

# Newsletter

International Graduate Program for Overseas Students  
Civil & Environmental Engineering

Issue No. 8 2003

## How do our alumni fare after graduation?

Our International Graduate Program has steadily increased enrollment over the last ten years. Meanwhile, it has also tightened its criteria for selection in admissions in view of substantial growth of applications it receives annually for both the master's and doctoral programs. This has enabled us to invite the brightest students among the applications we receive from many countries – mainly from Asia. (Fig. 1)

The status of students after graduation represents one of the primary reflections of university's quality of education. In determining institutional quality, we review these indicators of quality, recognizing that they help us understand how well we do relative to our peers. In addition, student satisfaction with our program offers a somewhat different perspective on quality. According to feedback we get from our alumni, they are overwhelmingly satisfied with the education they receive at Saitama University and have become successful and productive individuals after graduation, enabling them to serve humanity better. While student satisfaction remains an important indicator of academic quality, it too suggests the experience gained over the years by our faculty in educating and fulfilling the needs of graduate students from many different countries.

One of the reasons why international alumni rate the university so highly is their success in gaining employment after graduation. On the contrary, those who resume the same career after graduation find that the academic training and qualification gained at Saitama University pave the way for them to climb up the ladder. The majority of past degree recipients are employed either in academic (34%) or research related (20%) professions, while others have joined the industry or opted to pursue education for higher degrees (Fig. 2). There is no information to say that any of our graduates are unemployed, unless for personal reasons. Most of the graduates hold relatively high status jobs in their respective countries, or engage in professional careers in industrialized countries.

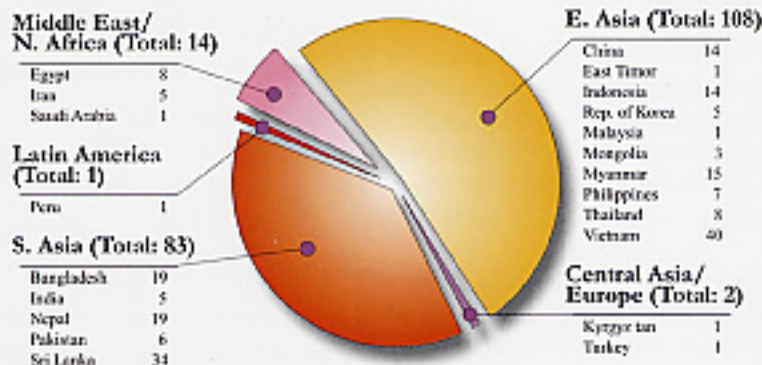


Figure 1. Geographical distribution of enrolment from 1992-2002



Figure 2. Alumni categorized by their occupation

## Greetings from the new Head of the Foreign Student Office

Dear current and prospective foreign students at and to Saitama University:

I am very pleased to be appointed as Head of FSO for several reasons. Firstly, I myself used to be a foreign student and benefited very much from various assistance extended by the FSOs of the universities I attended. I know from my personal experience how important the FSO is in making lives of international students more pleasant and productive in foreign countries. I am simply delighted to be given an opportunity to return the favors I enjoyed from this side.



Secondly, I am looking forward to becoming acquainted with as many international students as possible. I have traveled in more than sixty foreign countries and have many friends in even more countries. I am enjoying the benefit of being a part of a global network of good friends and eager to expand and share it with new friends. I am sure this new appointment will give me a better chance for expanding the network bigger and faster.

Sincerely,

Professor Koji Tsunokawa  
Head of FSO and Chairman of DCEE



## Graduation Time Congratulations

September 2002

Mr. Riaz Ul-Islam from Pakistan was awarded his PhD degree in September 2002. His doctoral thesis was on the "Optimization of Pavement Design and Maintenance Standards for Developing and Emerging Countries".

Mr. Rabindra Raj Giri from Nepal was awarded his PhD degree in September 2002. His doctoral thesis was on the "Numerical Simulation on DNAPL Subsurface Migration with Soil-Atmosphere Interaction".

Mr. Chandra Bahadur Gurung from Nepal was awarded his PhD degree in September 2002. His doctoral thesis was on the "Identification and Characterization of Wind-Induced Vibrations in Transmission Line by Field-Data Analysis".

Mr. Islam Mohammad Shariful from Bangladesh was awarded his PhD degree in September 2002. His doctoral thesis was on the "Research on Earthquake Resistant Reinforcement of Adobe Structures".

Mr. Javed Iqbal from Pakistan was awarded his MEng degree in September 2002. His master's thesis was on the "Earthquake Strong Motion Processing & Spatio-Temporal Analysis".

Ms. Hyunjung Chung from Korea was awarded her MEng degree in September 2002. Her master's thesis was on the "Development of Dynamic Forecasting Module considering Drivers' Response to Advanced PGI System Using Real-time Traffic Data".

Ms. Nguyen Thi Xuan Hong from Vietnam was awarded her MEng degree in September 2002. Her master's thesis was on the "Decomposition of Phragmites Australis Litter At Different Growth Stages".

Ms. Nika Bakhshalizadeh Ghiyasi from Iran was awarded her MEng degree in September 2002. Her master's thesis was on the "Variation of Growth Characteristics and Storage Content in Phragmites Australis Attributable to Summer Harvesting Effects".

Ms. Aye Aye Thant from Myanmar was awarded her MEng degree in September 2002. Her master's thesis was on the "Basic Study on the Estimation of Hydraulic

### Research Profile Series (7)

## The Structural Mechanics and Dynamics Group

The structural mechanics and dynamics group, also known as the structural engineering laboratory, which has been established under the Department of Civil and Environmental Engineering, carries out research activities on static and dynamic behaviors of different structures ranging from bridges and buildings to humans and their components and materials. The current studies of the laboratory broadly cover three major research fields: structural dynamics, engineering mechanics and human responses to vibration and noise.

Research activities of the structural dynamics field focus on research related to behavior of civil engineering structures subjected to dynamic loading such as wind, earthquake and human activities. Current topics investigated by this group include: energy-based damping evaluation of structural systems; vibration-based health monitoring and damage detection of structures; low-frequency noise problems caused by vehicle-induced bridge vibration; characterization of galloping in transmission lines based on field data; dynamic characteristics of the Tatara Bridge, the world longest cable stayed bridge; vibration control of civil engineering structures. The engineering mechanics group investigates increasingly important issues of advanced structural design. Currently, some of these studies deal with: crack-width control design for continuous composite girder bridges; time-dependent behavior and load-carrying capacity of cable-stayed composite girder bridges; rational determination method of partial safety factors for bridges. Moreover, this group investigates constitutive modeling of high damping rubber and long-term creep of crystalline hard rocks. Recently, research in the laboratory has been extended to cover human responses to vibration and noise, which provides a unique opportunity to investigate the effect of structural vibration on life environment. Ongoing researches in this field include: dynamic response of the human body exposed to translational vibration; dynamic interaction between structure and human; psychological response to complex low frequency noise; and engineering application of understanding of human response to vibration and noise.

The laboratory has a strong background, broad experience and sufficient facilities for conducting numerical modeling and simulations in research activities. Experiments related to research activities are conducted within the laboratory and also in other institutes that are academically linked to this laboratory.

There are three faculty members attached to this laboratory: Professor Hiroki Yamaguchi who is the head of the laboratory, together with Associate Professors Yoshiaki Okui and Yasunao Matsumoto, leads current research activities of the laboratory. In addition, there is an experienced technician, Mr. Yutaka Matsushashi, who attends to computer related and other general matters. Presently, the laboratory is home to five doctoral students, eleven Master's students including seven Japanese students. Each year, about ten undergraduate students join the laboratory and work in collaboration with graduate students under the supervision of the three faculty members.





### March 2003

Mr. Keerthi Kumara Ranasinghe from Sri Lanka was awarded his PhD degree in March 2003. His doctoral thesis was on the "Effect of Bond on Shear Behavior of RC Structures".

Mr. Eakarath Wichukreangkrai from Thailand was awarded his PhD degree in March 2003. His doctoral thesis was on the "Flexural and Shear Design Methodology of Prestressed Concrete Beams with Large Eccentric External Tendons".

Mr. Eric Augustus J. Tingatinga from Philippines was awarded his MEng degree in March 2003. His master's thesis was on the "Three-Dimensional Seismic Damage Simulation using Rigid Body-Spring Method".

Mr. Shamal Chandra Das from Bangladesh was awarded his MEng degree in March 2003. His master's thesis was on the "Field Experiment on Regrowth Dynamics of Typha Angustifolia after Cutting and Analyses of their Production and Nutrient Removal Capacity".

Mr. Song Won-Tae from Korea was awarded his MEng degree in March 2003. His master's thesis was on the "The modeling Analysis of the Rock Fractures which 1,000m boring data in Tono area were used for".

Ms. Tran Thi Thu Ha from Vietnam was awarded her MEng degree in March 2003. Her master's thesis was on the "The Basic Concept of a new Groundwater Monitoring System and 3-D Groundwater flow Analysis by using Finite Element Method (FEM)".

Mr. Nalin Rohana Chandrakumara Mannapperuma from Sri Lanka was

awarded his MEng degree in March 2003. His master's thesis was on the "Ecological Analysis of Rhizophora Apiculata Bl with a Growth Dynamic Model".

Ms. Dao Thi Loan from Vietnam was awarded her MEng degree in March 2003. Her master's thesis was on the "Growth Non-uniformity of Typha Angustifolia in a Small Marsh and Dependence on Subsoil Nutrient Levels".

Mr. Kumal Babu Adhikary from Nepal was awarded his MEng degree in March 2003. His master's thesis was on the "Development of Bond Strength Model for RC Structures Strengthened by Externally bonded FRP Sheets".

Mr. Sena Indra Wiraguna from Indonesia was awarded his MEng degree in March 2003. His master's thesis was on the "Mechanical Behavior of High Damping Rubber under Shear Deformation".

## Welcome New Students

### October 2002



G. H. M. J. Subashi  
Sri Lanka, Doctor



Ha Minh  
Vietnam, Doctor



Maruf M. Farid  
Indonesia, Doctor



Santoso Djoen San  
Indonesia, Doctor



Rajapakse H. Lalith  
Sri Lanka, Doctor



Devkota D. Chandra  
Nepal, Doctor



Shirazi Sharif Moniruzzaman  
Bangladesh, Doctor



Nguyen Thuy Ba  
Vietnam, Master



Wibowo Hardi  
Indonesia, Master



M. Leonel D. S. Gregorio  
East Timor, Master



Carlos A. V. Lopez-Raygada  
Peru, Master

### April 2003



Le Hung Quoc  
Vietnam, Doctor



Abhayaniha K. Chandana  
Sri Lanka, Master



Alim Md. Abdul  
Bangladesh, Master



Bakht Bilal  
Pakistan, Master



Bhattarai S. Kumar  
Nepal, Master



De Silva G. Sudhira  
Sri Lanka, Master



Dinh Hiep Van  
Vietnam, Master



Htike Htike  
Myanmar, Master



Min Mg Mg  
Myanmar, Master



Nguyen Minh Ba  
Vietnam, Master



Pathirana C. Ajantha  
Sri Lanka, Master



Rahman Farzana  
Bangladesh, Master



Swe Yu  
Myanmar, Master



Bui Anh Thu  
Vietnam, Master



## News

### New Appointments

Dr. Toshiko Komatsu was appointed as a professor of Molecular Environmental Engineering Laboratory in October 2002. Her research field is modeling fate and transport of contaminants in the soil and ground-water environment.

Dr. Takato Takemura was appointed as a research associate of the Soil Mechanics Laboratory in October 2002. His research field is rock mechanics based on structural geology.

Dr. Riaz Ul-Islam was appointed as a research associate of the Design and Planning Laboratory in October 2002. His research field is pavement management system and transportation planning.

### Faculty on Move

Dr. Bimal B. Adhikary resigned his position as a research associate of the Structural Materials Laboratory in September 2002. He is currently working as a project engineer at Frank Lam & Associates, USA.

### Alumni Information

Dr. Monzur A. Imteaz from Bangladesh is currently working as a Catchment Management Engineer at Parramatta City Council in Sydney, Australia. He graduated from Saitama Univ. in September 1997.

Mr. Mishraq-Ul-Quraish from Pakistan graduated in March 2000 and is now working as a Structural Engineer for Hainal-Konyi (S) Pte Ltd., Singapore. He was a ADB scholar during his study.

### Faculty Promotion

Dr. Yasunao Matsumoto was appointed as an associate professor of Structural Engineering Laboratory in October 2002. His research field is structural dynamics and human response to vibration.

## Awards

Associate Prof. Hisashi Kubota was awarded in October 2002 by JSTE (Japan Society of Traffic Engineers) with the Encouragement Award, which is the award for outstanding paper and presentation in The

22nd Conference of Japan Society of Traffic Engineers, for the paper entitled "TDM experiment in World Heritage Shirakawa-go" co-authored with Prof. D. Takeuchi, (Gifu Univ.), Mr. H. Taniguchi (Village Headman of Shirakawa Village) and Mr. T. Yoshigi (Head of Takayama national highway work office).

Associate Prof. Yasunao Matsumoto was

awarded the Annual Incentive Award by the Japan Society of Civil Engineers (JSCE) for the paper entitled "A study of the dynamic response of the human body to vertical whole-body vibration" co-authored by himself and Prof. M. J. Griffin (University of Southampton) in May 2003. The award is to honor young researchers for outstanding journal papers published within the JSCE publications.

### Message from Alumni

I came to Saitama University for doctoral studies at the special graduate program on Environmental Management and Infrastructure Development Engineering at the Department of Civil & Environmental Engineering in September 1999. During my studies, I found the overall environment very conducive for doing research including a helpful supervisor, good access to literature, safe and comfortable living accommodation and a generous stipend, which afforded me the security to focus on my research.



I learned a good deal about my major field of study, but more important, I developed deep awareness and appreciation about the learning process. I attribute this to the strong focus on research placed by our department and I think that all of us who studied or are studying at the department do get a flavor of the process, no matter whether pursuing master's or doctoral studies.

I finished my studies in September 2002 and got an opportunity to join the Design & Planning Laboratory as a research associate. I consider myself fortunate in this regard as it allowed me to continue my research and broaden my research skills in other areas of transportation engineering.

Since its establishment about a decade ago the special graduate program has grown and is growing; it is getting stronger and better. As an alumnus, I am very glad to see this. Please keep in touch as our network of alumni grows further.

With best wishes,  
Riaz Ul-Islam

## Message from the Foreign Student Office

New FSO members have joined in April 2003. Prof. Tsunokawa has newly become the head of the FSO, changing from Prof. Mutsuyoshi. In addition, Dr. Riaz Ul-Islam, one of our alumni, has joined our FSO members. He is currently working as a research associate at Saitama University.

This time, we are pleased to inform you that we have updated both our alumni directory and prospectus issued in 2000. The revised directory includes our graduates from Sep. 1995 to March 2003. The number of our graduates is increasing every year. If you have any changes or requests re-

garding your information, please let us know anytime. Saitama-city has been changed to the ordinance-designated city in April 2003. So, please be sure to confirm the following address. We wish you continued success.

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