

Faculty and Research Guide of the Graduate School of Natural Science and Technology, Gifu University

June 15, 2023

(List of Divisions related to Applied Biological Sciences)

1. Department of Life Science and Chemistry
 - Molecular Life Science Division ... p.1
 - Life Science for Food Division ... p.2
2. Department of Agricultural and Environmental Science
 - Plant Production Division ... p.3
 - Animal Science Division ... p.4
 - Environmental Science and Ecology ... p.5
3. International Joint Department of Food Science and Technology between Indian Institute of Technology Guwahati and Gifu University
 - Food Science and Technology Division ... p.6

[Department of Life Science and Chemistry] Molecular Life Science Division

Name	Research Field	Research Topics	Mail Address (Please change 「*」 to 「@」)	Official Web Site	
Professor ANDO, Hiromune	Carbohydrate-Oriented Life Science	Chemical Syntheses of Natural Glycoconjugates Creation of Versatile Carbohydrate Probes	ando.hiromune.i0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~kassel1/index-e.html	
Associate Professor IMAMURA, Akihiro	Applied Carbohydrate Chemistry	Chemical Syntheses of Biologically-relevant Glycans Development of Novel Glycosylation Methods	imamura.akihiro.k1*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~kassel1/index-e.html	JD
Associate Professor IWAMA, Tomonori	Microbial Biochemistry	Structure and function of bacterial chemoreceptor	iwama.tomonori.z8*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/h1884/	
Professor UENO, Yoshihito	Nucleic Acid Chemistry	Design and chemical synthesis of functional nucleic acids for gene therapy and genetic diagnosis	ueno.yoshihito.e7*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~biochem/	JD
Professor KIZUKA, Yasuhiko	Glycobiology	Biochemical analysis of physiological and pathological functions of mammalian glycans	kizuka.yasuhiko.k8*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~kizuka_2/	JD
Assistant professor KOMURA, Naoko	Glycoconjugate Chemistry	Chemical synthesis and chemical biology of glycans	komura.naoko.a1*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~kassel1/index-e.html	
Associate Professor SHIMADA, Atsuhiko	Enzyme Science	Structure-based understanding the chemical reaction mechanism driven by enzymes	shimada.atsuhiro.s2*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/sbk/	
Professor SUZUKI, Kenichi	Cell Biophysics	Studies on cell membrane structures and signal transduction by single-molecule imaging	suzuki.kenichi.b7f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~single/	
Associate Professor SUZUKI, Shiro	Biomass Metabolism & Chemistry	Research of the chemical structures, biosyntheses, metabolisms, and value-added use of plant biomass	suzuki.shiro.n5*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/biomass/	JD
Assistant professor TANAKA, Hidenori	Bio-related chemistry	Development of synthetic methods for oligosaccharides and nucleic acid-like biomolecules	tanaka.hidenori.v1*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~kassel1/index-e.html	
Professor NAKAGAWA, Tsutomu	Molecular Cellular Biology	Biochemical and molecular biological studies on the mechanisms of regulation of protein function by post-translational modifications and their biological significance	nakagawa.tsutomu.i1*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/nakagawa/	
Associate Professor NAKAJIMA, Kazuki	Bioanalytical Chemistry	Technological development for analyzing glycan-related molecules to understand glycan functions and their metabolic crosstalks.	nakajima.kazuki.x0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~knakaj2/en/index.html	
Associate Professor NAKAMURA, Kohai	Molecular Microbial Ecology	Syntrophic methanogenesis Prokaryotic diversity on anaerobic metabolism in carbon cycle	nakamura.kohai.r0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~tak2003/index-i.html	
Assistant Professor HASHIMOTO, Mianzu	Animal Biochemistry	Study on the mechanisms of brain development and function by analysis of genetically modified mice.	hashimoto.misuzu.b9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/nakagawa/	
Professor FUJITA, Morihisa	Systems Glycobiology	Studies on metabolism and transport of glycans and glycoproteins	fujita.morihisa.h3*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~mfujita/en/index.html	
Professor YANASE, Emiko	Bio-organic Chemistry	Isolation, structure determination and synthesis of Natural products	yanase.emiko.h2*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~biochem/	JD
Associate Professor YAMAUCHI, Kosei	Natural Products Chemistry	Isolation and identification of ingredients from natural products Investigation of physiological activity of ingredients in animal cells	yamauchi.kosei.p2*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/mitunaga/	JD

Faculty members with "JD" also teach for JD program (International Joint Department of Food Science and Technology between Indian Institute of Technology Guwahati and Gifu University)

Life Science for Food Division

Name	Research Field	Research Topics	Mail Address (Please change 「*」 to 「@」)	Official Web Site	
Associate Professor INAGAKI, Mizuho	Food Ingredients Biochemistry	Study on the enhancement of cellular homeostasis by food ingredients Study on the mechanism of intestinal microflora correction	inagaki.mizuho.u9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/mizuho/	
Associate Professor IMAIZUMI, Tepppei	Process Engineering for Agriproducts	Studies on structural and physical properties in processed fruit and vegetables	imaizumi.teppeij6*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~nousan/	JD
Professor IWAMOTO, Satoshi	Food Engineering	Inner structure changes of a natural stacked polymer films Application of self-assembly of natural amphiphilic substance to create functional interface Sol-gel and/or grass transition of food materials	iwamoto.satoshi.x7*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~shokko/	
Associate Professor KATSUNO, Nakako	Food Processing Chemistry	Study of dispersion stability of particles in nonaqueous food slurry Chemical changing in food during processing Study on hierarchical structure of starch	katsuno.nakako.n0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~aprocess/index.htm	JD
Associate Professor KITAGUCHI, Kohji	Nutritional Immunology	Molecular and cellular studies on the interaction between immune cells and food components Studies on inhibitory effect of food on allergic diseases	kitaguchi.kohji.u8*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~yabet/	JD
Associate Professor SHIMADA, Masaya	Nutritional Biochemistry	Regulation of metabolic diseases (fatty liver, diabetes etc.) by nutrients and food components	shimada.masaya.v7*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/nut-micr/	JD
Associate Professor THAMMAWONG , Manasikan	Postharvest Physiology	Understanding of Quality Change Mechanisms and Development of the Novel Postharvest Technology for Fresh Produces	thammawong.manasikan.i2*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/knakano/	JD
Professor NAKAGAWA, Tomoyuki	Food Microbiology	Molecular cell biology of yeasts Molecular breeding of yeasts Development of industrial enzymes	nakagawa.tomoyuki.u0*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/t.nakaga/	JD
Assistant Professor NAKAGAWA, Kasumi	Microbiology of Fermented Foods	Isolation and Characterization of Microorganisms from Nature	nakagawa.kasumi.j8*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/hakko/	
Professor NAKANO, Kohei	Postharvest Engineering	Postharvest Physiology and Technology of Fresh Agricultural produces	nakano.kohei.i7*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/knakano/	JD
Professor NISHIZU, Takahisa	Food Process Engineering	Studies on physical properties of food Development of food process monitoring technique Studies on food freezing	nishizu.takahisa.g0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~aprocess/index.htm	JD
Professor YABE, Tomio	Functional Food Biochemistry	Glycobiological studies on function control through proteoglycans. Structural analysis of a dietary fiber in food and studies on physiology.	yabe.tomio.r9*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~yabet/	JD

Faculty members with "JD" also teach for JD program (International Joint Department of Food Science and Technology between Indian Institute of Technology Guwahati and Gifu University)

[Department of Agricultural and Environmental Science]
Plant Production Division

Name	Research Field	Research Topics	Mail Address (Please change 「*」 to 「@」)	Official Web Site	
Professor OBA, Shinya	Agronomy, Farm Management, and Plant Production control	Study on the genetical and the physiological properties of field crop plants such as rice, soybean, buckwheat etc. Study on the plant production systems and the field control based on low input agriculture from soil science and ecological aspects	oba.shinya.y0*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/soba/	
Assistant Professor OCHIAI, Masaki	Horticultural Biotechnology and Bioengineering	Molecular and biological properties of horticultural plants under environmental control. Breeding of horticultural varieties suitable for protected cultivation.	ochiai.masaki.h3*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~hort/index.htm	
Associate Professor KOBAYASHI, Yuriko	Molecular Plant Nutrition	Molecular mechanism of tolerance and adaptation of plants to the soil environmental stresses such as nutritional and toxic elements	kobayashi.yuriko.h8*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/koyama/	JD
Professor KOYAMA, Hiroyuki	Plant Cell Technology	Molecular Physiology in the plant responses to aluminum toxicity and Pi deficiency Plant molecular breeding to improve growth performance in the acid soil Applied genomics approaches for "gene-fishing" that can utilize plant breeding	koyama.hiroyuki.i9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/koyama/	JD
Professor SHIMAZU, Teruaki	Environmental Control Engineering	Development of environmental control on plant production systems Analysis of greenhouse microclimate Analysis of the environmental response of plant physiological process	shimazu.teruaki.f9*f.gifu-u.ac.jp	https://mobile.twitter.com/ppfd1500	
Associate Professor SHIMIZU, Masafumi	Plant Protection	Biological control of plant diseases Analysis of tri-trophic interactions among plants, pathogens and plant probiotics	shimizu.masafumi.f3*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/hyakumac/	JD
Professor SUGA, Haruhisa	Molecular Plant Pathology	Molecular Ecology of Plant Pathogens Producing Mycotxins Pathogenicity Mechanisms of Plant Pathogens Genome Evolution of Plant Pathogens	suga.haruhisa.c2*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~lsrc/dgr/suga-hp/MGRC_SUGA.htm	
Associate Professor TANAKA, Takashi	Agronomy	Precision agriculture in rice, wheat, and soybean production Sustainable agronomic practices for forage rice and corn silage production system. Statistical modeling for agronomy data	tanaka.takashi.t1*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~cropsci/	
Assistant Professor HIENO, Ayaka	Fungal Ecology	Taxonomy and ecology of plant pathogenic fungi inhabiting agricultural land and surrounding environment Genetic population structure and distribution dynamics of phytopathogenic oomycetes	hieno.ayaka.h9*f.gifu-u.ac.jp	https://www.green.gifu-u.ac.jp/~kageyamalab/	
Professor MATSUI, Tsutomu	Crop Production Science	Heat induced floret sterility in rice Mechanics of anther dehiscence in grain crops Life cycle assessment in agriculture	matsui.tsutomu.m5*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~cropsci/	
Professor MATSUBARA, Yoichi	Horticultural Plant Production	Bioregulation of environmental stress tolerance in horticultural plants Antioxidative ability in horticultural plants Herb plants with antifungal and antioxidative ability	matsubara.yoichi.r6*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~ymatsu/	
Professor YAMADA, Kunio	Horticultural Science	Postharvest Physiology of Cut Roses Plant Physiology in the Petal Growth Phytoremediation using Ornamental Plants	yamada.kunio.k0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~hort/index.htm	
Associate Professor YAMANE, Kyoko	Genetics and Plant Breeding	Origin, Evolution, and Conservation of Wasabi Breeding of Buckwheat- Related Species. Molecular Cloning of Adaptation Characters in Triticum/ Aegilops Species, Wheat- Related Species.	yamane.kyoko.h6*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~kyamane/	
Professor YAMAMOTO, Yoshiharu Y.	Plant Genome Science	Environmental Stresses and Photosynthesis Genome-wide Analysis of Plant Promoter Photosynthetic Sea Slug	amamoto.yoshiharu.h5*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~yvy/yvy/Top.html	JD
Associate Professor LEE, Yoonmi	Agricultural Policy	Evaluation of Japanese Agricultural Policy Promotion of regional agriculture in japan	lee.yoonmi.i7*f.gifu-u.ac.jp	in preparation	

Faculty members with "JD" also teach for JD program (International Joint Department of Food Science and Technology between Indian Institute of Technology Guwahati and Gifu University)

Animal Science Division

Name	Research Field	Research Topics	Mail Address (Please change 「*」 to 「@」)	Official Web Site
Associate Professor ASANO, Makoto	Zoo and Wildlife Medicine	Population analysis on Wild Mammals Population Control of Invasive Alien Mammals Reproductive Research on Wild Mammals	asano.makoto.p9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/vetpage/wildlife/
Professor IWASAWA, Atsushi	Comparative Biochemistry (Animal Physiological Chemistry)	Ontogeny of the pituitary-thyroid axis in chicken embryo Development of sensitive, non-radioisotopic immunoassays for avian pituitary hormones Mechanism of avian glucose homeostasis	iwasawa.atsushi.j0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~aiwa/cebhaus.html
Assistant Professor OTSUKA, Tsuyoshi	Animal Productive Management	Biological rhythms and animal productivity Effects of environmental changes on animal physiology	otsuka.tsuyoshi.p7*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/otsuka/
Professor KUSUDA, Satoshi	Zoo Animal Reproduction	Reproductive physiology in zoo and wild animals Development of non-invasive endocrine monitoring techniques for endangered animals	kusuda.satoshi.y5*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~lar/
Professor SUZUKI, Masatsugu	Wildlife Biology	Reproductive Biology of Wildlife Management Techniques of Wildlife Wildlife Diseases	suzuki.masatsugu.u6*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/vetpage/wildlife/
Associate Professor TADANO, Ryo	Animal Genome Diversity	Study on genetic diversity of livestock and poultry	tadano.ryo.i0*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/tadano/
Associate Professor NINOMIYA, Shigeru	Animal Welfare & Behaviour	Animal management and welfare Ethology of animal behavioural expression in captivity	ninomiya.shigeru.b2*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/awb/
Assistant Professor HIMAKI, Takehiro	Animal Developmental Engineering	Artificial controls of the generative cells Development of the techniques to produce the high valuable animals	himaki.takehiro.s9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/himaki/
Professor MATSUMURA, Shuichi	Animal Genetics	Evolutionary genetics of domestic and wild animals Evaluation and conservation of genetic diversity in domestic and wild animals	matsumura.shuichi.k1*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~genetics/
Professor YAMAMOTO, Akemi	Animal Nutrition	Response of poultry to energy and amino acids Estimation of digestibility for pigs and poultry	yamamoto.akemi.f6*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/nutrition/
Professor YAYOTA, Masato	Animal Feeding and Nutrition	Nutritional ecology of grazing ruminants on semi-natural grasslands Digestive physiology of grazing ruminants	yayota.masato.t4*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/yayo/

Environmental Science and Ecology Division

Name	Research Field	Research Topics	Mail Address (Please change 「*」 to 「@」)	Official Web Site
Associate Professor ANDO, Masaki	Wildlife Ecology and Management	Interactions between Wildlife and Forest Ecosystem Wildlife Ecology and Management	ando.masaki.i7*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~m.ando/index.html
Professor HIRAMATSU, Ken	Water Resources and Environmental Engineering	Ecological and environmental hydraulics Conservation of aquatic ecology and environment in a rural area Water resources management	hiramatsu.ken.b7*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~water/index.html
Associate Professor HIROTA, Isao	Regional Resource Ecology	Regional plant utilization and management in Southeast Asia and Japan Agricultural system and ecology in Southeast Asia and Japan.	hirota.isao.m4*f.gifu-u.ac.jp	https://researchmap.jp/hirotaisao?lang=en
Associate Professor ITO, Kengo	Aquatic Biology and Environmental Science	Conservation of Aqua Biological Ecology Irrigation and Drainage Analysis of Plants Sap Flow	ito.kengo.h9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/joroken/
Assistant Professor KATAHATA, Shin-ichiro	Tree Ecophysiology	Environmental Response of Tree Flowering Mechanism of Tree	katahata.shin-ichiro.y8*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~ymuka/index.html
Associate Professor KATO, Shogo	Forest Ecology	Spatial pattern and process in woody plants (Hemiparasitic plant, understory plant, Liana and Japanese fir) Positive and negative phototropism of root climber	kato.shogo.u1*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~shogo/index.html
Professor MUKAI, Takahiko	Biogeography	Research on the diversity of aquatic animals, and on their conservation.	mukai.takahiko.k0*f.gifu-u.ac.jp	https://www1.gifu-u.ac.jp/~tmukai/
Professor MURAOKA, Hiroyuki	Plant and ecosystem physiological ecology	Light acquisition and utilization of vascular plants Plant growth and light environment in forest ecosystems Ecophysiological process in terrestrial ecosystem carbon cycle	muraoka.hiroyuki.y6*f.gifu-u.ac.jp	https://www.green.gifu-u.ac.jp/~muraokalab/
Associate Professor MORIBE, Junji	Wildlife Resources	Natural History of Wildlife Resource Management of Wildlife Development of Transfer Systems using LPWA	moribe.junji.g0*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/jmoribe/
Professor NISHIMURA, Shin-ichi	Agricultural Structures and Environment Engineering	Safety and effective use of agricultural structures for water supply	nishimura.shinichi.s1*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/hshimizu/
Associate Professor NISHIYAMA, Tatsuro	Mechanics for Agricultural Dams	Estimation of strength of rock foundations for dam safety	nishiyama.tatsuro.k6*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/hshimizu/
Professor OHTSUKA, Toshiyuki	Ecosystem ecology	Carbon and nitrogen cycle in forest ecosystems Community structure and ecosystem function Mangrove ecosystems	ohtsuka.toshiyuki.p9*f.gifu-u.ac.jp	https://www.green.gifu-u.ac.jp/~ohtsuka_lab/top.html
Associate Professor OKAMOTO, Tomoko	Chemical Ecology	Insect pheromone Research Role of plant volatiles in plant-animal interaction Speciation mechanisms	okamoto.tomoko.e2*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/insectecology/
Professor ONISHI, Takeo	Hydrology	Understanding water / material / heat dynamics from head water to ocean. Based on this knowledge, how to solve water and soil related environmental problems will be explored	onishi.takeo.k7*f.gifu-u.ac.jp	https://hydro-takeon.jp/
Associate Professor SAITOH, Taku	Environmental biophysics	Study on carbon, water and heat cycles in terrestrial ecosystems based on field measurements and ecosystem modelling	saitoh.taku.k0*f.gifu-u.ac.jp	https://www.green.gifu-u.ac.jp/~taku/Laboratory.html
Professor TSUCHIDA, Koji	Insect Ecology	Colony and population structures of social insects Genetic population structures of insects in the wild	tsuchida.koji.v4*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/agriculture-environment/insectecology/
Associate Professor Wei Yongfen	Environmental monitoring	Monitoring and assessment of Nitrogen, Carbon and environmental pollutants in natural environment (forest, agricultural land and water systems)	wei.yongfen.j3*f.gifu-u.ac.jp	https://researchmap.jp/2071

【International Joint Department of Food Science and Technology between Indian Institute of Technology
Guwahati and Gifu University】

Food Science and Technology Division

Name	Research Field	Research Topics	Mail Address (Please change 「*」 to 「@」)	Official Web Site
Professor EBIHARA, Akio	Enzyme Science	Protein structure-function relationships in brood regulation systems; Development of biosensor for early markers of diabetic complications; Integrated structural and evolutionary study with highly accurate protein structure prediction (<i>see Akio's Field</i>)	ebihara.akio.v9*f.gifu-u.ac.jp	https://www.abios.gifu-u.ac.jp/education-member/lifescience/sbk/

Faculty members with "JD" of each department also teach for JD program (International Joint Department of Food Science and
Technology between Indian Institute of Technology Guwahati and Gifu University)