SPECIAL PROGRAM FOR FOREIGN STUDENTS AT THE UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCE, GIFU UNIVERSITY (THREE-YEAR DOCTORAL PROGRAM, FALL 2014 ADMISSION)

For privately financed international students

AFFILIATED UNIVERSITY

Gifu University

Shizuoka University

COLLABORATIVE INSTITUTE

National Institute of Advanced Industrial Science and Technology

The United Graduate School of Agricultural Science, Gifu University

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For privately financed international students

The United Graduate School of Agricultural Science, Gifu University invites applications from international students who meet the following requirements to study agriculture in a doctoral course, starting in the fall semester of the 2014 academic year.

1. Major fields of study and number of students for admission

(1) Major fields: The three fields in the program are Science of Biological Production, Science of Biological Environment, and Science of Biological Resources. Any of these three fields is acceptable as long as the student can receive research guidance in that field from his or her prospective primary academic supervisor in the United Graduate School of Agricultural Science.

(2) Number of students: A few

2. Applicant qualifications and conditions

(1) Applicants should be outstanding students with the ability to obtain a doctorate within three years of admission to the program. Students may either come from another country or currently reside in Japan, and will study in the program as international students.

(2) Applicants must satisfy at least one of the following requirements with regard to academic background:

a. The applicant has obtained, or is planning to obtain by September 30, 2014, a master's degree or a degree that is equivalent to a master's degree in another country.

b. The applicant is judged in an examination of his or her qualifications by Gifu University to have academic ability equivalent to or greater than a person who holds a master's degree from a Japanese institution, and will be 24 years of age or older as of April 1, 2014.

c. The applicant has engaged in research at a university or a research institute for more than 2 years after having completed 16 years of school education in a foreign country, and based on the results of that research is judged by Gifu University to have academic ability equivalent to or greater than a person who has obtained a master's degree from a Japanese institution.

(3) Applicants should be recommended by the presidents or heads of universities (especially those having exchange programs with the member institutions of the United Graduate School of Agricultural Science, Gifu University), government and municipal offices, private companies, or other recognized institutions in their countries.

(4) Applicants should be in good physical and mental health.

(5) Applicants should be proficient in English.

3. Tuition and fees

1. Examination fee: 30,000 yen
2. Admission fee: 282,000 yen
3. Tuition: 267,900 yen (annual sum 535,800 yen)

4. Selection and Admission

The United Graduate School of Agricultural Science will select applicants based on the application forms and interviews, including via the Internet. Applicants will be notified of the results by the middle of July, after which Letters of Admission will be sent to the successful applicants.

5. Application procedure

Applicants are required to submit the following documents to the member institution of the United Graduate School of Agricultural Science, Gifu University to which his or her desired primary academic supervisor belongs. <u>These documents must arrive by May 30, 2014.</u> The documents must be submitted by the following people on the applicant's behalf: if you are currently a university student, the application documents should be submitted by your university dean; if you are currently employed, they should be submitted by your immediate superior; and if you are currently unemployed, they should be submitted by your research advisor at the university from which you graduated. The documents should be sent by registered express mail. <u>Applications submitted by the student him- or herself will NOT be accepted.</u>

(1) Application Form (form designated by Gifu University) [1 original]

(2) Certification of examination fee payment (See attached sheet for payment instructions) [1 original]

(3) Certificate of completion or letter of expected completion from the university the applicant graduated from [1 photocopy]

(4) Official transcripts from the university and graduate school the applicant graduated from (issued by the university the applicant graduated from) [1 original]

(5) Master's thesis or equivalent if applicant did not write a master's thesis. If the applicant has not yet obtained a master's degree, a report on his or her research progress should be sent [1 photocopy]
(6) Copy of family register, and certificate of citizenship or proof of residence in the applicant's home country [1 original]
(7) Official Letter of Recommendation (using form designated by Gifu University) [This Letter of Recommendation shall be addressed to the dean of the United Graduate School of Agricultural Science, Gifu University, and so it should be written by the dean of the student's department at the university he or she graduated from, or by the departmental head at the applicant's current place of employment] [1 original]
(8) Letter of personal recommendation (written by a faculty member who is well acquainted with the applicant) [1 original]
(9) Statement of purpose of study at Gifu University (using form designated by Gifu University) [1 original]
(10) Official transcript of TOEFL, TOEIC, or similar test of English proficiency [1 copy]
(11) Short essay in English (less than 1200 words) on what applicant wants to study and his or her ambitions of how to use that knowledge for the benefit of the society (written on form designated by Gifu University) [1 original]
(12) Two photographs of applicant (4 cm long × 3 cm wide, showing the applicant's upper body and head facing forward and without a hat, taken within three months prior to submission). The applicant's name and nationality should be written on the back of the photographs, and they should be attached to the designated places on the application form.

Notes on preparation of documents, and precautions

1) All documents should be in either English or Japanese, and prepared if at all possible using an English typewriter or a word processor.
2) Applications will NOT be accepted in the following cases: the submitted documents are not fully completed and accurate; one or more of the required documents were not submitted; the documents were submitted after the deadline.
3) The persons writing the above recommendations (official letter of recommendation, personal letter of recommendation) are asked to indicate in their letters of recommendation the level of the applicant's English ability, as "Excellent," "Average," or "Below average."
4) Use the forms designated by Gifu University for documents 1, 7, 9, and 11 above. All other documents should be prepared using A4 size paper.
5) None of the submitted documents will be returned to the applicant.
6) The applicant should write the name of the prospective primary academic supervisor on the application form. Supervisors should be selected from the attached list. Applications that do not include the name of a supervisor will not be accepted. Applicants should prepare a research plan in close communication with their supervisors.

6. General notes

Students are asked to learn about the culture, customs, and climate of Japan before they arrive. They are also strongly encouraged to acquire basic Japanese language skills, as this will make their daily lives in Japan much more comfortable and convenient.

Address for submission and Inquiries

The United Graduate School of Agricultural Science, Gifu University
1-1 Yanagido, Gifu 501-1193, Japan
Fax: +81-58-293-2992
E-mai1 : renno@gifu-u.ac.jp
※ The title of the e-mail should be "RENNO"

Contact information for member universities

Gifu University
The United Graduate School of Agricultural Science
1-1 Yanagido, Gifu 501-1193, Japan
Phone: +81-58-293-2984, 2985
Fax: +81-58-293-2992

Shizuoka University
Student Affairs Section (Office), Faculty of Agriculture
836 Ohya, Suruga-ku, Shizuoka 422-8529, Japan
Phone: +81-54-238-4810, 4811
Fax: +81-54-237-3028

Website for The United Graduate School of Agricultural Science, Gifu University:
http://www1.gifu-u.ac.jp/~rendai/eng/

Method of Payment for Examination Fee

The United Graduate School of Agricultural Science, Gifu University

1. Applicants in Japan

Examination fee: ¥30,000

Without separating the enclosed "Remittance Request (1)," "Receipt (2)," and "Notice of Delivery (3)," remit the examination fee at your nearest bank (a service charge must be paid by the applicant). After making the remittance, enclose the "Notice of Delivery (3)" with the application papers. Transfers cannot be made from ATMs.

2. Applicants outside Japan

Examination fee: ¥30,000

Applicants remitting money from outside Japan should transfer a ¥30,000 yen examination fee to the following bank account. Remittance charges such as handling fees for yen exchange and incoming remittance are to be paid by the applicant. Include a copy of documentary evidence of remittance with the application papers.

【Bank Information】

THE JUROKU BANK, LTD.
SWIFT: JUROJPJT
A/C with KURONO Branch
(Bank Branch Address: 124-3 Oritate, Gifu City, Japan)
A/C No.: 1361948
A/C Name: KOKURITSU-DAIGAKUHOZIN
GIFU DAIGAKU KENTEIRYOKOZA
(Gifu University Address: 1-1 Yanagido, Gifu City, Japan)

3. Note that once examination fees have been received they cannot be refunded.

Interview Methods

The United Graduate School of Agricultural Science, Gifu University

1. Method

・Face-to-face interviews will be conducted at the United Graduate School of Agricultural Science, Gifu University if the applicant is able to come to Japan. Details will be sent by mail in early June to the applicant's address in Japan.

・Video conference interviews will be conducted if the applicant is unable to come to Japan. Please make inquiries about the video conference system (e.g., usage, standards) in advance.

・If the video conference system is not available, the interviews will be conducted via e-mail.

Notes:

1) For e-mail interviews, the applicant will first be contacted via e-mail by his or her prospective primary academic supervisor. This e-mail will be sent to the applicant at the e-mail address written on his or her admission application.

2) E-mail interviews will be conducted by three faculty members in the applicant's preferred field of study. The applicant will exchange e-mail messages at least three times with each faculty member (a total of nine times or more).

3) During the interview period applicants should check their e-mail constantly, and respond to all e-mails.

2. Interview period: June 16 (Mon) – June 30 (Mon), 2014

3. If the interviews cannot be completed during the interview period, the applicant will be disqualified.

Important Notification

1. Preliminary consultation for applicants with disabilities

Special considerations may be necessary for challenged applicants (see the chart below). Such applicants require preliminary consultation with the Graduate School Office.

Classification	Degree of disability
Visual disability	Vision acuity in both eyes is less than the 0.3(20/60) level or visual disability other than eyesight is advanced. It is impossible or extremely difficult to recognize letters even with a magnifying glass.
Hearing disability	Hearing level in both ears is 60 decibels or higher. It is impossible or extremely difficult to understand a speaking voice even with hearing-aids.
Physically challenged	(a) It is impossible or extremely difficult to perform basic movements necessary for daily life including walking, even with adaptive equipment. (b) The level of physical challenges is milder than in (a) above, but regular medical guidance is needed.
Prone to illness or weak (including physical weakness)	(a) The level of illness including chronic respiratory disease requires regular medical guidance or some kind of restrictions in daily life. (b) The level of physical weakness requires restrictions in daily life.

(1) Consultation period
Consult by Friday, April 25, 2014.

(2) How to consult
Submit a document containing the following items (any style is acceptable):
(a) Preferred major chair, course, and department, and prospective advisor.
(b) Name of the university, faculty, and department from which you are graduating.
(c) Type and level of disability (a doctor's statement may be necessary in some cases).
(d) Preferred special considerations during examinations.
(e) Preferred special considerations while being enrolled at this university.
(f) Special considerations taken at the school from which you are graduating.
(g) Situations in your daily life.

(3) Contact
Address: c/o The Office of the United Graduate School of Agricultural Science, Gifu University, 1-1 Yanagido, Gifu 501-1193, Japan
FAX: +81-58-293-2992
E-mail: renno@gifu-u.ac.jp

2. Personal Information

The information provided in the application, such as name, address, and other personal matters will only be used by the United Graduate School of Agricultural Science, Gifu University Office for the purpose of processing applications and notifying successful applicants.

OUTLINE

THE UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCE, GIFU UNIVERSITY (THREE-YEAR DOCTORAL COURSE)

1. Purpose of Foundation

The United Graduate School of Agricultural Science provides a distinctive organization both for research and for education through the synergistic linkage of three allied universities; Gifu University, Shizuoka University, and Shinshu University (From 2010, mainly Graduate School of Agriculture of Shizuoka University and Graduate School of Applied Biological Sciences of Gifu University). We aim to impart sound expertise and wide knowledge concerning the biological production, biological environment, and biological resources to our students that they will become researchers and specialists having a high-level of scholarship, thus contributing to the development of agricultural science and related industries.

In order to meet the strong demand from foreign countries and to contribute to the development of agricultural science and related industries in foreign countries, the United Graduate School welcomes overseas applicants.

Blessed with its favorable location in the central districts (Chubu Chiho) of Japan, this United Graduate School also aims at contributing to the development of the Chubu Chiho through cooperation with the industrial sector.

2. Specialized Courses

(1) Science of Biological Production

Students in this course will cover all of the steps in agriculture: from production to trade and marketing of products. They are requested to study or develop knowledge and expertise on plants, animals, and their products. On the basis of such progress and integration, they will create a new era in agriculture, not only from the technological but also from the economical point of view, through the following areas: development of new biological resources, genetic improvements of plants and animals used hitherto, improvements of the technology of plant culture, animal feeding, and product preservation and processing.

(2) Science of Biological Environment

It is of vital importance, today and in the future, to expand, improve, and conserve fertile farmland and forests, which are the basis for biological production. Preserving farmland and forests from disaster and devastation are also very important.

It is particularly worthy of note that not a few recent world-wide environmental problems are in the area of agriculture.To solve and to cope with these problems, research programs have been developed, and various subjects are offered by scholars pursuing research relevant to these problems through advanced technology using physical, chemical, and biological methods.

(3) Science of Biological Resources

In order to use all of the available biological resources wisely, including animals, plants, and microbial products, and to solve underlying problems of soil and earth, this course offers deeper knowledge for the production of biological resources and multidisciplinary research on life sciences. Education and research related to the structure-function relationships of natural products, endowment of new functionality to unutilized natural resources, and efficient devices of waste treatment are systematically and collectively conducted from chemical, biological, physicochemical, biochemical as well as newly developed biotechnological standpoints.

3. Special Features of the United Graduate School of Agricultural Science

(1) At the time of enrollment, each student may request a professor as his/her primary academic supervisor from the "Fields of Instruction and Research Themes of Professors". The United Graduate School of Agricultural Science then assigns a professor as a primary academic supervisor and a field of study to each student based on the request.

(2) Each student at the United Graduate School of Agricultural Science will be assigned one primary academic supervisor and two co-academic supervisors.

(3) Although all students are registered with Gifu University, they conduct their course work mainly at the location where his/her primary academic supervisor is located.

The facilities and equipment at participating university locations are, however, available to all students.

4. Requirements for Doctoral Degree

Our doctoral course requires a residency of three years or more. (Persons who have achieved particularly outstanding research results may complete the course in less than three years.) In addition to earning 12 credits by required subjects (at least 9 credits) and elective subjects (at least 3 credits), a student must pass the doctoral dissertation review along with the final examination. Those who successfully complete the course will be conferred a doctoral degree in Philosophy (Agricultural Science).

5. Outline of Major Chairs [Rengo-Koza]

Course	Major Chair [Rengo-Koza]	Program Content
Science of Biological Production	Plant Production and Management	This major chair covers a wide spectrum of disciplines, ranging from production to supply of plant products to consumers. There are three major disciplines under the chair, and their objectives are: 1) Plant production science, which covers fields such as crop and horticultural sciences, and plant genetics and breeding. Advanced technology in genetic engineering, seed and sapling production, cultivation technology and biotechnology are its main objectives. 2) Science of plant product distribution, which covers postharvest technique and logistics of plant products. Research and education in a series of scientific fields from harvest to supply for consumers are the main objectives. 3) Science of business management, which comprehensively covers advanced studies for productivity, profitability and sustainable development and cultural advancements for business, rural, and national economies in conjunction with information sciences.
	Animal Resource Production	As the major chair covering the field of animal science, all disciplines in the chair are directed to research on animals, mainly mammals and birds, relating directly or indirectly to human welfare and life. By continuous efforts to give students newer scientific information and technology, the chair conducts high-level education for research in a wide variety of fields of animal science such as anatomy, physiology, genetics, development, reproduction, nutrition, management of livestock and grassland, and feed and product processing. Active use of biotechnology, including gene handling and information processing to increase the productivity of animals, is also a major concern.

Course	Major Chair [Rengo-Koza]	Program Content
Science of Biological Environment	Agricultural and Environmental Engineering	Research and education are conducted on principles of land and water engineering and physical planning for the consolidation and conservation of farmland and forests, which are the foundation of biological production. Research and education on mechanization of farm work are also carried out for increased labor productivity and supply of agricultural products. Specifically, conservation, disaster prevention, improvement and consolidation of farmland and forests, construction of relevant structures, development and utilization of machinery are the main subjects in this major chair. The main objective is sustainable development and utilization of natural resources over the long term to establish a sound foundation for biological production and a comfortable living environment for human life.
	Management of Biological Environment	The purpose in this major chair is to understand the principle of the ecological structure and function in various circumstances such as crop fields, forest areas and other useful locations with agricultural facilities, and to analyse the ecological changes or scientific phenomena in both natural and artificial conditions. More reasonable and theoretical practices for the control of plant growth and crop management are discussed and implemented in the advanced program with higher biological techniques, including pathological, entomological methods, and artificial techniques using agricultural-specific facilities or equipment.

Course	Major Chair [Rengo-Koza]	Program Content
Science of Biological Resources	Utilization of Biological Resources	This major chair offers studies on basic physiological, chemical and physical problems of various biological resources. We promote useful exploitation of resources for foodstuffs, energy, chemicals and feeds, new development of unused resources, effective regeneration of resources, and biological treatment of waste matters. Both education and research are focused on the practical application of these problems.
	Smart Material Science	This major chair is engaged in research on the understanding of biological processes through chemistry; that is, by identifying the structures of bio-active substances using spectroscopic and organo-chemical methods. In addition to the static chemistry mentioned, our research focuses on the dynamic chemistry of bio-active substances, the elucidation of the interactions of the substances, the mechanism of signal transduction, and bio-activity expression. Novel bio-active substances are developed along with advanced utilization of biological resources.
	Regulation of Biological Functions	Through scientific characterization of biological resources including proteins, nucleic acids and other bio-macromolecules involved, effective utilization and efficient control of the biological functions possessed by all living cells are comprehensively studied. Based upon these findings, extensive research is done to develop desirable, ideal systems for bio-production using biotechnological principles, i.e., gene recombinant, cell culture, and enzyme- and cell-immobilization techniques.

Fields of Instruction and Research Themes of Professors

Course	Major Chair [Rengo-Koza]	PROFESSOR	Field of Instruction and Research		Major Subject Offered for Examination
			Research Field	Research Theme	
Science of Biological Production	Plant Production and Management	MOTOHASHI, Reiko (Shizuoka University)	Molecular Breeding	Functional analysis of nuclear-encoded chloroplast proteins using tagged lines	Plant Molecular Biology
		MATSUBARA, Yoichi (Gifu University)	Vegetable Crop Science	Biological and physiological study and the application to sustainable culture and environmental stress tolerance in vegetable crops	Vegetable Crop Science
		FUKUI, Hirokazu (Gifu University)	Horticultural Plant Physiology	Theory of developmental physiology in horticultural plants and application of the theory to plant production	Horticultural Plant Physiology
		TANAKA, Itsuo (Gifu University)	Agro-environmental Engineering	Development of technology for environment control in plant production and explanation of plant response under controlled environment	Environment Control in Plant Growth
		SHIMAZU, Teruaki (Gifu University)	Enviromental Control in Plant Production Systems	Development of environmental control techniques for plant production and its application to plant science	Greenhouse and Biosystems Engineering
		OBA, Shinya (Gifu University)	Plant Growth Diagnostics	Analysis of economical plants by genetic and eco-physiological aspects to develop the technology for plant production	Plant Eco-physiology
		MAEZAWA, Shigenori (Gifu University)	Food Distribution System	Empirical study for mechanism of food distribution	Food Distribution System
		NAKANO, Kohei (Gifu University)	Postharvest Engineering	Development of the quality preservation theory and technology in agricultural pro-duces	Postharvest Technology
		KATO, Masaya (Shizuoka University)	Postharvest Physiology	Physiology, biochemistry, and molecular biology in postharvest horticultural crops	Postharvest Physiology
		ARAHATA, Katsumi (Gifu University)	Agribusiness Management and Economics	Economic analysis of farm behavior and industrial organization in agriculture and food system	Agribusiness Management and Economics
		ARAI, Satoshi (Gifu University)	Agricultural Economics	The theoretical and positive study on the regional agricultural economy and the agricultural policy	Agricultural Policy
		TOGASHI,Koichi (Gifu University)	Research on Local Industries and Corporations	Local industries and community develop-ment	Regional Policy for Industrial Development
		SHIBAGAKI,Hiroshi (Shizuoka University)	Agricultural Management and Economics	Theoretical and positive studies on agricul-tural cooperatives and agricultural finance	Agricultural Management and Economics
	Animal Resource Production	SASANAMI, Tomohiro (Shizuoka University)	Molecular Cell Biology	The studies on the molecular mechanism of egg envelop formation and fertilization in birds	Cell Biology
		KOHSAKA, Tetsuya (Shizuoka University)	Reproductive Physiology	Structure and function of the protein hormone relaxin in the male	Animal Reproduction
		TORIYAMA, Masaru (Shizuoka University)	Cell Biology	The studies on the mechanism of sea urchin egg mitosis	Molecular Biology of the Cell
		YOGO, Keiichiro (Shizuoka University)	Reproductive Biology	Molecular and cellular biology of development and differentiation of mammalian germ cells	Reproductive Biology
		IWASAWA, Atsushi (Gifu University)	Chemical Endocrinology	Biochemistry of animal endocrine system and metabolism	Chemical Endocrinology
		MATSUMURA, Shuichi (Gifu University)	Animal Genetics	Studies on evolutionary history and genetic diversity of animals	Animal Molecular Genetics
		DOI, Osamu (Gifu University)	Animal Reproduction	Physiology and technology of reproduction in animals	Physiology of Animal Reproduction
		YAYOTA, Masato (Gifu University)	Animal Nutritional Ecology	Nutritional ecology of ruminants and application to animal production	Animal Nutrition
		NINOMIYA, Shigeru (Gifu University)	Animal Welfare and Behaviour	Applied Ethology and animal welfare	Animal Welfare and Behaviour
		KOYA, Yasunori (Gifu University)	Animal Reproductive Biology	Studies on evolution of reproductive mode in fishes using functional morphology of gonad and reproductive behavior, and their application for aquaculture	Animal Reproductive Biology

Course	Major Chair [Rengo-Koza]	PROFESSOR	Field of Instruction and Research		Major Subject Offered for Examination
			Research Field	Research Theme	
Science of Biological Environment	Agricultural and Environmental Engineering	TSUCHIYA, Satoshi (Shizuoka University)	Forest Hydrology	Evaluation on the forest hydrological cycle and water balance	Forest Hydrology
		SENGE, Masateru (Gifu University)	Irrigation and Drainage	Theoretical and pratical studies on management and effective use of water resource	Irrington and Drainage
		HIRAMATSU, Ken (Gifu University)	Environmental Hydraulics	Management of water environment and aquatic ecosystem in rural area	Environmental Hydraulics
		ONISHI, Takeo (Gifu University)	Hydrology	Understanding the mechanism of water and material cycles and evaluation of the anthro-pogenic impact on these cycles	Hydrology
		ITO, Kengo (Gifu University)	Aquatic Environment	Management of environment and ecosystem conservation in paddy field	Ecology and Civil Engineering
		NISHIMURA, Shinichi (Gifu University)	Engineering for Agricultural Structures	Safety and effective use of agricultural structures for water supply	Engineering for Agricultural Structures
	Management of Biological Environment	MATSUI, Tsutomu (Gifu University)	Crop Production Science	Sustainable crop production	Crop Production Science
		TSUCHIDA, Koji (Gifu University)	Insect Ecology	Studies on the genetical variation within insect populations	Insect Ecology
		TAGAMI, Yohsuke (Shizuoka University)	Applied Entomology	Development of insect pest control tech-nique using insect-symbiont relationship	Biology of insect symbiosis
		KAGEYAMA, Koji (Gifu University)	Management of Plant Flora	Molecular ecology of soil microorganism, environmental evaluation using soil microorganisms	Ecology of Soil Microorganism
		SUGA, Haruhisa (Gifu University)	Molecular Plant Pathology	Stuies on evolution, ecology and pathogenicity of plant pathogens	Molecular Plant Pathology
		TSUDA, Satoshi (Gifu University)	Plant Ecology	Ecological studies on vegetation structure and dynamics	Plant Ecology
		SAWADA, Hitoshi (Shizuoka University)	Applied Ecology	Plant population biology and adaptation to defoliation and disturbance	Applied Ecology
		YAMASHITA, Masayuki (Shizuoka University)	Ecological Genetics	Invasion ecology of exotic plants and weeds	Invasion Ecology
		INAGAKI, Hidehiro (Shizuoka University)	Agroecology, Weed science	Studies on assessment of biodiversity in rural area and ecological management of weed	Weed science
		MUKAI, Yuzuru (Gifu University)	Forest Genetics	Population genetics and eco-physiology analysis of mating systems and mecha-nisms for maintenance of genetic diversities in woody plants	Genetics and Eco-physiology
		KAWAKUBO, Nobumitsu (Gifu University)	Plant Evolutionary Ecology	Evolutionary Studies on Flowering and Pollination	Evolutionary Biology
		OHTSUKA, Toshiyuki (Gifu University)	Ecosystem Ecology	Carbon cycling and carbon sequestration in terrestrial ecosystems	Carbon cycling in terrestrial ecosystems

Course	Major Chair [Rengo-Koza]	PROFESSOR	Field of Instruction and Research		Major Subject Offered for Examination
			Research Field	Research Theme	
Science of Biological Environment	Management of Biological Environment	MIZUNAGA, Hiromi (Shizuoka University)	Silviculture	Rehabilitation of forest ecosystem	Ecological Management of Forest
		AWAYA, Yoshio (Gifu University)	Forest Resource Management	Plant remote sensing and forest management	Ecosystem Metrology
		MURAOKA, Hiroyuki (Gifu University)	Ecosystem Physiology	Ecophysiological study from whole-plant to landscape in terrestrial ecosystems	Ecosystem Physiology
		ISHIDA, Megumi (Gifu University)	Montane Ecology and Management	Conservation and management of mountain zone	Montane ecology and management
Science of Biological Resources	Utilization of Biological Resources	MITSUNAGA, Tohru (Gifu University)	Phytochemistry	Structural analysis and functional elucidation of plant secondary metabolites	Natural Products Chemistry
		TERAMOTO, Yoshikuni (Gifu University)	Chemistry of Biomass-based Materials	Material functionalization of cellulose, related polysaccharides, and wood components	Chemistry of Biomass-based Materials
		KAWAI, Shingo (Shizuoka University)	Lignin Biochemistry	Biosynthesis and biodegradation of lignin and related compounds	Lignin Biochemistry
		KOJIMA, Yoichi (Shizuoka University)	Wood Biomass Science	Studies on the effective use of woody biomass	Wood Biomass Science
		KAMAYA, Yasushi (Shizuoka University)	Environmental Toxicology	Environmental Fate and Biological Effects of Organic Contaminants	Ecotoxicology
		SUZUKI, Shigehiko (Shizuoka University)	Wood Based Material	Production technology of wood-based materials and evaluation of their performance	Wood Based Material
		YASUMURA, Motoi (Shizuoka University)	Timber Structures	Structural use of wood and wood-based materials in building constructions	Timber structures
		IWAMOTO, Satoshi (Gifu University)	Physical Chemistry and Engineering for Food Materials	Physicochemical studies of phase and/or glass transitions of food colloids for high value-added food production	Colloid Science for Food Materials
		NISHIZU, Takahisa (Gifu University)	Food Process Engineering	Research in food physics and engineering analysis of food process operations	Food Process Engineering
		YABE, Tomio (Gifu University)	Carbohydrate Biochemistry	Biochemistry and molecular cell biology of glycans for molecular structure and biological functions	Glycobiology
	Smart Material Science	KISO, Makoto (Gifu University)	Carbohydrate Chemistry	Molecular structure and biological functions of biologically-active carbohydrates (reactions, synthesis and structure-activity relationship)	Chemistry of Biofunctional Carbo-hydrates
		ISHIDA, Hideharu (Gifu University)	Glycotechnology	Chemical biology of bioactive glycoconjugates	Chemical Biology
		ANDO, Hiromune (Gifu University)	Chemistry Featuring Carbohydrates	Molecular biology-oriented chemical synthesis of carbohydrates and application of their functions to medicinal chemistry	Chemistry on Synthesis and Application of Carbohydrates
		※KAMEYAMA, Akihiko (Gifu University)	Analytical Glycotechnology	Structure-function analysis of glycans and its applications to pharmaceuticals including products for medical diagnosis	Analytical Chemistry for Glycoconjugates
		UENO, Yoshihito (Gifu University)	Nucleic Acid Chemistry	Design and chemical synthesis of functional nucleic acids for gene therapy and genetic diagnosis	Chemistry of Nucleosides, Nucleotides and Nucleic Acids
		YOSHIMATSU, Mitsuhiro (Gifu University)	Life Science Organic Chemistry	Synthesis of bioactive compounds using a new methodology and their biological functions	Organic Chemistry

※ indicates guest professors from the National Institute of Advanced Industrial Science and Technology(AIST). Please note that in the case you prefer to study under the supervision of them, you will conduct research mainly at the AIST.

Course	Major Chair [Rengo-Koza]	PROFESSOR	Field of Instruction and Research		Major Subject Offered for Examination
			Research Field	Research Theme	
Science of Biological Resources	Regulation of Biological Functions	NAKAGAWA, Tsutomu (Gifu University)	Applied Biochemistry	Biochemistry and molecular cell biology of enzymes and proteins, and their application	Applied Biochemistry
		IWAHASHI, Hitoshi (Gifu University)	Applied Microbiology	Elucidation and utilization of stress response from microbe to higher organisms	OMICS Biology
		SUZUKI, Tohru (Gifu University)	Genome Microbiology	A new aspect of microbiology from genome science and bio-informatics	Genome Microbiology
		OGAWA, Naoto (Shizuoka University)	Environmental Microbiology	Analysis of the function of enviromental microbes	Environmental Microbiology
		SHIMIZU, Masafumi (Gifu University)	Plant Pathology	Studies on plant probiotics and plant-microbe interactions in the rhizosphere	Plant Pathology
		※CHIBA, Yasunori (Gifu University)	Microbial Glycobiology	Production technologies of glycan-engineered proteins and materials by microbes	Microbial Glycobiology
		HAYAKAWA, Takashi (Gifu University)	Food and Nutritional Biochemistry	Analysis of nutritional functions of water soluble vitamins and indigestible food components	Chemistry of Nutritional Functions
		NAKAGAWA, Tomoyuki (Gifu University)	Food and Nutritional Biochemistry	Molecular cell biology and molecular breeding of yeasts, Development of industrial enzymes	Food Microbiology
		SUZUKI, Fumiaki (Gifu University)	Animal Biochemistry	Fundamental and applied biochemistry on molecular regulations induced by specific peptides and proteins	Animal Biochemistry
		EBIHARA, Akio (Gifu University)	Enzyme Science	Studies on structure and function of enzyme	Enzyme Science
		NAGAOKA, Satoshi (Gifu University)	Functional Food Science	Biochemical and molecular biological studies on the physiological functions of food components	Functional Food Science
		MORITA, Akio (Shizuoka University)	Plant Nutrition	Nutritional physiology of plants and plant cells	Plant Nutrition
		KOYAMA, Hiroyuki (Gifu University)	Plant Cell Technology	Molecular physiology and molecular breeding of acid soil tolerant plants	Plant Cell Technology
		YAMAMOTO, Yoshiharu (Gifu University)	Plant Genome Biology	Study of environmental adaptation and evolution in plants	Plant Genome Biology

※ indicates guest professors from the National Institute of Advanced Industrial Science and Technology(AIST). Please note that in the case you prefer to study under the supervision of them, you will conduct research mainly at the AIST.