Fall 2023 Enrollment

# Graduate School of Environmental & Symbiotic Sciences Application Guide for Admission (PhD Program)

# **Selection Method for Non-Japanese**

(Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

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# Admission Policy of Graduate School of Environmental & Symbiotic Sciences

1 Goals for Human Resources Development

#### • PhD Program

#### (1) Human Resources Development for Professions

Since the social demand for skilled professionals with advanced knowledge of environmental issues is quite strong, we aim to foster highly-specialized experts with specialized and academic knowledge of environmental symbiosis, with the goal of placing them in leadership positions.

#### (2) Fostering Researchers

We aim to foster knowledgeable professionals who can play active roles as educational researchers in environmental fields at universities and academia as a whole, or who can play active roles in leadership positions at public research institutions or corporate labs.

#### (3) Higher Education in Specialized Field for Adults

By promoting open-door policies for adults, we aim to provide opportunities to reexamine adults' specialized fields from environmental points of view, and foster trained professionals who have wide and specialized knowledge of environmental symbiosis.

#### (4) Fostering Non-Japanese

Accepting adult students with master's degrees (or comparable academic ability) from overseas, we aim to foster trained professionals prepared for leadership positions who have learned basic principles, gained specialized knowledge, and mastered techniques of environmental symbiosis.

#### 2 Images of Human Resources Sought

#### • PhD Program

Based on the philosophy of the Graduate School of Environmental & Symbiotic Sciences, we seek postgraduates who, through the completion of the Master's

Degree Program, have acquired basic academic ability, specialized knowledge, and presentation/language skills in their area of expertise, and also who show aspirations to do further advanced research; or persons who have practical R&D (research and development) experience in fields related to environmental and symbiotic sciences.

#### 3 Entrance Examination

We evaluate students' examination papers holistically by an achievement test (English, Specialized subject), an interview, and screening of the documents (Research plan, etc.).

# Entrance Examination Dates & Admission Quota (Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

#### PhD Program

#### [Entrance Examination Dates]

	Qualification	Application	Entrance	Announcement	Enrollment
	Screening of		Examination	of Examination	Procedures
	Applicants		Date	Results	
Fall	From	From	Saturday,	Tuesday, July	From
Enrollment	Monday,	Monday, May	July 8,	18, 2023	Monday,
	April 3 to	8 to Friday,	2023		September
	Friday, April	May 19, 2023			11 to
	7, 2023	*Applicant			Friday,
	* Results will	screening			September
	be	results and			15, 2023
	announced	an admission			
	by Friday,	ticket will be			
	April 21,	sent by			
	2023	Friday, June			
		9, 2023			

#### [Admission Quota]

Fall	2 students
Enrollment	2 students

# PhD Program, Graduate School of Environmental & Symbiotic Sciences, Prefectural University of Kumamoto (Fall 2023 Enrollment) Selection Method for Non-Japanese Students (Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

#### 1 Admission Quota

Division of Environmental & Symbiotic Sciences: 2 students

#### 2 Qualification of Applicants

Those who wish to be admitted to the PhD Program must meet the conditions and one of the following qualifications.

- (1) Applicants who have a master's or professional degree, or are expected to be awarded one by September, 2023.
- (2) Applicants who have a master's or professional degree from a school overseas, or are expected to be awarded one by September, 2023.
- (3) Applicants who have a master's or professional degree by taking subjects in an overseas correspondence course in Japan, or are expected to be awarded one by September, 2023.
- (4) Applicants who have a master's or professional degree, or are expected to be awarded one by September, 2023, after completing a program at an educational institution in Japan which is recognized by the overseas country as having a graduate program and which is deemed eligible by the Japanese Minister of Education, Culture, Sports, Science and Technology.
- (5) Applicants who are designated eligible by the Minister of Education, Culture, Sports, Science and Technology. (Ministry of Education Notification No. 118, 1989)
- (6) Applicants who are recognized by the Graduate School of Environmental and Symbiotic Science as having academic aptitude equal to or higher than that of a master's or professional degree holder, as verified by the individual admission qualification screening, and at least 24 years of age.
- (Note) Qualification screening of applicants will be conducted prior to the application period for applicants who fall under conditions (5) or (6). Screened applicants who have valid qualification results do not need to be

screened again. Please refer to "Applying after Screening of Applicants" on page 8.

#### 3 Application Conditions

- (1) Applicants must not have Japanese nationality. In addition, people with foreign nationality with permanent residence in Japan or foreign students studying advanced degrees in Japan are excluded. See (2) for more details.
- (2) Applicants must have nationalities of the following countries and regions regarded as having mercury-related environmental issues.
  - a) Asia People's Republic of Bangladesh, Kingdom of Cambodia, People's Republic of China, India, Republic of Indonesia, Republic of Iraq, Mongolia, Republic of the Philippines, Kingdom of Thailand, Taiwan
  - b) Africa Republic of Kenya, Republic of Seychelles, United Republic of Tanzania
  - c) Europe Republic of Kazakhstan, Kyrgyz Republic
  - d) Latin America Federative Republic of Brazil
  - e) Other countries or regions that the president accredits as advancing countries, developing countries, or the regions which are regarded as requiring environmental measures on mercury.
- (3) Applicants should be age 35 or under as of April 1, 2023. However, applicants admitted by the president are excepted. admitted by the president is excepted.
- (4) Applicants must be prepared to research on mercury at the Collaborative Graduate School with a will to be involved with the mercury measures in the home countries or international organization after graduation.
- (5) Applicants must have sufficient English proficiency to study and conduct research.
- (6) Applicants must not have a scholarship from the Japanese government, home countries' governments, or other private foundations.

#### **4 Application Period**

From Monday, May 8 to Friday, May 19, 2023

Applications must arrive at our Academic Affairs and Entrance Examinations Division by 17:00 on Friday, May 19, 2023, in person or by mail. Applications which have not arrived by the deadline will not be

accepted under any circumstances. Applicants should submit them well in advance.

If application documents are brought in person, they will be accepted from 9:00 to 17:00 (except from 12:20 to 13:20).

#### **5 Application Procedures**

#### (1) Application Method

Applicants must submit the documents described in (2) below in person or by mail. If application documents are sent by mail, they should be sent by EMS.

#### (2) Application Documents

(2) Application Documents			
① Application for	On the prescribed form by the Graduate School		
Admission			
② Admission Ticket	On the prescribed form by the Graduate School		
and Photo Sheet	(The photo must have been taken within three months of		
	applying, with a full-face view directly facing the camera		
	without a hat against a plain background. Please write		
	your full name on the back of the photograph.)		
③ Curriculum Vitae	On the form prescribed by the Graduate School		
4 Research Plan	On the form prescribed by the Graduate School		
	Summary indicating the research process such as		
	master's thesis and research plan on mercury research		
	* Please attach a detailed research plan.		
⑤ Official Transcript	Official transcript issued by the latest university or school		
(Sealed)	(original copy only).		
※Excluding those	* Please attach an English translation for		
who apply based on	transcripts issued in other languages.		
one of the application			
qualifications listed in			
2(5) and (6).			
6 Graduation	Certificate issued by the last university or school (original		
Certificate or	copy only).		
Expected Graduation	* Please attach an English translation for		
Certificate	transcripts issued in other languages.		
※Excluding those			
who apply based on			

one of the application			
qualifications listed in			
2(5) and (6).			
⑦In case where the na	me on the Graduation Certificate is different from the		
applicants' present nar	ne, please attach proof of change of the name.		
8 Recommendation	Recommendation Letter from a supervisor at the		
Letter	graduate school (from the employer if employed at the		
	time of application).		
9 Confirmation	Summary of preliminary consultation with the		
Sheet on Preliminary	prospective supervisor's signature and seal		
Consultation			
10 In principal, Applicants who fall under condition (5) or (6) on page 4 and use			
current results of qualification screening need to submit: a copy of Approval			
Notice of Application Qualification; Official Transcript; and a Graduation			

Applying after Qualification Screening of Applicants

\*Please refer to "Applying after Screening of Applicants" below.

- Qualification of Applicants (5) or (6)-

Certificate or Expected Graduation Certificate.

- Submitting a certificate and an official transcript for applying
   When applicants are deemed eligible for application after applying for the
   qualification screening for the 2023 Entrance Examinations, Graduation
   Certificate and Official Transcript will be omitted from the list of required
   documents for the 2023 Entrance Examinations application only.
- Validity period for the result of Qualification Screening
   The result of Qualification Screening certifying eligibility eligible is valid for 5 years. When applying during the period of validity, please attach a copy of the "Approval Notification of Application Qualification".

#### (3) Place of Submission

Entrance Examination Section for Graduate School, Academic Affairs and Entrance Examinations Division, Prefectural University of Kumamoto 3-1-100 Tsukide, Higashi-ku, Kumamoto, 862-8502, Japan

#### (4) Admission Ticket for Examination

An admission ticket for examination will be sent to the applicants by mail by Friday, June 9, 2023, regardless of whether applicants brought the

application documents in person or by mail.

Please contact the Academic Affairs and Entrance Examination Division (TEL +81-96-321-6610) if the admission ticket has not arrived by the day, or if you lost the ticket before the day of the entrance examination.

#### (5) Application Consideration

① Prescribed forms by the Graduate School in "5(2) Application Documents" on page 6 and "8(1) Documents to be Submitted" on page 11 are available for downloading from our university's website. Please print the PDF on A4-sized white paper.

Website address https://www.pu-kumamoto.ac.jp/nyusi/graduate/

② Applicants must contact the Academic Affairs and Entrance Examination Division first to get instructions. Then, applicants must contact prospective supervisors on the list of instructors on the Application Guide for Admission or the university's website before undertaking application procedures.

Entrance Examination Section for Graduate School, Academic Affairs and Entrance Examination Division, Prefectural University of Kumamoto 3-1-100 Tsukide, Higashi-ku, Kumamoto, 862-8502, Japan E-mail nyusi@pu-kumamoto.ac.jp

Be sure to write the name of the supervisor in the "Desired supervisor" on the Application Form. The actual supervisor will be subject to change after enrollment.

- ③ If a false statement is found in the documents, authorization of admission will be revoked.
- 4 Application documents are non-returnable under any circumstances.
- ⑤ Incomplete applications will not be accepted.

#### **6 Selection Method**

The selection of applicants will be based on the overall results of our written and oral examinations, interviews, and document screenings.

- (1) Written Examination English
- (2) Oral Examination

The interview consists of a presentation focused on your master's thesis (including the process) or the other results of your research followed by questions related to your presentation. (Your presentation must include the results of your past research and your research plan on mercury study for the Doctoral course.)

#### (3) Examination Date

Date	Subjects	Time	Point Allocation	Total
	Written Examination English	10:00 - 11:30	100	
Saturday, July 8, 2023	Oral Examination (Including a research presentation)	13:00 -	100	200

Note 1: Please assemble on the 1<sup>st</sup> floor lobby in our Administration Building by 9:30.

- 2: Oral Examination time schedule will be displayed on campus on the day.
- 3: Late arrival up to 30 minutes will be admitted after the scheduled start of the English examination.

#### (4) Place of Examination

Prefectural University of Kumamoto

3-1-100 Tsukide, Higashi-ku, Kumamoto, 862-8502, Japan

TEL +81-96-321-6610

#### (5) Oral Examination

- ① A presentation focused on your master's thesis (including the process) or the other results of your research: 30 minutes
- ② Question-and-Answer session regarding the presentation (including questions related to your research field): 20 minutes
- ③ An LCD projector will be available for your presentation. The university will provide a computer and a projector. Applicants are required to bring a USB memory device or CDs and PDF data. (There is no maximum limit for the number of presentation slides.)

#### (6) Evaluation Criteria

English	Applicants will be evaluated according to their English abilities		
	related to their specialized fields.		
Oral	Applicants will be evaluated by their knowledge, consideration,		
Examination	motivation, and research accomplishments and abilities for the		

specialized fields after explaining the past research and the research plan.

#### (7) Acceptance Criteria

- ① Successful applicants will be those who scored more than approximately 60% of the total score.
- ② Applicants who have an excellent score in one of the subjects may be successful even though the total score falls short of the standards. However, applicants who have results less than 30% will not be successful in the event of any of ① or ②.

# 7 To applicants who wish to take the oral examination using video conferencing applications through the internet

- (1) If there is at least one applicant who wishes to take the oral examination using video conferencing applications through the internet, the oral examination will be conducted online for all applicants. Applicants who wish to take the examination online must notify the office during the application period.
- (2) If the examination is to be conducted online, the office shall contact all applicants promptly after the end of the application period.
- (3) The English exam is conducted through an oral examination in English and applicants are evaluated according to their English abilities for the specialized fields.
- (4) The examination will be held on Saturday, July 8, 2023 and the detailed schedule will be set in consideration of the local time in the applicants' countries of residence.

#### (5) Examination Date

Date	Subjects	Time	Point Allocation	Total
Saturday,	Oral Examination (Including a research presentation)	(Start time is	100	200
July 8, 2023	English (Oral Examination in English)	announced separately)	100	

#### (6) Oral Examination

① A presentation that is focused on your master's thesis (including the

- process) or the other results of your research: 30 minutes
- ② Question-and-Answer session regarding the presentation (including questions related to your research field): 20 minutes
- 3 Live video conference (Teams, Skype, or other compatible with Teams) through the internet is used.
- 4 Applicants must submit your presentation data for oral presentation to the office by e-mail until one week before the examination day (Friday, June 30, 2023). The data will be used for the oral presentation.
- (7) For evaluation and acceptance criteria, see "6 Selection Method".

#### 8 Screening of Applicants

For applicants who wish to apply for admission under Qualification of Applicant (5) or (6), a screening of applicants will be conducted.

- (1) Documents to be Submitted
  - Application for Screening of Applicants
     (on the form prescribed by the Graduate School)
  - 2 Curriculum Vitae (on the form prescribed by the Graduate School)
  - ③ Official Transcripts (issued by the latest and present university or the school, including credit hours) \*original copy only
  - ④ Degree Certificate or Graduation Certificate (issued by the last university or the school)
  - ⑤ Details of your Research, Education, Professional Experiences, Social Activities, etc. (on the form prescribed by the Graduate School)

    Please submit the details of your Research, Education, Professional Experiences, Social Activities, etc. Also please submit the separate prints (or copies) of your thesis or report if you have any.
  - 6 Research Plan (on the form prescribed by the Graduate School)A summary of your desired research (single spaced)
  - ⑦ Copy of certificate to prove the name change \* if applicable
    Please attach a copy of the certificate if the name on the official transcript and the degree (graduation) certificate are different from the present one.
  - \* Prescribed forms by the Graduate School in ①, ②, ⑤, and ⑥ are available for downloading from the university's website. Please print the PDF on A4-sized white paper.

Website address: https://www.pu-kumamoto.ac.jp/nyusi/graduate/

(2) Screening Method

Examination of submitted documents ((1)  $\bigcirc \sim \bigcirc$ ).

(3) Application Period for Qualification Screening

From Monday, April 3 to Friday, April 7, 2023

(Note) Applications must arrive at Academic Affairs and Entrance Examination Division by 17:00 on Friday, April 7, 2023, in person or by mail.

If application documents are brought in person, they will be accepted from 9:00 to 17:00 (Except from 12:20 to 13:20). Applications which have not arrived there by the deadline will not be accepted under any circumstances. Applicants should submit them well in advance.

If application documents are sent by mail, they should be sent by registered express mail (EMS), written "Application Form for Qualification Screening, PhD Program, Graduate School of Environmental & Symbiotic Sciences (Fall Enrollment)" in red color on the envelope.

(Place of Submission)

Entrance Examination Section for Graduate School, Academic Affairs and Entrance Examination Division, Prefectural University of Kumamoto

3-1-100 Tsukide, Higashi-ku, Kumamoto, 862-8502, Japan

(4) Results of Qualification Screening

Results of qualification screening will be sent to the applicants by Friday, April 21, 2023.

(Note) Please refer to page 6 when you apply for admission after the qualification screening.

#### **9 Announcement of Examination Results**

13:30 or later, Tuesday, July 18, 2023

The successful applicants' examinee numbers will be announced on our website (https://www.pu-kumamoto.ac.jp/nyusi/graduate/) and the results will also be mailed only to successful applicants. (Inquiries regarding the examination results will not be accepted over the phone.)

A letter of acceptance is the formal notice from the university.

#### 10 Enrollment Procedure

Successful applicants need to submit the required documents along with an acceptance letter, as well as the admission fee. The payment due date for the admission fee will be notified later.

#### (1) Procedure Period

From Monday, September 11 to Friday, September 15, 2023.

- \*① Office Hours are from 9:00 to 17:00. (Except from 12:20 to 13:20)
  - ② If enrollment documents are sent by mail, they must arrive by 17:00 on Friday, September 15, 2023.
  - ③ Necessary documents for enrollment procedure which have not arrived there by the deadline will not be accepted under any circumstances. Applicants should submit them well in advance.
  - Those who fail to complete the enrollment procedure by the deadline will be deemed to have declined the offer of enrollment.
- (2) Place of Procedure (Mailing Address)

Entrance Examination Section for Graduate School, Entrance Examination Academic Affairs and Entrance Examination Division, Prefectural University of Kumamoto

3-1-100 Tsukide, Higashi-ku, Kumamoto, 862-8502, Japan

#### (3) Documents to be Submitted

Documents must be submitted in person or by mail, and if they are sent by mail, they should be sent by EMS.

1) Pledge

(Pledge on Mercury Research should be submitted separately to Kumamoto Prefecture.)

(4) Admission Fee (as of 2023)

¥414,000

The payment date for the admission fee will be notified later.

(Note) If you decide to withdraw your enrollment after completion of the enrollment procedure, please contact the Academic Affairs and Entrance Examination Division by Friday, September 15, 2023. You need to submit an Enrollment Withdrawal Form.

Admission fees are non-refundable under any circumstances except when the applicants have not completed the procedure.

#### **11 Tuition** Fee (as of 2023)

Annual tuition fee: ¥535,800 (to be paid in two installments)

The payment deadline for the tuition fee and others will be notified later.

(Note) If the tuition fee and the due date are revised during the student's period of study, the revised tuition and the date will be applicable from the date of revision.

#### 12 Disclosing Examination Results to Applicants

#### (1) Disclosed Information

Scores: Total scores of each examination subject

Ranking: The results and the ranking will be disclosed to applicants who did not pass the examination only when there are more than 10 applicants who did not pass.

Unsuccessful applicants will be ranked A (upper third), B (middle third), or C (lower third) according to the grades.

#### (2) Disclosure Period and Time

From Friday, July 21 to Monday, August 21, 2023

Hours are from 9:00 to 17:00 (except from 12:20 to 13:20).

Disclosure results is not available on Saturdays, Sundays, and public holidays.

#### (3) Disclosure Method and Place

Applicants who took the entrance examinations should come to the Prefectural University of Kumamoto and request the disclosure of examination results orally at the Academic Affairs and Entrance Examination Division. (Substitutes are not permitted to request disclosure.)

Please bring your admission ticket as for proof of identity.

#### 13 Handling of Personal Information

Personal information submitted to the Prefectural University of Kumamoto in the form of applications and enrollment documents, and grades and results of entrance examinations are properly managed in accordance with the relevant laws regarding the protection of personal information.

Personal information is used only for selecting applicants for admission, enrollment procedures, registration, student support, and surveys and research, and is not used for purposes other than the ones mentioned above nor is provided to third parties.

When applicants request disclosure of entrance examination results, they will

be disclosed based on the relevant laws regarding the protection of personal information .

#### **14 Other Information**

Applicants with physical disabilities who therefore require special assistance during the exam and/or during the period of study should contact our Academic Affairs and Entrance Examination Division by Monday, May 8, 2023.

#### 15 Inquiries

Please contact the Academic Affairs and Entrance Examination Division by e-mail if you have any questions. Only e-mail is accepted.

Academic Affairs and Entrance Examination Division

Prefectural University of Kumamoto

E-mail: nyusi@pu-kumamoto.ac.jp

# Outline of Graduate School of Environmental & Symbiotic Sciences (PhD Program)

#### **1 Curriculum Configuration**

Our Graduate School's curriculum is designed with three Special Seminars and one Special Research to achieve our philosophy and Human Resources Development.

Charial	Special Seminar on Ecology-Related Environmental Symbiosis	Students should take one course chosen from eight themes. They should learn research methods related to material moving states and interrelated influence in the ecosystem including water, geosphere, and atmosphere. They also should aim to understand the methods to maintain and manage sustainable and high biological productivity, biological diversity, and ecosystems. Also, students can choose research on mercury at the Collaborative Graduate School with National Institute for Minamata Disease.
Special Seminar	Special Seminar on Residence-Related Environmental Symbiosis	Students should take one course chosen from six themes. Thinking extensively about the people's act of living on the earth as "Residence", they should consider the meaning of the symbiotic residential environment with nature and society. They also should aim for acquiring specific methods to realize an environmental and symbiotic society.
	Special Seminar on Food and Health-Related Environmental Symbiosis	Students should take one course chosen from nine themes to acquire the specific methods. From an environmental and symbiotic viewpoint, students should understand the importance of food resources and various food and health

		environmental factors comprehensively,		
		and aim to create a recycling society,		
	working for people's health maintenance			
	and disease prevention. Also, students can			
	choose research on mercury at the			
	Collaborative Graduate School with the			
		National Institute for Minamata Disease.		
	Students should choose a highly-specialized specific research			
Special	project from the point of view of environmental & symbiotic			
Research	science and complete a doctoral thesis through experimentations,			
	surveys, analysis, and the like.			

#### 2 Regular course term

3 years

#### 3 Day/Evening Course System

With an increased need for new specialized knowledge and the increased expectation for high Recurrent Education among adults, we provide a day/evening course to accept adults. In particular, for the PhD program, Special Research (for adults, including Special Seminar) is conducted basically at night (18:00-21:10).

## List of Instructors for Special Seminar Scheduled for fiscal 2023

	Position	- Name	Theme in Special Seminar* 1
D	Professor AGU	AGUSA, Tetsuro	Precise Measurement for Trace Chemicals
Ecology-Related Symbiosis		ISHIBASHI, Yasuhiro	Environmental Resource Circulation
Ecology-Re Symbiosis	Professor	ICHINOMIYA, Mutsuo	Marine Life Production
Ecol	Professor	ZHANG, Daizhou	Atmospheric Aerosols
Special Seminar on Environmental	Professor	KOBAYASHI, Jun	Management and Circulation of Environmental Substances
emina	Professor	MATSUZOE, Naotaka	Botanical Resources Production and Use
cial S Env	Associate Professor	KOMORITA, Tomohiro	Coastal Ecosystem
Spe	Collaborative Professor	YAMAMOTO, Megumi	Research on Mercury at the Collaborative Graduate School with the National Institute for Minamata Disease.
<b>-</b> -	Professor	KITAHARA, Akio <sup>*2</sup>	Timber Construction & Structures
ar ol atec tal	Professor	SHIBATA, Yu	Rural Planning
mina -Rel meni osis	Did	TAKAHASHI, Hironobu	Spatial Design
Special Seminar on Residence-Related Environmental Symbiosis		TANAKA, Akio <sup>※ 2</sup>	Architecture and Environmental Management
peci kesid Env	Professor	TSUJIHARA, Makihiko	Passive Environmental Conditioning
	Professor	LI, Li	Spatial Structure
d sis	Professor	AOKI, Tomoko	Motor Control
al Seminar on Food d Health-Related nmental Symbiosis	Professor	SHIMODA, Seiya	Clinical Manifestation Management
r or Rela Syr	Professor	SHIRATSUCHI, Hideki	Functional Food Analysis
nina Ith-I tal	Professor	TOMOYORI, Hiroko	Nutrition Functions of Food
Ser Hea nen	Professor	MATSUSAKI, Hiromi	Applied Microbiology
Special Seminar and Health-R Environmental	Professor	MATSUMOTO, Naoyuki	Physiology of Human Adaptation
Sp	Associate Professor	ANAN, Yasumi	Food Resources Safety

<sup>%1</sup>  $\,$  Please refer to page 19-26 for the themes in Special Seminar.

<sup>※2</sup> Scheduled to retire in March 2025

#### **Lecture Contents of Courses**

Course Title	Contents
Special Seminar on Ecology-Related Environmental Symbiosis	Students should take one course chosen from eight themes. They should learn research methods related to material moving states and interrelated influence in the ecosystem including water, geosphere, and atmosphere. They also should aim for understanding the methods to maintain and manage sustainable and high biological productivity, biological diversity, and ecosystems.
	Theme 1: Precise Measurement for Trace Chemicals [Content] The instructor lectures analytical technique of trace chemicals that are physicochemically and biologically changed in the environment and evaluation of effects on ecosystem by those chemicals. [Instructor] AGUSA, Tetsuro, Professor
	Theme 2: Environmental Resource Circulation [Content] As a point of law carbon and resource circulation, students should understand the recycling process of waste products and new energy manufacturing processes using biomass. [Instructor] ISHIBASHI, Yasuhiro, Professor
	Theme 3: Marine Life Production [Content] While understanding the structure and function of the lower trophic level ecosystem that supports the high fishery production in the ocean area around Japan, this course discusses how marine life resources should be used sustainably. [Instructor] ICHINOMIYA, Mutsuo, Professor
	Theme 4: Management and Circulation of Environmental Substances  [Content]  This course offers explanations for trace environmental pollutants—their existence, behaviors and toxicity impact assessment methods—in order to make students understand the health impact assessment for ecosystem and human beings as well as disposal methods and appropriate management/operation procedures of chemical substances.  [Instructor]  KOBAYASHI, Jun, Professor

Course Title	Contents
Course Title	Contents Thoma F. Atmospharia Agracals
Special Seminar on Ecology-Related Environmental Symbiosis	Theme 5: Atmospheric Aerosols [Content] The instructor gives an outline of the latest survey data and methods of analysis on atmospheric pollutants. Students should understand the current situation of survey research on air quality problems based on observation examples. [Instructor] ZHANG, Daizhou, Professor
	Theme 6: Botanical Resources Production and Use [Content]  The instructor gives the concept and the technique of the latest approach on food production. Students should understand the agricultural production methods in global and regional environment.  [Instructor]  MATSUZOE, Naotaka, Professor
	Theme 7: Coastal Ecosystem [Content] The instructor gives an outline of the marine environment & the ecological construction and function of coastal shallow sea areas including tidal flats, along with the concrete examples of Ariake Bay, Yatsushiro Bay, etc. Students should understand the theory and method of coastal ecosystem. [Instructor] KOMORITA, Tomohiro, Associate Professor  Theme 8: Mercury [Content]
	Students conduct research on mercury at Collaborative Graduate School with National Institute for Minamata Disease.  [Instructor]  YAMAMOTO, Megumi, Collaborative Professor

Course Title	Contents
Special Seminar on Residence-Related Environmental Symbiosis	Students should take one course chosen from six themes. Thinking extensively about the people's act of living on the earth as "Residence", they should consider the meaning of the symbiotic residential environment with nature and society. They also should aim for requiring specific methods to realize an environmental and symbiotic society.
	Theme 1: Timber Construction & Structures [Content] Students consider the possibility of timber, which is a renewable structural material, and the usages for residential environmental from the aspect of constructions. [Instructor] KITAHARA, Akio, Professor
	Theme 2: Rural Planning [Content] This course explores future directions of Japanese farming and fishing villages in the new era through understanding multifaceted functions and sustainable mechanism of farming/fishing/mountain village areas, learning from examples of Japan and abroad. [Instructor] SHIBATA, Yu, Professor
	Theme 3: Spatial Design [Content] Students should focus on sensuousness in spatial design, and learn knowledge on Japanese art which differ from western art from thought, culture, history and regionality, and consider future Japanese spatial design. [Instructor] TAKAHASHI, Hironobu, Professor
	Theme 4: Architecture and Environmental Management [Content] By quantifying the point of view of the various influences of actions to maintain the internal environment which affects the external environment, we will examine the ways of architecture and environmental management in terms of the symbiosis of architecture and the environment. [Instructor] TANAKA, Akio, Professor

Special Seminar on Theme 5: Passive Environmental Conditioning	
Residence-Related Environmental Symbiosis  [Content] Students consider the sustainable developm consumption and the relationships between his comfort from the perspective of residential econditioning.  [Instructor] TSUJIHARA, Makihiko, Professor  Theme 6: Spatial Structure  [Content] Students learn knowledge of spatial struct construction design, and evaluation of struction is subject to external impact by natural as earthquakes and typhoons.  [Instructor]  LI, Li, Professor	nent & energy uman health & environmental cture system, uctural safety

Course Title	Contents
Special Seminar on Food and Health-Related Environmental Symbiosis	Students should take one course chosen from seven themes to acquire the specific methods. From a point of environmental and symbiotic view, students should understand the importance of food resources and various food and health environmental factors comprehensively, and strive to create a recycling society, working for people's health maintenance and disease prevention.
	Theme 1: Motor Control 【Content】 Students should understand the mechanism of the nervous system and skeletal muscles which enable skillful and appropriate movements in human. 【Instructor】 AOKI, Tomoko, Professor
	Theme 2: Clinical Manifestation Management
	[Content] From the point of view of medicine, nutrition and pharmacy, students should understand origin and disease state of each disease such as diabetes, obesity, metabolic syndrome and endocrine disease. And student should examine and consider new prophylaxis, diagnosis and cure based on the newest knowledge on the disease state control.  [Instructor] SHIMODA, Seiya, Professor
	Theme 3: Functional Food Analysis
	[Content] Students should understand the analysis and evaluation method of various food components on food function and consider the construction of a recycling society through the functional foods, the functional material, functional material, and high-quality food material invention which maintain and raise health.  [Instructor] SHIRATSUCHI, Hideki, Professor
	Theme 4: Nutrition Functions of Food [Content] Explores and evaluates how food originated nutrients and functional ingredients have influence on the body, also examines the prevention and improvement of lifestyle-related disease. We will also study on the practical use of the system on "Function Claims" of food. [Instructor] TOMOYORI, Hiroko, Professor

Course Title	Contents			
Special Seminar on	Theme 5: Applied Microbiology			
Food and Health-Related Environmental Symbiosis	[Content] From the point of view of applied microbiology, students should consider the establishment of a Sound Material-Cycle Society such as through the foods using microorganisms and the control of microorganisms involved in foods to maintain and improve the health, and the application of biomass resources and the synthesis of environmentally-friendly materials by biotechnology.  [Instructor] MATSUSAKI, Hiromi, Professor			
	Theme 6: Physiology of Human Adaptation [Content]  Students should understand the mechanism of structural and functional alteration of body including the brain by not only physical activity but also physical inactivity. We will discuss about the exercise prescription and eating habits which promote the neurogenesis effective in maintenance and improvement of cognitive functions. [Instructor]  MATSUMOTO, Naoyuki, Professor  Theme 7: Food Resources Safety [Content]  Students should understand the food contamination and biological effects of chemicals derived from human activities or the natural environment, and consider the food safety and risk control methods based on scientific evidence. [Instructor]  ANAN, Yasumi, Associate Professor			

Course Title	Contents				
Special Research	Students should choose the specific research task specialized highly from the viewpoint of environmental symbiosis study, and write PhD thesis through experiments, investigations, and analysis.				
	Research 1: Research on Marine Ecology and Environmental Conservation				
	Research 2: Research on Resource Circulation Using Unused Resources and Energy Generation				
	Research 3: Research on Behavior of Particles and Chemicals in Atmosphere and Water				
	Research 4: Research on Food, Plant Production, and Environment				
	Research 5: Research on Environment-Conscious Structure				
	Research 6: Research on Safety of Architectural Construction				
	Research 7: Research on Continuation of Rural Area				
	Research 8: Research on Environment-Conscious Residential Environment				
	Research 9: Research on Analysis and Evaluation of Food Safety				
	Research 10: Research on Analysis and Evaluation of Food Preference and Functionality				
	Research 11: Research on Physiology, Biochemistry, and Management of Food and Health				
Research 12: Applied Microbiology Research on Food, He Environment					

Course Title	Contents
Special Research	Research 13: Research on Clinical Medicine of Food and Health  As for the Special Research, students can conduct research on mercury at Collaborative Graduate School with National Institute for Minamata Disease under the above research projects.

#### reference

# Prefectural University of Kumamoto International Postgraduate Scholarship for Research on Mercury

Since the "Minamata Convention on Mercury" has been adopted, the Kumamoto Prefectural Government has decided to subsidize "support to foster mercury-specialized experts" to make advanced efforts in Japan and overseas for realization of a mercury-free environment.

In response to this, Prefectural University of Kumamoto has established a scholarship in 2014 sponsored by Kumamoto Prefecture to foster international researchers in the mercury research field. This scholarship is for our international students who will conduct specialized research on mercury at the Collaborative Graduate School with the Prefectural University of Kumamoto and National Institute for Minamata Disease.

Graduate School of Environmental & Symbiotic Sciences, Prefectural University of Kumamoto is recruiting international students who conduct research on environmental pollution and health effects of mercury at the Collaborative Graduate School under the Scholarship for Research on Mercury.

#### 1 Outline of the Scholarship in 2023

#### (1) Eligibility

Applicants who pass the entrance examination of the PhD Program, Graduate School of Environmental & Symbiotic Sciences, Prefectural University of Kumamoto (Fall 2023 Enrollment), Selection Method for Non-Japanese (Special Admission Quota for International Postgraduate Scholarship for Research on Mercury), enter the Prefectural University of Kumamoto, and conduct research on mercury at the Collaborative Graduate School with National Institute for Minamata Disease.

- (2) Number of the Scholarship Recipients
  Within the limits of the budget, no more than 2 students in above (1) as scholarship recipients
- (3) Amount of Scholarship

  ①Entrance Fee ¥414,000 ②Tuition ¥535,800 ③Living Expenses

  ¥150,000/month ④Travel Expenses up to ¥362,000 ⑤Transportation

to/from Japan up to ¥300,000 (actual expenses)

Total: ¥3,411,800

(4) Duration of Scholarship

Regular course term

(5) Cancellation of Scholarship

The student is disqualified

- ① In the event of disciplinary action under the code of the Graduate School
- ② In the event of leaving school or being expelled
- 3 In the event of death
- ④ In the event that he/she displays inappropriate behavior such as abandonment of the research on mercury, and the Graduate School resolves the student is not appropriate as a scholarship student and the President has confirmed it.

#### 2 Selection of Applicants in 2023

- (1) As for the Selection of Applicants in 2023, please refer to the Application Guide for Admission.
- (2) Entrance Examination Dates

Qualification		Entrance	Announcement of
Screening of	Application Period	Examination	Examination
Applicants Period		Date	Results
From Monday, April	From Monday, May	Saturday, July	Tuesday, July 18,
3 to Friday, April 7,	8 to Friday, May	8, 2023	2023
2023	19, 2023		

- (3) Admission Quota: 2 students
- (4) Those who recommend the applicants and applicants themselves must contact their prospective supervisor before applying and explain adequately the contents their "Recommendation Letter" and "Research Plan".
- (5) The final selection will be based on the overall results of our written examinations (English), oral examinations, interviews, and document screenings.

#### 3 Scholarship in 2023

#### (1) Determination of Scholarship Students

Applicants who pass the entrance examination of Selection Method for Non-Japanese (For International Postgraduate Scholarship for Research on Mercury) for Fall Enrollment and are admitted to enter the Graduate School of Environmental & Symbiotic Sciences will be chosen as scholarship recipients and "Notice of Determination for Scholarship Recipient" will be delivered.

#### (2) Amount of Scholarship

①Entrance Fee ¥414,000 ②Tuition ¥535,800 ③Living Expenses ¥150,000/month ④Travel Expenses up to ¥362,000 ⑤Transportation to/from Japan up to ¥300,000 (actual expenses)

Total: ¥3,411,800(maximum)

In consideration of a second half of academic year 2023, the amount will be \(\pmu\_2,063,000\)(maximum).

#### (3) Payment of Scholarship

For the academic year 2023, the expense for transportation to Japan (actual expenses), Entrance Fee, Tuition (for fall semester), and living expenses (for 6 months) will be paid in October (\*The payment will be by installments in April and October in and after 2024). As for the travel expenses, the cost calculated by Prefectural University of Kumamoto's travel expenses rule will be paid monthly.

#### (4) Payment of Tuition

The Scholarship recipients should pay the tuition for the academic year 2023 by the prescribed way of the Office of Prefectural University of Kumamoto, by the prescribed date. In and after 2024, the payment dates of the tuition for fall enrollment students are 2 times, at the end of April and the end of October.

## Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment Selection Method for Non-Japanese

(Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

# Application for Admission \*\*Applicant's No.

Desired Study Field			
In Roman letter		М	Nationality
Name in full in Native Language		F	
Date of Birth	Year Month Date Age		
Eligibility	Year Month National/Public/Private Graduate School Name  Division		1 Graduated (Earned Degree) 2 Expected to Graduate (Earn Degree)
	Earned Degree Master of Others		3 Others ( )
	Others		
Current Address	(Phone No.		)
Contact Information When Taking Exam	(Phone No. (Cell Phone No.		)
Name of Employer	(Phone no.	ccupati	on
Desired Supervisor			

[Note] Please do not write in the space \*.

Those who apply after Qualification Screening should write "Applying after individual Qualification Screening" in "Others" on the "Eligibility".

Applicants must contact prospective supervisors before writing the "Desired Supervisor" name and submit the Confirmation Sheet on Preliminary Consultation when applying. The actual supervisor will be subject to change after enrollment.

Do not cut				
Photo Sheet	Selection Method	Selection Method for Non-Japanese (Special International Postgraduate Scholarship for Research		
Photo Sheet	Applicant's No.	*	РНОТО	
	In Roman letter		4cm×3cm, within 3 months of applying,	
Graduate School of Environmental & Symbiotic Sciences	Name		with a full-face view directly facing the camera, against a	
(PhD Program) 2023 Fall Enrollment	Date of Birth	Year Month Date M F	plain background and without a hat. Write full name on	
Linoillient	Desired Study Field		the back of a photo.	

(Note) Please do not fill in the column  $\divideontimes$ .

#### Do not cut

Admission Ticket	Selection Method	Selection Method for Non-Japanese (Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)
	Applicant's No.	*
Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment	In Roman letter	
	Name	
	Date of Birth	Year Month Date M·F
	Desired Study Field	

- (Note) 1 Please bring this ticket to an entrance examination and put it on the desk to show to proctors.
  - 2 Please do not fill in the column ※.

Do not cut

## Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment Selection Method for Non-Japanese

(Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

## **Curriculum Vitae**

In Roma	n letter			A 1: +/-	*
Name in Native La				Applicant's No.	
		R	egistry Records (from elemer	ntary school)	
	Year	Month			
	Year	Month			
	Year	Month			
Educational	Year	Month			
Background	Year	Month			
	Year	Month			
	Year	Month			
	Year	Month			
	From Year	Month			
	To Year	Month			
	From Year	Month			
Occupational	To Year	Month			
Experience	From Year	Month			
	To Year	Month			
	From Year	Month			
	To Year	Month			
Research Achievement, Qualification, and Reward & Punishment				Punishment	
Year Month					
Year Month					
Year Month		Month			
Year Month					

[Note] 1 Please do not fill in the column %.

- 2 Please write Occupational Experience if you have any.
- 3 Please write on another paper (A4 size) when you need more space.
- 4 This form is available for downloading from the University's website.

## Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment Selection Method for Non-Japanese

(Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

# **Research Plan**

1. Applicant's Name :	
(Theme)	
[Summary]	

- ※1 Please write horizontally. You may write on a word processor or by hand.
- %2 This form is available for downloading from the University's website.
- 3 Please attach the detailed research plan.

PhD Program

[Fall Enrollment]

Month

Day

# **Application for Screening for Applicants**

Year

Dean, Graduate School of Env	ronmental & Syı	mbiotic Sciences	
	(Applicant) In Roman letter Name		
	Date of Birth	Year Month Day ( Age)	_
	Contact Address		
	PHONE		

I would like to apply for individual Qualification Screening to apply for Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment.

Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment <For Qualification Screening>

Name			

# **Curriculum Vitae**

		Educational Background (from Elementary School)
Year	Month	
		Occupational Experience
Year	Month	

 $<sup>\</sup>divideontimes$  This form is available for downloading from University's website.

Graduate School of Environmental	& Symbiotic Sciences (P	PhD Program) 2	2023 Fall I	∃nrollment
<for qualification="" screening=""></for>				

# Achievement List of Research, Education, Duties, and Social Activities

Year	Month	Research (Presentation on Conference, thesis, etc)
Year	Month	Education

<sup>\*</sup> This form is available for downloading from University's website.

Graduate School	of Environmental	& Symbiotic Sciences	(PhD Program)	2023 Fall Enrollmen
<for qualification<="" td=""><td>on Screening&gt;</td><td></td><td></td><td></td></for>	on Screening>			

<u>Name</u>		_

# Achievement List of Research, Education, Duties, and Social Activities

Year	Year Month Duties		
	N4 bl-	Control Antivities (AIDO potivities ato)	
Year	Month	Social Activities (NPO activities etc)	
Year	Month	Others	

 $<sup>\</sup>ensuremath{\,\%\,}$  This form is available for downloading from University's website.

## Graduate School of Environmental & Symbiotic Sciences (PhD Program) 2023 Fall Enrollment Selection Method for Non-Japanese

(Special Admission Quota for International Postgraduate Scholarship for Research on Mercury)

Applicant's Name

Confirmation Sheet on Preliminary Consultation				
Consultation Date	Year Month Date			
Summary of Prelim	inary Consultation			
	I have received the preliminary consultation as abo	ove.		
Desired Supervisor				
	Signature	Seal		
	copy of the supervisor's e-mail or letter to prove			