

# Saitama University

# Newsletter

International Graduate Program for Overseas Students  
Issue No. 11 2006 Environmental Science & Infrastructure Engineering

The International Graduate Program on "Environmental Science and Infrastructure Engineering" is one of the most vibrant programs at Saitama University. This program has come all the way from a humble beginning in 1992 to what it is today, enrolling 56 students from more than 20 countries all around the world. Most of the students currently enrolled are supported by prestigious scholarships such as Monbukagakusho, ADB-JSP, Joint Japan-World Bank and The Inter- American Development Bank Scholarships. The program has produced more than 200 alumni who are working in reputable companies and academic institutions in many countries, including Japan.

The program is committed to providing a high quality education, which is meant to equip the graduates with problem solving capability and leadership ability so as to make them competent and competitive in the professional world. Emphasis is given to cutting edge research that provides our graduates with state-of-the art knowledge of their respective disciplines, which is of immense value, especially for those who are seeking careers in academia and research.

The new website for our International Program has been launched: (<http://www.civil.saitama-u.ac.jp/fso/fso.html>) We hope that you will find the information on our site both useful and informative. In our program, class instruction, research supervision and guidance are conducted in English; dissertations, reports, examinations and presentations by students can also be given in English. Our program also offers courses on Japanese language and culture to the students and their families so that they can better understand and enjoy Japanese culture and tradition during their stay in Japan.



Welcome Party in June 2006

## Greetings from the Head of the Foreign Student Office

After two years since all national universities in Japan were incorporated, another major institutional change took place this year that affected our international graduate program. All the masters and doctoral programs of the Graduate School of Engineering and Science were reorganized to create more coherent graduate programs. The idea is to establish an enabling platform for more efficient synergy of engineering and science.



Within this new framework, all the graduate programs that supported the old International Program on Civil and Environmental Engineering were also merged to establish a unified, new Division of Graduate School of Environmental Science and Infrastructure Engineering. That is why the name of our international program has also been changed, which is now called ***International Graduate Program on Environmental Science and Infrastructure Engineering***. Under this new aegis, we will strive to make our program even stronger both in research and education, enabling us to provide still better opportunities for qualified international students. It just so happened that this issue is the first in a new decade of our News Letter commemorating the start of our renewed International Graduate Program. I would like to invite all of you to join our new endeavor to make this program more relevant and productive to the needs of all constituencies.

Sincerely yours,



Professor Koji Tsunokawa  
Head of FSO

# Graduation Time Congratulations

## September 2005

Mr. Santoso Djoen San from Indonesia was awarded his PhD degree under the guidance of Prof. Tsunokawa.

Mr. Sharif Moniruzzaman Shirazi from Bangladesh was awarded his PhD degree under the guidance of Prof. Kazama.

Mr. Rajapakse Hemantha Lalith from Sri Lanka was awarded his PhD degree under the guidance of Prof. Asaeda.

Mr. Dam Khanh Toan from Vietnam was awarded his PhD degree under the guidance of Prof. Tanimoto.

Mr. Ha Minh from Vietnam was awarded his PhD degree under the guidance of Prof. Mutsuyoshi.

Ms. G. H. M. J. Subashi from Sri Lanka was awarded her PhD degree under the guidance of Associate Prof. Matsumoto.

Mr. Soe Aung Ko Ko from Myanmar was awarded his MEng degree under the guidance of Associate Prof. Osada.

## March 2006

Mr. Maruf Mokhammad Farid from Indonesia was awarded his PhD degree under the guidance of Associate Prof. Suzuki.

Mr. Dinesh Chandra Devkota from Nepal was awarded his PhD degree under the guidance of Prof. K. Watanabe.

Mr. Zaw Naing Win from Myanmar was awarded his MEng degree under the guidance of Prof. H. Kubota.

Ms. Nguyen Thi Hai from Vietnam was awarded her MEng degree under the guidance of Associate Prof. Fujino.

Mr. Mahmood Zafar from Pakistan was awarded his MEng degree under the guidance of Associate Prof. Iwashita.

Mr. Guades Ernesto Jusayan from Philippines was awarded his MEng degree under the guidance of Prof. Kazama.

Mr. Nguyen Huy Hoang from Vietnam was awarded his MEng degree under the guidance of Dr. Mogi.

## Research Profile Series (10)

### Molecular Environmental Engineering Research Group (Soil Mechanics Laboratory)

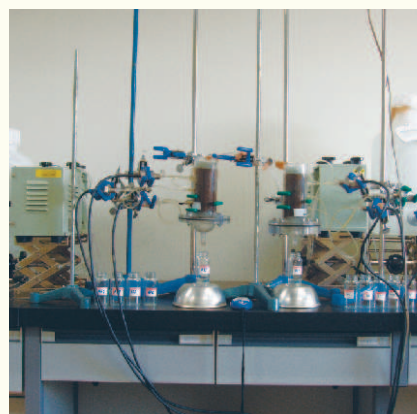
The Molecular Environmental Engineering (MEE) research group is part of the Soil Mechanics Laboratory, under the Department of Civil and Environmental Engineering, Saitama University. The MEE laboratory was established in 2002 by Professor Toshiko Komatsu and later merged with the Soil Mechanics laboratory in 2004 as a research group. Currently, there are two undergraduate students, three master's students and one doctoral student under Dr. Komatsu's supervision.

Although the MEE group is part of the Soil Mechanics lab, the research focus of the MEE group is more centered on the environment. The research interests include soil chemistry and soil physics, particularly constitutive models on transport parameters in soil in liquid and gaseous phases; diffusion and diffusion-controlled processes in porous media; development of prediction models for gas diffusivity, air permeability, solute diffusivity, saturated and unsaturated hydraulic conductivity; development of soil pore connectivity and tortuosity parameters; pesticide and heavy metal adsorption onto soils, soil colloids, and clay minerals; colloid facilitated transport of chemicals in soils; and use of the Time Domain Reflectometry (TDR) electromagnetic method for non-destructive point measurements of water and solute transport in soils.

Research is conducted using several types of chemical analysis equipment such as a High Performance Liquid Chromatograph (HPLC), an ion chromatograph, a Total Organic Carbon (TOC) analyzer and a high speed refrigerated centrifuge. The laboratory also holds complete apparatuses for soil water retention measurements such as a pressure extractor and a sandbox in addition to other equipment for soil physics experiments which can be conducted in a temperature and humidity controlled room.

The research group is in collaboration with Aalborg University (Denmark) and the University of California, Davis (USA) in developing long-term data collection, analysis and interpretation of soil-gas transport parameters that govern the fate and transport of volatile organic chemicals and emissions of greenhouse gases. Prof. Per Moldrup of Aalborg University also visits the laboratory every year to give a special lecture in the Environmental Soil Science course and advises students on their research.

The MEE research group of the Soil Mechanics Laboratory inculcates the culture of teamwork and cooperation among its members, encourages discussions, strictly observes cleanliness, and instills concern for the environment. The aspiration of the Molecular Environmental Engineering group is for the students to conduct high quality research and later use their research in helping to reduce global environmental damage.





Mr. Chandragopal Balaji from India was awarded his MEng degree under the guidance of Associate Prof. Saitoh.

Mr. Sazzad Md. Mahmud from Bangladesh was awarded his MEng degree under the guidance of Associate Prof. Suzuki.

Ms. Thidar Aye from Myanmar was awarded her MEng degree under the guidance of Associate Prof. Tanaka.

Mr. Karunarathna Anurudda Kumara from Sri Lanka was awarded his MEng degree under the guidance of Associate Prof. Tanaka.

Mr. Vu Trinh Duy from Vietnam was awarded his MEng degree under the guidance of Prof. K. Watanabe.

Mr. Regmi Gyanendra from Nepal was awarded his MEng degree under the guidance of Prof. K. Watanabe.

Mr. Shrestha Santa Man from Nepal was awarded his MEng degree under the guidance of Prof. Kawakami.

Mr. Zaman Md. Mashrur from Bangladesh was awarded his MEng degree under the guidance of Prof. Komatsu.

Mr. Shoovdor EnkhTUR from Mongolia was awarded his MEng degree under the guidance of Prof. Mutsuyoshi.

Mr. Pantha Bhoj Raj from Nepal was awarded his MEng degree under the guidance of Prof. Tsunokawa.

Mr. Ngo Duc Mau from Vietnam was awarded his MEng under the guidance of Prof. Y. Kubota.

Mr. Velez, Flores Jose Alberto from Honduras was awarded his MEng degree under the guidance of Prof. H. Kubota.

## Welcome New Students

### October 2005



Alope Rajbhandary  
Nepal, Doctor



Eric A. J. Tingatinga  
Philippines, Doctor



Jhabindra Prasad  
Ghimire  
Nepal, Doctor



Mohammad  
Mamunur Rashid  
Bangladesh, Doctor



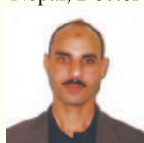
Nguyen Hop Minh  
Vietnam, Doctor



Subodh Dhakal  
Nepal, Doctor



Abdel-Rahman  
Mohamed Abdel-  
Gawad  
Egypt, Doctor



Ahmed Hassan Safi  
Hemaïd  
Egypt, Doctor



Sasikala  
Shanmugasuntharam  
Sri Lanka, Doctor



Soares Lourenco  
East Timor, Master

### April 2006



Zaw Naing Win  
Myanmar, Doctor



Ali M. M. Younus  
Bangladesh, Master



Assad Nimer Fahid  
Syria, Master



Awall Md. Robiul  
Bangladesh, Master



Bari Md. Wasiul  
Bangladesh, Master



Damdindorj  
Dejidmaa  
Mongolia, Master



D. T. K. K.  
Chamindu  
Sri Lanka, Master



Goit Chandra  
Shekhar  
Nepal, Master



Jongkittipong  
Wachira  
Thailand, Master



Liang Hsun Fu  
Taiwan, Master



Manalo Allan  
Capilar  
Philippines, Master



M. S. A. Perera  
Sri Lanka, Master



Myo Thant  
Myanmar, Master



N. A. K. Nandasena  
Sri Lanka, Master



Phan Huy Dong  
Vietnam, Master



Rauf Asim  
Pakistan, Master



Thanda Thatoe New  
Win  
Myanmar, Master



Tran Trang Huyen  
Vietnam, Master



Zeng Chen Fan  
China, Master



Wah Wah Han Su  
Yin  
Myanmar, Master



Hnin Wityi  
Myanmar, Master

## News

### New Appointments

Dr. Ha Minh from Vietnam was appointed as Research Associate of Structural Materials Lab. in January 2006. He received his Ph.D degree from Saitama University in September 2005. His research field is concrete engineering and development of bridge management system. He is also a staff member of the FSO.

Dr. Shingo Asamoto was appointed as Research Associate of Structural Materials Lab. in June 2006. He obtained his Dr. Eng. degree from the University of Tokyo in March 2006. His research field is concrete engineering, especially time-dependent deformation of concrete such as shrinkage and creep based on microscopic approach.

### Faculty on Move

Prof. Atsuhiko Machida of Structural Materials Eng. Lab. retired from Saitama University in March 2006. He is currently working as a Visiting Professor at the Geosphere Research Institute.

Dr. Ekram Azim resigned from his position as Research Associate of Soil Mechanics Lab. in September 2005. At present he is working for the University of Stirling in Scotland.

Dr. Jagath Manatunge, who was Research Associate at the Department of Environmental Science and Human Engineering, resigned from his position in December 2005. He is currently working as a Senior Lecturer at Maratuwa University in Sri Lanka.

Dr. Riaz Ul-Islam resigned from his position as Research Associate of the Design and Planning Lab. in September 2004. At present he is working for Opus International Consultants in New Zealand.

### Faculty Promotion

Dr. Masato Saitoh was promoted to the Associate Professor of Foundations and Earthquake Engineering Laboratory in December 2005. His research field is earthquake engineering and seismic design of structures.

Dr. Takeshi Maki was promoted to Associate Professor of the Structural Materials Engineering Laboratory in April 2006. His research field is concrete engineering.

Dr. Hidehiko Kazama was promoted to Professor of the Geosphere Research Institute in July 2006. His research field is soil mechanics and foundation engineering.

## Awards

Associate Prof. Kiichi Suzuki was awarded in June 2005 by the International Association for Computer Methods and Advances in Geomechanics with the Significant Junior/Senior Paper Award 2005 for the paper entitled "Principal deviatoric strain increment ratios for sand having inherent trans-

verse isotropy" co-authored with Prof. Eiji Yanagisawa (Hachinohe National College of Technology).

Associate Prof. C. T. Oguchi was awarded the prize of "the Great Woman of the 21st Century" in December 2005 by the Governing Board of Editors of the ABI (American Biographical Institute) for her significant accomplishments within, and mastery of "Geomorphology".

### Message from Alumni

It is my great pleasure to introduce myself as an alumnus of the special graduate program of the Department of Civil and Environmental Engineering at Saitama University. I was fortunate to enroll in this program for doctoral study in October 1999 and obtained PhD in September 2002. Here, I found a very favorable environment for conducting research because of the scholastic guidance and cooperation of the supervisor and other staff members, excellent research facilities, convenient accommodation, and the cooperation of both Japanese and foreign students. I learned a lot, and more importantly, received the training to formulate and solve new problems independently.



I was awarded a postdoctoral fellowship by the Japan Society for the Promotion of Science and came here again last November for two more years. It has given me an opportunity to learn more and extend my research work with the cooperation of my very helpful host researcher. This time, I found that the special graduate program is more advanced with advanced technologies, facilities and suitable environment.

Staying in Japan is a wonderful experience and a great opportunity to learn Japanese culture and language. I would like to ask other students to use the opportunity to learn Japanese and explore the country as much as possible. I appreciate the Foreign Student Office for their continuous support to foreign students. Let us keep in touch and make the program stronger, introducing it to our potential friends.

With my best wishes,  
Mohammad Shariful Islam

### Message from the Foreign Student Office

The Seventh International Summer Symposium was held in the academic year 2005 by the Japan Society of Civil Engineers. From our department, Ms. G. H. M. Jimila Subashi, a Monkasho scholar and Ms. Thidar Aye, an ADB scholar were awarded the Excellent Presentation Award.

The 2006 graduate program has already started and twenty new master's students have come to our department. We would also like to welcome Dr. Ha Minh, one of our alumni, as a FSO member since January. He will be a great help to the promotion of our graduate program.

This time we are planning to update both the English prospectus and alumni directory, which is the third revision. We would like to express our thanks for your cooperation in issuing the alumni directory. We are looking forward to hearing from you anytime.

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