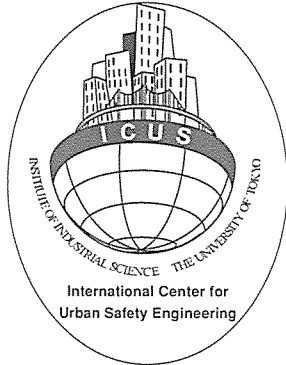


# ICUS NEWSLETTER

International Center for Urban Safety Engineering



Institute of Industrial Science  
The University of Tokyo

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## TRAFFIC ACCIDENTS - ANOTHER DISASTER IN URBAN SAFETY -

By

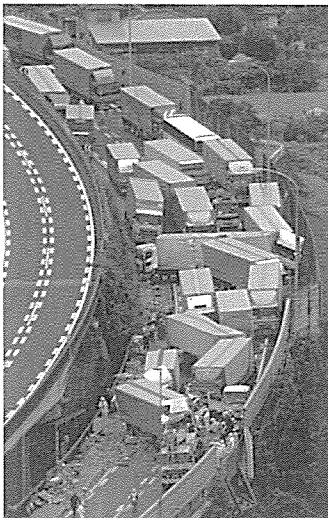
Shinji TANAKA

Have you ever experienced a traffic accident (regardless of its severity) in your life? If not, you are a relatively lucky person. However, if you think of your family members and friends, you may not be able to belong to the lucky group any more. Actually, the probability of one person encountering a fatal traffic accident in his/her life is 0.5%. The probability becomes 53.4% for injury accidents and much more for non-reported accidents. Looking at these figures, you can realize your good fortune so far, which, nevertheless is not guaranteed in the future. There were two serious traffic accidents in Japan in

2006. One took place at an intercity motorway in the middle of a rainy night. A truck slipped, spun, and stopped with its front turned back blocking the carriageway. Thereafter, 20 vehicles collided with it one right after the other. As a result of this accident, 4 fatalities and 10 injuries occurred.

The other tragic accident occurred similarly in the night. A drunk driver collided with a car, at the top of an over-sea bridge, from behind. The car, carrying the five members of a family, dived into the sea due to the impact and the 3 children in the rear seats were killed. This accident, widely covered by the media, resulted in a revision of the Road Traffic Law to toughen the penalty for drunken driving.

earthquakes, typhoons, floods, tsunamis and so on. All of them seriously impact our society at once and therefore it is of course quite important to prepare for them. However, if we assess the severity of disasters by the number of deaths, traffic accidents result in more fatalities than any natural disasters every year in Japan as shown in the graph below (although there is a decreasing trend). We all remember the Hanshin-Awaji Earthquake Disaster or the Sumatra Tsunami Disaster very clearly, but few of us remember yesterday's fatal traffic accidents. I think these should be regarded as man-made disasters affecting urban safety. We should start to tackle them to realize a comprehensive urban safety.



Serious traffic accidents in 2006

Copyright: The Mainichi Newspapers (left) and The Yomiuri Shimbun (right)

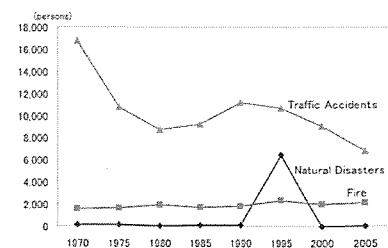
### TRAFFIC ACCIDENTS - HUMAN DISASTER -

When we think of disasters, we easily picture natural disasters, such as

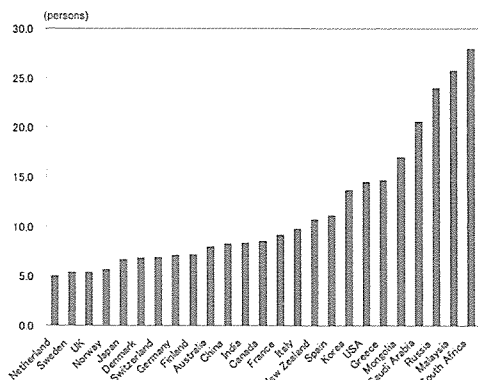


### TRAFFIC ACCIDENTS IN THE WORLD

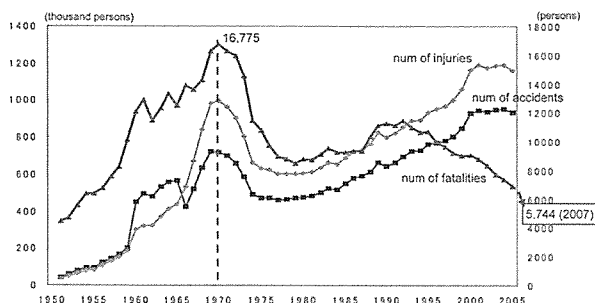
First, let us review the situation of traffic accidents in the world. As for



Number of fatalities  
caused by disasters



Number of fatalities per 100 thousand persons



Trend in the number of traffic accidents in Japan

the number of fatalities by traffic accidents in different countries, the top three deadliest countries are China, India, and the United States. The first two are the most populated and the last one is the most motorized country. However, if you see the same numbers in relative terms, i.e. number of fatalities per 100 thousand persons, as shown in the graph on the top of this page, the situation becomes different. China and India are now ranked in the middle, and the most dangerous countries are South Africa, Malaysia and Russia. On the other hand, northern European countries such as Netherlands, Sweden, the United Kingdom and Norway, which are regarded as keen on safety measures, are in the safest group. Japan is a

relatively safe country next to them. Actually, the Japanese government set a goal in 2003 "to reduce traffic fatalities to less than 5,000 a year and to realize the safest traffic society in the world." If the number achieves this, then "the safest" might become true. These figures suggest that Japan has fewer problems on the traffic safety issue.

**TRAFFIC ACCIDENTS IN JAPAN**

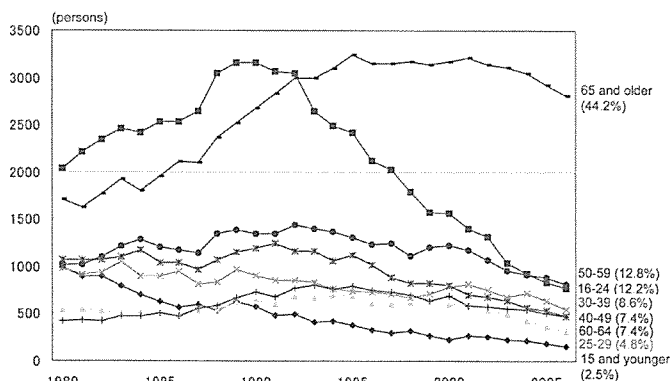
Then, can we be relieved with the current situation? The above graph shows the trend of traffic accidents, fatalities and injuries in Japan. There was a peak in 1970, when the number of fatalities was 16,775. This serious situation was often called "traffic war". After that, the government and

the police made a lot of efforts to reduce traffic accidents by, for example, providing sidewalk or cross-over bridges for pedestrians, putting on traffic signals at intersections, making it mandatory to use seat belt, etc. Vehicle manufacturers also improved their products recently by equipping them with airbags, impact absorption bodies and so on. Thanks to these countermeasures, the number of fatalities reduced drastically to 5,744 in 2007, which is about one third of the peak value.

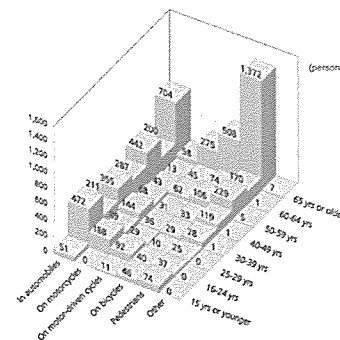
However, if you see the number of injuries or accidents, they have not decreased in the last 5 years. This is one recent trend of traffic accidents in Japan. Of course, as the volume of vehicles is growing rapidly, it is not easy to reduce the number of traffic accidents. Therefore, we need some other countermeasures to realize "the real safest traffic" or "zero-accidents society".

**ACCIDENTS BY AGE GROUPS**

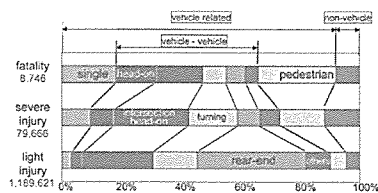
Let us see more specific problems. The bottom left side graph shows the number of fatalities by age group. The dominant age group is "65 and older", which accounts for 44.2% of fatalities. (Young people group situation was worse in the 80s but it has improved nowadays). Actually, the fatality ratio of elderly people in traffic accidents is extremely high (2.30%) compared with other age groups (0.32 - 0.56%). This means, traffic accidents involving elderly people are likely to become fatal ones. Also, Japanese society itself is aging more and more, therefore, the number of licensed drivers who are 65 years old and older is about 8 million today and will double to 17 million in 2030. This transition may cause more serious problems.



Fatalities by age group



Fatalities by mode and age group



Types of accidents by severity (2001)

**ACCIDENTS BY MODE**

If you see the fatalities by transportation mode, bottom right side figure in the previous page, the largest is in vehicles (41.3%) and the second is pedestrians (28.6%). Actually, the percentage of pedestrian fatalities out of the total has been increasing from 2000. And, the percentage of elderly people (over 65) is also increasing.

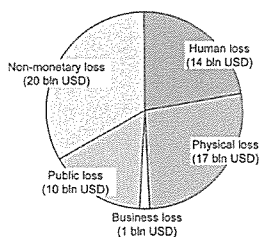
The graph of fatalities by age groups and transportation modes suggests that elderly pedestrians are at significantly high risk, followed by elderly people in vehicles or on bicycles. From these results, you may understand the necessity of traffic safety countermeasures especially for elderly people, and pedestrians.

**TYPES OF ACCIDENTS**

Then, what type of accidents are most serious? The figure above shows the types of accidents by severity, that is, fatality, severe injury and light injury. From this, we can see that: pedestrian, single and head-on accidents are major fatal accidents. Rear-end accidents are the largest light injury accidents. Intersection head-on is relatively high in all categories. Different types of countermeasures depending on the accident type are necessary.

**SOCIAL LOSS BY TRAFFIC ACCIDENTS**

Finally, how much social cost or loss do traffic accidents cause? The Cabinet Office in Japan conducted a research project to estimate the social loss caused by traffic accidents. It classified the loss into five categories, that is, human loss, physical loss, business loss, public loss and non-monetary loss. Here, human loss means medical care cost or salary loss, physical loss means car / structure damages, business loss is caused by worker's absence, public loss is the cost for ambulances, police



Composition of social loss caused by accidents (2007)

and cleaning, and non-monetary loss means mental loss like pain, sorrow and trouble.

According to the result, the total loss including non-monetary loss was approximately US\$60 billion in 2007 and the composition is shown in the graph above. Non-monetary loss occupies quite a large share (35%), which comes mainly from fatal accidents. Even though the number of fatalities becomes less than 6,000, we have to continue efforts to reduce them so that social loss is reduced too.

If we see the monetary part by severity, then the loss due to injury accidents especially lighter ones is the hugest because their number is quite large. In any sense, losses are enormous and continue every year.

**RESEARCHES TO IMPROVE TRAFFIC SAFETY**

To solve the problems mentioned above and to improve the traffic safety, we are conducting researches from the viewpoint of traffic engineering. One of the topics introduced here is about signal control improvement.

Generally in signal control, we need some clearance time (between yellow and red lights) to clear the traffic from the intersection when the signal phases change. At this moment, a lot of traffic accidents like head-on, rear-end and pedestrian occur. Therefore, the clearance time is key to improve traffic safety in urban signalized intersections. We observed actual traffic flows at several intersections using video cameras and examined whether the current signal settings are appropriate to ensure traffic flows in different directions.

The same can be said on pedestrian signals. Currently, pedestrian signal clearance time (flashing signal) is determined by half the crossing road length and as a



Driving simulator analysis

result a lot of pedestrians remaining on the road when the signal turns to red. Here, we also conducted field observations and analyzed pedestrian walking behavior. Then discussed the feasibility of a new pedestrian signal control method to reduce the number of remaining pedestrians.

We sometimes use a driving simulator to analyze driver's behavior when he/she is faced with a yellow signal and puzzled whether to go or not, which is called "dilemma situation". As the driving simulator can record precise data of vehicle and driver, we can analyze his/her behavior in detailed for instance reaction time, vehicle's deceleration, etc. After doing this, we would like to propose an advanced signal control which reduces such dilemma situation.

**TOWARDS SAFER TRAFFIC**

Traffic accident are the most important issue to be solved in transportation problems, and will continue to be in the future. Japan's efforts achieved a considerable reduction in the number of traffic fatalities from the peak, but there are still lots of casualties due to traffic accidents. Furthermore, there are still many developing countries which do not have very basic traffic safety facilities like pedestrian sidewalk and traffic signals. We must continue looking for a better solution to achieve a safer traffic, and would like to contribute to safety improvement in other countries with our experiences.

Data Source: Cabinet Office, National Police Agency, Fire and Disaster Management Agency, Japan Automobile Manufacturers Association

## ICUS joins the Chiba Experimental Station Open House

ICUS joined the Chiba Experimental Station Open House which was held on November 9. Overall 750 people visited the exhibition. ICUS theme was "Towards the Establishment of a Sustainable Urban System." Laboratory members participated and displayed their panels showing their research activities. Topics included earth and underground structures, diffusion of contaminants in urban areas, and analysis of traffic



*ICUS Exhibition at Chiba Experimental Station Open House*

jam among others. RNUS and BNUS activities were also introduced. Reports and newsletters

were handed to visitors as well as small flashlight key holders.

*(By P. Mayorca)*

## 13 Open Lecture was held

The 13th ICUS Open Lecture was held at IIS on October 2 and attended by approximately 140 participants. The title of the lecture was "Safety for Urban Infrastructure –Crisis management and disaster control based on Intelligence–." In this Open Lecture, we focused on the role of information and intelligence for the safety of the infrastructure. Three speakers were invited from each industry, government and academia.

Prof. Meguro, the ICUS Director,



*Prof. Hiroyuki Morikawa*

gave the welcome speech after which the following presentations were given:

- Prof. Hiroyuki Morikawa, Research Center for Advanced Science and Technology, the Univ. of Tokyo, "Information Communications Technology (ICT) infrastructure for security and safety based on ubiquitous computing"
- Mr. Yukio Toho, Senior Manager of Disaster Countermeasures Office, NTT, "Disaster risk management of NTT group –Availability of ICT for disaster



*Mr. Yukio Toho*

control"

- Mr. Mitsuo Uehara, Director General for Crisis Management, City of Yokohama, "Management strategies for crisis of Yokohama City"

The closing remarks were given by Prof. Yasuoka. After the Open Lecture a small party was held and attended by approximately 60 people. The speakers and all participants actively exchanged their opinions in the lecture and the party.

*(By S. Miyazaki)*



*Mr. Mitsuo Uehara*

## ICUS activities recognized domestically and internationally

### ICUS laboratory member received Mondialogo Engineering Award

The Mondialogo Engineering Award invites engineering students in developing and developed countries to form international teams to propose projects to improve the quality of life in the developing world. Every year, ten Mondialogo Engineering Awards and 20 Honorable Mentions are given. This year 801 project proposals were submitted. To participate in the Mondialogo Engineering Award, the University of Tokyo, Oxford University (UK), Nepal Engineering College (Nepal), and Indian Institute of Technology Mumbai (India) worked together, exchanged ideas and submitted a proposal entitled "Improving the structural strength under seismic loading of non-engineered buildings in the Himalayan region."

After a competitive evaluation, this project was selected as one of the top ten Mondialogo Engineering Award and €20,000 were received to implement the proposal.

### ICUS awarded the 2007 University of Tokyo (UT) President's Award

Dr. M. Y. Ohara, Dr. S. Miyazaki, and Prof. K. Meguro received the 2007 University of Tokyo President's Award for "Development of Portable Disaster Manuals and E-learning System on Emergency Responses in the University of Tokyo Hospital." This award is given to faculty members who greatly contributed to improve the environment of the University. ICUS participated in the working group on disaster management manual system for the University of Tokyo Hospital with the University of Tokyo Hospital

and the Division for Environment, Health and Safety. Portable disaster manuals for doctors and nurses were developed and practically used at a disaster drill held in September, 2007. An E-learning system to learn about emergency responses was also developed and 242 doctors and 879 used it before the drill. An awarding ceremony was held on Dec 21, 2007 at the auditorium in the University.

*(By N. Sathiparan , Meguro Laboratory member and M.Y. Ohara)*



*2007 UT President's Award Ceremony*

## USMCA 2007 was held at Dhaka, Bangladesh

Bangladesh Network Office for Urban Safety (BNUS), BUET, Bangladesh and ICUS organized the Sixth International Symposium on New Technologies for Urban Safety of Mega cities in Asia, USMCA 2007, at Dhaka on December 09-10, 2007. The co-organizers of this symposium were the Foundation for the Promotion of Industrial Science (Japan), Center of Excellence, The University of Tokyo (Japan), and Center for Environment and Geographic information Services (Bangladesh).

The two-day long symposium program was arranged in two keynotes and plenary sessions and ten technical sessions. Two keynote speeches and five plenary lectures were delivered by invited distinguished academicians and researchers from several Asian countries. The symposium was inaugurated by Mr. Tapan Choudhury, Advisor of Food, Energy and Disaster Management Ministry of the Government of Bangladesh. Prof. Mehedi Ahmed Ansary, Project Director of BNUS and chairman of USMCA 2007 organizing committee, delivered the welcome speech followed by the opening speeches of HE Masaki Inoue Ambassador of Japan in Bangladesh, Professor

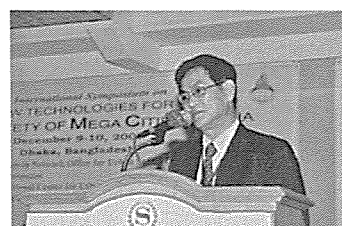


*Mr. Tapan Chowdhury, Hon. Adviser delivering the Chief Guest Speech*

Tsuneo Katayama, President of the International Association of Earthquake Engineering, Prof. Jamilur Reza Choudhury, President of Bangladesh Earthquake Society and Prof. A.M.M. Safiullah Vice-chancellor, Bangladesh University of Engineering and Technology.

Keynote lectures were given by Prof. Tsuneo Katayama and Prof. Jamilur Reza Choudhury. Plenary speakers were Prof. Kenji Ishihara, Chuo University (Japan), Prof. Worsak Kanok-Nukulchai, Dean of the School of Engineering & Technology, Asian Institute of Technology (Thailand), and Professors T. Uomoto, Y. Yasuoka, and K. Meguro.

Sixty-eight papers were presented in technical sessions covering a wide range of issues in the areas of urban safety including: safety assessment and monitoring of existing infrastructure; advanced technologies for assessment of urban safety; maintenance,



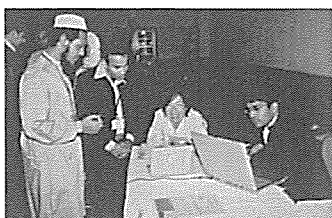
*Prof. Worsak presenting a Plenary Lecture*

retrofitting and rehabilitation of structures; disaster management; tsunamis, flood, and environmental risk assessment; and urban road safety. Several presentations were made on newly developed advanced tools and methodologies for addressing these issues.

ICUS prepared the Excellent Young Researcher Award to encourage activities of young researchers in the field of urban safety engineering. The winners of this award were: Ms. Afifa Imtiaz (Bangladesh University of Engineering and Technology) and Dr. Ema Kato (Port and Harbor Research Institute, Japan).

The next symposium will be held at Tsinghua University in Beijing, China, on October 21-22, 2008. Abstracts are invited by June 22, 2008. Further information will be posted in ICUS web site soon.

*(By M. Ansary)*



*Ms. Yoshimoto with BNUS staff*



*Prof. Choudhury presenting a Keynote Lecture*



*Young researchers with Prof. Meguro and Prof. Ansary*

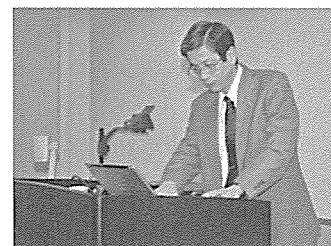
## RC-58 held meeting

The Research Committee 58 (RC-58) held its third meeting on October 17, 2007. It is working under the topic "Business Continuity Management (BCM) Systems Suitable for Japanese Society." This time, Prof. Hiroaki Maruya from the Institute of Economic Research, Kyoto University delivered a lecture on "Meaning of Business Continuity Plan (BCP) and Its Recent Trend." He talked about the lessons from the recent earthquakes and

manmade disasters in Japan, political background of BCP in Japan and abroad, concrete process of making BCP. He also addressed the importance of disseminating BCP to small and medium-sized enterprises and introduced his recent activity for developing a step-up guide instructing how to adapt BCP in small and medium-sized enterprises. The committee members are now reviewing the existing BCM related literature

published in Japan and abroad.

*(By M. Y. Ohara)*



*Prof. Hiroaki Maruya*

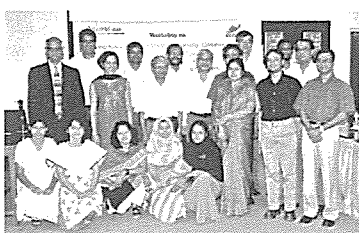


## BNUS Activities

### Workshop on Sharing Knowledge on Last-Mile Warning: Community-based Last-Mile Warning Systems

The workshop was held in Dhaka on October 25, 2007, jointly hosted by the Bangladesh Network Office for Urban Safety (BNUS) and LIRNEasia, Sri Lanka. Prof. Dr. A.M.M. Safiullah, Honorable Vice-chancellor of BUET, and Mr. K. M. Massud Siddiqui, Director General of Disaster Management Bureau (DMB), were present as the chief and special guests in the inaugural session, respectively. The workshop was moderated by BNUS Project Director Prof. Dr. Mehedi A. Ansary.

Presentations were delivered by Prof. Rohan Samarajiva, Executive Director of LIRNEasia, Mr. Md. Nasir Ullah, Director, Cyclone Preparedness Program, Mr. Nuwan Waidyanatha, Project Manager, LIRNEasia, Ms. Natasha Udu-gama, Project Dissemination Manager, LIRNEasia, Prof. Aftab Alam Khan, Department of Geology, Dhaka University, Mr. Sujit Kumar



Workshop participants

Debsarma, Meteorologist and System Manager, Bangladesh Meteorological Department, Dr. Ashutosh Sutra Dhar, Dept. of Civil Engineering, BUET, and Dr. S. Rangarajan, Senior Vice President, World Space (Satellite Radio).

### 60 years celebration of engineering education in Bangladesh

July 2007 marked the 60th anniversary of the establishment of the erstwhile Ahsanullah Engineering College, the first institution for producing graduate engineers in Bangladesh, which then followed a glorious path to become a premier institution of excellence in engineering education in Bangladesh known as the



BUET 60th Anniversary celebrations

Bangladesh University of Engineering and Technology (BUET).

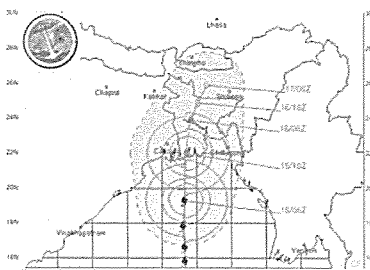
A series of events were arranged to celebrate this memorable events. A fair was inaugurated at December 28, 2007 and continued until December 31. BNUS had participated actively in this fair. BNUS activities were presented as well as BNUS/ICUS joint publications. A number of visitors were interested in the mock drill which was organized by BNUS in collaboration with the Bangladesh Red Crescent Society. Some posters made by BNUS were also distributed among the visitors to build up awareness against natural disasters.

(By M. Ansary)

## Damage due to Cyclone SIDR in Bangladesh

Cyclone SIDR, a category 4 storm, developed over the Bay of Bengal and struck the coast of Bangladesh on the evening of November 15, 2007. With winds of up to 240 km/hr and associated tidal surges of several meters, it killed over thousands of people and destroyed houses, crops, vegetables and plants alike along its trail of devastation over an area of thousands of square kilometers. Due to the complex of deltas on the coast, these tidal surges have penetrated deeply and extensively inland, compounding the already existing problems from seasonal flooding. SIDR, was one of the 10 fiercest cyclones that hit the region between 1876 and 2007.

As of December 31, 2007, the Government of Bangladesh official (MoFDM) report illustrates that the number of death caused by SIDR has risen to 3,363 affecting 8.9 million people of 2 million families. 871 people are still missing. These casualties and damage to houses, livestock, crops, educational institutions, roads and embankments have been reported from



SIDR path over Bangladesh

1,950 unions of 200 upazilas of 30 districts. Most deaths and damages have been attributed to the storm surge. These figures could still be conservative. Disaster preparedness may have had an important mitigating effect as 3.2 million people were evacuated from the coastal areas.

The cyclone has partially or totally damaged more than one million dwellings and also essential service infrastructure. Delivery of aid is slow due to the immense logistical difficulties and the sheer scale of devastation. Roads to some areas are still impassable.



Small shops, businesses, and market areas were damaged along the road side

Survivors are thronging moving vehicles in the belief that aid is being delivered. This is restricting the movement and accessibility on roads and increasing journey times for relief workers. With crop plantations wiped out, people will not be able to sustain themselves in the coming months. Waterborne diseases are now starting to take root in areas where there is no clean drinking water. The early winter cold and fog is further worsening living conditions.

(By M. Ansary)

## RNUS Activities

### ICUS renewed contract of RNUS with AIT

ICUS and the Asian Institute of Technology (AIT), Thailand, agreed to renew the Memorandum of Agreement to continue their cooperating program in RNUS reaffirming their strong commitment and determination to make the urban environment safer. The contract signing ceremony between ICUS Director, Prof. Meguro and the Dean of School of Engineering and Technology, Prof. Worsak Kanok-nukulchai, was held on December 9,



*Contract signing between Prof. Meguro and Prof. Worsak Kanok-Nukulchai*

2007 during the USMCA2007 at the Sheraton Hotel, Dhaka.

Since its establishment, RNUS, in cooperation with the Asian Institute of Technology, has carried out many

successful joint researches and projects in the areas of urban safety disaster management, sustainable engineering and infrastructure management including the "Study on Application of Fly Ash as Concrete Ingredient in Thailand & Japan," "Evaluation of Water Use in Irrigated Paddy Fields in Eastern Part of Thailand Using Remote Sensing and Meteorological Data," "Urban Flood Inundation Modeling in Mekong River Basin Using a Physically Based Surface-River Model," etc.

*(By K. Worakanchana)*

## Dr. Hiroshi Yokota joined ICUS

We would like to welcome warmly Dr. Hiroshi Yokota as Visiting Professor of ICUS from November 1, 2007. He is Executive Researcher and Director of Life Cycle Management Research Center for Coastal Infrastructures, Independent Administrative Institution of the Port and Airport Research Institute.

He graduated from the Department of Civil Engineering, Tokyo Institute of Technology in 1978 and obtained his

Doctor of Engineering Degree in February 1993 from the same institute.



*Prof. Hiroshi Yokota*

His research interest includes structural concrete including structural design and performance verification of civil infrastructure. His recent research targets are life-cycle management of existing structures including maintenance and repair methodologies, prediction of progress of structural performance degradation, and durability enhancement.

*(By K. Meguro)*

## ICUS Activities

- All ICUS members attended the 6th International Symposium on New Technologies for Urban Safety of Mega cities in Asia from Dec. 7 to 12.
- Prof. Meguro visited Stockholm, Sweden from Oct. 21 to 23 to attend the meeting of the Global Facility for Disaster Reduction and Recovery (GFDRR).
- Prof. Meguro and Dr. Ohara attended the 2nd International Conference on Urban Disaster Reduction which was held in Taipei, Taiwan from Nov. 26 to 30.
- Prof. Meguro attended the meeting of the board of directors of the World

Seismic Safety Initiative held in Singapore from Dec. 1 to 6.

- Dr. Ooka visited Tsinghua University, Beijing, China, from Nov. 19 to 24 to meet Professors Yi Jiang, Yingyin Zhu, and others for discussing about urban environment and energy issues.
- Dr. Ooka visited Seoul, Korea from Nov. 25 to 27 to attend a seminar of international experts to which he was invited.
- Dr. Kawano visited Chongqing, China from Nov. 3 to 10 to join the 3rd Sino-Japan Geotechnical Symposium.
- Dr. Tanaka participated in the World Congress on Intelligent Transportation

Systems which was held at Beijing, China from Oct. 10 to 15.

- Dr. Worakanchana stayed at AIT for his research work and teaching duties at RNUS from Dec. 1 to Feb. 28.
- The 13th Open Lecture was held on Oct. 2.
- The Research Committee 58 met on Oct. 17 and Dec. 13 to report on each working group progress.
- ICUS joined the Chiba Experimental Station Open House on Nov. 9.
- The student seminar was held on Nov. 30. Approximately 20 students joined the event.

## Awards

- Dr. Ohara, Dr. Miyazaki, and Prof. Meguro, received the University of Tokyo President's Award for the "Development of Portable Disaster Manuals and E-learning System on Emergency Responses in the University of Tokyo Hospital" on Dec. 21.
- Dr. Ooka received the Best Paper Award at the International Conference of Sustainable Building 2007 held in

Taipei, Taiwan, on Nov. 10 for his paper "Study on the Prediction of Indoor Humidity Distribution with Coupling Simulation of CFD and Vapor Diffusion Analysis through Building Materials."

- Mr. N. Sathiparan, Meguro Laboratory graduate student, received the Mondialogo Engineering Award as a member of the team which submitted the proposal "Improving the structural strength under

seismic loading of non-engineered buildings in the Himalayan region."

- Mr. R. I. Wicaksono, Kuwano Laboratory graduate student, received the Best Presentation Award at the 9th International Summer Symposium of the Japan Society of Civil Engineers for his paper "Small Strain Stiffness of Clean Sand and Gravel Based on Dynamic and Static Measurements."

**Editor's Note**

*In this trimester, we have again witnessed the devastating effects of natural disasters. Bangladesh was hit by SIDR Cyclone which left a path of devastation. I would like to hereby express our deepest sympathies to the affected population on behalf of ICUS.*

*During the period of this volume, we could successfully hold the USMCA-6 thanks to the efforts of our Bangladeshi colleagues at BNUS and BUET and all the participants. In this symposium we were able to*

*exchange opinions, discuss different problems in our urban environment, and strengthen collaboration ties among experts in the field.*

*As mentioned by Dr. Tanaka in the main article of this volume, traffic accidents are one of the major issues of urban safety. To address this and other similar problems, we need to first investigate the phenomena and single out the problems that require attention. Then, we should define concrete and quantifiable goals and finally design plans to reach those goals. With this approach, Japan has been able to reduce the number of traffic related fatalities to one*

*third of its peak values, which were reached some 40 years ago.*

*Urban safety problems need to be addressed from several viewpoints. Of course, it is necessary to solve the technical issues, such as improving the quality of the vehicles in the case of traffic safety. However, it is also equally important to create regulations and educate the public. Learning from past experiences and sharing lessons is very useful as well. We do hope that together with our Newsletter readers, we will create a safer urban environment.*

*(By K. Meguro)*

*If you would like to contribute an article to ICUS newsletter or have any comment or suggestion, please contact the editorial committee at [icus@iis.u-tokyo.ac.jp](mailto:icus@iis.u-tokyo.ac.jp).*

**PRINTED MATTER**

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