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

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 14 ～ April 20, 2017 Japan time: 17 : 00</td>
<td>Application Period</td>
</tr>
<tr>
<td>Late of April ～ Beginning of May, 2017(tentative)</td>
<td>Notification of schedule on an Oral Examination</td>
</tr>
<tr>
<td>Beginning to middle of May, 2017(tentative)</td>
<td>Oral Examination</td>
</tr>
<tr>
<td>Beginning of July, 2017 (tentative)</td>
<td>Notification of Results</td>
</tr>
<tr>
<td>October 1, 2017</td>
<td>Admission</td>
</tr>
</tbody>
</table>

2. QUALIFICATIONS

- **The number of students to be admitted**
  *International students: Total 16 students*  
  *The number is subject to change.*

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of applicants accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>International student (special quota)</td>
<td>1</td>
</tr>
<tr>
<td>International students (self-financed quota)</td>
<td>A few students</td>
</tr>
</tbody>
</table>

※Out of all successful candidates, those who rank among the top 1 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.


- **Academic Background**
  Applicant must have graduated or will graduate from a Japanese university by September 30, 2017. 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, 2017 a 16-year school curriculum in a foreign country.

[2] is or will be age 22 by September 30, 2017 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, 2017 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, 2017.

- **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. 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 as email attachment by the deadline.
  Applicants must submit the original copy of these documents once admission is determined. Please keep originals with you until then.

Application Period and E-mail address for submission

Application Period: April 14, 2017 (Fri) ~ April 20, 2017 (Thu) by Japan time: 17:00
Email address: eticku@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)

Note:
After applicants submit the application forms to us, we will e-mail to each applicant in order to inform him/her that we received them certainly.
Please be sure to make inquiries to us, in the case that you don’t receive any notice from us a couple of days after your application.
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 *Forms will be attached to the final applicant guidelines.
1) Application Checklist (form1)
2) Application Form (form2)
3) Field of Study and Study plan form (form3)
4) Statement of purpose (form4)
5) Recommendation from the president or the head of a department of the last university attended
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) Short Essay (form5)
11) Official Certificate of TOEIC or TOEFL-iBT or TOEIC-PBT (if you have).
12) Letter of Acceptance from Prospective Supervisor (form6)

*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 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 and the
screening of the submitted documents.
Date of Oral Examination: about the beginning to middle of May, 2017
(tentative)
Venue of Oral Examination: It will be announced later.

2. Announcement of Results
Date: the beginning of July, 2017 (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: 282,000 JPY
Tuition fee (Annually): 535,800 JPY
(First semester: 267,900 JPY / Second semester: 267,900 JPY)

*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 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, Kakuma-machi, Kanazawa City, Ishikawa, JAPAN
920-1192 TEL 076-264-5164

(3) Tuition Fee Exemption

Successful applicant who passes the examination 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, Kakuma-machi, Kanazawa City, Ishikawa, JAPAN 920-1192 TEL 076-264-5164 |

5. 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 250,000 JPY or the equivalent to cover the immediate needs after arrival in Japan (rent of apartment, insurance, etc.). Admission fee and tuition fee must be arranged in addition.
Moreover, submission of the deposit balance proof of about 1,000,000 JPY 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.
## Environmental Technology
### International Course
### Instructors and Research

### Division of Material Chemistry

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Research Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiroshi Hasegawa</td>
<td>Professor</td>
<td>Hydrosphere chemistry, environmental chemistry, remediation technology, toxic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>metals, rare metals</td>
</tr>
<tr>
<td>Akio Ohta</td>
<td>Associate Professor</td>
<td>Physical chemistry of interfaces, surfactant science, amino acid-type surfactants, surfactants, biomaterials, calorimetry</td>
</tr>
<tr>
<td>Teruya Maki</td>
<td>Associate Professor</td>
<td>Analytical chemistry, bioaerosols, environmental chemicals phytoplankton</td>
</tr>
<tr>
<td>Tetsuya Taima</td>
<td>Associate Professor</td>
<td>Organic photovoltaic cell, peroviskite solar cell, molecular orientaiton control</td>
</tr>
</tbody>
</table>

### Division of Mechanical Science and Engineering

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Research Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akio Kodama</td>
<td>Professor</td>
<td>Adsorption, gas separation, desiccant cooling, air purification, low-temperature heat energy</td>
</tr>
<tr>
<td>Osamu Miki</td>
<td>Professor</td>
<td>Environmental Conservation, Marine Environment Improvement, Recycle</td>
</tr>
<tr>
<td>Yugo Osaka</td>
<td>Assistant Professor</td>
<td>Research from combustion gas to production technologies</td>
</tr>
</tbody>
</table>

### Division of Environmental Design

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Research Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryoko Ikemoto</td>
<td>Professor</td>
<td>Sewage systems, wastewater treatment, biological waste water treatment, water environment, microbes, sulfate reduction</td>
</tr>
<tr>
<td>Zhen-jiang Shen</td>
<td>Professor</td>
<td>Inventory and total amount control approach for urban environment management simulation, agent-based models</td>
</tr>
<tr>
<td>Masami Furuuchi</td>
<td>Professor</td>
<td>Assessment of atmospheric environment, aerosol, nano-particles, air pollution control technology, assessment of occupational exposures</td>
</tr>
<tr>
<td>Mitsuhiko Hata</td>
<td>Associate Professor</td>
<td>Aerosol, biomass combustion, source countermeasure technologies</td>
</tr>
<tr>
<td>Ryo Honda</td>
<td>Associate Professor</td>
<td>Environmental Process Engineering, Biomass Energy, Environmental Microbiology, Membrane Process, Global Warming Mitigation Technology</td>
</tr>
<tr>
<td>Masashi Ohashi</td>
<td>Associate Professor</td>
<td>Materials physics and chemistry, Thermophysical property, Functional materials, Low temperature, Magnetism</td>
</tr>
<tr>
<td>Norihisa Matsuura</td>
<td>Assistant Professor</td>
<td>Water environmental engineering, wastewater treatment, eco-friendly technology, microbial community analysis</td>
</tr>
</tbody>
</table>

### Division of Natural System

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Research Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoshio Otani</td>
<td>Professor</td>
<td>Aerosol technology, nano-particles, air filtration</td>
</tr>
<tr>
<td>Takafumi Seto</td>
<td>Professor</td>
<td>Nano-particles, aerosols</td>
</tr>
<tr>
<td>Kenji Takahashi</td>
<td>Professor</td>
<td>Biomass Refinery, Artificial photosynthesis, chemical reaction processes using ionic liquids, supercritical fluids, plasma and microwave</td>
</tr>
<tr>
<td>Mikio Kumita</td>
<td>Associate Professor</td>
<td>Adsorption, Sorption cooling, Heat and mass transfer, Reaction engineering</td>
</tr>
<tr>
<td>Noboru Takiguchi</td>
<td>Associate Professor</td>
<td>Bioprocesses, bioinformatics</td>
</tr>
<tr>
<td>Hidenori Higashi</td>
<td>Associate Professor</td>
<td>Supercritical fluids technology, Aerosol science &amp; technology, Molecular dynamics</td>
</tr>
<tr>
<td>Yayoi Inomata</td>
<td>Associate Professor</td>
<td>Atmospheric Environment Science, Meteorology, Geochemistry</td>
</tr>
</tbody>
</table>