

Saitama University Newsletter

International Graduate Program for Overseas Students
Civil & Environmental Engineering

Issue No. 12 2007

It has been fifteen years since the International Graduate Program on Civil and Environmental Engineering was launched at Saitama University in 1992. Since then the program has awarded Master's and Doctoral degrees to 294 students from 24 different countries. For the growth of every institution, strong alumni relations are imperative. With this in view, the Foreign Student Office (FSO) has recently updated the alumni directory to keep track of all graduates from this program.

The International Graduate Program offers opportunities for highly qualified overseas students to pursue graduate studies in the field of civil and environmental engineering. The program is now offering graduate studies in twelve different fields of study and admits around 20-25 students every year. There are currently 61 students from 17 different countries enrolled in the program. Most of the international students in this program are supported by scholarships sponsored by various institutions including the Japanese Government (Monbukagakusho) Scholarship, the Asian Development Bank - Japan Scholarship Program (ADB-JSP), the Joint Japan-World Bank Scholarship, the Inter-American Development Bank Scholarship and several other public and private scholarships.

The homepage for our International Program has been updated recently to accommodate more relevant information about application procedures and to provide an overview about life in Japan for the prospective applicants. The FSO also organizes orientations in the spring and fall semesters for new students. Additionally, the FSO hosts an International Student Party each se-



Graduates with Japanese teachers at the graduation party in March 2007

mester to help international students to become acquainted with each other. Writing and presentation skills are very important, especially for those seeking careers in academia and research. Tak-

ing this into consideration, two new courses on Advanced Technical English have been launched for international students since this semester.

Greetings from the Head of the Foreign Student Office

I am most pleased to learn of your interest in our International Graduate Program on Civil and Environmental Engineering at Saitama University. Four doctor and eleven master students obtained degrees in September 2006 and in March 2007 and we welcomed twenty-two new students in October 2006 and in April 2007. Our faculty members are committed to ensuring that our program is intensive, intellectually stimulating, and personally rewarding. Students have the opportunity to participate in fascinating research projects on civil and environmental engineering. I am pleased to see many of our alumni developing successful careers in academia, official circles and industry. I hope that all of you are working actively and are in good health. I am looking forward to hearing good news from you.

Sincerely yours,

Professor Koji Tsunokawa
Head of FSO



Visit of the Head of FSO to the President of Belgrade University

Graduation Time Congratulations

September 2006

Mr. Tuladhar Rabin from Nepal was awarded his PhD degree in September 2006. His doctoral thesis was on the "Seismic Behavior of Concrete Pile Foundation in Cohesive Soil" under the guidance of Prof. Mutsuyoshi. At present he is working as a JSPS Postdoctoral Research Fellow at Saitama University.

Mr. Gupta Vivek Kumar from Nepal was awarded his PhD degree in September 2006. His doctoral thesis was on the "Development of Section Classification Criterion and Ultimate Flexural Equation for Composite I-Girders" under the guidance of Associate Prof. Okui.

Mr. Sohail Ahmed Rai from Pakistan was awarded his PhD degree in September 2006. His doctoral thesis was on the "Applications of Artificial Neural Networks and Genetic Algorithms to Runoff Analysis for Mountainous Watersheds" under the guidance of Prof. K. Watanabe.

Mr. Jinadasa K. B. Shameen Nishantha from Sri Lanka was awarded his PhD degree in September 2006. His doctoral thesis was on the "Constructed Wetlands for Sustainable Water Quality Management in Tropical Regions" under the guidance of Prof. Tanaka. He is working as a Researcher at Institute of Fundamental Studies in Sri Lanka.

March 2007

Mr. Khakimov Aziz Ravshanovich from Uzbekistan was awarded his PhD degree in March 2007. His doctoral thesis was on the "Noise Generation Mechanism of Modular Expansion joint in Highway Bridges" under the guidance of Prof. Yamaguchi. At present he is working for Institute of Mechanics and Seismic Stability of Structures of the Academy of Science of the Republic of Uzbekistan as an Engineer.

Mr. Das Shamal Chandra from Bangladesh was awarded his PhD degree in March 2007. His doctoral thesis was on the "Influence of Disturbance Timing and Strength on Population and Nutrient Dynamics of Aquatic Plants" under the guidance of Prof. Tanaka. He is currently working as a Sub-divisional Engineer at Management and Monitoring Cell in Bangladesh.

Research Profile Series (11) Rock Mechanics Laboratory

Rock mechanics laboratory is one of the inherent laboratories of the Department of Civil and Environmental Engineering at Saitama University. It is being led by Associate Professor Dr. Tadashi Yamabe and Associate Professor Dr. Masahiko Osada. Currently, there are 1 permanent in-house lab technician and 15 students (10 Japanese students and 5 foreign students); 2 doctoral students, 9 master's students and 4 undergraduate students pursuing their research and study in the laboratory to promote the research activities through scientific publications in journals, conferences and symposiums.

The research activities of the rock mechanics laboratory cover a wide spectrum of disciplines in topics related to Geomechanics, Rock Engineering and Engineering Geology. Some of the leading researches being carried out at present are non-linear fully coupled modeling of hydro-mechanical, thermo-mechanical, thermo-hydro-mechanical properties of rockmass, shear deformation and permeability characteristics of soft rocks, drying induced deformation and poroelastic behaviors of soft rocks, stability analysis of jointed rock slopes and adobe structures by discontinuity deformation analysis (DDA), GIS and Photogrammetric modeling for geoenvironmental characterization, three dimensional integrated modeling of microfocus X-ray CT images and enhancement of rock mechanics lab tests. Basically, most of the ongoing research works are dedicated to investigate the progressive deformation behavior of Excavation Disturbed Zone (EDZ) in underground openings.

The laboratory is equipped with modern facilities and sophisticated instruments to support the research activities. Testing facilities include triaxial testing machine, large scale high-pressure direct shear test machine and Scanning Electron Microscope (SEM) together with many other fundamental testing equipments. It also has a sufficient computing facility to develop numerical models and simulations, computational algorithms and the advanced parametric processing of massive data. In addition, some special devices such as high resolution laser scanner for the acquisition of rock fractured surface topography and softcopy digital stereo photogrammetric workstations are also installed in the laboratory.

Rock mechanics laboratory is in close collaboration with Geosphere Research Institute of Saitama University (GRIS) and other international cooperative research agencies in characterization of deep geological environment in the context of radionuclear waste disposal. Through its extensive research and study plan, the laboratory provides sound knowledge of geomechanical principles and solutions towards various rock foundation problems and practical orientations that verge into the requirements of civil engineering industry. The intent of the rock mechanics laboratory is embodied in the program to develop engineers with integrated teamwork abilities, leadership skills and innovative research ideas.



Mr. Grutas Rhommel Nepomuceno from Philippines was awarded his MEng degree in March 2007. His master's thesis was on the "Receiver Function Analyses of Strong Motion Accelerograms to Identify Basement-Sediment Interface in Kanto Plain and Metro Manila Area" under the guidance of Dr. Mogi. He is working as a Science Research Assistant at Philippine Institute of Volcanology and Seismology.

Mr. Parik Manoj Kumar from India was awarded his MEng degree in March 2007. His master's thesis was on the "Post-Earthquake Disaster Simulation using Estimated and Collected Data" under the guidance of Prof. Kawakami.

Mr. Md. Hafizur Rahman from Bangladesh was awarded his MEng degree in March 2007. His master's thesis was on the "Evaluation of the Benefits of Computerized Pavement Management System (PMS) for Developing Countries" under the guidance of Prof. Tsunokawa. At present he is working for Roads and Highways Department in Bangladesh as a Sub-divisional Engineer.

Mr. Nguyen Xuan Hien from Vietnam was awarded his MEng degree in March 2007. His master's thesis was on the "Study on Numerical Simulation of Wave Transformation considering the Effects of Vegetation in Shallow Water" under the guidance of Prof. Tanimoto. He is working as a Researcher at Institute of Meteorology and Hydrology, Ministry of Natural Resources and Environment in Vietnam.

Ms. Sharma Anu from Nepal was awarded her MEng degree in March 2007. Her master's thesis was on the "Mechanisms of Pesticide Adsorption onto Kaolinite" under the guidance of Prof. Komatsu. She is working for Aquatic Ecology Center at Kathmandu University in Nepal.

Ms. Endah Retnaningrum from Indonesia was awarded her MEng degree in March 2007. Her master's thesis was on the "Effects of Water Temperature and Drift Materials on Macroinvertebrate Growth in Regulated River" under the guidance of Associate Prof. Fujino. She is working for Gadjah Mada University in Indonesia as a Lecturer.

Mr. Bandula Heva Thaminda Madunoraj from Sri Lanka was awarded his MEng degree in March 2007. His master's thesis was on the "Design Method for Lateral Distortional Buckling of Composite I Girders" under the guidance of Associate Prof. Okui.

Mr. Nurhusein Mebruk Mohammed from Ethiopia was awarded his MEng degree in March 2007. His master's thesis was on the "Evaluation of Effect of Shaft Excavation on the Groundwater Flow System around Mizunami Underground Research Laboratory" under the guidance of Prof. K. Watanabe. He is continuing his Doctoral course at Saitama University.

Mr. Nguyen Duc Hai from Vietnam was awarded his MEng degree in March 2007. His Master's thesis was on the "Flexural Behavior of Hybrid Frp Composite Girders" under the guidance of Prof. Mutsuyoshi. At present he is continuing his Doctoral course in the Structural materials laboratory at Saitama University.

Welcome New Students

October 2006



Aung Ko Ko Soe
Myanmar, Doctor



Bao Linfa
China, Doctor



Bishnu Prasad Regmi
Nepal, Doctor



Dinh Van Hiep
Vietnam, Doctor



Rahman Farzana
Bangladesh, Doctor



Sanjay Kumar Jha
Nepal, Doctor



Swe Yu
Myanmar, Doctor



Weragoda Sujithra
Kaushaliya
Sri Lanka, Doctor



Nima Kelzang
Bhutan, Master



Gomes Pattiyaage Ishan Ayantha
Sri Lanka, Doctor



Muhammad Abdur
Rahman Bhuiyan
Bangladesh, Doctor

April 2007



Nguyen Hai Duc
Vietnam, Doctor



Nurhusein Mebruk
Mohammed
Ethiopia, Doctor



Gansukh Nyamdavaa
Mongolia, Master



Lam Huu Quang
Vietnam, Master



Karyadi Surawi
Indonesia, Master



Ei Ei Mon
Myanmar, Master



Munir Sarfraz
Pakistan, Master



Mohammad Nurul Islam
Bangladesh, Master



Tamrakar Aswain
Bir Singh
Nepal, Master



Vu Thao Thi Phuong
Vietnam, Master



Ahn Changwan
Korea, Master

News

Faculty on Move

Prof. Katsutoshi Tanimoto of Hydraulic Engineering Laboratory retired from Saitama University in March 2007, where he had served in the field of hydraulic engineering. He is currently teaching at the Civil and Environmental Engineering Department.

Faculty Promotion

Dr. Norio Tanaka was promoted to Professor of Hydraulic Engineering and Urban Environmental Engineering Laboratory in April 2007. His research field is river engineering and river environmental engineering.

Dr. Ken Kawamoto of Soil Mechanics Laboratory was promoted to Associate Professor in April 2007. His research field is environmental soil mechanics.

Awards

Assoc. Prof. Yoshiaki Okui and Dr. Vivek Kumar Gupta were awarded in May 2007 by the Japan Society of Civil Engineers with the Tanaka Prize, which is an award for outstanding research publication on bridge engineering, for the paper entitled "Development of web slenderness limits for composite I-girders accounting for initial bending moment" co-authored with Prof. M. Nagai (Nagaoka University of Technology).

Dr. Ha Minh was honored by the Japan Society of Civil Engineers (JSCE) with the Excellent Paper and Presentation Award for the paper entitled "Chloride-Induced Corrosion in Post-Tensioned Concrete Beams with Poor Grouting Condition" co-authored with Prof. Mutsuyoshi in the Eighth International Summer Symposium held in Nagoya in July 2006.

Dr. Aziz Khakimov, formerly Doctoral student of the Structural Mechanics and Dynamics Group, was honored by the JSCE with the Excellent Presentation Award in the Eighth International Summer Symposium held in Nagoya in July 2006.

Dr. Rabin Tuladhar, a JSPS Postdoctoral fellow from the department, was awarded the Certificate of Excellence from the Japan Society of Civil Engineers for the best paper and presentation in the Eighth International

Summer Symposium held in Nagoya in July, 2006 for his paper entitled "Seismic Pile-Soil Interaction".

Mr. Augustus Cooper Resurreccion was awarded the American Geophysical Union 2006 Fall Meeting Outstanding Student Paper Award (Hydrology section) for his paper entitled "Effects of inter- and intra-aggregate pore space on the soil-gas diffusivity behavior in unsaturated, undisturbed volcanic ash

soils" at the conference held on December 11 to 15, 2006 at the Moscone Center in San Francisco, California, USA.

Mr. N. A. K. Nandasena was awarded for the outstanding research paper in the field of Hydraulic, Coastal and Environmental Engineering, 8th International Summer Symposium (2006) held by the Japan Society of Civil Engineers (JSCE), in Nagoya, Japan.

Message from Alumni

I was enrolled in the special graduate program of the Department of Civil and Environmental Engineering at Saitama University in April 2002 and obtained a Master's degree of Engineering in March 2004.



In Japan, my teachers and colleagues taught me how to work hard and to be effective. The learning process was quite different from my previous study. Since I returned back to my country, I have been working in the Kyrgyz-Japanese Project and I was involved from the early establishment of this project. It is a great opportunity for me to work with Japanese people continuously and to keep our relationship. I mostly concentrate on education so I can make our project more relevant and productive.

I had a great chance to learn Japanese culture and language. Staying in Japan was wonderful and memorable. Special thanks to Foreign Student Office (FSO) for promotional activities such as guidance, advice and support for foreign students. It is my great desire that more international students can come and learn many things by studying at Saitama University, which contributes to the future development of their countries.

With best wishes,
Mira Toktoralieva

Message from the Foreign Student Office

We are very happy to send you the 12th issue of our Newsletter. We wish you a healthy and productive year.

By the way, we were planning to issue our alumni directory last year. Some alumni are waiting for the directory to be issued. However, in Japan, the law of Private Information Protection came into effect in April 2005.

Therefore we are hesitating about the publication of our alumni directory. We realize that private information should be protected from the wrong use of others.

This time we are going to enclose the questionnaire when we send you the Newsletter 2007. Please let us know your opinion by email. We are looking forward to your reply anytime.

The Foreign Student Office (FSO)
Department of Civil & Environmental Engineering
Saitama University 255 Shimo-Okubo
Sakura-ku, Saitama-shi, Saitama, Japan
338-8570
Phone/Fax: +81-48-858-3555
Email: fso@sun.civil.saitama-u.ac.jp
<http://www.civil.saitama-u.ac.jp/fso/fso.html>

Editorial Board for this issue

Chief Editor: Professor K. Tsunokawa
Design and Layout: K. Nakazawa

Contributors: Dr. Ha Minh

Dr. Rabin Tuladhar
Mr. Aung Ko Ko Soe
Ms. Mira Toktoralieva