

佐賀大学大学院農学研究科
アグリビジネス国際人材育成プログラム
修士課程（外国人留学生一在外）
日本政府（文部科学省）奨学金学生募集要項

**Guide for the Application for the Japanese Government
(Monbukagakusho) Scholarship of Post-graduate Program
for Agribusiness Global Human-resources Development
(PPAGHD)**

(Master Course)

2024

Application Deadline: January 23, 2024

Academic Year Start: October 1, 2024

Graduate School of Agriculture
SAGA UNIVERSITY

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**Post-graduate Program for
Agribusiness Global Human-resources Development (PPAGHD)
in Graduate School of Agriculture , Saga University**

**(Master Course)
2024**

CONTENTS

- Guide for Application 1
- Academic Staffs, their Research Interests and Major fields 7
- APPLICATION FORM (Enclosed Booklet)

**Guide for the Application for the Japanese
Government (Monbukagakusho) Scholarship of
Post-graduate Program for Agribusiness Global Human-resources
Development (PPAGHD)**

The Post-graduate Program for Agribusiness Global human-resources Development (PPAGHD) in the Graduate School of Agriculture provides all lectures, seminars, and internships in English for both foreign and Japanese students. Students from overseas can learn and study completely in Japan without a hurdle of Japanese language. The PPAGHD is an educational course in the Graduate School of Agriculture, Saga University, that will start in October 2024, in order to bring up global researchers and/or engineers who will contribute to the agricultural science. This is a call for application to a two-year Master Course for the academic year of 2024, sponsored by the Scholarship Program of Monbukagakusho (The Ministry of Education, Culture, Sports, Science and Technology of the Japanese Government). Foreigners having the nationality in the country list (appendix) and arriving from foreign countries to attend this program can apply to this scholarship program.

Nowadays, education and research in agricultural science should be conducted from comprehensive and global viewpoints. Expertise on agriculture become to more important for produce food and keeping biological resources. The creation of agricultural expertise is indispensable for understanding and solving the problems posted by the impact of human activities on the global environment and on all living organisms, including humans. The PPAGHD has been established in the Graduate School of Agriculture in order to discuss/share global agricultural problems whole over the world. The scope and goal of this PPAGHD are to educate for students to acquire agricultural knowledge and enhance their ability of logical thinking, in the hope from comprehensive global viewpoints after they return to their home countries.

In the Master Course program of the PPAGHD, education and research guidance of the fields are given by the Department of Biological Resources Sciences in the Graduate School of Agriculture. Applicants should decide the research fields and choose prospective relevant supervisor(s) appearing on the List of Academic Staffs.

Students who complete the Master Course program of the PPAGHD are granted the Master of Agriculture. In this application, the month of entrance is October, and they can enter the PPAGHD course immediately after completing their Bachelor program in their country without learning of Japanese language.

QUALIFICATIONS

1. **Applicants:** Foreigners having the nationality in the list in appendix below and arriving from foreign countries to attend this program can apply.
2. **Grant history:** Applicants who had been granted with any kind of MEXT scholarship in past three years are required to have an appropriate experience in their study and/or educational activities in foreign countries for at least three years after the scholarship was completed.
3. **Age:** Applicants must be people who were born on or after April 2, 1989.
4. **Academic career:** Student's record of applicants should belong to a highest class in the University from which the applicant graduated. The following candidates may apply for admission:
 - a. Those who have received Bachelor's Degree from Japanese University.
 - b. Those who have received Bachelor's Degree after completing 16 years course of school education in foreign country, or will receive it as of September 30, 2024.
 - c. Those who have completed 16 years course of school education of foreign country in Japan through correspondence education of a foreign school, or will complete the course as of September 30, 2024.
 - d. Those who have completed 16 years course of school education of foreign country at educational institutions of the foreign country in Japan, which is designated by the Minister

of Education, Culture, Sports, Science and Technology of the Japanese Government, or will complete the course as of September 30, 2024.

- e. Those who have completed 15 years course of school education in foreign country, and been admitted by the Graduate School of Saga University to obtain sufficient credits with excellent score.
 - f. Those who have been designated by the Minister of Education, Culture, Sports, Science and Technology of the Japanese Government.
 - g. Those who are 22 years old or more as of September 30, 2024, and are admitted by the Graduate School of Saga University as that their academic abilities are equivalent to or higher than Bachelor's Degree of Japanese Universities upon reviewing the submitted materials.
5. **Health:** Applicants should be in good health both mentally and physically.
 6. **Language proficiency:** A good working level of English is required.
 7. **Arrival in Japan:** Applicants should arrive in Japan by September 30, 2024, if admitted.

Remarks

- 1) Military personnel and civilian employees of the armed forces are not eligible.
- 2) Admission shall be canceled if the applicant fails to arrive in Japan between the dates mentioned above.
- 3) At our university, only one member of a married couple should apply. The scholarship can not be applied for when one member of a married couple has received the Japanese government scholarship.
- 4) Neither applicants for other universities in Japan for the Japanese government scholarship, nor applicants for embassy recommendation, nor the recipients of scholarships from their country are eligible for this program.
- 5) The scholarship shall be canceled if the applicant fails to receive the Bachelor's Degree by September 30, 2024.
- 6) If you are handicapped and hope the special care about the entrance examination or the study in Japan, please consult with the entrance examination office before the application.

SCHOLARSHIP BENEFITS

1. Monthly allowance: A monthly amount of 144,000 Yen (as of 2023) shall be paid from Monbukagakusho for two years from October 2024. This allowance may not be paid if the recipient is absent from school for over a month.
2. Allowance for transportation
 - a. Transportation to Japan: Monbukagakusho shall provide an economy class air ticket between the international airport nearest to the scholarship recipient's residence in the country of the scholarship recipient's nationality and New Tokyo (Narita) International Airport or Fukuoka International Airport. Monbukagakusho will appoint route and date of the flight. The travel fee in the recipient's home country, the airport fee, the airport tax, special tax for the transportation, the travel fee in Japan should be covered at recipient's own expense. (In principal, "the scholarship recipients' residence" is defined as the mailing address denoted on the application form.)
 - b. Transportation from Japan: According to the scholarship recipient's application, Monbukagakusho shall provide a set of economy class air tickets to the recipients who will leave for their home countries in the month of their completion of the program. The coverage of the tickets shall be from Narita International Airport or Fukuoka International Airport to the international airport nearest to the place of their residence in their home country. This privilege shall be applicable for the scholarship recipient.
3. School fees: All school fees such as entrance examination, registration, and tuition costs, shall be waived.

Remarks

- 1) Travel and accident insurance to/from Japan should be covered at recipient's own expense. The international airport departing to/from Japan must be the international airport in the country of the scholarship recipient's nationality.
- 2) The Monbukagakusho scholarship will be granted for 2 years to complete the Master course program of the PPAGHD.

SELECTION AND ADMISSION

1. Applicants who have excellent records will take an interview or an Internet interview by your desired Advisory Professor (Supervisor) after all-round judgment of submitted papers. The interview or an Internet interview certifies that applicant does not apply for another university and that applicant will enter Saga University certainly when applicant is selected as a candidate of the scholarship. The academic ability of applicants is also confirmed by the interview or an Internet interview.
2. Applicants shall be examined by the Screening Committee of the PPAGHD. Only those who have a solid academic background, research capability and commitment are selected. The selected scholarship candidates will be informed and asked to reply their acceptance of the selection immediately in the March 2024. After receiving their confirmation letter, they will be recommended to Monbukagakusho for the award of a scholarship in March. The final decision of Monbukagakusho will be informed to the candidates through Saga University in July 2024.
3. When the applicants accept their scholarship candidate in March 2024, they should withdraw all other scholarship applications.
4. The total number of scholarship recipients is 3.

Remarks

- 1) Applicants selected by Monbukagakusho as grantees must enroll in the program. Refusal to enter the course after acceptance is not allowed.
- 2) Those who apply for Saga University are not allowed to apply for any other universities as the Monbukagakusho scholarship student.
- 3) Those who have applied for the Japanese government scholarship from Saga University and other university simultaneously, the Monbukagakusho will cancel their scholarship candidate for all universities, even if applicants are admitted as the Monbukagakusho scholarship student at Saga University.

ENROLLMENT

1. Date of enrollment is October 1, 2024.
2. Scholarship grantees shall be enrolled as regular graduate students of Saga University.

APPLICATION PROCEDURE

1. Applicants should prepare the following documents to be forwarded to the Entrance Examination Office, Saga University.
 - ① **Application Form** (Form A).
 - ② **Application Form for Japanese Government (MONBUKAGAKUSHO:MEXT) Scholarship** (Form B). (This should be printed on both sides.)
 - ③ **Field of Study and Research Plan** (Form C). (This should be printed on both sides.)
 - ④ **Official transcript of Bachelor's Degree or certification of Bachelor's Degree.** If applicant is a student now, **certificate** that the applicant will be provided Bachelor's Degree before September 30, 2024.
 - ⑤ **Transcripts of Academic Record** issued by the university authorities and their English translation. (The criteria of academic assessment should be also shown.)

- ⑥ **Certificate of a student's record of highest class in the University from which the applicant graduated.** (GPA, ranking at the class, classification of ABC, or another corresponding numerical index)
- ⑦ **English summary of Bachelor Thesis** or its equivalent if available, not exceeding four sheets of A4 size paper typed in double space. When a Bachelor Thesis is not required by the University from which the applicant graduated, prepare a statement to that effect.
- ⑧ **Certificate of Citizenship** issued by the appropriate authorities.
- ⑨ **Recommendation and Reference**
 - a. A letter of **Recommendation** (Form D) from the head (Dean, in case of University) of the applicant's affiliated institution.
 - b. Letter(s) of **Reference** (Form E) from those who know the applicant's research/study capability addressed to the Dean of the Graduate School of Agriculture.
 - c. **Certificate for the relationship** with the Graduate School of Agriculture, Saga University (Optional, if any). Those who have attend SPACE program, short-term program (i.e., Sakura Science Program) or similar ones at Saga University, can be submit the related document or certificate. Additionally, if the applicants have a supervisor who has a relationship with Saga University professors, they can attach the supporting letter that indicates the relationship (free letter style).

The letters of recommendation and reference(s) should indicate the English proficiency of the applicant. The recommendation letter should refer to certification that the applicant will surely enter Saga University, if the applicant is selected as a Grantee of Monbukagakusho scholarship.

- ⑩ **Certificate of English ability** (for example, TOEFL, IELTS).
 - ⑪ **Three Photographs** (hatless portrait), 4.5 cm×3.5 cm in size, taken within six months of application date. Two copies should be attached to the application form. One extra copy should be enclosed therein, with the applicant's name and the nationality on the reverse side of the copies.
2. All documents should be sent by registered air mail, and must arrive at the Entrance Examination Office by **January 23, 2024**.

Remarks

- 1) The above documents should be type-written in English on A4 size paper.
- 2) Incomplete documents are not acceptable.
- 3) Applicants are advised to choose their desired Advisory Professor (Supervisor), and to indicate the supervisor's name on the application form (Form A).
- 4) None of the documents submitted is returned to the applicant in any case.

NOTES

- 1. The rights of a grantee of the scholarship shall be deprived under the following cases:
 - a) False statements on the documents.
 - b) Violation of the pledge.
 - c) Leaving and/or transferring from the Graduate school of Saga University.
 - d) Changing the Supervisor without approval program director /international affairs of Saga University.
 - e) Violation of school regulations, and no satisfactory academic achievement.
- 2. Grantees are recommended to be well acquainted with the Japanese language, culture, customs, etc. A skill of the Japanese language is necessary in daily life.
- 3. Grantees are expected to complete their Master Course Program within two years.
- 4. Part of grantees who proceed to the Doctor Course of PPAGHD will be permitted the extension

in the periods of scholarship if the petition is accepted by the Monbukagakusho.

5. Applicants who are not selected as candidate of the scholarship will have the information of failure by the Dean of the Graduate School of Agriculture, Saga University in the end of March 2024. If the applicants desire to enter the PPAGHD of Saga University as the Private-Expense foreign students, they will receive the results of selection in June, after applicants pay a fee of entrance examination, 30,000 Yen. The entrance examination fee should be transferred as a postal money order at post office, or sent as a check (US dollar) to Entrance Examination Office of Saga University. Note that in the case of a check, if amount of exchanged Japanese yen was below 30,000 Yen, the check can not be received by Entrance Examination Office of Saga University.

The Private-Expense foreign students must pay the following entrance fee and tuition fee.

Entrance fee: 282,000 yen (scheduled).

Tuition fee: 267,900 Yen for each semester (scheduled). [535,800 Yen per academic year (scheduled).]

Amount of due might be slightly revised depending on the decision of the administration council. Payments must be done for each semester biannually within the beginning two months of the semester. For the following information on the tuition assistance, exemption subsidization, and scholarships is available at the Benefits section.

1. Exemption of tuition fee from complete to 50% may be granted depending on circumstances.
2. There are several scholarships for private-expense foreign students. Students can apply for these scholarships.
3. Housing: Students can apply to Saga University International House, or low-cost apartments supported by Saga prefecture and other organizations.

CORRESPONDENCE

The application form of the PPAGHD should be sent by air mail to the address shown below. Note that the application forms must not be submitted in any kinds of electronic form. Forms sent by facsimile and attached files on e-mail are not accepted in any occasion.

Entrance Examination Office
Saga University
1 Honjo-machi
Saga 840-8502, Japan
Fax: (+81)-952-28-8944
E-mail: contact@mail.admin.saga-u.ac.jp

対象国リスト
Applicable countries list

アフリカ Africa

アルジェリア	Algeria
アンゴラ	Angola
ウガンダ	Uganda
エスワティニ	Eswatini
エジプト	Egypt
エチオピア	Ethiopia
エリトリア	Eritrea
ガーナ	Ghana
カーボベルデ	Cabo Verde
ガボン	Gabon
カメルーン	Cameroon
ガンビア	Gambia
ギニア	Guinea
ギニアビサウ	Guinea-Bissau
ケニア	Kenya
コートジボワール	Côte d'Ivoire
コモロ	Comoros
コンゴ共和国	Republic of Congo
コンゴ民主共和国	Democratic Republic of the Congo
サントメ・プリンシペ	Sao Tome and Principe
ザンビア	Zambia
シエラレオネ	Sierra Leone
ジブチ	Djibouti
ジンバブエ	Zimbabwe
スーダン	Sudan
セーシェル	Seychelles
赤道ギニア	Equatorial Guinea
セネガル	Senegal
ソマリア	Somalia
タンザニア	Tanzania
チャド	Chad
中央アフリカ	Central African Republic
チュニジア	Tunisia
トーゴ	Togo
ナイジェリア	Nigeria
ナミビア	Namibia
ニジェール	Niger
ブルキナファソ	Burkina Faso
ブルンジ	Burundi
ベナン	Benin
ボツワナ	Botswana
マダガスカル	Madagascar
マラウイ	Malawi
マリ	Mali
南アフリカ	Republic of South Africa
南スーダン	South Sudan
モザンビーク	Mozambique
モーリシャス	Mauritius
モーリタニア	Mauritania
モロッコ	Morocco
リビア	Libya
リベリア	Liberia
ルワンダ	Rwanda
レソト	Lesotho

南西アジア Southwest Asia

インド	India
スリランカ	Sri Lanka
ネパール	Nepal
パキスタン	Pakistan
バングラデシュ	Bangladesh
ブータン	Bhutan
モルディブ	Maldives

東南アジア Southeast Asia

インドネシア	Indonesia
カンボジア	Cambodia
シンガポール	Singapore
タイ	Thailand
フィリピン	Philippines
ブルネイ	Brunei
ベトナム	Viet Nam
マレーシア	Malaysia
ミャンマー	Myanmar
ラオス	Lao

中南米 Central and South America

アルゼンチン	Argentina
ウルグアイ	Uruguay
エクアドル	Ecuador
ガイアナ	Guyana
コロンビア	Colombia
スリナム	Suriname
チリ	Chile
パラグアイ	Paraguay
ブラジル	Brazil
ベネズエラ	Venezuela
ペルー	Peru
ボリビア	Bolivia

中東 Middle East

アフガニスタン	Afghanistan
アラブ首長国連邦	United Arab Emirates
イエメン	Yemen
イスラエル	Israel
イラク	Iraq
イラン	Iran
オマーン	Oman
カタール	Qatar
クウェート	Kuwait
サウジアラビア	Saudi Arabia
シリア	Syria
トルコ	Turkey
バーレーン	Bahrain
ヨルダン	Jordan
レバノン	Lebanon
パレスチナ	Palestine

大洋州 Oceania

オーストラリア	Australia
キリバス	Kiribati
クック諸島	Cook Islands
サモア	Samoa
ソロモン諸島	Solomon Islands
ツバル	Tuvalu
トンガ	Tonga
ナウル	Nauru
ニウエ	Niue
ニュージーランド	New Zealand
バヌアツ	Vanuatu
パプアニューギニア	Papua New Guinea
パラオ	Palau
フィジー	Fiji
マーシャル	Marshall
ミクロネシア	Micronesia

欧州 Europe

アイスランド	Iceland
アイルランド	Ireland
アゼルバイジャン	Azerbaijan
アルバニア	Albania
アルメニア	Armenia
アンドラ	Andra
イタリア	Italy
ウクライナ	Ukraine
ウズベキスタン	Uzbekistan
英国	United Kingdom
エストニア	Estonia
オーストリア	Austria
オランダ	Netherlands
カザフスタン	Kazakhstan
北マケドニア	North Macedonia
キプロス	Cyprus
ギリシャ	Greece
キルギス	Kyrgyz Republic
クロアチア	Croatia
コソボ	Kosovo
サンマリノ	San Marino
ジョージア	Georgia
スイス	Switzerland
スウェーデン	Sweden
スペイン	Spain
スロバキア	Slovakia
スロベニア	Slovenia
セルビア	Serbia
タジキスタン	Tajikistan
チェコ	Czech Republic
デンマーク	Denmark
ドイツ	Germany
トルクメニスタン	Turkmenistan
ノルウェー	Norway
バチカン	Vatican
ハンガリー	Hungary
フィンランド	Finland
フランス	France
ブルガリア	Bulgaria
ベルギー	Belgium
ポーランド	Poland
ボスニア・ヘルツェゴビナ	Bosnia and Herzegovina
ポルトガル	Portugal
マルタ	Malta
モナコ	Monaco
モルドバ	Moldova
モンテネグロ	Montenegro
ラトビア	Latvia
リヒテンシュタイン	Liechtenstein
リトアニア	Lithuania
ルーマニア	Romania
ルクセンブルク	Luxembourg

北米 North America

アメリカ	United States
カナダ	Canada

東アジア East Asia

モンゴル	Mongolia
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ACADEMIC STAFFS ATTENDING PPAGHD, AND THEIR MAJOR FIELDS AND RESEARCH INTERESTS

Agriculture [MASTER COURSE]

Biological Science Course

Genetics and Plant Breeding..... **Watanabe, S.**

1. Molecular breeding in rice and soybean.
2. Development and utilization of breeding methods based on gene manipulation.
3. Improvement of soybean fatty acid composition by induced mutation.

Crop Science..... **Suzuki, A.**

1. Mechanism of root nodule symbiosis and its utilization for leguminous crops production.
2. Mechanism of arbuscular mycorrhizal symbiosis and its utilization for crops production.

Vegetable and Ornamental Horticulture..... **Isshiki, S. and Ogura-Tsujita, Y.**

1. Genetics and systematics of eggplant and its related Solanum species.
2. Cell, tissue and organ culture of vegetables and ornamentals.
3. Breeding of eggplant.
4. Biology of orchid mycorrhizal symbiosis and its application for horticultural uses.
5. in vitro culture of orchids and symbionts.
6. Conservation of wild orchids.

Improvement of Tropical Crops..... **Zheng, S.H. and Fujita, D.**

1. Physiology and Eco-morphology of tropical leguminous crops.
2. Sustainable cropping system which adapted to tropical agriculture.
3. Improvement of yield-related traits in rice through genetic and breeding studies.
4. Genetic and breeding studies for resistance to planthopper and leafhopper in rice.
5. Genetic improvement for days to heading in indica rice.

Plant Nutrition..... **Nishida, S.**

1. Molecular mechanism of plant adaptation to variable nutrient availability.
2. Biotechnology to improve plant tolerance to low nutrient availability and mineral stress.
3. Metal/metalloid accumulation in plants.

Animal Reproduction..... **Yamanaka, K.**

1. Efficient production of offspring from genetically superior individuals by reproductive technologies.
2. Application of reproductive technology to fertility treatment.
3. Recent problems in animal reproduction.

Controlled Environment Horticulture..... **Goto, F.**

1. Indoor production system.
2. Energy saving technology in greenhouses.

3. Breeding of vegetables suitable for plant factories.
4. Environmental optimization to adapt new crops to plant factories.

Functional Plant Resources..... **Matsumoto, Y.**

1. Breeding and cultivation of functional and medicinal plants.
2. Storage and processing techniques of horticultural crops.

Integrated Field Science **Ueno, K.**

1. Production methods for sustainable agriculture.

Fruit Science **Fukuda, S.**

1. Molecular breeding in loquat and wild onion.
2. Genetics and genomics of Rosaceae.

Animal Science **Ebara, F.**

1. Animal behavior and management.

Plant Mycology **Kusaba, M.**

1. Classification and identification of plant pathogens.
2. Genetics of pathogenicity of plant pathogens.
3. Genetic diversity in the fungal population.

Nematology..... **Yoshiga, T.**

1. Biological and physiological characteristics of plant parasitic nematodes.
2. Growth regulation and pathogenicity of entomopathogenic nematodes.
3. Species diversity and ecological significance of brackish water nematodes.

Systems Ecology..... **Tokuda, M.**

1. Insect-plant interactions.
2. Mechanism and adaptive significance of host manipulation by insects.
3. Evolutionary ecology and biosystematics of gall-inducing insects.
4. Insect pest management.

Fruit Tree Science **Kotoda, N.**

1. Genomics, physiology, and chemistry in fruit crops (apple, citrus, grape, kiwi fruit, olive, papaya, passion fruit, and peach etc.).
2. Citrus germplasm (cultivated/wild species) and DNA marker development.
3. The molecular mechanism of flowering and the role of gibberellins in plants.
4. Postharvest physiology in fruit crops.

Food Resource and Environmental Science Course

Agricultural and Environmental Geotechnics..... **Kondo, F. and Miyamoto, H.**

1. Geotechnical research on maintenance and management of agricultural creek slopes in Saga Plain.
2. Soil management and conservation for sustainable crop production.

Rural Environment..... **Haraguchi, T.**

1. Conservation of the water environment in agricultural field.
2. Water utilization for agriculture.

Environment of Shallow Sea and Tidal Flat..... **Koriyama, M.**

1. Conservation of tidal flat environment.
2. Environmental monitoring of shallow sea area.

Irrigation Science **Yuge, K.**

1. Quantification of water consumption in agricultural field.
2. Multi-functionality in agriculture.
3. Sustainable land use planning in Japanese rural area.

Environmental Soil Science..... **Tokumoto, I.**

1. Transport of water, salts, ions and heat in unsaturated soil.
2. Measurement of soil hydraulic properties and salt movement.

Agricultural Environmental Chemistry **Ueno, D.**

1. Instrumental analytical chemistry to evaluate agricultural environment.
2. Identification of odor chemicals (stinks and flavors) from field and products.
3. Development of pest control system using odor chemicals.

Water Environmental conservation in Rural Areas **Anan, M.**

1. Evaluation of agricultural water management in paddy field.
2. Modeling of water flow and quality in rural area.
3. Quantification of flood mitigation function in agricultural field.

Agricultural Machinery and Information Technology **Inaba, S.**

1. Running resistance of agricultural rubber crawler.
2. Vibration analysis for agricultural vehicles.
3. Database for agricultural production.
4. Management of glassy ratio of rye with image processing technology.

Agricultural Production Engineering..... **Tanaka, M.**

1. Environmental control for hydroponic culture of vegetables.
2. Nondestructive quality evaluation of agricultural products.

Food Resource Research and Informatics **Kitagaki, H.**

1. The effect of food components on intestinal microbes
2. The effect of cosmetics on skin microbes
3. Functionalities of cosmetics
4. Application of informatics to food and cosmetic research

Applied Biochemistry and Food Science Course

Applied Microbiology **Kobayashi, G and Goto, M.**

1. Development of acetone-butanol-ethanol fermentation from biomass.

2. Microflora analysis by PCR-DGGE.
3. Isolation and characterization of useful bacteria and fungi.
4. Molecular breeding of fungi for production of organic acids, enzymes.

Molecular Biological Science **Horitani, M.**

1. Molecular mechanism of cold adapted enzymes and protein engineering.
2. Functional analysis of new enzymes from plants.
3. Advanced magnetic resonance and X-ray crystallography.
4. Structural and functional studies on metallo-enzymes.

Biomolecular Chemistry..... **Soh, N.**

1. Colorimetric and fluorescence analysis for bioscience
2. Biohybrid materials for bioanalysis and bioengineering

Bioresource Science and Technology.....**Noma, S.**

1. Extraction of food components using pressurized carbon dioxide.
2. Preparation of seasoning under pressurized carbon dioxide.
3. Pasteurization of microorganisms in food.

Bioresource Chemistry **Hama, Y. and Mitsutake, S.**

1. Structure and function of mucus glycoproteins and algal polysaccharides.
2. Isolation and characterization of novel glycolipids from marine animals.
3. Synthesis, metabolism and cellular signaling of membrane lipid in health and disease.
4. Development of Functional food materials.

Nutrition Biochemistry **Nagao, K.**

1. Control of lipid and lipoprotein metabolism by food ingredients and drugs.
2. Nutrition and physiology of polyunsaturated fatty acids.
3. Enzymatic and genetic regulation of glycerolipid metabolism.
4. Lipid metabolism and cytokine regulation in hepatic diseases.

Algal Life Science..... **Kimura, K.**

1. Developments of molecular breeding method for *Pyropia yezoensis* “Nori”.
2. Physiology of macro algae and its relating microbe and virus.
3. Molecular physiology of phytoplankton and its infectious virus.
4. Phytoplankton ecology in Ariake sea.

Food Function Development..... **Inoue, N.**

1. Evaluation of plant-derived functional ingredients.
2. Prevention and improvement of lifestyle-related diseases by functional lipids.

Biochemistry..... **Tsujita, T.**

1. Elucidation of the molecular mechanism for oxidative, hypoxia, proteostasis stress using genomic modified vertebrate and/or cell lines.
2. Discovering the bioactive compounds to protect lifestyle diseases from chemical library or natural plants.

Genomics **Nagano, Y.**

1. Genomics of food and medicinal plants
2. Genomics of other organisms

Chemistry of Natural Resources **Kawaguchi, S.**

1. Synthesis and evaluation of cosmetic materials using organic molecules derived from agricultural product and biomass.
2. Synthesis and evaluation of bioactive molecules.
3. Synthesis of organophosphorus compounds using unused phosphorus.
4. Synthetic use of iodine resources

Chemistry of Natural Resources **Kawazoe, Y.**

1. Identification, purification, and structure elucidation of bioactive natural products.
2. Elucidation of mode of action of bioactive molecules.
3. Development of molecular tools.

Regional Development and Management Studies Course

Agricultural Economics & Farm Management **Tsuji, K.**

1. Agricultural economics
2. Farm management
3. Rural development in Asia

Regional Resources **Nakai, S.**

1. Geographical studies on landscape, communities, and land utilization of rural settlement.
2. Land improvement and sustainable developments.
3. Food culture from an anthropological perspective.

Rural Development **Fujimura, M.**

1. Environmental change and human survival in Asia.
2. Issues and challenges relating to land use and conservation in rural community.