



# **Kanazawa University**

## **Graduate School of Natural Science and Technology**

### **(Master's Level Section)**

“Environmental and Energy Technologies International Course”

## **Second Applicant Guidelines for International Students (October 2023)**

**- Self-financed Quota Applicants-**

### **Application Outline for Admission**

Environmental and energy engineers who can contribute to the global society are expected to be equipped with not only the advanced knowledge and skills of environmental and energy engineering but also the ability to propose and design the skills and processes that are in harmony with the regional society and the understanding of regional cultures and history. This course will train individuals who can contribute to the global society by providing education on (1) advanced knowledge and skills on environmental and energy engineering, (2) advanced communications skills for collaborating with engineers from other nations and to understand the historical and cultural background of the regional residents who will be the users of the environmental and energy technology, and (3) the leadership to propose the appropriate skills and processes for each regional circumstances surrounding the environmental problems that occur across national borders. Moreover, the course will nurture individuals who will act as a bridge with Japan at the site of research and technological development in the fields of environment and energy and who will contribute to the sustainable development of the society through cooperation across national borders.

## 1. SCHEDULE

Date	Details
April 21 – April 28, 2023 Japan time: noon	Application Period
Late of May, 2023 (tentative)	Notification of schedule on an Oral Examination
Beginning to middle of June, 2023 (tentative)	Oral Examination
Beginning of July, 2023 (tentative)	Notification of Results
October 1, 2023	Admission

## 2. QUALIFICATIONS

### ●The number of students to be admitted

Category	Number of applicants accepted
International students (self-financed quota)	5

※ In this application guideline, we recruit only those who wish to apply for self-financed quota. In case a successful candidate in the special quota declined the admission, a self-financed international student will move up to fill the special quota in order of exam result. The students in special quota will be exempted from the payment of both admission fee and tuition fee.

### ●Divisions offered

- 1) Division of Material Chemistry (Applied Chemistry Course)
- 2) Division of Mechanical Science and Engineering
- 3) Division of Frontier Engineering
- 4) Division of Electrical, Information and Communication Engineering
- 5) Division of Geosciences and Civil Engineering (Course in Civil Engineering)

### ●Field of Study

Environmental engineering fields (atmospheric environment, water environment, soil environment, waste management, etc.) and energy technology

### ●Research field and supervisor

Please select your intended field of specialization at Kanazawa University, and your preference for Supervisor.

For the professors who can accept students in this course, please refer to the Appendix.

Prior to application, applicants must contact their preferred supervisors directly via email in order to discuss the possibility of studying under their guidance. Then, applicants must receive a letter of acceptance from prospective supervisor. Note that we cannot accept the application without the letter of acceptance from prospective supervisor.

Reference URL: <http://www.nst.kanazawa-u.ac.jp/etic/english/research/>

#### ●Academic Background

Applicant must have graduated or will graduate from a Japanese university by September 30, 2023. Applicant will be deemed to have academic ability equal or superior to that of a Japanese university graduate, if he/she

[1] has completed or will complete by September 30, 2023 a 16-year school curriculum in a foreign country.

[2] is or will be age 22 by September 30, 2023 or older and has taken an individual entrance qualification examination and has been judged by a graduate school as being equal or superior in academic ability to a university graduate.

Note: Eligible applicants include those who otherwise satisfy or will satisfy the qualification requirements by September 30, 2023 for admission to a Japanese graduate school.

#### ●Health

Applicant must be physically and mentally fit to pursue the study at university.

#### ●Arrival in Japan

Applicant is able to leave for and arrive in Japan within two weeks of October 1, 2023.

#### ●Visa Requirement

Selected applicants must obtain a College Student (ryugaku) visa from the Japanese consulate general in the country of their nationality.

#### ●Other

Any applicant who meets any or all of the following conditions is ineligible.

[1] Those who are military personnel or military civilian employees at the time when the school period is due to begin;

[2] Those who cannot arrive in Japan during the period designated by Kanazawa University;  
or

[3] Those who are expected to graduate at the time of application and cannot satisfy the qualifications and the conditions related to academic background by the deadline given.

### 3. APPLICATION PROCEDURES AND SELECTION

#### (1) Application Procedure

##### ●Submit documents

Applicants must submit the following PDF documents to the Student Affairs Division, Graduate School of Natural Science and Technology, Kanazawa University and prospective supervisor **as e-mail attachment** by the deadline. After receiving a notification of application complete, applicants must send the originals.

### **Application Period and address for submission**

Application Period: April 21, 2023 (Fri) ~ April 28, 2023 (Fri) by Japan time: noon

Admission Affairs Section, Student Affairs Division,  
Science and Engineering Administration Department  
Kakuma, Kanazawa 920-1192

Email address: [s-nyusi@adm.kanazawa-u.ac.jp](mailto:s-nyusi@adm.kanazawa-u.ac.jp)

(please include “[ETIC]” in the subject header)

Website: <http://www.nst.kanazawa-u.ac.jp/etic/english/>

#### **Note:**

If applicants find it difficult to send documents to us because of exceeds size or any other reasons, please split them into several files and send them separately.

### **Required Documents**

- 1) Application Checklist \*
  - 2) Application Form \*
  - 3) Statement of purpose \*
  - 4) Academic transcript of the last university attended
  - 5) Graduation certificate or degree certificate of the last university attended (or an attested document certifying that the applicant will graduate from the school, where applicable)
  - 6) Students Registration Certificate (for current students)
  - 7) Summary of Graduation Thesis, etc. (free format, 2-3 A4 sized pages)
  - 8) Field of Study and Research plan form \* Both side printing
  - 9) An original score of any test of English language ability such as TOEIC, TOEFL-iBT or IELTS. (if any)
  - 10) Letter of Acceptance from Prospective Supervisor \*
- ※ You should submit PDF only. The prospective supervisor will submit the original to Admission Affairs Section, Student Affairs Division.
- 11) Photocopy of a passport or birth certificate or certificate of citizenship
- ※ Items with \* must be printed in A4 sized paper using prescribed forms.
- ※ Above documents must be written in either Japanese or English. A document written in any other language must accompany a Japanese or English translation.
- ※ Photographs (4.5×3.5cm) to be pasted on the application must be taken with in the past 6 months. And it must be of upper body, uncapped, full-faced, and solid-color background. Name and nationality must be indicated on the back.
- ※ Applicant should clearly describe his/her research program on Field of Study and Study plan form because it will serve as important materials for placement of the applicant at a university.
- ※ The academic transcripts of the last university attended must show the grade scale applied and the grades earned by the applicant on all the subjects studied. (A degree certificate or a graduation certificate simply showing the ranking of the applicant at graduation will not

substitute for academic transcripts.)

- ※ For abstracts of the theses, abstracts of the graduation thesis and presented papers will suffice. Please note that these abstracts will be used as basic data for evaluation of the applicant's academic ability.
- ※ Applications will not be accepted if any of the documents are incomplete, incorrect, or not supported by evidence, or if they are not received by the specified deadline. Once submitted, documents cannot be modified and will not be returned.
- ※ If any information of the documents is later found to be false, admission can be canceled at any time after enrollment.

## (2) Examination

### 1. Screening Method

Selection will be based on the results of an Oral Examination over the Internet and the screening of the submitted documents.

Date of Oral Examination: about the beginning to middle of June 2023 (tentative)

Venue of Oral Examination: It will be announced later by prospective supervisor.

### 2. Announcement of Results

Date: the beginning of July 2023 (tentative)

※ The results will be notified by e-mail and document.

## 4. SCHOOL FEE

### (1) Fees

Applicants need not to pay examination fee.

Admission fee: 282,000JPY

Tuition fee (Annually): 535,800JPY

(First semester: 267,900JPY / Second semester: 267,900JPY)

※ If amendment of admission fee and tuition fee take place, the new fee will apply from the date of revision.

### (2) Admission Fee Exemption

Successful applicant who passes the examination as a self-financed student is eligible to apply for admission fee exemption (full or half), if he/she meets the following conditions of ① or ②. Please inquire the details after being selected.

① Applicant who has financial difficulties in paying the admission fee and has exemplary academic records.

② Applicant who faces significant difficulty in paying admission fee due to a loss of his/her financial supporter within a year from enrollment or to wind and flood damages brought upon the student or his/her financial supporter.

Additional details are available from the contact information below.

Student Support Division, Kanazawa University, Kakuma, Kanazawa, Ishikawa, 920-1192  
JAPAN TEL 076-264-5164

### (3) Tuition Fee Exemption

Successful applicant who passes the examination as a self-financed student is eligible to apply for tuition exemption (full or half), if he/she meets the following conditions of ① or ②. Please inquire the details after being selected.

① Applicant who has financial difficulties in paying the tuition fee and has exemplary academic records.

② Applicant or student who faces significant difficulty in paying tuition fee either due to a loss of his/her financial supporter within a year from enrollment or to wind and flood damages brought upon the student or his/her financial supporter.

Additional details of this information are available from the contact information below.

Student Support Division, Kanazawa University, Kakuma, Kanazawa, Ishikawa, 920-1192  
JAPAN TEL 076-264-5164

## 5. SCHOLARSHIP OF KANAZAWA UNIVERSITY

Kanazawa University provides some scholarship programs for International students.

For more information, please refer to the following website.

<http://www.adm.kanazawa-u.ac.jp/ie/e/abroad/scholarship.html>

## 6. NOTES

(1) Each applicant is advised to learn the Japanese language and to acquire some information on Japanese weather, climate, customs, university education, and conditions in Japan, as well as about the difference between the Japanese legal system and that of his/her home country before departing for Japan.

(2) The successful applicant should bring approximately 250,000JPY or the equivalent to cover the immediate needs after arrival in Japan (rent of apartment, insurance, etc.). For Self-Financed student, admission fee and tuition fee must be arranged in addition.

Moreover, submission of the deposit balance proof of about 1,000,000JPY might be requested at a state to issue a student visa.

(3) If you are granted or will be granted any scholarship while you stay in Japan including MONBUKAGAKUSHO scholarship, government of your country etc., please make sure to fill in the name of scholarship field in the application form in advance.

- (4) Additional details of this program are available from the contact information below.
- (5) Do not use erasable ball-point pens for application documents.



Admission Section, Student Affairs Division,  
Science and Engineering Administration Department,  
Kanazawa University  
Kakuma, Kanazawa, Ishikawa 920-1192 JAPAN  
Phone: +81-76-234-6823 Fax: +81-76-234-6844  
<http://www.nst.kanazawa-u.ac.jp/etic/>  
E-mail: [s-nyusi@adm.kanazawa-u.ac.jp](mailto:s-nyusi@adm.kanazawa-u.ac.jp)

# Environmental and Energy Technologies International Course

## Instructors and Research

### Division of Material Chemistry

Name	Position	Research Field
<a href="#">Hiroshi Hasegawa</a>	Professor	Hydrosphere chemistry, environmental chemistry, remediation technology, toxic metals, rare metals
<a href="#">Tetsuya Taima</a>	Professor	Organic photovoltaic cell, perovskite solar cell, molecular orientation control
<a href="#">Akio Ohta</a>	Associate Professor	Physical chemistry of interfaces, surfactant science, amino acid-type surfactants, surfactants, biomaterials, calorimetry
<a href="#">Takahiro Yamaguchi</a>	Associate Professor	Electrochemistry, Modified electrode, Oxygen reduction reaction
<a href="#">Asami Mashio</a>	Assistant Professor	Marine chemistry, Environmental chemistry, Analytical chemistry
<a href="#">SHAHIDUZZAMAN MD</a>	Assistant Professor	Fabrication of Perovskite Solar Cells
<a href="#">WONG KUO HONG</a>	Assistant Professor	Biogeochemical cycles, Chemical oceanography, Aquatic Analytical Chemistry, Trace metals, Microorganism
<a href="#">ASAKAWA, Hitoshi</a>	Associate Professor	Atomic force microscopy, Solid-liquid interface, Intermolecular interactions
<a href="#">NAKANO, Masahiro</a>	Assistant Professor	photovoltaic devices, self-assembled monolayer, organic spintronic materials

### Division of Mechanical Science and Engineering

Name	Position	Research Field
<a href="#">Takahiro KIWATA</a>	Professor	Fluid Engineering
<a href="#">Takaaki Kono</a>	Associate Professor	Wind Turbine Engineering, Computational Fluid Dynamics, Wind Engineering
<a href="#">Hiroshi Enomoto</a>	Associate Professor	Combustion, Internal combustion engine, Biomass usage
<a href="#">Yoshikazu Teraoka</a>	Associate Professor	thermal engineering, heat transfer
<a href="#">Akio Kodama</a>	Professor	Adsorption, gas separation, desiccant cooling, air purification, low-temperature heat energy
<a href="#">Takuya Tsujiguchi</a>	Associate Professor	Fuel cell, Desiccant Cooling system, Heat and Mass Transport analysis
<a href="#">Yugo Osaka</a>	Associate Professor	Thermal battery, Heat/Electricity integrated energy management system, Exhaust gas purification
<a href="#">Masashi Haruki</a>	Professor	Properties in chemical engineering process/Transfer operation/Unit operation, Reaction engineering/Process system, Thermal engineering

### Division of Frontier Engineering

Name	Position	Research Field
<a href="#">Takafumi Seto</a>	Professor	Nano-particles, aerosols
<a href="#">Hirohisa Uchida</a>	Professor	High pressure/Supercritical fluid technology, Advanced materials production, Crystallization, Thermodynamics
<a href="#">Mikio Kumita</a>	Professor	Adsorption, Sorption cooling, Heat and mass transfer, Reaction engineering
<a href="#">Noboru Takiguchi</a>	Associate Professor	Bioprocesses, bioinformatics
<a href="#">Yayoi Inomata</a>	Associate Professor	Atmospheric Environment Science, Meteorology, Geochemistry

### Division of Electrical, Information and Communication Engineering

Name	Position	Research Field
<a href="#">Tatsuo Ishijima</a>	Professor	Plasma Application
<a href="#">Yasunori Tanaka</a>	Professor	Power engineering/Power conversion/Electric machinery, Plasma science
<a href="#">Takeo MARUYAMA</a>	Associate Professor	Optoelectronics, Silicon Photonics, Optical Wireless Power Transmission, Semiconductor Devices
<a href="#">Yusuke NAKANO</a>	Assistant Professor	Electrical Discharge, Electrical Insulation, Current Interruption, Power System

### Division of Geosciences and Civil Engineering

Name	Position	Research Field
<a href="#">Zhen-jiang Shen</a>	Professor	Inventory and total amount control approach for urban environment management simulation, agent-based models
<a href="#">Mitsuhiko Hata</a>	Professor	Aerosol, biomass combustion, source countermeasure technologies
<a href="#">Ryo Honda</a>	Professor	Environmental process engineering, Environmental microbiology, Water treatment process
<a href="#">Masashi Ohashi</a>	Professor	Materials physics and chemistry, Thermophysical property, Functional materials, Low temperature, Magnetism
<a href="#">Kenji Taniguchi</a>	Professor	Numerical weather prediction, River runoff simulation, Impact assessment of global warming
<a href="#">Tatsuya Nishino</a>	Professor	Architectural Planning, Living Environment for the Elderly, Restructuring of Public Facilities
<a href="#">Seiya Hanamoto</a>	Associate Professor	Environmental chemistry
<a href="#">Norihisa Matsuura</a>	Associate Professor	Water environmental engineering, wastewater treatment, eco-friendly technology, microbial community analysis
<a href="#">Hiroe Hara-Yamamura</a>	Assistant Professor	Water environment engineering, Wastewater reclamation, Emerging contaminants
<a href="#">Yuri Nishiwaki-Akine</a>	Assistant Professor	biomass conversion, surface chemistry