University of Tsukuba

Graduate School of Life and Environmental Sciences

Graduate School code: *57C*

Web site: ***【http://www.envr.tsukuba.ac.jp/~sustep/】***

1. Graduate School code	*57C*	
2. Maximum number of participants	5 Participants per year	
3. Fields of Study	✔□Environmental Science ✔□Marine Science ✔□Meteorology ✔□Natural Disaster/ Disaster Prevention Science ✔□Tourism ✔□Politics ✔□Economics ✔□Sociology □Education ✔□Engineering ✔□Agriculture (incl. Fisheries) ✔□Geology □ICT □Medical Science □Others ( )	
Sub Fields	Hydrology, geomorphology, human and regional geography, sustainability studies, environmental dispute resolution, traditional knowledge for environmental governance	
4. Program and Degree	Program	Master's Program in Environmental Sciences (SUSTEP Program)
	Degree	Master of Environmental Sciences
5. Standard time table (Years needed for graduation)	2 years	
6. Language of Program	English	
7. Desirable English level and Necessary Academic background	Linguistic Ability	TOEFL-IBT: 70 or more; or equivalent score from TOEIC, IELTS is desirable for the admission to our master's program. If admitted as a research student, Pacific-LEADS participants can take TOEFL test before the entrance examination in January/February. In addition, good writing and speaking skills in English are desirable.
	EJU, IELTS, GRE or else	
8. Prior Inquiry From Applicants (Before Submission of Application Documents)	Please see "10. Professors and Associate Professors."	
9. Website	Master's Program in Environmental Sciences (SUSTEP Program) http://www2.envr.tsukuba.ac.jp/eng http://www.envr.tsukuba.ac.jp/~jds/index/html http://www.envr.tsukuba.ac.jp/~sustep/	
10. Professors and Associated	Name	Research Subject、Contact (e-mail)、Special message for the

Professors		Future students
		See attached document: Appendix 1
11. Features of University	The University of Tsukuba was established in 1973 as the first comprehensive university in post-WWII Japan to spearhead nation-wide university reform policy. The main campus is located in the northern part of Tsukuba City, 60 km northeast of Tokyo with one of the largest campuses of the country (2,700 hectares). The City center is only 45 minutes from Tokyo by train or bus. There are direct bus services to the Narita International Airport, the Haneda Airport, and Tokyo Disneyland! The University has emphasized openness, innovative systems for education and research, and new university self-governance in undertaking the reform policy. Through its unique curriculum and research incentives, it has cultivated many leaders and scholars with advanced and creative knowledge. As of May 2017, 9,944 undergraduate students and 6,834 graduate students are registered in degree programs. Among them were 1,905 international students from 117 countries. The total number of faculty members is 2,782. We have always strived to be a unique, active, and internationally competitive university with superlative education and research facilities. Our effort has proved to be successful as the Japan Ministry of Education, Culture, Sports, Science and Technology recognized in 2009 our University as one of the thirteen "leading universities" in Japan. The University has produced three Nobel Prize laureates in physics and chemistry along with many distinguished scholars in sciences and humanities. Our distinguished kinesiology and sports department has produced several Olympic medalists. Another distinctive characteristic of the University is to have many affiliated universities and several overseas offices throughout the world. As of May 2017, there are more than 342 MOUs, which encompass 66 countries.	
12. Features of Graduate School	**The Strengths and Characteristics of the Graduate School of Life and Environmental Sciences** The Graduate School of Life and Environmental Sciences consists of four major academic fields: agricultural sciences, biology, earth sciences, and interdisciplinary studies (including social sciences and humanities). It offers both basic and advanced courses. It also offers six programs in English, which provide advanced knowledge and technologies that pertain to agriculture and rural development. Those faculty members who are not involved in these English programs have also provided research guidance in English. This experience has resulted into publishing many academic journal articles, some books, and conference presentations in English. The Pacific-LEADS Fellows who belong to the Master's Program in Environmental Sciences are entitled to take any courses in other graduate schools. If those outside courses are important to conduct and refine thesis research, maximum 10 credits can be recognized as part of requirement for degree completion. **Past International Research Cooperation** This Graduate School has actively implemented the JICA-University of Tsukuba agreement on the quality improvement of international cooperation, international contributions, and the development of academic research and education since 2006. (1) From 2006 to 2013, this Graduate School collaborated with JICA in undertaking an "International Collaborative Expert Education Program for Sustainable and Rural Development"; (2) From 2009 to 2015, in collaboration with JICA, this School has undertaken "Sustainable System for Food and Bio-Energy Production with Water-Saving Irrigation in the Egyptian Nile Basin"; (3) Since 2010 the School has undertaken collaborative research with JICA on the diversity assessment and development of sustainable use of genetic resources in	

	Mexico; (4) Since 2007, this Graduate School has conducted UNESCO chair research on sustainable ground water management; (5) Since 2014, the School has undertaken an education program for nature conservation for both Japanese and international students; (6) From 2016, the School will offer another education program for master's degree on mountain sciences in collaboration with several renowned national universities in Japan; (7) This School has facilitated researches on Ocean science at its Shimoda Marine Research Center since 1932; (8) Since 2010, this School has offered an education program on environmental disaster prevention; (9) Experts in this School have offered downscaling lectures on climatology and meteorology for experts and government officials in twelve Pacific Island countries; (10) Experts in this School have conducted collaborative research with the Japan International Research Center for Agricultural Sciences regarding the conservation of soil on raised coral reefs in the Marshall Islands.
13. Features and Curriculum of Program	**Sustainability Science, Technology, Policy (SUSTEP) Program in the Master's Program in Environmental Sciences, University of Tsukuba** **(a) Education Mission at the Graduate School of Life and Environmental Sciences** The Graduate School of Life and Environmental Sciences at the University of Tsukuba will offer Pacific-LEADs Fellows educational guidance and research instructions by renowned experts in both natural sciences and social sciences. The Fellows will also **foster skills to effectively communicate advanced scientific knowledge in rural areas or policy-making arenas as the future global leaders**. **(b) Building the Foundation: Environmental Sciences Program** After admission, Pacific-LEADS Fellows will belong to the Master's Program in Environmental Sciences, and they will set out the process of acquiring master's degree in environmental sciences in two years. In order to receive the degree, they need to acquire 30 credits or more from the courses that are recognized by the Master's Program. They also complete master's thesis and pass oral examination as partial fulfillment of the degree requirement. One unique aspect of our Master's Program is that compulsory seminar and fieldwork courses encompass wide-ranging topics, including hydrology, meteorology, forestry, ecology, agricultural sciences, biology, environmental engineering, waste management, environmental economy, soil sciences, remote sensing, history, and environmental ethics. This education process is heightened by a set of field activities, in which students examine some specific case in the field within this interconnected context. **(c) Road to Becoming Global Leader/Expert: SUSTEP Program** With this basic training as their intellectual foundation, the Fellows can enroll in our certificate program, "Sustainability Science, Technology, and Policy (SUSTEP)," which aims to foster global leaders by refining their diplomatic skills to cogently communicate one's expertise with appealing leadership quality. The SUSTEP Program developed as a result of about 11 years of past experience in administering 4 certificate programs in English. After completing requirements, a student will receive a certificate and supplement. The supplement verifies the contents of inductee's learning history, including GPA. Another distinctive feature of the SUSTEP program is that students have opportunities to meet and interact with distinguished leaders and experts from not only Japan but also Australia, Canada, Germany, the Netherlands, and the United States for seminars or other academic meetings regarding their research topics. Through these opportunities, the Fellows can establish an international network that can benefit their future career development. In addition, the SUSTEP Program has established a consortium with graduate schools in Asia, Europe and Latin America to stimulate

Fellows' research progress. In 2015, the SUSTEP Program joined the world-wide university network, "the Global Universities Partnership on Environment for Sustainability (GUPES)," which is one of UNEP's flagship programs. As part of membership activities, we send a number of students to Tongji University, Shanghai, each year for sustainability conference and workshops.

However, global leadership and expertise do not mean that students take courses and listen or go abroad for conferences. In our degree program, JDS Fellows actively participate in learning processes. We provide courses that foster their presentation, writing and debating skills in English. The quality of these courses can match the ones at North American graduate schools. In addition, Pacific-LEADS Fellows have opportunities to present their research topics and engage in debates at international internships in Asia, Europe or elsewhere. These opportunities have successfully enhanced the confidence and international competitiveness of our graduates. The SUSTEP program also offers the academic writing support center, which provides professional support and advice for the Fellows and other students in writing in English. In addition, the Fellows can take academic writing seminars for writing reports and journal articles in English.

Our Tailor-Made Program for You

Our educational activities for Pacific-LEADS Fellows will focus on four major areas: (1) academic seminar, (2) field survey, (3) internship trips in Japan and overseas, and (4) the improvement of the educational environment. Each year the SUSTEP Committee discusses and decides detailed plans for seminars and activities. They are also welcome to provide feedback. This "tailor-made" practice has become norm among our committee members.

(1) For the international seminar, we invite distinguished experts from renowned universities or research institutions. We select these speakers on the basis of not only their name value but also their educational merit. This opportunity also means to expand the Fellows' academic networks, which can be useful after their graduation.

(2) If necessary, Pacific-LEADS Fellows will travel to the country/region of their theses research topics with at least one faculty member of the University of Tsukuba. There they learn how to conduct research and survey for data collection.

(3) The SUSTEP program committee will organize domestic internships that meet the research interests of Pacific-LEADS Fellows each year. In the past, we have taken students to places where they could observe and examine the issues that are related to the ocean ecosystem, Japanese rural development, biodiversity and Satoyama, local environmental conservation, the impact of mining developments, tourism and local economy, environmental disaster prevention and public works policies, climate change and energy problems.

(4) The Master's Program in Environmental Sciences has webpages that are specifically designed for SUSTEP students and those in the Master's Program in Environmental Sciences in general. In 2014, we uploaded our promotion video (available also in YouTube). The video was made entirely by our students and faculty members. By using the websites, students can now receive course information, reading materials and important news about courses. Another good news for upcoming Fellows to our Program is that the entire building that our Program uses (Natural Science Buildings) are completely renovated with enhanced earthquakes resistance and security. The Fellows have a free WiFi access in their study rooms. There is also a lounge space with kitchen facility. Laboratories and classrooms are designed for multiple purposes to facilitate group discussion or study.

Available courses in English

The basic requirement for course work is to take 30 credits or more, including 18 compulsory courses. Most of the compulsory courses are directly relevant to thesis completion, which is also required to complete the degree.

Compulsory Courses (Master's Program in Environmental Sciences) (18 credits)

	(a) Specialized foundation courses: Introduction to Environmental Sciences (1 credit) Exercises in Environmental Sciences (Seminar) (1 credit) Field and Laboratory Practices in Environmental Sciences (1 credit) (b) Specialized courses: Seminar in Environmental Sciences 1S, 1F, 2S, 2F (1.5 credit each) Thesis Seminar in Environmental Sciences, 1S, 1F, 2S, 2F (3 credit each) **Elective Courses (Master's Program in Environmental Sciences) (12 credits from below)** (1) Applied Environmental Ethics (Introduction to English Presentation and Debate); (2) Climate System Study I; (3) Climate System Study II; (4) Cultural Ecology; (5) Ecological Soil Resources; (6) Environmental Analytical Chemistry; (7) Environmental Field Appraisal; (8) Environmental Health Perspective; (9) Environmental Law; (10) Environmental Microbiology; (11) Environmental Policy Appraisal; (12) Environmental Remote Sensing; (13) Environmental Risk; (14) Environmental Science Practicum I; (15) Environmental Science Practicum II; (16) Environmental Science Practicum III; (17) Integrated Water Science and Technology; (18) International Field Appraisal I; (19) International Field Appraisal II; (20) Introduction to Environmental Governance; (21) Introduction to Environmental Policy; (22) Introduction to Environmental Stress; (23) Introduction to International Health; (24) Introduction to Waste Management; (25) Introduction to Water Environment; (26) Integrated Water Science and Technology; (27) Landscape Planning; (28) Policy and Planning for Forest Conservation; (29) Prevention and Mitigation of Sediment Disaster; (30) Regional Air Pollution; (31) Simulation of Environmental Policy; (32) Soil and Water Environmental Colloid Science; (33) Spatial Information Engineering in Environmental Science; (34) Terrestrial Ecology; (35) Utilization and Recycling of Bio-resources; (36) Vegetation Science. **In alphabetical order by course title.*
14. Academic Schedule	Please see attached tables (Appendix 2).

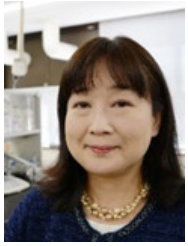
15. Supporting service to International Students

International Students Support Center for Consulting or counseling about daily life, campus life, cross-cultural adjustment etc.	The International Student Center on campus offers consultation services and information on international students' everyday life.
Provision of Student Dormitory	On the main Tsukuba campus, where JDS Fellows study, there are 60 student residence buildings, which can accommodate up to 4,000 persons (3,446 single rooms; 153 couple units; 250 family units). It is possible that all regular students, including JDS Fellows, can find a room. New students normally receive priority. These housing complexes are conveniently located within the campus.
Japanese Language Education Program for International Students	Free Japanese language courses are available. Applicants take placement tests and take appropriate courses.
Cultural Activities	The SUSTEP Program and students organize parties and hiking activities several times a year. Each laboratory also organizes field trips or cultural activities, depending on the creativity of students and instructors. The International Student Center of the University of Tsukuba also offers information about other cultural events (see http://www.global.tsukuba.ac.jp/isc?language=en).

Any special attention to Religious Practice	The University of Tsukuba accepts students from various religious backgrounds without discrimination.
facilities (Library etc)	The University of Tsukuba libraries hold more than 2,600,000 books (more than 1,022,062 foreign language books) and 31,687 journals (12,804 foreign language ones, mostly in English). This open-access holding is the largest in Japan. There are also 27 research databases and 25,721 e-journal/book titles (non-Japanese title 25,092). The library website uses OPAC search catalogue, which allows to explore all forms of information (e.g., newspaper, magazine, journals) by simple keywords. Considering that Japanese libraries tend to have relatively small collection of books and journals in English, our university libraries offer the best research conditions in English. The main library regularly offers guidance for researchers and students in both English and Japanese (about 148 times a year).
Please state other particular supporting service you are endeavoring, if any.	**Campus-wide tutor services**: All new international students are eligible to receive tutor services up to 80 hours per year. Tutors are normally senior students. All tutors receive training sessions before engaging in tutor services. **International conference grant**: The University of Tsukuba provides travel grants to selected students who present academic papers at international conferences.
16. Message to Prospective International Students	
Message from University	Message to Relevant Government Agencies or Delegating Organizations The Master's Program in Environmental Sciences and its SUSTEP Program at the University of Tsukuba has offered a sustainability policy-practice degree program to more than 103 young and promising government officials and researchers. They have come, for example, from Bangladesh, Ghana, the Kyrgyz Republic, Mongolia, Myanmar, Sri Lanka and Vietnam. Among many graduate programs in Japan, we are one of the very few graduate programs that are capable of offering studies on multidisciplinary sustainability policy and practice. When Pacific-LEADS Fellows join our program, they also become part of the Japan's oldest graduate program in environmental sciences, the history of which has spanned about forty years. This tradition continues with our unbroken commitment to scholarly innovation and social/international responsibilities. And most of our graduates have inherited this tradition in pursuing their advanced career paths in their respected countries. Message to Future JDS Fellows In June, those of us who supervised JICA scholarship fellows come together and listen to the final thesis presentations. We recollect then how these fellows started their studies. Some of them looked anxious without fully comprehending what was expected. In less than two years, however, they communicate with us about their research results in English almost fluently. We also see confidence in their faces. All audiences now listen to them carefully and learn from their presentations. They also realize that they have now much larger capacities, knowledge, and insights than they did two years ago. If you decide to join us, this is probably what you expect to see yourself in two years, a very small fraction of your lifetime.
Voice of International Students	See http://www.envr.tsukuba.ac.jp/~jds/people04.html

List of Teaching Staff and Their Academic Fields for Supervision Master's Program in Environmental Sciences
Graduate School of Life and Environmental Sciences, University of Tsukuba

Position	Name (LAST/ First)	Research Keywords for Supervision Contact Message to Future Students
Professor 	ASANUMA Jun (Mr.)	Surface Hydrology, Hydrometeorology, Draught, arid hydroclimate, Water Control Science Contact asanuma@suiri.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001098 Message Our focuses are on the physical aspects of hydrological phenomena through in-situ and satellite observations, quantitative analyses and numerical simulations.
Professor 	ADACHI Yasuhisa (Mr.)	Environmental colloid and interface engineering, Flocculation and Coagulation, Colloid and Interface in Ecosystem, Colloid facilitate transportation, Water treatment , Bio-colloid Contact adachi.yasuhisa.gu@u.tsukuba.ac.jp http://www.agbi.tsukuba.ac.jp/~colloid/ Message Our aim is to apply and enhance the knowledge of colloid and interface science in many aspects of bio-technology and environmental sciences. Examples are soil and water, microbiology, algae, water and waste water treatment, food and human health care.
Professor	FUJIKAWA Masaki (Mr.)	Architectural History/Design, City

		Planning/Architectural Planning, Japanese History Contact fujikawa@sk.tsukuba.ac.jp http://infoshako.sk.tsukuba.ac.jp/~tj330/Labo/fujikawa/index.html Message
Professor 	ISODA Hiroko (Ms.)	Food science, Cell biology, Food and Medicinal plant, Anti-aging, Prevention of life style related disease, Bio-resource, Environmental risk assessment Contact isoda.hiroko.ga@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001303 Message Our team developed through the last decade several functional bioassay based on mammalian cells readouts for the screening of health benefit of different bio-resource and identification of their main bio-active compounds.
Professor 	KAMIJO Takashi (Mr.)	Forest and grassland ecology, Silviculture, Forests, vegetation, biodiversity, the forestry, nature protection Contact kamijo.takashi.fw@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001306 Message I welcome those who wish to conduct fieldworks on forest ecology, vegetation in Japan/the world, the forestry, and wildlife.

Professor 	KUMAGAI Yoshito (Mr.)	Environmental Biology, Toxicology Contact yk-em-tu@md.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001640 Message
Professor 	KUSAKA Hiroyuki (Mr.)	Urban climate, local meteorology, atmospheric boundary layer, numerical simulation, synoptic-scale weather in east Asia, weather forecast, global warming Contact kusaka@ccs.tsukuba.ac.jp http://www2.envr.tsukuba.ac.jp/eng/faculty-research/fr-view?id=39 Message
Professor 	MASUDA Misa (Ms.)	Natural resource conservation, Natural resource policy, Rural development particularly in developing countries Contact masuda.misa.gm@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001414 Message
Professor 	MATSUMOTO Hiroshi (Mr.)	Environmental biochemistry, Modes of action of herbicides and phytotoxic natural products, Mechanisms of herbicide resistance, Chlorophyll and carotenoid synthesis inhibitors, Reactive oxygen species in plants, Antioxidative enzymes and antioxidants Contact hmatsu@biol.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001347 Message

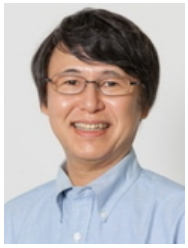
		Herbicides are phytotoxic compounds released into the agroecosystem. Plants and microorganisms synthesize natural phytotoxic compounds. To understand their modes of action is very important for reducing an environmental risk. Those graduate students who are interested in the interaction between plants and chemical substances are welcome.
Professor 	MURAKAMI Akinobu (Mr.)	landscape planning, Urban and rural planning, Urban heat island, Urbanization and environmental change, Planning history Contact murakami@sk.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000000861 Message The development of urban areas holds the key to many of the challenges we face in our interactions with the environment. Our laboratory seeks to provide a better understanding of the interactions and feedbacks between environment and urban development at the local and regional scales through field survey and analysis using GIS, remote sensing data and numerical simulation.
Professor 	NISHIMOTO Haruo (Mr.)	Policy and plan for prevention and reduction against sediment related disaster Contact nishimoto.haruo.fp@u.tsukuba.ac.jp Message
Professor	NOMURA Nobuhiko (Mr.)	Bacterial cell-cell communication and bacterial biofilm Contact

		nomunobu@sakura.cc.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001409 Message
Professor 	OHSAWA Yoshiaki (Mr.)	Socio-Economic Planning, City Planning, Regional Science Contact osawa@sk.tsukuba.ac.jp http://infoshako.sk.tsukuba.ac.jp/~tj330/Labo/koshizuka/ Message
Professor 	ONDA Yuichi (Mr.)	Geography, Natural disaster Science, Forest science, Transfer of Fukushima derived Cs-137 in the environment, Soil erosion studies using fallout radionuclides, hillslope hydrology, water resources and forest management Contact onda@geoenv.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001209 Message Please visit my web pages: http://www.ies.life.tsukuba.ac.jp/~geodiagnostics/ONDA-enNew/index.html
Professor	SATOH Shinobu (Mr.)	Plant physiology, Injury responses, Root functions, Plant hormones, Cell wall Contact satoh.shinobu.ga@u.tsukuba.ac.jp

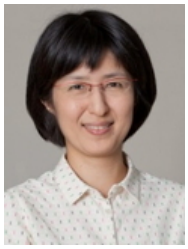
		http://www.biol.tsukuba.ac.jp/~plphys/shinobuhomepage/SSindex.html Message My research focuses on (1) molecular events in the tissue-reunion process of injured stem, (2) seasonal/hormonal regulation and the functions of xylem sap components and root-expressed genes.
Professor 	SUEKI Keisuke (Mr.)	Inorganic chemistry, Nuclear and radiochemistry Contact ksueki@chem.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000000642 Message
Professor 	SUGITA Michiaki (Mr.)	Hydrology, Boundary layer meteorology, agricultural meteorology, evapotranspiration, ecohydrology, GIS Contact sugita@geoenv.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001093 Message If you are interested in hydrology and/or agricultural meteorology, feel free to contact me. My specialty is a combined approach of detailed field measurements, together with GIS, model and remote sensing.
Professor	SUZUKI Iwane (Mr.)	Plant molecular biology/Plant physiology, Molecular biology, Genetics/Chromosome dynamics, Ecology/Environment Contact iwanes6803@biol.tsukuba.ac.jp http://plmet.biol.tsukuba.ac.jp/index.html

		Message
Professor 	TAMURA Kenji (Mr.)	Soil science, Environmental education Contact tamura@agbi.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001301 Message
Professor 	TANAKA Hiroshi (Mr.)	Weather and oceanic physics and hydrology, Weather and Climate, Weather Forecasting, Atmospheric Dynamics, General Circulation of the Atmosphere Contact tanaka.hiroshi.fw@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001109 Message My expertize is in general the circulation of the atmosphere, including data analysis, theory and numerical simulations. Students are welcome to join us to study.
Professor 	TSUJIMURA Maki (Mr.)	Hydrology, Water Environment, Water Resources, Groundwater, Groundwater Contamination Contact mktsuji@geoenv.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001413 Message We conduct scientific investigations on hydrological processes and the water environment in the regions of warm humid, tropical humid, and arid/ semi-arid regions, in Japan, Vietnam, Mongolia, Tunisia, Bangladesh, and China. We can provide opportunities

		for you to learn about field surveys, the chemical analysis of water samples, the interpretation of integrated data on hydrological and mass transport processes. Also, you will acquire skill for the advanced analysis of isotope and gas composition in water. If you are interested in hydrology and the water environment, please join us at Tsukuba.
Professor 	UEDA Hiroaki (Mr.)	Climatology and meteorology, Climate dynamics, Ocean dynamics, Paleo-climate modeling, Air-sea-land Interaction, Climate system Contact hueda@envr.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001393 Message Our laboratory is capable of supervising students who are enthusiastic for the climate dynamics, having the knowledge of meteorology as well as physics and mathematics.
Professor 	WATANABE Kazuo (Mr.)	Plant genetic resources, Genetics, Plant breeding, Biodiplomacy, Environmental ethics, Sustainable rural development with biodiversity Contact nabechan@gene.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001376 http://www.gene.tsukuba.ac.jp/Plant/GeneticDiversity/ Message My research group appreciates the participation of highly self-disciplined and flexible-thinking individuals with strong challenging spirits for helping people and the planet.

Professor 	WATANABE Shun (Mr.)	Urban planning and architecture design, Social system engineering, Media informatics and data base, Spatial Information Science, Geographic Information System, Architectural Design Computing, Uaban and Environmental Design, Design Science Contact shun@sk.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000000814 Message I hope that you can build your personal network with Japanese specialists during your stay and you will become a bridge person between your country and Japan.
Professor 	ZHANG Zhen Ya (Mr.)	Bioresource process engineering, Biomass conversion; Bioenergy production; Organic waste recycling; Functional food material development Contact zhang.zhenya.fu@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001405 Message Our research focuses on the application of biotechnology and life sciences to realize clean energy production, biomass conversion, and organic waste recycling in practice. With biomass as the main research subject, the topics are divided into four specific aspects, *i.e.* biogasification, bioethanol production, wastewater purification, and functional food, respectively.
Associate Professor	AKIYAMA Kazuya (Mr.)	Landslide, Snow avalanche, Sediment-related disaster Contact akiyama.kazuya.gf@u.tsukuba.ac.jp

		http://www.trios.tsukuba.ac.jp/researcher/0000003731 http://edip-tsukuba.org/index.php Message The EDIP (Environmental Disaster Prevention Program) was established in April 2010 for the purpose of training students to become leaders in handling environmental disasters such as sediment disasters.
Associate Professor 	BETSUYAKU Shigeyuki (Mr.)	Plant Pathology, Plant Immune Dynamics, Plant Developmental Biology, Molecular Biology, Genetics, Cell-to-cell signaling Contact betsuyaku.shige.ge@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003906 Message
Associate Professor 	FUJII Sayaka (Ms.)	City Planning/Architectural Planning Contact fujii@sk.tsukuba.ac.jp http://infoshako.sk.tsukuba.ac.jp/~tj330/Labo/omura/info.html Message
Associate Professor 	HIROTA Mitsuru (Mr.)	Carbon cycle and greenhouse gases dynamics in terrestrial ecosystem, Response to environmental change in alpine ecosystem, terrestrial ecosystem ecology, plant ecology, carbon dynamics, biodiversity, ecosystem function Contact hirota@biol.tsukuba.ac.jp

		http://www.trios.tsukuba.ac.jp/en/researcher/0000001397 Message If you are interested in the world of terrestrial ecosystem ecology (TEE) under changing environments with strong motivation, guts and smile, let us join TEE laboratory.
Associate Professor 	HOTTA Norifumi (Mr.)	Forest engineering, watershed conservation, Erosion control engineering, Forest hydrology, Sediment dynamics in mountain catchment, Mechanics of debris flows Contact hotta.norifumi.ge@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001226 Message An understanding of water and sediment dynamics is fundamental for watershed management and disaster mitigation. Our laboratory focuses on studying these dynamics, especially in mountain areas, and seeks students who are interested in these topics.
Associate Professor 	KAIDA Naoko (Ms.)	Environmental economics and policy studies, socio-economic valuation of natural and environmental resources, pro-environmental behavior analysis, sustainable consumption and lifestyle, environmental cooperation and ODA Contact naoko.kaida@sk.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003031 Message The research topics cover socio-economic and institutional domains of environmental and sustainability

		issues. Students with strong motivations to contribute to sustainable development with better social, economic and environmental well-being are welcome to join.
Associate Professor 	KAJIYAMA Mikio (Mr.)	Polymer synthesis, Polymer chemistry, Organic chemistry, Material science, Synthesis of condensation polymers, Polyamides and polyimides, Fluorinated polymers and siloxanes, Controlled molecular interactions and free energies, Chemical modification for bio-plastics. Contact kajiyama.mikio.fp@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001247 Message Let's create novel materials with heterogeneous combinations and find pleasure in your synthetic experiments !
Associate Professor 	LEI Zhongfang (Ms.)	Fundamental, mechanism and design of new-developed waste(water) treatment and recycling technologies, Wastewater treatment, Biogranulation, N and P recovery and removal, Heavy metals immobilization, Biosolids Contact lei.zhongfang.gu@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003223 Message Our research objective is to enhance biological wastewater treatment processes, especially by using biogranulation technology to recover and remove nutritional elements (N & P). Another topic is how to remove or immobilize heavy metals in sewage sludge and livestock manure to achieve their safe and effective

		disposal and reclamation.
Associate Professor 	MATSUI Kenichi (Mr.)	Environmental history/law/ethics, Human/historical geography, Water and biodiversity policies, Indigenous/traditional knowledge, Agricultural/water policies, Water ethics, Sustainable tourism Contact kenichim@envr.tsukuba.ac.jp matsui.kenichi.gt@u.tsukuba.ac.jp http://www.envr.tsukuba.ac.jp/~envethic Message I help you choose and refine your thesis topics that are related to socio-cultural/historical aspects of environmental, agricultural, water and biodiversity policies. I also deal with legal and ethical implications of environmental or ethno-ecological studies, including traditional ecological knowledge. I also help you become internationally competent and outstanding academic writers and presenters.
Associate Professor 	MATSUSHITA Bunkei (Mr.)	Remote Sensing, Environmental dynamic analysis, water environment monitoring, land use/cover change, modeling Contact Matsushita.bunkei.gn@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001215 Message Let us monitor and protect our planet (earth) from the space.
Associate Professor	MIZUNOYA Takeshi (Mr.)	Environmental evaluation by simulation analysis, Environmental economic policy, Comprehensive

		environmental evaluation, Expanded Input-Output modeling, Environmental technology evaluation, Integrated watershed management Contact mizu@jsrsai.envr.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003224 Message My research focuses on analyzing and evaluating the complex interactive relationships between socio-economic systems and the environment and proposing comprehensive policies towards sustainability through the use of Input-Output modeling.
Associate Professor 	NASAHARA Kenlo (Mr.)	Remote sensing, Ecology, Watershed management, Disaster management Contact nasahara.kenlo.gw@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001410 Message
Associate Professor 	SHIMIZU Kazuya (Mr.)	Water treatment biology, Water supply engineering Contact shimizu.kazuya.fn@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003971 Message
Associate Professor	UENO Kenichi (Mr.)	Atmospheric science, Natural geography, Atmosphere and land-interaction, precipitation system over Eurasian Continent, snow cover and mountain weather Contact

		ueno.kenichi.fw@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001111 Message Please visit my HP for more detailed information: http://air.geo.tsukuba.ac.jp/~kueno/index-english.html
Associate Professor 	Andrew S. Utada (Mr.)	Soft-Matter Physics, Complex Fluids, Microfluidics, Applied Microbiology Contact utada.andrew.gm@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003853 Message
Associate Professor 	UTSUMI Motoo (Mr.)	Aquatic biogeochemistry and engineering, Aquatic eco-engineering, biological water treatment, microbial ecology, biogeochemistry, C, N and P cycling Contact utsumi.motoo.ge@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001380 Message World's water environmental problems are serious as the twenty-first century is known as "the century of water." Let's discuss how to solve these problems together.
Associate Professor	YABAR Helmut (Mr.)	Environmental engineering and management Contact hyabar@jsrsai.envr.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001395

		Message Mentorship in Spanish is also available.
Associate Professor 	YAMAJI Keiko (Ms.)	Environmental Chemical Ecology, Root endophytes, Secondary metabolites, Chemical Ecology, Environmental stress, Plant defense Contact yamaji.keiko.fp@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001416 Message If you are sincerely interested in my research areas, let's study together!
Collaborative Professor 	TAKAMI Akinori (Mr.)	Atmospheric Chemistry, Atmospheric Aerosol, Atmospheric Air Pollution, trans boundary air pollution Contact takamia@nies.go.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001395 Message Students who are interested in atmospheric environment and aerosol are all welcome!
Collaborative Professor 	TIN TIN Win Shwe (Ms.)	Environmental chemicals/pollutants, Neurotoxicity, Brain, Behavior Contact tin.tin.win.shwe@nies.go.jp http://www.nies.go.jp/rsdb/vdetail.php?id=201062 Message My research focuses on evaluation of exposure to

		environmental chemicals or pollutants on higher brain functions. Warmly welcome to students who interested in environmental health research.
Collaborative Associate Professor 	KOIKE Eiko (Ms.)	Environmental pollutants, Biological effect, Environmental medicine, Toxicology, Immunology Contact ekoike@nies.go.jp http://www.nies.go.jp/rsdb/vdetail-e.php?id=203905 Message We investigate the biological effects of atmospheric or indoor environment chemicals in animal model and cell culture. Especially, we focus on immune system and their mechanisms.
Collaborative Associate Professor 	NAGASHIMA Tatsuya (Mr.)	Regional air pollution, Global warming, Stratospheric ozone, Air pollution, Transport of atmospheric constituents, Atmospheric chemistry-climate interaction, Atmospheric chemistry modeling Contact nagashima.tatsuya@nies.go.jp http://www.nies.go.jp/rsdb/vdetail-e.php?id=100290 Message I do research on air quality in Asian region with numerical models. I welcome those who are interested in the relationship between human activities and our atmospheric environment.
Collaborative Associate Professor	SUGATA Seiji (Mr.)	Air pollution monitoring data, PM2.5, Material transport in the atmosphere, numerical simulation, meteorology Contact

		sugatas@nies.go.jp http://www.nies.go.jp/researchers-e/100103.html Message Through the cooperative graduate school, you can enjoy a student life in Tsukuba University and a research life in National Institute for Environmental Studies simultaneously.
*Lecturer 	SHIMADA Akihiko (Mr.)	Origins of life, Microorganisms and enzymes, enzyme evolution, enzyme stereoselectivity, the origin of optical activity, external secretion polysaccharide, Poisonous organochlorine compound-assimilating soil bacteria Contact ashimada@kankyo.envr.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001408 Message My research seeks to understand the cause of the birth of life forms on earth. Also I aim to eliminate poisonous compounds in the soil by using the functions of soil bacteria.
*Assistant Professor 	ADACHI Minaco (Ms.)	Carbon cycle of terrestrial ecosystems, process-based model Contact adachi.minaco.gf@u.tsukuba.ac.jp Message
*Assistant Professor	KAMAE Yoichi (Mr.)	Climatology and Climate Change, Global Climate Modeling, Atmospheric General Circulation, Paleoclimate Modeling

		Contact kamae.yoichi.fw@u.tsukuba.ac.jp https://trios.tsukuba.ac.jp/en/researcher/0000003733 Message Prof. Ueda and I coordinate "Climate Laboratory" addressing global climate system and change. Our professional activities including a book "Climate system study" written in English will help you to realize our goals and supervisions. Please visit our Lab's website. http://www.u.tsukuba.ac.jp/~ueda.hiroaki.gm/English/Welcome.html
*Assistant Professor 	KAWADA Kiyokazu (Mr.)	Environmental agriculture and ecology, Ecological diversity, Natural resource conservation, Geography, Vegetation sciences, Plant ecology, Diversity Contact kawada.kiyokazu.gu@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001422 Message Vegetation is fundamental element of nature. I am looking for ambitious students who want to learn about the vegetation sciences.
*Assistant Professor 	OMORI Yuko (Ms.)	Ocean biogeochemistry, Carbon dynamics, Dissolved organic matter Contact omori.yuko.ft@u.tsukuba.ac.jp Message My research focuses on the ocean carbon cycle driven by marine microorganisms. If you are interested in the

		ocean biogeochemical cycle, let's study together.
*Assistant Professor 	SHIMPO Naomi (Ms.)	Landscape Planning Contact shimpo.naomi.gn@u.tsukuba.ac.jp http://npom.ehoh.net/ Message
*Assistant Professor 	SHINKAI Yasuhiro (Mr.)	Environmental pharmaceutical science, Toxicology, Environmental chemicals, Stress response, Environmental biology, Chemical biology Contact ya_shinkai@md.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000001672 Message Everything in science is like a Saioh's horse. A mistake may sometimes turn out to be a breakthrough. If you are interested in keywords of my research, please visit our laboratory. The door is open for you.
*Assistant Professor 	TAKAHASHI Shinya (Mr.)	Risk sciences of radiation and chemicals Plant molecular biology/Plant physiology Environmental impact assessment Algae biomass Contact takahashi.shinya.fp@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003927

		Message
*Assistant Professor	TAKAHASHI Junko (Ms.)	Soil science, Pedology, environmental radioecology Contact takahashi.junko.ka@u.tsukuba.ac.jp Message Soil is not only important for living things but beautiful and profound. If you are interested in the soil and the issues surrounding the soil, let's study together!
*Assistant Professor 	TOYOFUKU Masanori (Mr.)	Bacterial cell-cell communication, biofilm, membrane vesicle Contact toyofuku.masanori.gf@u.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003299 Message We explore bacterial interactions and how bacteria forms communities. We expect that understanding these events would lead to new techniques to control bacteria in the environment.
*Assistant Professor 	VILLAREAL Myra (Ms.)	Food Functionality, Pigment Cell Research, Melanoma Contact villareal.myra.o.gn@u.tsukuba.ac.jp Message Our lab investigates the effect of bioactive food and medicinal plants components, specifically for cancer/stem cell research and food functionality

		studies.
Assistant Professor 	YAMAMOTO Sachiko (Ms.)	Regional planning, Architectural planning Contact sachiko@sk.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/Profiles/0004/0007806/profile.html Message
*Assistant Professor 	YOKOI Tomoyuki (Mr.)	Evolutionary ecology of plants-insects interactions, Pollination service, Pollination, Invasive species, Bee, Satoyama, Behavior Contact tomoyoko@kankyo.envr.tsukuba.ac.jp http://www.trios.tsukuba.ac.jp/en/researcher/0000003326 Message My work ranges from basic field research of insects to applied research for conservation and agricultural use. If you are interested in my themes, please contact me.

* Available as sub-supervisors