# Saitama University Newsletter

International Graduate Program for Overseas Students Civil & Environmental Engineering

Issue No. 6 2001

#### A Decade of International Graduate Program

The Special Graduate Program for International Students on "Environmental Management and Infrastructure Development Engineering" in the Department of Civil and Environmental Engineering has almost completed a decade. Started with just six students in 1992, the program has gradually expanded to accommodate over sixty students today. More than eighty students have already graduated from our program and they have established themselves very well in their respective careers in different parts of the world.

Currently, the program is supported by scholarships from the Japanese Government, the Asian Development Bank and the World Bank. Several students are also being supported by public and private agencies and foundations. Recently, the department has been re-organized with the establishment of Department of Environmental Science and Human Engineering and the Geosphere Research Institute in order to streamline research and teaching activities more effectively.

We are constantly trying to improve our program by offering more and more courses in English medium, making coursework more demanding and putting greater emphasis on high level research. We are asking Doctoral students to publish their research works in scholarly journals and present at international conferences. We equally encourage Master students also to do so. All these steps are geared towards improving the reputation of our graduate program.



Agreement between Saitama University and University of Moratuwa on January 5, 2001

In order to strengthen and expand mutual contacts between the two universities, and to promote reciprocal collaboration and exchange in all areas of teaching and research, Saitama University has entered into an inter-institutional agreement with the University of Moratuwa, Sri Lanka. The Agreement on Academic Exchange and The Memorandum on Student Exchange were signed on 5 January 2001 between Professor Tsutomu Hyodo, President of Saitama University and Professor D. S. Wijeyesekera, Vice Chancellor of the University of Moratuwa. This academic link is the brainchild of Professor H. Mutsuyoshi, Head of the Foreign Student Office and was initiated with the close involvement of several alumni at the University of Moratuwa who are presently attached to Saitama University.

#### From the Desk of the Head of the Foreign Student Office

In late March of this year, I visited Vietnam to attend the ICCMC/IBST 2001 International Conference. During my stay in Vietnam, I visited the University of Civil Engineering in Hanoi, where one of our recent graduates, Mr. Ha Minh is working as a faculty member. I had very fruitful discussions with the Rector of the university and other office bearers. We agreed upon establishing an academic agreement between the University of Civil Engineering and Saitama University. I sincerely hope that this agreement will be mutually beneficial to both of our universities and particularly to our International Graduate Program by further promoting and internationalizing it.

With season's greetings,

Hiroshi Mutsuyoshi Professor and Head Foreign Student Office



Photo: L to R Prof. Mutsuyoshi, Rector Nguyen Le Ninh

## Graduation Time Congratulations

#### September 2000

Mr. Duong Hong Son from Vietnam was awarded his Ph.D. degree in September 2000. His doctoral thesis was on the "Periphyton Population and Resources Dynamics in a stream" under the guidance of Prof. Asaeda. At present, he is working for Marine Hydrometeorological Center, Vietnam.

Mr. Bimal Babu Adhikary from Nepal was awarded his Ph.D. degree in September 2000. His doctoral thesis was on the "Strenghtening of Reinforced Concrete Beams with Epoxy Bonded Steel Plates and CFRP Sheets" under the guidance of Prof. Mutsuyoshi. At present, he is working as a Research Associate at Saitama University.

Mr. Mahesh Raj Gautam from Nepal was awarded his Ph.D. degree in September 2000. His doctoral thesis was on the "Study and Neural Network Modeling of Hydrological Processes of Mountainous Forest Catchments" under the guidance of Prof. K. Watanabe. He is currently working as a Postdoctoral Researcher at Saitama University.

Mr. Patikhom Cheevarunothai from Thailand was awarded his MEng degree in September 2000. His master's thesis was on the "Precise Modeling of Transmission Lines for Gallopiong Analysis". His supervisor was Prof. Yamaguchi.

Ms. Kumuduni Mala Kumari Dodampe Gamage from Sri Lanka was awarded her MEng degree in September 2000. Her master's thesis was on the "Fish Feeding Behavior as Modified by Macrophytes in Shallow Eutrophic Lakes: A Simulation Study Using a Biomanipulation Model" under the guidance of Prof. Asaeda.

#### March 2001

Mr. Ashraf Mabrouk EL-ABD from Egypt was awarded his PhD degree in March 2001. His doctoral thesis was on the "Energy-Based Performance Evaluation of Buildings with Passive Controllers for Seismic Excitations" under the guidance of Prof. Yamaguchi. He is currently working for the Ministry of Housing and New Communities, Egypt.

### Research Profile Series (5) **DESIGN AND PLANNING LABORATORY**

Infrastructure management and transportation planning research activities at the Design and Planning Laboratory are conducted within the organizational structure of the department of Civil and Environmental Engineering, Saitama University. There are two study groups within Design and Planning Laboratory. Infrastructure Design and Management Group led by Professor Koji Tsunokawa and Urban Transportation Group led by Dr. Hisashi Kubota. Other members include two research associates, Kunihiro Sakamoto and Ima Fatima, one doctoral student, eleven masters students and ten undergraduate students.

Infrastructure Design and Management Group focuses on a broad range of complex issues related to transportation infrastructure. The research conducted by this group, broadly speaking, encompasses three areas: study of the impact of road development on socio-economic conditions, pavement management system, and development of simplified transportation systems analysis approach for developing countries. The outlines of these themes are stated one by one. The study on the impact of road development on socio-economic conditions includes post evaluation studies of road projects in developing countries with a view to identifying the effects of road projects on the alleviation of regional disparity in income distribution and the empirical studies on the relationship between road infrastructure development and economic development with Japanese and international data. In the area of pavement management system, various issues such as the calibration of HDM-4 (Highway Design and Maintenance Standards Model) to Japanese conditions, development of appropriate PMS (Pavement Management Systems) for developing countries using HDM-4, development of combined optimal control and option-evaluation approaches for PMS and so on are under investigation. Research in the area of urban transportation systems analysis particularly focuses on the development of disaggregate joint choice model of destination and mode of travel for cities in developing countries and the development of a combined discrete and continuous representation of transit and highway network.

The major research fields of Urban Transportation Group embrace a range of processes in urban transportation planning as follows:

- : Public involvement in transportation planning
- : TDM (Transportation Demand Management)
- : Traffic calming
- : Universal design and barrier free
- : Developing microscopic traffic simulation (tiss-NET)
- : ITS (Intelligent Transportation System)
- : Information system for public transportation
- : Driver's route choice and finding behavior



at Saitama University.

the Computer Science Dept. at Lamar Uni-turer at BUET, Bangladesh. versity, USA.

Ms. Shiromi Karunaratne from Sri Lanka Mr. Ha Minh from Vietnam was awarded was awarded her PhD degree in March his MEng degree in March 2001. His 2001. Her doctoral thesis was on the "Math-master's thesis was on the "Shear Strengthematical Modeling and Field Studies of ening of Reinforced Concrete Beams Us-Phragmites australis: Implications for Man- ing Epoxy Bonded Steel Plates, CFRP agement of Aquatic ecosystems" under the Sheets and Externally Anchored Stirrups" guidance of Prof. Asaeda. At present she under the guidance of Prof. Mutsuyoshi. He is working as a JSPS Postdoctoral Fellow is currently working as a Lecturer at Univ. of Civil Engineering, Vietnam.

Mr. Ningthoujam Shantikumar Singh from Mr. Md. Shah Alam from Bangladesh was India was awarded his MEng degree in awarded his MEng degree in March 2001. March 2001. His master's thesis was on the His master's thesis was on the "SEM Ob-"Parameter Identification of dynamic sys-servations and Constitutive Modeling of tems using Kalman Filter" under the guid- Elastomers" under the guidance of Dr. ance of Prof. Kawakami. He is currently in Okui. At present he is working as a Lec-

Ms. Cho Cho Win from Myanmar was awarded her MEng degree in March 2001. Her master's thesis was on the "Effect of Non-Darcy Flow on Pollutant Migration around Underground Waste Disposal Site". Her supervisor was Prof. K. Watanabe. She is working as an Assistant Lecturer at Yangon Technological University, Myanmar.

Ms. Qian Liehong from China was awarded her MEng degree in March 2001. Her master's thesis was on the "Seismic Behaviour of Steel-Concrete Hybrid Bridge Piers". Her supervisor was Prof. Machida. She is working for Terachi Metals Co., Ltd., Japan.

#### Welcome New Students

#### October 2000



Mongolia, Doctor



Mendbayar Oyunchimeg Golshani Aliakbar Iran, Doctor



Karim M. Fazlul Bangladesh, Doctor



Dam Khanh Toan



Htay Win Vietnam, Doctor Myanmar, Doctor



Nguyen Lan Kim Vietnam, Doctor



Javed Igbal Pakistan, Master



Aye Aye Thant Myanmar, Master



Chung Hyun-Jung Korea, Master



Nguyen Thi Xuan Hong Vietnam, Master



Bakhshalizadeh Ghiyasi Nika Iran, Master



Jha Kaushal Kumar Nepal, Doctor



Sultana Munira Bangladesh, Doctor



Dodampe G. K. Mala Kumari Sri Lanka, Doctor



Nguen Hung Thanh Vietnam, Doctor



Adhikary Kamal Babu Nepal, Master



Wiraguna Sena Indra Indonesia, Master



Wang Shuang China, Master



Dao Loan Thi Vietnam, Master



Das Shamal Chandra Bangladesh, Master



Tran Thi Thu Ha Vietnam, Master



Song Won Tae Korea, Master



TingaTinga Eric A. Jacinto Philippines, Master



Myint Htwe Myanmar, Master



Mannapperuma N. R. Chandrakumara Sri Lanka, Master

#### News

#### New Appointments

Dr. Yoji Arakawa was appointed as an associate professor of the Geosphere Research Institute in April 2001. His research field is igneous petrology and petrochemistry.

Dr. Bimal Babu Adhikary has joined the Department of Civil and Environmental Engineering as a research associate in April 2001. His major research interests are reinforced and prestressed concrete structures.

Dr. Masato Saitoh was appointed as a research associate in the Foundation Engineering Laboratory in April 2001. He had been engaged as a staff of Railway Technical Research Institute for five years. His research field is earthquake engineering.

Dr. Jagath Manatunge was appointed by the Faculty of Engineering as a research associate in April 2001. He is attached to the Department of Environmental Science and Human Engineering. His main research area is restoration and management of lakes and reservoirs.

#### Faculty on Move

Prof. Ryunoshin Yoshinaka in the Rock Mechanics Laboratory retired from Saitama University in March 2001 and became an emeritus professor. He is currently working as a visiting professor at the Geosphere Research Institute.

Dr. Vu Ca Thanh resigned his position as an associate professor of Coastal Engineering Laboratory in March 2001. At present he is working for INA Corporation, Japan as a numerical modeling expert.

Dr. Hamid R. Haddadi, a research associate in the Earthquake Engineering Laboratory, quit his job in September 2000 and now he is working for the California Department of Conservation, USA.

#### Faculty Upswing

Dr. Masahiko Osada was promoted to Associate Professor in April 2001. His major field of specialization is rock mechanics, and applied geology.

Dr. Hidenori Mogi was promoted to Assistant Professor in April 2001. His major field of specialization is earthquake engineering.

#### **Awards**

Prof. Takashi Asaeda received the International Distinguished Leadership Award in November 2000 from the American Biographical Institute for his activities, including editing "The Encyclopedia of Life Support Systems" published by the UNESCO-EOLSS Joint Committee.

Dr. Wael A. Zatar, JSPS Fellow in the Department was honored by JSCE with the Excellent Paper and Presentation Award for the paper entitled "Partially Prestressed Concrete Bridge Piers with Low Strength Ratios" coauthored with Prof. Mutsuyoshi in the Second International Summer Symposium held in Tokyo in July 2000.

Dr. Bimal B. Adhikary was awarded the Japan Society of Civil Engineers Excellent Paper and Presentation honor for the paper entitled "Further Tests and Numerical Simulation on Shear Strengthening of Concrete Beams with Steel Plates" coauthored with Prof. Mutsuyoshi in the Second International Summer Symposium held in Tokyo in July 2000.

Dr. Tilak Priyadarshana was awarded the Certificate of Excellent Presentation in recognition for his distinguished presentation for research results during the Second Summer Symposium of the JSCE held in July 2000. He is currently attached to the Department of Environmental Science and Human Engineering.

#### Message from Alumni

I came to Saitama more than ten years ago, in 1990 and was one of the first foreign students of our Graduate School. Exactly, six months after my coming here, the Doctoral Course of our Graduate School was established. The next year, with the introduction of our Special Program, many foreign students were coming. Life was better, but still very hard for me during that time. How do you think? You had a good time at our Graduate School? For me, No, really No. However, in exchange, I got a lot of knowledge. I must say that I have benefited much from our graduate program and I am capable of solving almost all problems concerning our field of study.

After obtaining my doctoral degree and working for seven years in our Program, I just resigned from our university and temporarily work for a consultant company in Tokyo. I would like to tell you that the atmosphere of working in a company is amazing. I am confident that if we can learn the way Japanese companies are doing their business, we will be successful. I am planning to go back to my country soon and do a lot of new things there. I hope to tell you my future stories and hear from you.

Best wishes, Vu Thanh Ca

#### Message from the Foreign Student Office

How are you? We hope all of you are fine. We would like to introduce three reliable members to you.

Ms. Ima Fatima, Dr. Bimal Babu Adhikary and Dr. Jagath Manatunge have joined our FSO members. Some of you may remember them as alumni, others may have spent time at Saitama University together. They are currently working as research associates at Saitama University. Anyway, we are very happy to welcome them and look forward to working together. We are making every effort to improve our graduate program in the future.

By the way, on May 1, Urawa, Omiya and

Yono cities merged to form Saitama City. So, our mailing address has been changed from Urawa city to Saitama city.

We wish you good health and happiness, and we look forward to hearing from you.

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#### Editorial Board for this issue

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