

International Graduate Program on Civil and Environmental Engineering

PROSPECTUS 2010-2011



Graduate School of Science and Engineering

Department of Civil and Environmental Engineering

Foreign Student Office (FSO)
International Graduate Program on Civil and Environmental Engineering
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Message from the Head of Foreign Student Office (FSO)



I am pleased to introduce this prospectus of the International Graduate Program on Civil and Environmental Engineering at the Graduate School of Science and Engineering at Saitama University. In this prospectus you will find all the necessary information about the program for prospective international students. The program offers excellent opportunities to highly qualified international students for pursuing graduate studies and research in the field of Civil and Environmental Engineering. This program first started accepting students in 1992 and has since awarded Master's and Doctorate Degrees to 268 students from 24 countries. Currently, we have 71 students from 14 countries enrolled in the program.

The program is highly competitive and admits about 20-25 students each year. Most students are awarded scholarships by the Ministry of Education, Culture, Sports, Science and Technology of the Japanese Government, Asian Development Bank-Japan Scholarship Program, Joint World Bank-Japan Scholarship Program, or Special Program for Studies at Japanese Universities Program of the Inter-American Development Bank. In addition to these programs, several public and private organizations also grant scholarships to international students in our program. Not all students, however, are awarded scholarships, and we accept a few qualified self-financed students each year.

We are committed to offering the best education both in terms of research and course work. Our faculty is comprised of well-known experts in their respective fields and boasts excellent experimental, computing, and reference facilities.

Please review this prospectus, and should you desire to pursue your graduate study in our program, submit all the required application materials to us. Application forms and detailed information on the selection procedure and our program are available at our web site, <http://www.civil.saitama-u.ac.jp/fso/>. Please do not hesitate to contact us if you have any further questions.

We wish you all the best in your pursuit of excellence and look forward to welcoming you to our university,

Koji Tsunokawa
Professor and Head of the FSO



Saitama University and Its Graduate Program

Saitama University and Its Vicinity

Saitama University is located in a quiet suburban area of Saitama city, the capital of Saitama prefecture. Saitama city is located about 30 kilometers north of metropolitan Tokyo. Access to central Tokyo by East Japan Railway is very convenient, which is about an hour's journey from the university. This enables residents of the university to access all bookstores, libraries, and research facilities around Tokyo area.

The main library of the university has a large collection of books and academic journals. The inter-library loan service offered by the main library enables faculty, staff and students to borrow materials from all libraries in Japan and many libraries abroad. Additionally, each department has its own library to facilitate research and teaching for faculty, staff and students in the department. The University has many sports facilities including an athletic field of 30,937 m²; two gymnasiums of 2,112 m²; Judo, Karate, Kendo and Aikido halls totaling 863 m²; and a swimming pool of 2,406 m².



The Saitama University International House was established for the purpose of providing accommodation and other facilities for international researchers and students in order to contribute to international exchange in many fields of research and education promoted by the university. The House consists of three buildings with a total of 168 single, couple and family rooms. In principle, the period of residence for researchers and students in the International House is one month minimum and one year maximum.

Overview of the Graduate Program

Saitama University is a reputed national university for higher education and research in Japan. The university consists of five faculties: Faculty of Liberal Arts, Faculty of Education, Faculty of Economics, Faculty of Science, and Faculty of Engineering. There are four graduate schools in the university: the Graduate School of Cultural Science, Graduate School of Education, Graduate School of Economic Science and Graduate School of Science and Engineering. Total number of full time students as of May 2008 was 8,779 students, among which the number of undergraduate students was 7,554 and the number of graduate students (master's and doctoral courses) was 1,225.



The International Graduate Program on Civil and Environmental Engineering of the Graduate School of Science and Engineering of Saitama University offers highly qualified students from overseas opportunities to pursue graduate studies and do research in the field of environmental and civil engineering. The fields of study include Infrastructure Management, Transportation Planning, Environmental Engineering, Ecological Engineering, Coastal and Ocean Engineering, Hydraulics and Water Resources Engineering, Geotechnical and Geological Engineering, Concrete and Material Engineering, Structural and Wind Engineering, Earthquake Engineering, etc.



The graduate program includes courses specially designed for international students, in which class instruction and research supervision are all given in English. Master thesis and doctoral dissertation are accepted in English. Japanese language courses are also offered for foreign students and their spouses. Currently, the number of foreign students registered in this program is 71 students, comparable to that of Japanese graduate students in the Department.

The program starts in April or October, when the spring and fall semesters begin and students are required to stay a minimum of two years for a Master of Engineering and three years for a Doctor of Engineering/Doctor of Philosophy degree. Scholarships for master's degree course are available from the Asian Development Bank-Japan Scholarship Program (ADB-JSP), World Bank (Joint Japan/World Bank Graduate Scholarship Program, JJ/WB GSP), Inter-American Development Bank (Special Program for Studies at Japanese Universities of Japan, SPJU). For doctoral degree course, the Ministry of Education, Culture, Sports, Science and Technology of the Government of Japan (Monbukagakusho) provides scholarships for talented doctoral applicants. Some private and public agencies also offer scholarships for graduate studies in our program.

So far, 268 students from different countries have graduated from our program and they are engaged in academic and professional activities in different parts of the world. We take pride that many of our graduates have established themselves very well in their respective careers.

Requirement for Admission to the Program

The students are admitted to the Graduate School of Science and Engineering of Saitama University on the recommendations of the Department of Civil and Environmental Engineering. The Department selects students on the basis of the applicant's academic qualifications shown on the documents submitted by the applicants. However, the applicants who have already been studying in Japan must take written examinations and interview held at the university. Such applicants should consult the Graduate School of Science and Engineering well in advance for the timetable and other information related to the examination and interview.

Since the program is highly selective and the number of foreign students that can be accommodated is limited, only the most qualified applicants are admitted. After the Department have thoroughly reviewed and evaluated the application materials of each applicant, specified recommendation of the Department for admission is granted.

To be eligible for admission to the master's degree course, an applicant should hold a degree from an accredited institution comparable to the bachelor's degree offered by Saitama University and have sufficient undergraduate training to undertake graduate study in civil and environmental engineering. For admission to the doctoral course, an applicant should hold a Master's degree comparable to that offered by Saitama University or its equivalent. However, an applicant with equivalent professional experience may be admitted to the program in lieu of the university credentials.

Application forms are available on request from the Foreign Student Office (FSO) of the Department. Please write to the FSO or, alternatively, you can download the forms in pdf format from FSO's

website. The following documents must be submitted when applying to the program:

- Completed application form (Form A)
- Certified copies of previous academic records
- Two letters of recommendation (Form B)
- Essays on selected topics (Form C)
- A concise resume (Form D)
- Filled out address labels and return postcard (enclosed in the application package)
- Certificate of English proficiency (an official score of TOEFL, IELTS or equivalent)

The approximate schedule for the application and admission processes is shown below:

(A-1) Doctoral applicants who are seeking admission with Monbukagakusho scholarship

- December 22, deadline for receiving applications
- January 22, of the following year, notification of results to short-listed candidates
- January 22-31, of the following year, internet-based interviews for short-listed candidates
- March 31, of the following year, notification of results to applicants
- October 7, of the following year, Graduate program begins

(A-2) Master's applicants who are seeking admission with ADB-JSP scholarship

- October 20, deadline for receiving applications
- March 31, of the following year, notification of results to applicants
- April 10, of the following year, Graduate program begins

(A-3) Master's applicants who are seeking admission with JJ/WB scholarship

- October 20, deadline for receiving applications
- March 31, of the following year, notification of results to applicants
- October 7, of the following year, Graduate program begins

(A-4) Master's applicants who are seeking admission with SPJU scholarship

- April 20, deadline for receiving applications
- July 25, notification of results to applicants
- October 7, Graduate program begins

(B) Applicants who are seeking only admission, and are self-funded or have already obtained other scholarships/financial assistance

- November 1, deadline for receiving applications for the April intake
- December 20, notification of results to applicants for the April intake
- April 10, Graduate program begins
- April 15, deadline for receiving applications for the October intake
- June 20, notification of results for the October intake
- October 7, Graduate program begins

An applicant must be in good mental and physical health. If admitted, the applicant must be able to come to Saitama University by April 10th (for April intake) or October 7th (for October intake) of the following year.

Study Programs

Currently, the Department of Civil and Environmental Engineering of Saitama University through the Graduate School of Science and Engineering offers Master of Engineering and Doctor of

Engineering/Doctor of Philosophy degree programs in broad range of environmental and civil engineering disciplines.

I) Master of Engineering

To qualify for the Master of Engineering, the student must comply with the following requirements:

- The period of full time attendance to fulfill the requirements of the degree program is minimum two years.
- A minimum of 30 credits beyond the Bachelor's degree is required, including 10 credits awarded for a thesis.
- A thesis based on the research carried out under the supervision of his/her thesis supervisor must be completed and satisfactorily presented.

II) Doctor of Engineering/Doctor of Philosophy

To qualify for the degree of Doctor of Engineering/Doctor of Philosophy, the candidate must have a broad knowledge of his/her field of study and demonstrate distinguished accomplishment and substantial contributions to the advancement of that field through profound knowledge and original ideas. The candidate must comply more specifically with the following regulations:

- The period of full time attendance is minimum three years beyond a Master's degree.
- A minimum of 12 credits from course and laboratory works beyond Master's degree is required.
- The student must satisfactorily present his/her dissertation proposal, approximately one and a half years from his/ her enrollment in the program.
- As the most important requirement for the doctoral degree, a dissertation based on original research carried out at Saitama University under the supervision of his/her advisor and with the assistance of the candidate's supervising committee must be completed and presented. The candidate must pass a final examination on the dissertation and a comprehensive examination in his/her specific field of study.
- At least one international journal publication (accepted or published) based on the doctoral research is required.

Qualifications and Financial Assistance

The selection process is highly competitive, and the program admits only 15 to 20 students to the master's course and 7 to 10 to the doctoral course. Scholarships offered by Monbukagakusho, ADB-JSP, JJ/WB GSP and SPJU are available to students who have demonstrated academic excellence.



All scholarships cover tuition and academic fees, a monthly allowance and a round air ticket to the awardee's home country. The Monbukagakusho Scholarship for doctoral course is granted initially for one and a half years extendable up to three years based on the satisfactory performance of the student. The master's degree scholarships are granted for two years. Both master and doctoral scholarships are not extendable beyond two and three years, respectively. The master's degree scholarships require the awardees to return to their home countries upon completion of study to contribute to their countries' development.

(A-1) A doctoral degree applicant for the Monbukagakusho Scholarship must:

- be a citizen of a country where the Japanese Government Scholarship is offered.
- not be over 35 years of age as of April 1 of the application year.

If admitted, the applicant must be able to come to Saitama University by October 7 of the following year. An applicant who was a recipient of the Japanese Government Scholarship for the last three years is not eligible for this scholarship program.

(A-2) A master's degree applicant for the ADB-JSP Scholarship must:

- be a citizen of a member country of the Asian Development Bank.
- not be over 35 years of age at the time of application.
- not be an executive director, an alternate director, an official or a staff member of the Asian Development Bank and other international organizations. This includes a consultant and a close relative.
- have at least two years of full-time professional working experience in his/her home country in a related field.

(A-3) A master's degree applicant for the JJ/WB GSP Scholarship must:

- be a citizen of a member country of the World Bank.
- be under the age of 40 by March 31st of the year of application.
- agree to return to his/her home country after completion of study.
- not be an executive director, an alternate director, an official or a staff member of the World Bank Group. This includes a consultant and a close relative.
- have at least two years of full-time professional working experience in his/her home country in a related field.

(A-4) A master's degree applicant for the SPJU Scholarship must:

- be a citizen of a member country of the Inter-American Development Bank.
- be under the age of 40 at the time of application.
- not be an executive director, an alternate director, an official or a staff member of the American Development Bank. This includes a consultant and a close relative.
- have some work experience in a public agency or in an organization devoted to research or teaching.

The program will, in principle, not support applicants who are pursuing a second master's degree. Applicants living or working in a country other than his/her home country are not eligible for the scholarship. Those admitted must be able to come to Saitama University by April 10 or October 7 (please refer to "Requirement for Admission to the Program").

Applicants are requested not to contact the Asian Development Bank, World Bank and Inter-American Development Bank regarding the scholarships. All inquiries about the scholarships should be directed to the Department of Civil and Environmental Engineering at Saitama University.

There is no separate application form for all the above scholarships. The same application forms are used for all these scholarship programs. One set of application materials is enough to be considered for all of the scholarships, if eligible.

Applicants who pass the selection without these scholarships must either be self-supported or obtain other scholarships, financial assistance or financial grants from different sources to be admitted to the program.

Indicative figures for academic and living expenses for the 2010-2011 intakes are: tuition fee 535,800 yen per year, admission fee 282,000 yen upon admission, and cost of living about 120,000 to 150,000 yen a month.

Lecture Courses

The following courses are offered by the program. They are all given in English. Foreign students with sufficient Japanese capability may also take courses taught in Japanese which are not included in the following list. Most graduate courses are equivalent to two credits, i.e., two lecture hours per week for 15 weeks.

I) Master's Course

- Advanced Course in Aquatic Ecology
- Advanced Course in Transportation System
- Advanced Earthquake Engineering in Urban Areas
- Advanced Environmental Engineering in River
- Advanced Lecture on Environmental Protection
- Advanced Lecture on Construction Materials
- Advanced Mathematics for Planning
- Advanced Reinforced Concrete Engineering
- Advanced Rock Mechanics I
- Advanced Rock Mechanics II
- Advanced Soil Mechanics I
- Advanced Soil Mechanics II
- Advanced Theory on Earthquake Engineering
- Construction Management
- Ecologically Friendly Materials Engineering
- Environmental Geology
- Environmental Microclimatology
- Environmental Soil Science
- Environmental Symbiosis and Ethics
- Environmental Vibration and Noise Assessment
- Exercise on Data Processing and Analysis
- Fluid Mechanics
- Geotechnical Earthquake Engineering
- Infrastructure Planning and Management
- Landscape Planning and Design
- Nonlinear Mechanics of Reinforced Concrete Structure
- Rock Weathering and Geomorphological Processes
- Soil Physics
- Structural Dynamics and Control
- Training on methods in Aquatic Ecosystem
- Urban Environmental Design

II) Doctoral Course

- Advanced Computational Geomechanics
- Advanced Infrastructure Planning and Management
- Advanced Lecture on Ground Dynamics
- Advanced Lecture on Reinforced Concrete
- Advanced Lecture on Seismic Resistant Design of Reinforced Concrete Structure
- Advanced Numerical Geomechanics
- Advanced Reliability Analysis in Engineering
- Advanced Structural Dynamics
- Advanced Theory on Construction Management
- Advanced Theory on Dynamic Design Method
- Advanced Theory on Elastic Waves
- Advanced Topics in Environmental Vibration and Noise Assessment
- Applied Mechanics of Materials
- Environmental Conservation
- Environmental Geotechnical Engineering
- Geosphere Environment
- Geosphere System Engineering
- Geotechnical Aspects of Earthquake Engineering
- River Environmental Engineering
- Rock Weathering and Geomorphological Processes
- Urban Transportation System Planning

Research Groups

Research themes under the International Graduate Program on Civil and Environmental Engineering are categorised into three academic research groups and one research institute, which can be explained as follows:

Academic Research Groups:



Earth System Engineering

- Rock Mechanics
- Soil Mechanics
- Vibration Engineering



Environmental System Engineering

- Environmental and Hydraulic Engineering
- Foundations and Earthquake Engineering



Planning and Design System Engineering

- Design and Planning
- Structural Engineering
- Structural Material Engineering

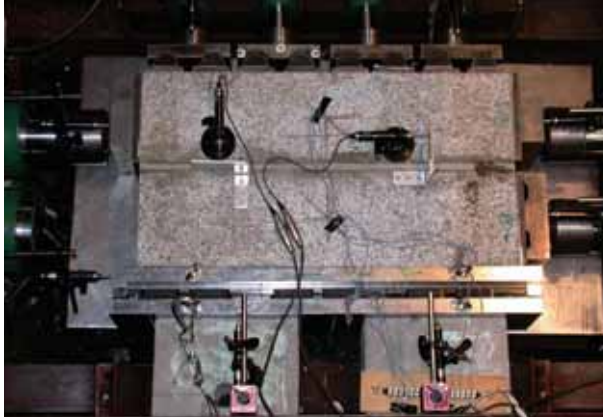
Research Institute:



Geosphere Research Institute

ROCK MECHANICS

Earth System Engineering



The Rock Mechanics Laboratory calls for students with broad knowledge in geology, physics, chemistry, and civil and environmental engineering. Our research activities are related to rock structures such as underground caverns, rock slopes, and rock foundations. The intended problems include various kinds of interrelated phenomena caused by geological processes along with artificial stimulation. Recent researches in the laboratory are focused mainly on rock slope stability problems and on geological disposal of nuclear waste. The deformational and hydraulic properties in rocks and rock masses are fundamentals for understanding such complicated problems. The laboratory is equipped with loading systems of various capacities for obtaining mechanical and hydraulic properties of rocks under various environments in addition to numerical codes for finite element methods and for discontinuous deformation analysis.



Tadashi Yamabe
Associate Professor

B.Sc. (1977); M.Eng. (1979), Saitama Univ.; D.Eng., Nagoya Univ. (1987); Res. Assoc., Saitama Univ. (1979-88); Visit. Res., Nagoya Univ. (1981-82); Assoc. Prof., Saitama Univ. (1988-); Visit. Scholar, Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia (1994)



Masahiko Osada
Associate Professor
(Joint Appointment)

B.Sc., Univ. of Tokyo (1988); D.Eng., Saitama Univ. (1999); Res. Assoc., Saitama Univ. (1989-2001); Assoc. Prof., Saitama Univ. (2001-); Visit. Scholar, Swiss Federal Institute of Technology (2002)

SOIL MECHANICS

Earth System Engineering



The Soil Mechanics Laboratory offers an integrated program of education and research in the forefront of geotechnical and geoenvironmental engineering. Extensive research and teaching facilities are now available to access the latest developments of geotechnical and geoenvironmental engineering problems. The major research topics being covered are: Soil mechanics; Environmental soil science; Soil and groundwater pollution.



Toshiko Komatsu
Professor

B.Sci. (1969); D.Eng. (1987), Hiroshima Univ.; Res. Assoc., Hiroshima Univ. (1969-91); Visit. Scholar, University of California, Davis (1988-89); Assoc. Prof., Hiroshima Univ. (1992-2002); Adjunct Prof., Hiroshima Univ. (2002-03); Professor, Saitama University (2002-)



Kiichi Suzuki
Associate Professor

B.Eng. (1974); M.Eng. (1976); D.Eng. (1995), all from Tohoku Univ.; Kajima Corp. (1976-96); Assoc. Prof., Saitama Univ. (1996-); Visit. Scholar, Univ. of Southern California (2002)



Ken Kawamoto
Associate Professor

B.Sc. (1994); M.Sc. (1996); Ph.D. (2002), all from Univ. of Tokyo; Res. Assoc., Saitama Univ. (1997-2007), Visit. Scholar, Aalborg Univ. (2005-06), Assoc. Prof., Saitama Univ. (2007-)

VIBRATION ENGINEERING

Earth System Engineering



The Vibration Engineering Laboratory provides students with both courses and research programs on earthquake engineering which are very interdisciplinary, such as topics related to geomechanics, seismology, and structural and material engineering. Our research interests are: seismic response analysis of soil-structure system; strong ground motion near fault; analysis of dynamic failure of ground; mechanics on granular materials and numerical experiments of them; deformation of surface soil layer due to earthquake faults; and reinforcement of adobe structures.



Kazuyoshi Iwashita
Professor

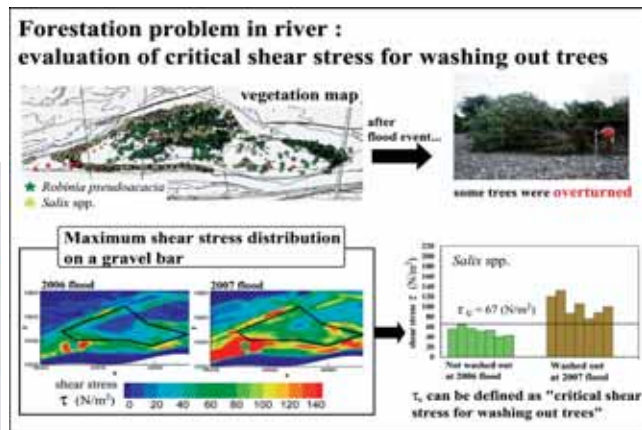
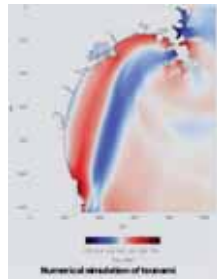
B.Eng. (1983); D.Eng. (1988), Univ. of Tokyo; Res. Assoc. (1988-90); Assist. Prof. (1990-92); Assoc. Prof. (1993-2008), Saitama Univ.; Visit. Scholar, Univ. of California at Berkeley (1996-97), Professor, Saitama Univ. (2008-)



Hisashi Taniyama
Assistant Professor

B.Sc. (1989); M.Sc. (1991), Univ. of Tokyo; D. Eng., Saitama Univ. (2001); Res. Assoc., Saitama Univ. (1991-2007), Assist. Prof., Saitama Univ. (2008-)

ENVIRONMENTAL AND HYDRAULIC ENGINEERING



Research themes of the Environmental and Hydraulic Engineering Laboratory are:

- 1. Riparian and freshwater environmental and ecological engineering.** Research topics include: observation and model evaluation of riparian and freshwater ecosystems; analysis of wash-out condition of plants grown in river; physical modeling and analysis of vegetation effect on river flow; rehabilitation of gravel bars; physical effects on the plant growth and recovery after plants are damaged; development of mathematical models for management and control of river and wetland ecosystems; tsunami inundation in river with mangrove or riparian vegetation; analysis of breaking condition of bed protection blocks; development of distributed water balance model.
- 2. Coastal environmental engineering.** Research topics include: Field survey, hydraulic experiment and numerical simulation of tsunamis; Field survey on hydraulic phenomena of tsunami disaster; Evaluation of coastal forest as bio-shield for mitigating damages against tsunamis and storm surge by using hydraulic experiment and numerical simulation; Development of numerical simulation model on the tsunami inundation including coastal forest and other countermeasure effect; Developing of damage fragility model by tsunami and other hydraulic disaster; Risk assessment of tsunami, storm surge and flooding.
- 3. Ecology, botany and natural environment studies.** Research topics include: Investigation of river and forest environment in Asian countries; characteristic of river ecosystem and monitoring environment are conducted in Ara-river, Tama-river and Tone river. And restoration of river ecosystem and wetland are studied in Minuma area in Saitama and Si-Songklam basin along Mekong River in Thailand. Urban environment; Evaluation for disaster prevention of open space in the urban area are analyzed with the remote sensing and other technique. Greening technology; Ecological greening technology by using native plants are studied.



Yasushi Sasaki
Professor

B.Sc., Hiroasaki Univ. (1969); Ph.D., Tohoku Univ. (1980); Assoc. Prof., Saitama Univ. (1982-1991); Professor, Saitama Univ. (1991-)



Norio Tanaka
Professor

B.Eng. (1986); M.Eng. (1988); D.Eng. (1991), all from Univ. of Tokyo; Engineer, I.N.A. (1991-2000); Assist. Prof., Saitama Univ. (2000-02); Assoc. Prof., Saitama Univ. (2002-07); Professor, Saitama Univ. (2007-)



Kenji Harada
Assistant Professor

B.Eng. (1998); M.Eng. (2000); D.Eng. (2003), all from Tohoku Univ.; COE Researcher, DPRI, Kyoto Univ. (2003-2005); Research Scientist, Disaster Reduction and Human Renovation Institution (2005-2008); Assist. Prof., Saitama Univ. (2008-)



Junji Yagisawa
Assistant Professor

B.Eng., Hosei Univ. (2003); M.Eng. (2005); Ph.D. (2009), Saitama Univ.; Assist. Prof., Saitama Univ. (2009-)

FOUNDATIONS AND EARTHQUAKE ENGINEERING

Environmental System Engineering



The Foundations and Earthquake Engineering Laboratory covers studies on earthquake engineering and the engineering applications of earth science. The main research activities are: lifeline systems engineering; seismic excitation and structural response; reliability theory; seismic wave propagation; site and propagation path effects on strong ground motion; temporal and spatial variations of strong ground motion; soil-structure interaction; and base isolation systems.



Hideji Kawakami
Professor
(Joint Appointment)

B.Eng. (1974); M.Eng. (1976); D.Eng. (1979), all from Univ. of Tokyo; Res. Asst., Columbia Univ. (1976-77); Res. Assoc., Saitama Univ. (1979-87); Assoc. Prof., Saitama Univ. (1987-94); Professor, Saitama Univ. (1994-)



Hidenori Mogi
Associate Professor

B.Eng. (1990); M.Eng. (1992), Tokyo Inst. Tech.; D.Eng., Saitama Univ. (1999); Res. Assoc., Saitama Univ. (1994-2001); Lecturer, Saitama Univ. (2001-2008); Assoc. Prof., Saitama Univ. (2008-)



Masato Saitoh
Associate Professor

B.Eng. (1994); M.Eng. (1996); D.Eng. (2001), all from Saitama Univ.; Researcher, Railway Technical Research Inst. (1996-2001); Res. Assoc., Saitama Univ. (2001-2005); Assoc. Prof., Saitama Univ. (2005-)

DESIGN AND PLANNING

Planning and Design System Engineering



Research in the Design and Planning Laboratory is carried under the aegis of the Infrastructure Design and Management Group (IDMG) led by Prof. Koji Tsunokawa and Urban Transportation Group (UTG) led by Prof. Hisashi Kubota.

IDMG research encompasses the following areas: development, application and post evaluation of Pavement Management Systems (PMS) for developing countries, municipal governments, national expressway corporations, etc.; development of optimization models for PMS using analytical and simulation approaches; infrastructure asset management; development and application of urban transportation analysis tools for developing countries including the development of behavioral models of travelers and simplified network analysis tools using continuous/discrete network models.

The major research fields of UTG embrace a range of processes in urban transportation planning as follows: Urban transportation planning such as TDM (Transportation Demand Management), Social-Experiment, Public involvement and Citizen participation for transportation planning; Traffic safety and calming including developing the device for traffic calming such as sinusoidal speed hump; and ITS (Intelligent Transportation System) include bus information and location system; and developing and applying of Micro traffic simulation named "tiss-NET" model.



Koji Tsunokawa
Professor

B.Eng. (1971), M.Eng. (1975), Univ. of Tokyo; Eng. Deg., Masachusset Inst. of Tech. (1982); Ph.D., Northwestern Univ. (1986); Assoc. Prof., Ohio State Univ. (1986-88); Senior Officer at World Bank and Overseas Economic Cooperation Fund (now merged with JICA) (1988-98); Professor, Saitama Univ. (1998-), Part-time Lecturer, Univ. of Tokyo (2001-)



Hisashi Kubota
Professor

B.Eng., Yokohama National Univ. (1982); M.Eng. (1984); D.Eng. (1988), Univ. of Tokyo; Res. Assoc., Saitama Univ. (1988-89); Assist. Prof., Saitama Univ. (1989-92); Assoc. Prof., Saitama Univ. (1992-2005), Professor, Saitama Univ. (2005-)



Kunihiro Sakamoto
Associate Professor

B.Eng. (1993); M.Eng. (1995), Saitama Univ.; D.Eng. Univ. of Tokyo (2003), Res. Assoc., Saitama Univ. (1996-2007); Assist. Prof., Saitama Univ. (2007-2009); Assoc. Prof., Saitama Univ. (2009-)



Djoen San Santoso
Assistant Professor

B.Eng., Parahyangan Catholic Univ. (1995); M.Eng., Asian Institute of Tech. (1999); Ph.D., Saitama Univ. (2005), Engineer, Pondok Kisocon Raya (1995-1997); Program Assoc. and Planning Officer, Asian Institute of Tech. (1999-2002); Construction Manager, Srikanokporn Construction, Part JV (2006-2007); Assist. to the Dean, Asian Institute of Tech. (2007-2008); Assist. Prof., Saitama Univ. (2008-)

STRUCTURAL ENGINEERING

Planning and Design System Engineering



The Structural Engineering Laboratory specializes in statics and dynamics involved in planning, design, performance evaluation and maintenance of civil engineering structures, such as bridges. The effects of those structures on the living environments are of interest to the laboratory also. The recent activity of the laboratory covers the following research areas:

- Structural Dynamics and Control
- Structural Mechanics
- Fracture Mechanics
- Bridge Engineering
- Wind Engineering
- Structural Health Monitoring
- Human Response to Vibration and Low Frequency Noise

Theoretical and experimental investigations in the above areas have been conducted within the laboratory or in collaboration with other institutions.



Hiroki Yamaguchi
Professor

B.Eng., Saitama Univ. (1975); M.Eng., Univ. of Tokyo (1977); D.Eng., Univ. of Tokyo (1980); Assist. Prof., Univ. of Tokyo (1980-82); Assist. Prof., Saitama Univ. (1981-87); Visit. Res., Univ. of California, Berkeley (1985-86); Assoc. Prof., Saitama Univ. (1987-94); Assoc. Prof., Asian Inst. of Tech. (1990-92); Professor, Saitama Univ. (1994-)



Yoshiaki Okui
Professor

B.Eng. (1983); M.Eng. (1985), Saitama Univ.; D.Eng., Univ. of Tokyo (1993); Engineer, Kawasaki Heavy Industries Co. (1985-89); Res. Assoc., Saitama Univ. (1989-93); Assoc. Prof., Saitama Univ. (1993-2008); Visit. Res., Delft Univ. (1996-1997); Professor, Saitama Univ. (2008-)



Yasunao Matsumoto
Associate Professor

B.Eng. (1993); M.Eng. (1995), Univ. of Tokyo; Ph.D., Univ. of Southampton (1999); Res. Asst., Univ. of Southampton (1998-99); Res. Assoc., Saitama Univ. (1999-2002); Assoc. Prof., Saitama Univ. (2002-)

STRUCTURAL MATERIAL ENGINEERING

Planning and Design System Engineering



The Structural Material Engineering Laboratory deals with the construction materials including concrete, steel and new materials such as Fiber Reinforced Polymers and the behaviors of structures consisting of these materials. The current research areas being covered are as follows: Reinforced concrete; Prestressed concrete; Composite structures; Application of new materials to concrete members; Fresh concrete; Earthquake engineering for RC structures; Strengthening and retrofitting of existing structures.



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Professor

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