / Functional Biomaterials Interface science and engineering for biomaterials / Intelligent mechanics
	Division of Biological Functions and Systems Organic electronics and solar cells including organic and inorganic materials / Functional Materials and Devices Human-friendly control systems / Nano Bioscience
	Division of Environmental Engineering Biomolecular Engineering / Biopolymers, Structure and Function / Bioelectronics / Environmental Bio-Adaptation Biological Recycling / Biochemical Zero-Emission / Eco-materials & Green Chemistry
Cooperative Divisions	Division of Physiological and Biochemical Adaptation Biomolecular Design / Analysis for human adaptation / Exercise Physiology System Photo-functional materials including photocatalyst and photovoltaic cell
Chartered Divisions	Division of Green Technology Materials Interface Science & Engineering / Functional Materials Engineering / Mechatronics Micro-Technology / Green Electronics

Research Center for Advanced Eco-fitting Technology

Academic Members

	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Biomechanics</p> <p>Professor, Dr.Eng. Hiroshi YAMADA</p>	<p>Biomedical Engineering and Biomechanics for Life-Sustaining Technologies</p> <p>■Keywords •Biomedical engineering •Microbiomechanics •Mechanical testin •Finite element method •Human tissues •Vascular diseases •Pressure ulcer •Tooth restoration</p> <p>■Research overview Medical diagnosis assistance and prevention of diseases and injuries through mechanical testing, constitutive modeling and computational analysis, focusing on mechanics of diseased arteries, restoration of fractured teeth, prevention of pressure ulcers.</p> <p>E-mail yamada@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~yamada</p>
	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Biofluid Engineering</p> <p>Professor, Dr.Eng. Masaaki TAMAGAWA</p>	<p>Biofluid Engineering for Advanced Medicine and Development of Medical Devices</p> <p>■Keywords •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</p> <p>■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</p> <p>E-mail tama@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~tama</p>
	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Biothermal Engineering</p> <p>Professor, Dr.Eng. Hiroshi ISHIGURO</p>	<p>Heat and Mass Transfer in Living System, and Its Application to Medical and Biotechnologies</p> <p>■Keywords •Thermal Engineering •Heat and Mass Transfer •Bio- and Medical Engineering •Cryobiology •Thermal Therapy •Thermal Environment •Design of Process and Device</p> <p>■Research overview Bioengineering based on Heat and Mass Transfer, Biotransport, Cryopreservation, Crypsurgery, Thermal Therapy (Hyperthermia and High temperature), Thermal Environment, Fundamentals and Applications.</p> <p>E-mail ishiguro@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~ishiguro</p>
	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Bio-Microdevices</p> <p>Professor, Ph.D. Takashi YASUDA</p>	<p>Study on Microfabricated Devices for Analysis of Biological Functions</p> <p>■Keywords •Micromachine •MEMS(Micro Electro Mechanical Systems) •Micro-nanofabrication •Microfluidic device •Bio-device •Biosensor •Cell analysis •Microliquid handling</p> <p>■Research overview Development of microdevices using micro-nanofabrication, and their application to life-science technologies including cell analysis, blood separation, microliquid handling, biomolecule sensing, etc.</p> <p>E-mail yasuda@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~yasuda</p>
	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Functional Biomaterials</p> <p>Associate Professor, Ph.D. Toshiki MIYAZAKI</p>	<p>Development of novel biomaterials for tissue repair</p> <p>■Keywords •Biomaterial •Biocompatible material •Ceramics •Hybrid material •Artificial bone •Artificial joint •Cancer treatment</p> <p>■Research overview Development of biocompatible materials for repair and regeneration of hard tissues such as bone and teeth Development of ceramic processing with low energy consumption inspired by biological system</p> <p>E-mail tmiya@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~tmiya</p>
	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Interface science and engineering for biomaterials</p> <p>Professor, Dr. Eng. Nobuya SHINOZAKI</p>	<p>Study on interfacial phenomena for making materials gentle to life body and environment</p> <p>■Keywords •Metallic biomaterials •Surface modification for materials •Composite materials •Wetting between molten metal and ceramic •Surface tension of molten metal •Interfacial reaction</p> <p>■Research overview Interfacial phenomena related to surface modification of bone substitution metallic materials, manufacturing process of ultra-lightweight composite materials for medical treatment and nursing, and development of lead free solder harmless to human body</p> <p>E-mail shino@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~shino</p>
	<p>Division of Biofunctional Mechanisms</p> <p>Research area</p> <p>Intelligent mechanics</p> <p>Associate Professor, Ph.D.(Eng.) Kazuto TAKASHIMA</p>	<p>Study on soft sensors and actuators, and applications to medical, welfare and industrial technologies</p> <p>■Keywords •Tactile sensor •Smart soft materials •Minimally invasive surgery •Human-interactive robot •Computer aided surgery •Mechanical testing of medical devices •Biomimetics •Biotribology</p> <p>■Research overview Development of soft tactile sensor. Development of computer-based surgical simulation system for guidewire navigation in blood vessels. Applications of shape-memory materials and artificial muscle to human-interactive robot</p> <p>E-mail ktakashima@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~ktakashima/</p>
	<p>Division of Biological Functions and Systems</p> <p>Research area</p> <p>Organic electronics and solar cells including organic and inorganic materials</p> <p>Professor, Ph.D. Shuzi HAYASE</p>	<p>Organic and inorganic solar cells prepared by coating processes including material syntheses and device preparations</p> <p>■Keywords •Coating technology •Fuel cells •Emission devices •Nanotechnology •Nanomaterials •Organic solar cells •Dye-sensitized solar cells •Inorganic solar cells</p> <p>■Research overview Nanomaterials and organic electronics for organic solar cells, emission devices and fuel cells.</p> <p>E-mail hayase@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~hayase</p>

	<p>Division of Biological Functions and Systems</p> <p>Research area Functional Materials and Devices</p> <p>Associate Professor, Ph.D. SHYAM S. PANDEY</p>	<p>Functional Molecules for Advanced Applications</p> <p>■Keywords <ul style="list-style-type: none"> •Molecular design •Solar cells •organic semiconductors •Organic devices •Photo-functional materials •Smart materials </p> <p>■Research overview Design and development of functional materials for energy harvesting and optoelectronics</p> <p>E-mail shyam@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~shyam</p>
	<p>Division of Biological Functions and Systems</p> <p>Research area Organic electronics and solar cells including organic and inorganic materials</p> <p>Professor, Ph.D. Tingli MA</p>	<p>Development and application of functional materials for organic solar cell</p> <p>■Keywords <ul style="list-style-type: none"> •Photo-electronic device •Nano materials •Photocatalysis •Hydrogen production •Functional dye •Functional semiconductor •Dye-sensitized •Application </p> <p>■Research overview Studies on organic and inorganic solar cells, photocatalysts and hydrogen production by using nano materials</p> <p>E-mail tinglima@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~tinglima/</p>
	<p>Division of Biological Functions and Systems</p> <p>Research area Human-friendly control systems</p> <p>Professor, Dr.Eng. Tsuyoshi HANAMOTO</p>	<p>Study on intelligent control of motors. Development of motor controls and power conversion systems.</p> <p>■Keywords <ul style="list-style-type: none"> •Power electronics •Motor control •Hardware control •High efficiency power conversion •human-friendly control </p> <p>■Research overview Human-friendly and environment-friendly motor control and application. Development and application of bio-inspired soft computing.</p> <p>E-mail hanamoto@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~hanamoto</p>
	<p>Division of Biological Functions and Systems</p> <p>Research area Nano Bioscience</p> <p>Professor, Dr. Eng. Masamichi NAITOH</p>	<p>Development of environmentally-friendly materials for semiconductor nano-devices</p> <p>■Keywords <ul style="list-style-type: none"> •Nanotechnology •Nanomaterials •Semiconductor •Carbon Nano-Tubes •Graphene •Spherical Carbon particles •One-Dimensional Structures </p> <p>■Research overview We investigate new carbon materials (carbon nano-tubes, graphene, spherical carbon particles, etc.) for application in new semiconductor devices.</p> <p>E-mail naitoh@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~naitoh/</p>
	<p>Division of Environmental Engineering</p> <p>Research area Biomolecular Engineering</p> <p>Associate Professor, Ph.D. Shinya IKENO</p>	<p>Development and application of functionalized nanomaterials using biomolecular</p> <p>■Keywords <ul style="list-style-type: none"> •nanoparticle •functionalized peptide •bioprocess •biosensor •genetic engineering •drug screening </p> <p>■Research overview I have been studying development of functionalized nanomaterial combined with biomolecule and nanoparticle, and application of functionalized biomolecular to bioprocess such as production of a substance.</p> <p>E-mail ikeno@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~ikeno</p>
	<p>Division of Environmental Engineering</p> <p>Research area Biopolymers, Structure and Function</p> <p>Associate Professor, Ph.D. Tamaki KATO</p>	<p>Design, synthesis, and conformational analysis of functional biomolecules.</p> <p>■Keywords <ul style="list-style-type: none"> •Peptide •Protein •Enzyme •Amino acids •Molecular design •Organic Synthesis •SAR </p> <p>■Research overview Design, synthesis, and conformational analysis of peptide-based artificial functional molecules (Peptide nanotubes, peptide-based drug design etc).</p> <p>E-mail tmkato@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~tmkato</p>
	<p>Division of Environmental Engineering</p> <p>Research area Bioelectronics</p> <p>Professor, Ph.D. Tetsuya HARUYAMA</p>	<p>Molecular interface science for bioelectronics</p> <p>■Keywords <ul style="list-style-type: none"> •Bioelectronics •Molecular interface •Molecular energy device •Biosensor •Qualified analysis •HTA for drug discovery </p> <p>■Research overview Our research activities in a consistent manner, from basic research to applied research, in order to design and create various molecular interfaces which can recognize molecules and convert them into information (signals) or energy. Basic research and practical applied research has been developed in parallel. Typical examples of our studies are briefly shown in WEB page.</p> <p>E-mail haruyama@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~haruyama</p>
	<p>Division of Environmental Engineering</p> <p>Research area Environmental Bio-Adaptation</p> <p>Associate Professor, Dr.Eng. Toshinari MAEDA</p>	<p>Microbial Biotechnology using Unique Biological Functions</p> <p>■Keywords <ul style="list-style-type: none"> •Metabolic Engineering •Protein Engineering •Genetic Engineering •Environmental Biotechnology •White Biotechnology •Bioremediation •Environmental Bio-adaptation </p> <p>■Research overview Unique microbial functions can be elucidated and improved using biotechnologically-engineered approaches to construct an innovative technology which should be useful to environment and human society.</p> <p>E-mail toshi.maeda@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~toshi.maeda</p>
	<p>Division of Environmental Engineering</p> <p>Research area Biological Recycling</p> <p>Associate Professor, Ph.D. Minato WAKISAKA</p>	<p>Sustainable Biomass Utilization and Ecosystems Management</p> <p>■Keywords <ul style="list-style-type: none"> •Biomass •Ecosystems Management •Ecomaterial •Systems Design •Sustainability </p> <p>■Research overview Marine biomass conversion into eco material and its environmental impact assessment from the viewpoint of sustainable ecosystems management</p> <p>E-mail wakisaka@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~wakisaka</p>

	<p>Division of Environmental Engineering</p> <p>Research area Biochemical Zero-Emission</p> <p>Professor, Dr.Agric. Yoshihito SHIRAI</p>	<p>Sustainable Lower Carbon and Recycling Society and Prevention from the Global warming issues in 21st Century</p> <p>■Keywords <ul style="list-style-type: none"> •Biomass •Zero Emission •Poly-lactate •Chemical Recycling •Malaysia •Palm Oil Industry •Global Warming Gas •Innovative Development in the Local Area </p> <p>■Research overview We are studying widely and aiming to create a sustainable society in the 21st Century by creating effective utilization of biomass and their recycling, resulting in establishing the lower carbon society and avoiding the global warming issues.</p> <p>E-mail shirai@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~shirai</p>
	<p>Division of Environmental Engineering</p> <p>Research area Eco-materials & Green Chemistry</p> <p>Professor, Dr. Engineering. Haruo NISHIDA</p>	<p>Development of green-chemistry and creation of eco-materials for establishing the recycling-based society</p> <p>■Keywords <ul style="list-style-type: none"> •Chemistry on promising materials •Circulative resources •Eco-materials •Green chemistry •Biomass-based •Polylactic acid •Recycling-based society •Chemical Recycling </p> <p>■Research overview To establish the recycling-based society, we are required to utilize renewable resources in place of fossil resources for producing the commodities. The "Circulative Resources" is the keyword for developing promising eco-materials.</p> <p>E-mail nishida@lisse.kyutech.ac.jp</p>
	<p>Division of Physiological and Biochemical Adaptation</p> <p>Research area Biomolecular Design</p> <p>Associate Professor, Dr.Sci. Shokichi OHUCHI</p>	<p>Molecular Design and Chemistry of Bioorganic Compounds, Microwave Assisted Chemical Biology</p> <p>■Keywords <ul style="list-style-type: none"> •Bioorganic chemistry •Biocatalytic reaction •Enzymatic engineering •Genetic engineering •Protein design •Microwave assisted chemistry •Origin of life and chemical evolution •Green chemistry </p> <p>■Research overview We focus the studies of design and synthesis of a unique and functional bioorganic compounds. Also the research of microwave assisted chemical and enzymatic reaction is carried out.</p> <p>E-mail ohuchi@life.kyutech.ac.jp</p>
	<p>Division of Physiological and Biochemical Adaptation</p> <p>Research area Analysis for human adaptation</p> <p>Professor, Ph.D. Masafumi TORII</p>	<p>Human adaptability to thermal environment</p> <p>■Keywords <ul style="list-style-type: none"> •Autonomic neuronal system •Thermoregulation •Thermal conditions of environment •Heat production •Heat loss </p> <p>■Research overview We analyze the mechanisms in human adaptability throughout measuring physiological regulatory responses to endogenous and/or exogenous thermal stress.</p> <p>E-mail torii@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~torii</p>
	<p>Division of Physiological and Biochemical Adaptation</p> <p>Research area Exercise Physiology System</p> <p>Professor, Ph.D. (Health and Sports Science) Kohji HIRAKOBA</p>	<p>Clarification of Exercise Physiology System and Theoretical Construction on Application to Biological and Physiological Engineering</p> <p>■Keywords <ul style="list-style-type: none"> •Types of Muscle Contraction •Respiratory, Circulatory and Metabolic Functions •Capacity to Oxygen Utilization in Muscle •Oxygen Supply to Exercising Muscle •Conversion of Chemical energy into Mechanical Energy •Electromyogram (EMG) </p> <p>■Research overview Investigation into 1) Physiological Functions from Oxygen uptake Kinetics during Constant-Load Exercise, 2) Muscular Mechanical Efficiency during Exercise Including Internal Work, and 3) Localization and Hierarchy in Muscular Activation</p> <p>E-mail hirakoba@life.kyutech.ac.jp</p>
	<p>Division of Physiological and Biochemical Adaptation</p> <p>Research area Photo-functional materials including photocatalyst and photovoltaic cell</p> <p>Associate Professor, Ph.D. Naoya MURAKAMI</p>	<p>Development of novel photo-functional materials including shape-controlled inorganic nanomaterial for photocatalyst and photovoltaic cell</p> <p>■Keywords <ul style="list-style-type: none"> •Photocatalyst •Spectroscopy •Photovoltaic cell •Nanomaterial </p> <p>■Research overview Development of photo-functional nanomaterials for photocatalyst and photovoltaic cell and spectroscopic analysis for elucidation of mechanism</p>
	<p>Division of Green Technology</p> <p>Research area Materials Interface Science & Engineering</p> <p>Associate professor, Dr. Eng. Kenji OBATA</p>	<p>Development of Functional Inorganic Materials with High Functionality</p> <p>■Keywords <ul style="list-style-type: none"> •Fine ceramics •Chemical sensor using metal oxide •Solid-state electrolyte gas sensor •Electrochemical device </p> <p>■Research overview Research on physical/chemical modification and evaluation of bulk and surface/interface of solid-state material and on detection of chemical substances</p>
	<p>Division of Green Technology</p> <p>Research area Functional Materials Engineering</p> <p>Professor, Dr. Eng. Shigenori MATSUSHIMA</p>	<p>Development of Functional Inorganic Materials with High Functionality</p> <p>■Keywords <ul style="list-style-type: none"> •Fine ceramics •First-principles energy band calculation •Relativistic molecular orbital calculation •Visible-light responsible photocatalyst •Preparation and Characterization of Functional Inorganic Materials </p> <p>■Research overview Collaborative approach between experiment and theoretical calculation to develop inorganic materials with high functionality</p>
	<p>Division of Green Technology</p> <p>Research area Mechatronics</p> <p>Professor, Dr.of Information Eng. Hideki HONDA</p>	<p>Mechatronics Control to fit in human society</p> <p>■Keywords <ul style="list-style-type: none"> •Mechatronics •Control Theory •Motion Control •Electronic and information technology based Assistive Technology </p> <p>■Research overview Study mechatronics control methods to design an environment where mechatronics systems fit in the human society.</p> <p>E-mail honda@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~honda</p>



Division of Green Technology

Research area

Micro-Technology

Professor, Ph.D.

Iwao SASAKI

The research on the upgrading of the functional thin film materials

Keywords

- Functional Thin Film
- Solid Lubrication Bearing
- Sputtering (Physical Vapor Deposition)
- Magnetic Material

Research overview

Research on functional materials utilizing the unique phenomena, which are prominent in a micro/nanometer scale.

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Division of Green Technology

Research area

Green Electronics

Professor, Dr.Eng.

Shin-ichi NISHIZAWA

High power density integration with enabling materials, ultimate power devices, and design technologies

Keywords

- Semiconductor
- Power Converter
- Power Devices
- Reliability
- Power Integration

Research overview

Green electronics by high power density integration with enabling materials, ultimate power devices and design technologies, for the advanced power management system





Division of Proactive Maintenance

Research area

Antibacterial metals

Professor, Ph.D.

Toshio ANZAI

Microbially influenced corrosion and antibacterial stainless steels

Keywords

- Microbially influenced corrosion
- Antibacterial properties
- Stainless steel
- Diagnosis

Research overview

The diagnosis of microbially influenced corrosion on stainless steels and the developments of antibacterial stainless steels

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Division of Proactive Maintenance

Research area

Composite Materials

Associate Professor, Dr.Eng.

Kouichi NAKANO

Functional Design and Evaluation of Physical Properties on FGM

Keywords

- Functionally Graded Materials (FGM)
- Powder Metallurgy
- Welding & Bonding
- Microbially Influenced Corrosion

Research overview

Development of Manufactured Goods made from FGM like as Piping Joints, Hard Metal Tools, Commutators and so on, that have Graded Functions.

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Division of Nano porous material

Research area

Nanomaterial

Professor, Dr.Eng.

Jun FUCHIKAMI

Study of Oil Refining Catalyst and Environmental Protection Catalyst

Keywords

- Petroleum Products
- Hydroprocessing Catalyst
- Fluid Catalytic Cracking
- Nitrogen Oxide Reduction Catalyst

Research overview

①Study of Hydroprocessing Catalyst for Sulfur/Heavy Metal Reduction in Petroleum Products and for Diesel Oil Production from Heavy Oil. ②Study of Fluid Catalytic Cracking for more Gasoline and Propylene from Heavy Oil. ③Study of Environmental Protection Catalyst to reduce Nitrogen Oxides in Exhaust Gas



Division of Nano porous material

Research area

Nanomaterial

Associate professor, Ph.D.

Mitsunori WATABE

Catalyst design by controlling nano pore structure and nano size active site

Keywords

- Environmental issue
- Petroleum refining catalyst
- Nanopore structure
- Nano size active site

Research overview

Study of pore structure, active site for Petroleum refining catalyst



Division of Eco-Hybrid Welding

Research area

Laser-Arc Hybrid Welding Process

Professor, Ph.D.

Yoji WADA

Laser-Arc Hybrid Welding Process Visualization of Molten Metal as well as Measuring its Characteristics in Arc Welding

Keywords

- Laser Welding
- Hybrid Welding
- Visualization of Molten Pool

Research overview

Research on Laser-Arc Hybrid Welding for Steel as well as Advanced Arc Welding Process

Research on Visualization of Molten Metal as well as Measuring its Temperature Distribution and Viscosity in TIG Arc Welding for Special Metals

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Division of Eco-Hybrid Welding

Research area

Evaluating Failure and Deterioration of Plant Materials

Associate Professor, Ph.D.

Tatsuya YOSHIMOTO

Technique for Evaluating Failure and Deterioration of Heat-resisting Steel Using Nondestructive Method Study on Repair-welding Technique of various Materials

Keywords

- Ultrasonic-examination
- Heat-resisting Cast Steel
- Pipes
- Evaluating Deterioration of Materials
- Repair-welding

Research overview

Research on Technique for Evaluating for Failure and Deterioration of Plant made of Heat-resisting Steel Using Ultrasonic-examination

Study on Repair-welding Technique of various Equipments(made of Cr-Mo Steel,Stainless Steel etc.)

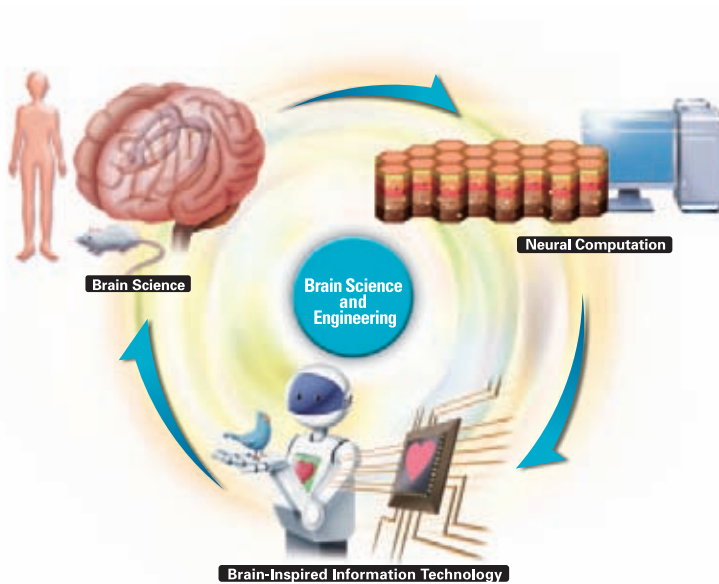
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Department of Brain Science and Engineering

Division overview



It is probably an instinct of mankind to wish to understand its own brain and also to create something similar to the brain. The last few decades of the 20th century have witnessed extraordinary progress in neuroscience. Today, we have learned much about how the brain and nervous systems work. Many of the areas relevant to this are within the research and educational scope of this department. These are sensory reception mechanisms such as visual perception, higher-order brain functions such as cognition, learning and memory as well as motor control mechanisms such as rhythmic signal generation for locomotion. On the other hand, while "next-generation computers" have been talked about for a long time, keywords like "soft computing" or "neuro, fuzzy, chaos" have been heard only in recent years. All these ideas have a common aspect of "brain-like flexibility and the corresponding disciplines are another repertoire of the department. Thus, the faculty and students of the department aim to understand brain mechanisms and to apply that knowledge in order to develop novel computers and devices.

Divisions	<p>Division of Natural Information Processing</p> <p>Neuronal rhythm and Brain Computer Interface (BCI) / Neuroscience / Mathematical Neural Network Motion Control System / Team Management</p>
	<p>Division of Higher Brain Functions</p> <p>Learning and memory mechanisms / Learning theory of higher-order self-organizing intelligence Cognitive Neuroscience, Environmental and behavioral physiology / Brain-Inspired Robotics and Intelligence Dynamics Kansei Information Processing, soft computing / Human-friendly systems</p>
	<p>Division of Brain-Like Information Processing Machines</p> <p>Brain-like Integrated Systems / Computational and Cognitive Brain Science / Brain-Like Intelligent Machines Human function substitution systems / Practical Robotics / Brain-like Computer System</p>
Cooperative Divisions	<p>Division of Mathematical Neuroscience</p> <p>Mathematical Linguistics / Behavioral cognitive psychology</p>
Chartered Divisions	<p>Division of Human Technology</p> <p>Physiological Psychology / Visual Motor Control / Analysis and modeling of brain signals Computational Theory of Mind and Intelligence / Systems Intelligence / Vision Sensing</p>

Academic Members

	<p>Division of Neural Information Processing</p> <p>Research area Neuronal rhythm and Brain Computer Interface (BCI) Professor, Ph.D. Kiyohisa NATSUME</p>	<p>The relationship between the generation of neuronal rhythm and memory process</p> <p>■Keywords <ul style="list-style-type: none"> •Neuronal rhythm •EEG •Theta rhythm •Circadian rhythm •Hippocampal slices •Brain computer interface •L2 English learning •Video Game </p> <p>■Research overview We study experimentally on the generation of neuronal rhythm and compute the rhythm on the computer. We also developed the eLearning system for Japanese English learners using BCI technology.</p> <p>E-mail natume@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~natume</p>
	<p>Division of Neural Information Processing</p> <p>Research area Neuroscience Associate Professor, Ph.D. Yoshitaka OTSUBO</p>	<p>Taste transduction mechanisms</p> <p>■Keywords <ul style="list-style-type: none"> •Patch-clamp •Ca²⁺-imaging •immunohistochemistry •single cell RT-PCR •action potentials •confocal laser microscope •signal transduction </p> <p>■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.</p> <p>E-mail otsubo@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~otsubo</p>
	<p>Division of Neural Information Processing</p> <p>Research area Neuroscience Professor, Ph.D. Kiyonori YOSHII</p>	<p>Structure and function of taste buds.</p> <p>■Keywords <ul style="list-style-type: none"> •Signal processing •Taste receptors •Neuroscience •Cellular networks •Ion channels •Neurotransmitters •Electrophysiology </p> <p>■Research overview We investigate the role of interactions among cells that sense taste substances, physiologically, pharmacologically, and molecular biologically, to elucidate the taste transduction mechanisms that support the development of human-friendly information processing systems.</p> <p>E-mail yoshii@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~yoshii</p>
	<p>Division of Neural Information Processing</p> <p>Research area Mathematical Neural Network Associate Professor, Ph.D. Katsumi TATENO</p>	<p>Neural coding and Neurodynamics</p> <p>■Keywords <ul style="list-style-type: none"> •Neural coding •Neurochaos •Memory •Taste •Chemical sensor •electric receptor </p> <p>■Research overview Our interests are complex behavior of neural activity and theoretical investigation on neural coding in the brain. Specifically, we are currently doing research on signal processing in chemical or electric receptor organs.</p> <p>E-mail tateno@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~tateno</p>
	<p>Division of Neural Information Processing</p> <p>Research area Motion Control System Professor, Dr.Eng. Kazuo ISHII</p>	<p>Development of Field Robots and Application to Real Environment</p> <p>■Keywords <ul style="list-style-type: none"> •Wheeled mobile robot for rough terrain •Underwater robot •Omni-directional mobile robot •Sewer pipe inspection robot •Motion control system •Neural networks </p> <p>■Research overview Development of mobile robots for outdoor environment, irregular terrain, underwater, sewer pipe. Environment recognition system, self-localization system, adaptive learning system, motion control system, bio-inspired information processing, etc.</p> <p>E-mail ishii@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~ishii</p>
	<p>Division of Neural Information Processing</p> <p>Research area Team Management Professor, Dr.Hlth.Sci. Doosub JAHNG</p>	<p>Team Management and Health Resources Management</p> <p>■Keywords <ul style="list-style-type: none"> •Communication •Teaming & Leadership •Occupational Health Marketing •Health Awareness •Evaluation and Consulting </p> <p>■Research overview <ol style="list-style-type: none"> 1) Teaming (Building, Performing, and Evaluating of Team activities); Research & Consulting with Team and Personal Scales 2) Comprehensive Health Resources Integrated Solutions (CHRIS); Research & Consulting for Physical, Mental, and Social Health conditions 3) Evaluation of educational communication such as school class, lectures, and seminars; Key Words Meeting (KWM) system development </p> <p>E-mail jahng@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~jahng</p>
	<p>Division of Higher Brain Functions</p> <p>Research area Learning and memory mechanisms Associate Professor, Ph.D. Satoru ISHIZUKA</p>	<p>Elucidation of signal processing mechanisms in the brain underlying learning and memory</p> <p>■Keywords <ul style="list-style-type: none"> •Hippocampal brain slices •Plasticity •Frequency response characteristics •Spontaneous firing •Temporal pattern •Rhythm •Local electroencephalogram •Chaos </p> <p>■Research overview Studies based on electrophysiological and morphological techniques, toward experimental elucidation of signal processing mechanisms in the real-brain.</p> <p>E-mail ishizuka@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~ishizuka</p>
	<p>Division of Higher Brain Functions</p> <p>Research area Learning theory of higher-order self-organizing intelligence Professor, Dr.Eng. Tetsuo FURUKAWA</p>	<p>Development of the self-organizing learning theories and the algorithms of brain-like intelligence</p> <p>■Keywords <ul style="list-style-type: none"> •brain-like intelligence •self-organizing systems •neural networks •statistical machine learning •pattern recognition </p> <p>■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.</p> <p>E-mail furukawa@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~furukawa</p>

	<p>Division of Higher Brain Functions</p> <p>Research area</p> <p>Cognitive neuroscience, Environmental and behavioral physiology Professor, M.D. Ph.D. Shuji AOU</p>	<p>Brain strategy to conserve individuals and species and their dependence on environmental chemicals</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Motivated behavior •Emotion •Stress •Social brain functions •Environmental chemicals •Hypothalamus •Amygdala •Prefrontal cortex <p>E-mail aou@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~aou</p> <p>■Research overview</p> <p>Brain mechanisms to control motivated, emotional and social behaviors under the influences of environmental changes are studied to reveal brain strategy to survive as individuals and species.</p>
	<p>Division of Higher Brain Functions</p> <p>Research area</p> <p>Brain-Inspired Robotics and Intelligence Dynamics Associate Professor, Ph.D. Hiroaki WAGATSUMA</p>	<p>Investigating principles of neural dynamics underlying our intuitive intelligence: Insights from brain-inspired robotics</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Neural synchronization •Nonlinear dynamics •Biological information coding •Explicit memory and central executive •Brain-inspired system •Neuromorphological robot •System biology <p>E-mail waga@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~waga</p> <p>■Research overview</p> <p>"Intuition" is the most attractive aspect of the brain. Our intuition is not merely a combination of past memories. It arises from a close coupling of past knowledge and the situated cognition of current events. Such a dynamic link between the past, the present, and the future is sustained by information flow throughout the environment, the body and the internal nervous systems. We study brain-inspired robotics as a methodology for intelligence dynamics.</p>
	<p>Division of Higher Brain Functions</p> <p>Research area</p> <p>Kansei Information Processing, soft computing Associate Professor, Ph.D.(Eng.) Kaori YOSHIDA</p>	<p>Designing appropriate information system based on Kansei Information Processing.</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Kansei Information Processing •Human-Computer Interaction •soft computing •cognitive psychology •intelligent image processing •information design <p>E-mail kaori@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~kaori/</p> <p>■Research overview</p> <p>We study on Kansei Information Processing as one of Human-Computer Interaction research. The aim of research is 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.</p>
	<p>Division of Higher Brain Functions</p> <p>Research area</p> <p>Human-friendly systems Lecturer, Ph.D.(Eng.) Eiichi INOHIRA</p>	<p>Study on human-friendly motion control of autonomous robots</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Autonomous robot •Motion control •Neural network •Upper limb prosthesis <p>E-mail inohira@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~inohira</p> <p>■Research overview</p> <p>Development of motion control systems generating suitable actions in human living space.</p>
	<p>Division of Brain-Like Information Processing Machines</p> <p>Research area</p> <p>Brain-like Integrated Systems Professor, Dr.Eng. Takashi MORIE</p>	<p>Design and development of integrated circuits, devices and systems for brain-like vision and recognition</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Intelligent information processing •Vision and image recognition •Integrated circuits and systems for robot and vehicle vision •Integrated circuits for nonlinear dynamical systems •Analog/digital integrated circuits and system design •Nano-structure device design <p>E-mail morie@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~morie</p> <p>■Research overview</p> <p>Research and development of software and digital/analog integrated circuit (VLSI) design for high performance vision and recognition systems mimicking brain functions.</p>
	<p>Division of Brain-Like Information Processing Machines</p> <p>Research area</p> <p>Computational and Cognitive Brain Science Associate Professor, Ph.D. Keiichi HORIO</p>	<p>Development of higher level cognition mimicking human inference mechanism</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Inference mechanism •Higher level cognition •Pattern recognition •Decision making •Data Mining <p>E-mail horio@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~horio</p> <p>■Research overview</p> <p>Development of higher level cognition mimicking human information mechanism, and its application to pattern recognition, decision making, data mining, and so on</p>
	<p>Division of Brain-Like Information Processing Machines</p> <p>Research area</p> <p>Brain-Like Intelligent Machines Associate Professor, Ph.D. Hiroyuki MIYAMOTO</p>	<p>Development of brain-like intelligent machines based on computational neuroscience, with emphasis on construction of self-learning robots.</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Learning by watching •Skill acquisition •Motor learning •Autonomous robots •Image processing •Neural network <p>E-mail miyamo@brain.kyutech.ac.jp URL http://www.brain.kyutech.ac.jp/~miyamo</p> <p>■Research overview</p> <p>Development of learning by watching robot, skill acquisition robot, motor learning robot, welfare robot.</p>
	<p>Division of Brain-Like Information Processing Machines</p> <p>Research area</p> <p>Human function substitution systems Associate professor, Ph.D.(Eng.) Chikamune WADA</p>	<p>Research on developing functional substitution system for the disabled/ the elderly people based on human sensory/motor characteristics</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Human interface •Assistive technology •Functional substitution •Biological information •Biological data measurement •Sensation •Motor function <p>E-mail wada@life.kyutech.ac.jp URL http://www.life.kyutech.ac.jp/~wada</p> <p>■Research overview</p> <p>Research on developing human-friendly assistive device/substitution system for the disabled/the elderly people based on psychophysical analysis of human sensory-motor systems</p>
	<p>Division of Brain-Like Information Processing Machines</p> <p>Research area</p> <p>Practical Robotics Associate Professor, Dr.Eng. Amir Ali Forough Nassiraei</p>	<p>Development of intelligent and practical robotic systems for social contribution</p> <p>■Keywords</p> <ul style="list-style-type: none"> •Autonomous and self-sufficient robot •Practical service robot •Medical and healthcare robot •Robotic system for underwater facilities •Robotic system for renewable energy facilities •Novel actuators and sensors <p>E-mail nassiraei@brain.kyutech.ac.jp</p> <p>■Research overview</p> <p>Development of autonomous and self-sufficient practical robotic systems including design of novel actuators and sensors. Designing practical service robots for indoor and outdoor environments, marine vessels and underwater facilities, pipe inspection and manipulation, renewable and new energy facilities, healthcare and medical applications.</p>



Division of Brain-Like Information Processing Machines

Research area

Brain-like Computer System

Associate Professor, Ph.D.

Haku TAMUKOH

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

Keywords

- Brain-like computer
- Softcomputing
- hw/sw complex system
- Digital hardware design
- Intelligent image processing
- Autonomous robotics

Research overview

A brain-like computer system laboratory aims to realize a brain-like computer and its application to human-friendly systems such as an autonomous robot for supporting daily life and a human-friendly interface system including intelligent image processing and recognition.

E-mail | tamukoh@brain.kyutech.ac.jp URL | <http://www.brain.kyutech.ac.jp/~tamukoh/>



Division of Mathematical Neuroscience

Research area

Mathematical Linguistics

Associate Professor, Ph.D.

Takashi TOYOSHIMA

Theories of Natural Language, Computational Models of Language in the Brain

Keywords

- Natural Language
- Discrete Symbolic Computation
- Neural Networks
- Generative Grammar

Research overview

Theoretical Investigation of Natural Languages and Its Computational Model in the Brain

E-mail | toyo@brain.kyutech.ac.jp URL | <http://www.lai.kyutech.ac.jp/~toyo>



Division of Mathematical Neuroscience

Research area

Behavioral cognitive psychology

Associate Professor, Ph.D.

Hirohisa ISOGAI

Mechanism of human motor behavior

Keywords

- Cognitive motivation
- Socialpsychology of motor behavior
- Acquisition of motor skill
- Image training
- Emotion and performance

Research overview

cognitive motivation of behavior, information process of motor behavior, psychophysiology of mental training

E-mail | isogai@brain.kyutech.ac.jp URL | <http://www.lai.kyutech.ac.jp/~isogai/index.html>



Division of Human Technology

Research area

Physiological Psychology

Professor, Dr.Medical Sciences.

Satoru MIYAUCHI

Physiological Psychology

Keywords

- Functional magnetic resonance imaging (fMRI)
- Electroencephalograph (EEG)
- Sleep
- Imager

Research overview

Non-invasive measurements of human brain function during wakefulness and sleep

E-mail | miyauchi@brain.kyutech.ac.jp



Division of Human Technology

Research area

Visual Motor Control

Associate Professor, Dr.Med.

Makoto KATO

Research on visually guided motor control mechanisms

Keywords

- Visual information processing
- Motor control
- Functional MRI
- Non-invasive brain function measurements

Research overview

Research on visually guided motor control mechanisms of arm and eye movements in human brain

E-mail | kato@brain.kyutech.ac.jp



Division of Human Technology

Research area

Analysis and modeling of brain signals

Professor, Dr.Eng.

CICHOCKI Andrzej

Biological Signal Processing

Keywords

- Blind Source Separation
- Independent Component Analysis
- Multi-way Analysis
- Nonnegative Matrix, and Tensor Factorizations
- Canonical Correlation Analysis
- Higher Order Partial Least Squares.

Research overview

Investigation and development of new algorithms and software for analysis, extraction, enhancement, detection, localization, recognition, clustering and classification of brain signals and neuroimages



Division of Human Technology

Research area

Computational Theory of Mind and Intelligence

Professor, Ph.D.

Yoko YAMAGUCHI

Computational Theory of Mind and Intelligence

Keywords

- Brain wave
- Neural network
- Synchronization
- Memory
- Thought
- Creativity

Research overview

We aim to clarify the computational theory of mind and intelligence based on principle of complex systems.



Division of Human Technology

Research area

Systems Intelligence

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
- Knowledge harvesting

Research overview

Research and development on algorithms of intelligent systems by studying soft computing and statistical analysis as basic and applications of healthcare and environmental domain.



Division of Human Technology

Research area

Vision Sensing

Professor, Ph.D.

Masaki SUWA

Basic and applied research on intelligent vision system

Keywords

- Vision Sensing
- 3D Sensing
- Physics-based Vision
- Pattern Recognition

Research overview

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.

CAMPUS LIFE

Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology offers international students the following support in various areas of your student life.

Tuition and other fees, and exemption

Below are shown the tuition and other fees. Students can get exemption of all or half of admission fee and tuition fee through a selection procedure. Most international students in our graduate school get exemption of at least half of tuition and admission fee.

Application fee: ¥30,000 Admission 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. Monthly stipend is from ¥20,000 to ¥140,000. More than half of the international students get scholarship in our graduate school.

Doctoral course students can get about ¥50,000 per month as a professor's research assistant.

Monthly expenses, except for tuition fee, in Kitakyushu city is approximately ¥60,000 ~ ¥80,000 including house rent for international students, ¥12,000 shown below.

Accommodation

Students can live in the apartment complex in Wakamatsu campus. The house rent is about ¥12,000 per month. Students who live with their family can apply for international house in Tobata campus. The house rent is about ¥10,000 to ¥15,000.



Tutor

A tutor, who is current student in the laboratory, can help your study and daily life in Japan. This tutor system is available for the first year after enrollment.



Japanese language class

Students can take the appropriate Japanese language class after a placement test.



Medical fee reimbursement

When an international student with the National Health Insurance coverage receives treatment for illness or injury at a medical institution and pays medical charges, 65% of the costs incurred will be reimbursed by our university.

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

<http://www.kyutech.ac.jp/english/index.html>

Admissions

fall semester

Master's Program and Doctoral Program (selection by interview)

The 1st Selection	Date of interviews	July
	Site	Kyushu Institute of Technology (Wakamatsu Campus)

The 2nd Selection	Date of interviews	August
	Site	Kyushu Institute of Technology (Wakamatsu Campus)

Alternate Site in Tokyo

Admissions Interview	The 1st selection will be held at also Horyu club in Tokyo	
	Date	July
	Site	Meisenkai Tokyo Center (Shinbashi-Ekimae-Bldg. No.1)
	Contacts	+81-93-695-6006

spring / fall semester

Master's Program and Doctoral Program (selection by interview)

The 1st Selection	Date of interviews	July
	Site	Kyushu Institute of Technology (Wakamatsu Campus)

The 2nd Selection	Date of interviews	August
	Site	Kyushu Institute of Technology (Wakamatsu Campus)

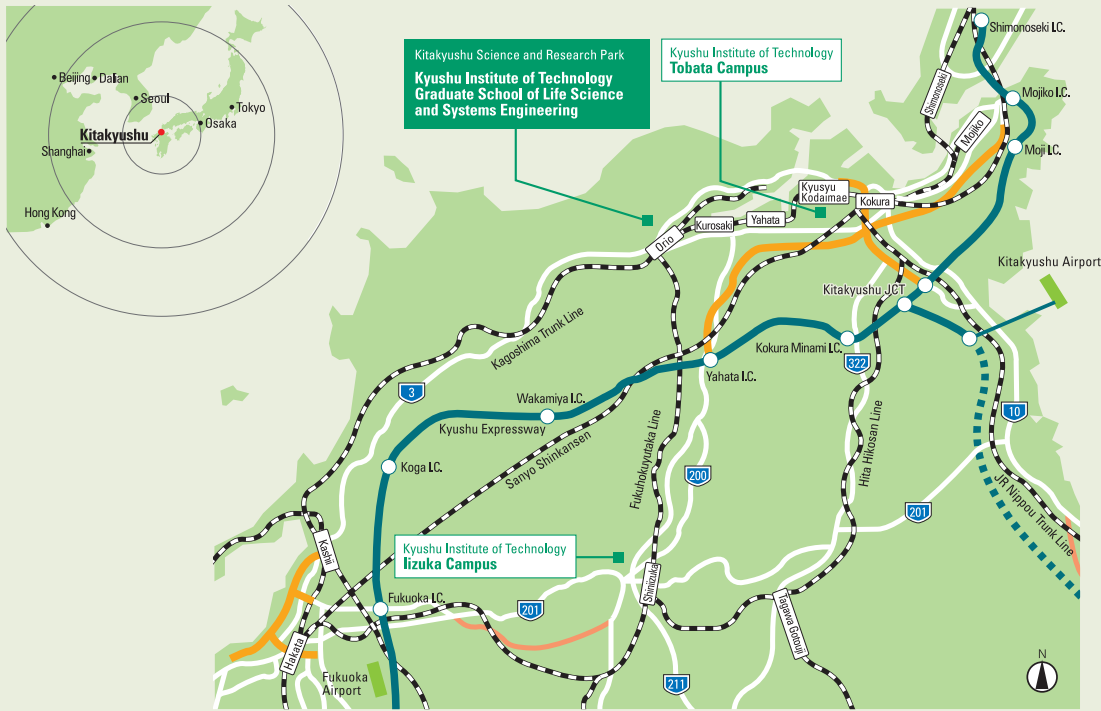
The 3rd Selection	Date of interviews	October
	Site	Kyushu Institute of Technology (Wakamatsu Campus)

The 4th Selection	Date of interviews	March
	Site	Kyushu Institute of Technology (Wakamatsu Campus)

Alternate Site in Tokyo

Admissions Interview	The 1st selection will be held at also Horyu club in Tokyo	
	Date	July
	Site	Meisenkai Tokyo Center (Shinbashi-Ekimae-Bldg. No.1)
	Contacts	+81-93-695-6006

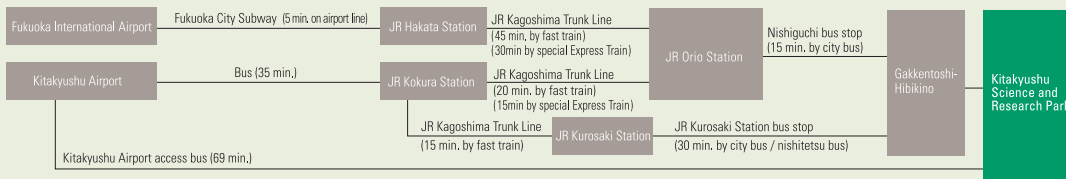
■ Access



Graduate School of Life Science and Systems Engineering



■ Access to Kitakyushu Science and Research Park



Tobata Campus

■ From major cities

By Shinkansen bullet train "Nozomi"

Tokyo	— Kokura	... 4 hours and 32 minutes
Shin-Osaka	— Kokura	... 2 hours
Hakata	— Kokura	... 17 minutes

By Airplane

Tokyo	— Kitakyushu Airport	... 1 hour and 35 minutes
Tokyo	— Fukuoka International Airport	... 1 hour and 40 minutes
Seoul	— Fukuoka International Airport	... 1 hour and 10 minutes
Beijing	— Fukuoka International Airport	... 2 hours and 15 minutes
Hong Kong	— Fukuoka International Airport	... 2 hours and 50 minutes

By Car

From the airports and stations to the Kitakyushu Science and Research Park

Kitakyushu Airport	... 60 minutes
Fukuoka International Airport	... 70 minutes
JR Kokura Station	... 35 minutes
JR Orio Station	... 10 minutes



Iizuka Campus



Kyushu Institute of Technology
Graduate School of Life Science and Systems Engineering

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Life Science and Systems Engineering	http://www.lsse.kyutech.ac.jp/
Kyushu Institute of Technology	http://www.kyutech.ac.jp/