# Kanazawa University

## Graduate School of Natural Science and Technology

## (Master's Level Section)

"Environmental Technology International Course"

Second Applicant Guidelines for International Students(October 2018)

**Application Outline for Admission**

The Graduate School of Natural Science and Technology, Kanazawa University, has established the Environmental Technology International Course in October 2014 in order to train researchers and technical experts (environmental engineers) with specialized knowledge and skills in the field of environmental technology to support the sustainable development of the society. The new course is designed in an interdisciplinary fashion across the Master's courses in the Divisions of Material Chemistry (Applied Chemistry Course), Mechanical Science and Engineering (Environment and Human-related Mechanical Systems Course), Environmental Design and Natural System (Chemical Engineering Course), and aims to train human resources who can play a main role in recycling resources and reducing environmental burden without being obstructed by national borders.

Environmental engineers who can contribute to the global society are expected to be equipped with not only the advanced knowledge and skills of environmental 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 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 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** |
|---|---|
| May 1 ～ May 11, 2018<br>Japan time: 17 : 00 | Application Period |
| Middle to Late of May, 2018(tentative) | Notification of schedule on an Oral Examination |
| Beginning of June, 2018 (tentative) | Oral Examination |
| Beginning of July, 2018 (tentative) | Notification of Results |
| October 1, 2018 | Admission |

## 2. QUALIFICATIONS

**●The number of students to be admitted**

| Category | Number of applicants accepted |
|---|---|
| International student (special quota) | 3 |
| International students (self-financed quota) | A few students |

※Out of all successful candidates, those who rank among the top 3 examinee in result of the entrance exam will be accounted as the candidate in special quota. The student 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 (Environment and Human related Mechanical Systems Course)
3) Division of Environmental Design
4) Division of Natural System (Chemical Engineering Course)

**●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://ridb.kanazawa-u.ac.jp/public/index_en.php

●**Academic Background**

Applicant must have graduated or will graduate from a Japanese university by September 30, 2018. 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, 2018 a 16-year school curriculum in a foreign country.

[2] is or will be age 22 by September 30, 2018 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, 2018 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, 2018.

●**Visa Requirement**

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

●**Other**

Any applicants who meet any or all of the following conditions are not eligible:

[1] Applicant is an active member of the military or a civilian employed by the military at the time the school period is due to begin.

[2] Applicant is unable to travel to Japan within the dates set by Kanazawa University.

[3] Applicants who are expected to graduate at the time of application and, cannot satisfy the qualifications and the conditions of 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 email attachment** by the deadline. And then, applicants must send the originals as well.

**Application Period and E-mail address for submission**

Application Period: May 1, 2018 (Tue) ~ May 11, 2018 (Fri) by Japan time: 17:00
Email address: s-nyusi@adm.kanazawa-u.ac.jp
HP: http://www.nst.kanazawa-u.ac.jp/etic/english/
(Academic Affairs Section, Student Affairs Division, Graduate School of Natural Science and Technology, Kanazawa University)
The application forms are available on the above mentioned website.

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 (form1)
2) Application Form (form2)
3) Short Essay (form3)
4) Statement of purpose (form4)
5) A letter of recommendation from the president, Dean, or Director of the institute addressed to the President of Kanazawa University (form5)
6) Academic transcript of each academic year of the last university attended (issued by the same university)
7) Graduation certificate or degree certificate of the last university attended (or an attested document certifying that the application will graduate from the school, where applicable)
8) Students Registration Certificate (for current students)
9) Summary of Graduation Thesis, etc. (free format, 2-3 A4 sized pages)
10) Field of Study and Study plan form (form6)
11) Certificate of official language qualification such as TOEIC or TOEFL-iBT or TOEIC-PBT. (if you have).
12) Letter of Acceptance from Prospective Supervisor (form7)
    ※You should submit PDF only. The prospective supervisor will submit the original to Admission Affairs Section, Student Affairs Division.
13) Photocopy of a passport or birth certificate or certificate of citizenship

*From form1 to form7 must be printed in A4 sized paper.

*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 of upper body, uncapped, full-faced, and solid-color background.

*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 application on all the subjects studied for each year. (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.

(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 of June, 2018 (tentative)
   Venue of Oral Examination: It will be announced later by prospective supervisor.

2. Announcement of Results
   Date: the beginning of July, 2018 (tentative)
   *The results will be notified by e-mail and document.

## 4. SCHOOL FEE

(1)Fees

For the international student who passes the exam as a student of special quota, examination fee, admission fee, and tuition fee will be waived.

For the international student who passes as a student of self-financed quota, examination fee will be waived, but admission fee and tuition fee need to be submitted.

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 takes 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.

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

②Applicant 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.

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|---|
| Student Support Division, Kakuma-machi, Kanazawa City, Ishikawa, JAPAN 920-1192 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.

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

②Applicant 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.

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| Student Support Division, Kakuma-machi, Kanazawa City, Ishikawa, JAPAN 920-1192 TEL 076-264-5164 |

## 5. SCHOLARSHIP OF KANAZAWA UNIVERSITY

Kanazawa University provides the 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 students, 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 and

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.

Academic Affairs Section, Student Affairs Division,
Science and Engineering Administration Department,
Graduate School of Natural Science and Technology, Kanazawa University
Kakuma-machi, Kanazawa City, Ishikawa, JAPAN 920-1192
Phone: +81-76-234-6853 Fax: +81-76-234-6844
http://www.nst.kanazawa-u.ac.jp/etic/
E-mail: s-nyusi@adm.kanazawa-u.ac.jp

# Environmental Technology International Course

Instructors and Research

## Division of Material Chemistry

| Name | Position | Research Field |
|---|---|---|
| Hiroshi Hasegawa | Professor | Hydrosphere chemistry, environmental chemistry, remediation technology, toxic metals, rare metals |
| Tetsuya Taima | Professor | Organic photovoltaic cell, peroviskite solar cell, molecular orientaiton control |
| Akio Ohta | Associate Professor | Physical chemistry of interfaces, surfactant science, amino acid-type surfactants, surfactants, biomaterials, calorimetry |
| Teruya Maki | Associate Professor | Analytical chemistry, bioaerosols, environmental chemicals phytoplankton |
| Takahiro Yamaguchi | Associate Professor | Electrochemistry, Modified electrode, Oxygen reduction reaction |
| Asami Mashio | Assistant Professor | Marine chemistry, Environmental chemistry, Analytical chemistry |

## Division of Mechanical Science and Engineering

| Name | Position | Research Field |
|---|---|---|
| Akio Kodama | Professor | Adsorption, gas separation, desiccant cooling, air purification, low-temperature heat energy |
| Osamu Miki | Professor | Environmental Conservation, Marine Environment Improvement, Recycle |
| Takuya Tsujiguchi | Associate Professor | Fuel cell, Desiccant Cooling system, Heat and Mass Transport analysis |
| Yugo Osaka | Assistant Professor | Research from combustion gas to production technologies |

## Division of Environmental Design

| Name | Position | Research Field |
|---|---|---|
| Ryoko Ikemoto | Professor | Sewage systems, wastewater treatment, biological waste water treatment, water environment, microbes, sulfate reduction |
| Zhen-jiang Shen | Professor | Inventory and total amount control approach for urban environment management simulation, agent-based models |
| Masami Furuuchi | Professor | Assessment of atmospheric environment, aerosol, nano-particles, air pollution control technology, assessment of occupational exposures |
| Mitsuhiko Hata | Associate Professor | Aerosol, biomass combustion, source countermeasure technologies |
| Ryo Honda | Associate Professor | Environmental Process Engineering, Biomass Energy, Environmental Microbiology,Membrane Process, Global Warming Mitigation Technology |
| Masashi Ohashi | Associate Professor | Materials physics and chemistry, Thermophysical property, Functional materials, Low temperature, Magnetism |
| Kenji Taniguchi | Associate Professor | Numerical weather prediction, River runoff simulatoin, Impact assessment of global warming |
| Norihisa Matsuura | Assistant Professor | Water environmental engineering, wastewater treatment, eco-friendly technology, microbial community analysis |
| Hiroe Hara-Yamamura | Assistant Professor | Water environment engineering,Wastewater reclamation, Emerging contaminants |

## Division of Natural System

| Name | Position | Research Field |
|---|---|---|
| Yoshio Otani | Professor | Aerosol technology, nano-particles, air filtration |
| Takafumi Seto | Professor | Nano-particles, aerosols |
| Kenji Takahashi | Professor | Biomass Refinery, Artificial photosynthesis, chemical reaction processes using ionic liquids, supercritical fluids, plasma and microwave |
| Hirohisa Uchida | Professor | High pressure/Supercritical fluid technology, Advanced materials production, Crystallization, Thermodynamics |
| Mikio Kumita | Associate Professor | Adsorption, Sorption cooling, Heat and mass transfer, Reaction engineering |
| Noboru Takiguchi | Associate Professor | Bioprocesses, bioinformatics |
| Hidenori Higashi | Associate Professor | Supercritical fluids technology, Aerosol science & technology, Molecular dynamics |
| Yayoi Inomata | Associate Professor | Atmospheric Environment Sicence, Meteorology, Geochemistry |