ICUS NEWSLETTER

International Center for Urban Safety Engineering

Institute of Industrial Science
The University of Tokyo

VOLUME 5 NUMBER 2
JULY-SEPTEMBER 2005

WHY ARE YOU AFRAID OF ONLY EARTHQUAKES?

By

Taikan OKI

WHAT ARE PEOPLE IN JAPAN AFRAID OF?

More than 90% of people in Japan are afraid of big earthquakes, but percentage of the people who are afraid of extreme weather, such as typhoons, torrential rainfall, and droughts, is less than 60% — recent survey by Tokyu Agency Inc., an advertising agency, illuminated the people's consciousness on their fear. Even though these two natural disasters by seismic and atmospheric variations respectively are the top two issues that people in Japan are apprehensive about their safety, why are their perceptions quite different for these two? The number of people who are not afraid of wind storm and floods is 4 times that of those who are not afraid of earthquakes. The survey by Tokyu Agency Inc. was conducted in September 2005. Its results are consistent with the observation of the special public opinion poll conducted in February 2005 by the Cabinet Office of Japan which indicates that 34% of people in Japan do not think they have any risk from torrential rainfall or typhoons.

In 2004, two torrential rainfall events subsequently occurred in July associated with the seasonal rain front at Niigata and Fukushima, and Fukui Prefectures and there were 10 landfalls of typhoons during the season. As a result, over 200 lives were lost. If these surveys either by Tokyu Agency Inc. or by the Cabinet Office of Japan were done in 2003, before the prominent damage of 2004, awareness of the risk against floods would have been much less and people must have expressed their fear mostly against earthquakes.

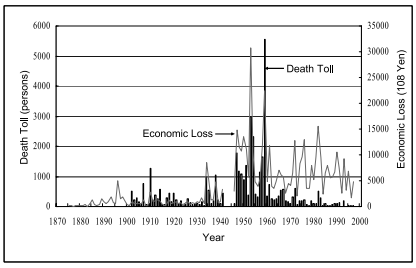
Actually, there was an earthquake of magnitude 6.8 on the Richter scale in Chuetsu region of Niigata Prefecture on October 23, 2004, and of course, this disaster reminded the risk of earthquakes for the people in Japan. This might have been reflected in to the results of the survey, as well.

Property damage due to flood caused by failure of embankment

Damage by Natural Disasters in FY2004

	Death toll	Injured	Collapsed	Half Damaged	Partially Damaged
Snow	**86**	**758**	**55**	**5**	**94**
Earthquake	**47**	**5,572**	**3,270**	**13,746**	**105,152**
Flood	**230**	**2,539**	**1,450**	**15,960**	**92,371**

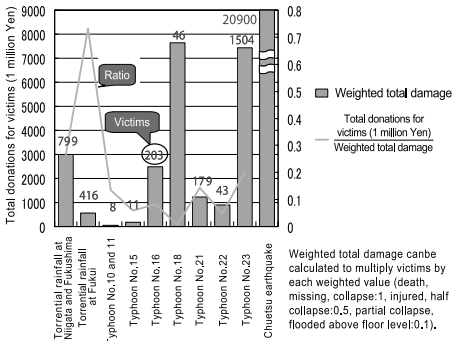
(Fire and Disaster Management Agency, Japan, by March 20, 2005.)



Victims and economic loss due to flood

Above table is a list of damages caused by natural disasters summarized by Fire and Disaster Management Agency, Japan for the Japanese fiscal year of 2004, namely from April 2004 through March 2005. The number of earthquake related death toll was increased till October 4, 2005. All the numbers include the indirect damage, for example, those who lost their lives during the evacuation or in the hospital, and the period of counting the damage is not set unlike the statistics of car accidents in Japan, which counts only the loss within 24 hours after accidents.

As is apparent from the table above, many lives were lost due to floods in 2004. The number is exceptional in recent Japan as shown in above figure. It was not rare a few decades ago for the death toll in a year due to floods to be more than a few hundreds. But since 1982, when severe floods in Nagasaki Prefecture resulted in 299 deaths or missings, human casualties have been decreasing even though the economic losses have not decreased significantly.

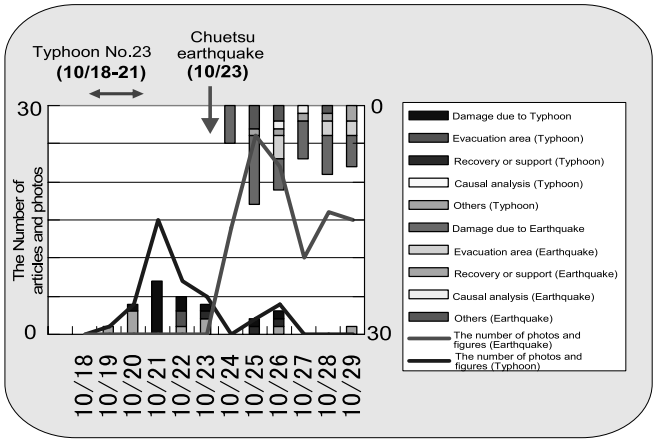


Weighted total damage canbe calculated to multiply victims by each weighted value (death, missing, collapse:1, injured, half collapse:0.5, partial collapse, flooded above floor level:0.1).

Ratio of the donation compared to the weighted total damage

The perception of higher interest in earthquake than flood can be observed in the number of articles on newspapers. Below figure shows typical example for the case of the Asahi Shimbun NewsPaper. The number of articles on the Typhoon No. 23 (TOKAGE) was the peak on October 21, the next day of the most serious damages were given and follow up articles were on the page space.However, after the big earthquake hit Chuetsu region, Niigata Prefecture, in the evening on October 23, most of the space were filled with the articles on the earthquake and articles on the floods were suppressed. Absolute number of articles, photos and figures on earthquake were much larger compared to those on floods, even though the total number of the death toll due to the Typhoon No.23 only was close to 100; it was less than 40 at that moment by the earthquake.

This difference of the attention by mass media made difference for the charity donation. Approximately 30 billion yen of charity donation were sent for the earthquake; however, it was only 3 billion yen for the Typhoon No.23. Left figure illustrates the ratio of the donation compared to the weighted total damage by each disaster. Apparently, people suffered by floods were not well treated and supported, and the situation is really unfair.



Transition of newspaper articles about Typhoon No.23 (Asahi Shimbun Newspaper)

FLOODS IN JAPAN IN 2004

Some characteristics are diagnosed in the floods of 2004. Although not surprising, disaster challenged people — either aged person over 65 years old or handicapped person— accounted for 64% of the deaths or missings due to floods and landslides in Japan in 2004. Percentage of persons aged over 65 years is approximately 20% in Japan now. It was a shock for experts of flood disaster mitigation to hear the news of aged person drowned in floods because recent casualties were mostly by landslides, and only a few were lost due to dropping into a flooded channel accidentally or being confined in a basement. This fact initiated the discussion on how to issue more efficient alert information introduced below.

Many cases were observed where people were isolated in their houses and could not evacuate from the inundated area. Because of the large area and the number of people affected, it took long time for helicopters to safely transfer all affected people to safe places. Fortunately no serious damage was reported but day nurseries and schools were isolated and some children had to spend over night there. It is surprising children were in day nurseries and schools when flood warning was issued. We should not put too much priority for efficiency in our daily activities but should accept idleness under emergency; we should stay at home with children and should not let them go outside under severe weather conditions.

Other common feature of the damage due to floods in the last year was that the levees of main stream of major rivers managed by the national river bureau were fine even though water level exceeded the dangerous level at some locations. However, levee crevasse occurred at the sections of tributaries of major river basins that are managed by prefectures.

Unfortunately, most of the hazard maps or the inundation hazardous areas were estimated for levee crevasse of main streams of major rivers, and inundated areas in the last year were not

foreseen. As bad luck would have it, flood forecasting systems were not generally installed and operated in these tributaries.

It was known before, but it was also made clear by the flood disasters in 2004 that higher levee can hold larger floods, however, once levee crevasse occurred, the damage particularly close to the levee becomes seriously severer. Practically it is impossible to secure the safety of levee for its all length, therefore, we should consider the risk of levee failure and their impacts in the design of river improvement measures.

WHAT LESSONS WERE LEARNT AND WHAT ARE THE MITIGATION MEASURES?

It was recognized that the delays in issuing flood alert to the local people by the local governments were one of the critical reasons that flood damages were intensified. According to the recent survey, it was suggested that disaster challenged persons need additional one hour, approximately, for their evacuation. There were only two categories of disaster related alert that local government issued in the past: evacuation instructions and evacuation directives. Reflecting on the disasters in 2004, evacuation preparation information was added and the reactions local people should take when they hear these three commands, were clearly defined, which may have been different in each local government. For the case of flood alert, the "evacuation preparation information" is issued when water table is expected to reach to the dangerous level within certain time, over which the safety of the levee cannot be guaranteed. The "certain time" here is defined as the time within the duration disaster challenged person can evacuate and the accuracy of the information can be assured. Disaster challenged person should evacuate immediately and ordinary people should start preparing for their evacuation if they touch with the "evacuation preparation information." Evacuation instructions are issued when the water table is expected to reach the dangerous level within certain time; "certain time" being the duration within which ordinary people can evacuate. All the people should evacuate immediately. An evacuation directive is issued when serious disaster has already happened, such as levee crevasse, finding of critical cracks in levees or a large quantity of leakage of water, failure of flood management facilities such as water gates or pumping stations, or the reach to the dangerous water level. People are suggested to evacuate immediately if they can but they should assure the safety of the evacuation route. These three levels of alerts are defined for storm surges, landslide disasters, and tsunamis, as well. The basic philosophy is the same as for the case of flood alerts.

Mayors are responsible for issuing flood alerts, but practically speaking, municipal governments are not used to flood disasters and are not equipped to carry out proper flood prediction. For these typically small rivers a new concept of "special warning water level" is recommended. Mayors are suggested to issue the "evacuation preparation information" when the water level reaches the "special warning water level."

WHAT KIND OF RESEARCH AND DEVELOPMENT ARE GOING ON AT IIS/UNIV. OF TOKYO?

Oki and Kanae Laboratory, the Hydrology and Water Resources Engineering Laboratory at the IIS, the University of Tokyo, has been working on the global water cycle within the context of earth system science and world water resources assessment including the virtual water trade. Corresponding to the recent floods disasters in Japan, they have started to develop a macro scale hydrological modeling system which covers whole land area all over Japan. Prototype model was developed in 0.1 degree horizontal resolution, and proved that the prediction by the Meso Scale Model of the Japan Meteorological Agency, which is delivered in real time through the internet, can be used for practical flood forecasting. The modeling system is now under revision and improvement of its accuracy. The merit of the modeling system is unlike the classical rainfall-runoff modeling in hydrology; soil moisture distribution can be obtained simultaneously, and is expected to be used for the risk assessment of land slides considering the historical record of soil moisture estimated by offline simulation.

Such a modeling system will also be developed in Thailand under the Japan EOS (Earth Observation System) Promotion Project (JEPP), which was initiated by the approval of the 10-year implementation plan of the GEOSS (Global Earth Observation System of Systems). Even though the demonstration project of the hydrological modeling system will be developed in Mae Waang river basin near Chiang Mai, Thailand in cooperation with Thai Universities, such as Kasetsart, Chulalongkorn, and King Mongkut, and Thai Operational Agencies such as Royal Irrigation Department, Thai Meteorological Department, and Royal Forestry Department, hydrometeorological and climatological studies should have a scope covering whole Indo-China Peninsula and neighboring oceans such as Andaman Sea and South China Sea. This scope fits to the planning of new project "Monsoon Asia Hydro-Atmospheric Science Research and Prediction Initiative" (MAHASRI) as a successive project of the GEWEX Asian Monsoon Experiment (GAME). Our project will have close relationship with GEOSS, MAHASRI, IAHS/PUB, GWSP, GE-WEX/GSWP, etc., and probably will have a name such as "GEOSS and MAHASRI Experiment in Tropics" (GaME-T). GaME-T aims to investigate the "Scientific Basis for Hydrometeorological Warning System" in short, medium, and long ranges for flood and drought management with the basic understanding of Asian Monsoon System and the latest technology of monitoring and modeling. All the interested researchers and stakeholders are welcome to join the new project.

REMARKS

There are also many issues to be discussed in this topic, such as the impact of climate change, global warming to the water resources management,the development of the robustness against flood disaster in community, integrated water resources management incorporated with the land use management, but they will be introduced in another occasion.

After ten years of my affiliation with INCEDE/ICUS

- Greetings from the Monash University, Australia -

After ten years of my association with this quarterly newsletter as a staff of INCEDE and then ICUS, for the first time I am writing as a network member of ICUS. It makes me nostalgic with flash back of so many interesting events and activities of INCEDE and ICUS that I participated in during the last 10 years of my stay at the University of Tokyo. Walking down the memory lane, I joined INCEDE in August 1995 as a Research Associate after obtaining my M. Eng. degree in civil and water resources engineering from the Asian Institute of Technology (AIT). Soon after joining INCEDE, I got many wonderful opportunities to participate in several international projects of INCEDE in areas of urban disaster mitigation. I was also assigned the editorial task of the INCEDE newsletters. Through these activities, I got to know and work with many enthusiastic INCEDE and ICUS Network members and in the course of time, I developed long lasting friendship with many of them. I shall cherish our friendship in the days and years to come and look forward to having opportunities again to work with from the Monash University.

I am grateful to the then INCEDE Directors Prof. T. Katayama, Prof. K. Sudo and colleagues Prof. S. Herath and Prof. K. Meguro for giving me the opportunity and support to complete my Ph.D. from the University of Tokyo in 1999 as a working staff of INCEDE. As INCEDE became ICUS in 2001, I became a research staff of ICUS. With the expansion of research areas at ICUS to urban safety, our team and activities were expanded. That expanded the horizon for me to work with some of the great researchers. In 2003, I was promoted to the position of Associate Professor. Promotion comes with additional loads; it was not exceptional for me. I was immediately assigned with the responsibility of coordinating the activities of the Regional Network Office of Urban Safety (RNUS) at AIT, which was newly established for regional collaboration of ICUS in areas of urban safety. For this task, I joined the School of Civil Engineering of AIT as a visiting Associate Professor. Coordinating a new office was challenging, but with the wonderful support of my colleagues from ICUS and AIT, I was successful in establishing and expanding the activities of RNUS and initiating several collaborative research projects. I thank Prof. Taketo Uomoto, the ICUS Director for rendering his unconditional support to me in my initiatives at RNUS.

The ten years of my career at the University of Tokyo is the most satisfactory and enriching experience of my professional life so far. I take this opportunity to thank all my past and present colleagues at the University of Tokyo for their kind support to me during my stay.

I moved to Australia in July 2005 to join the School of Applied Sciences and Engineering (SASE) of the Monash University as a faculty member. At SASE, I am involved with teaching and research in areas of water engineering and science. SASE is located in the modern and picturesque Gippsland campus of the Monash University in the township of Churchill, Victoria. The faculty of SASE consists of a team of scientists and engineers of various disciplines focusing on teaching and research in multi-disciplinary areas of science and engineering. SASE offers degrees and double-degrees in several fields of science by on-campus and off-campus modes. The school also offers a range of honours, postgraduate and research programs in science and engineering. One of the new programs at SASE is the Bachelor of Civil and Environmental Engineering established to meet the increasing demand of an integrated program of civil and environmental engineering for sustainable development in the 21st Century. The program provides broad-based capabilities for the design, implementation and management of civil engineering solutions in an environmental context. If you are more interested to know about SASE or the Monash University, please feel free to contact me any time by e-mail.

Finally, I extend my best wishes to all the colleagues at ICUS and RNUS for their continued research endeavor to enhance the safety and security of Asian cities. I am looking forward to collaborating with ICUS, RNUS and its network members from my new office in areas of water related urban disaster risk management.

(by Dushmanta Dutta, Lecturer, School of Applied Sciences Engineering, Monash University dushmanta.dutta@sci.monash.edu.au)

Gippsland campus, Monash University, Churchill, Victria, Austraria

Dr. Dushmanta Dutta

International Collaboration Between Asia-Pacific Space Agencies for Disaster Reduction

A technical workshop of Asia-Pacific Regional Space Agency Forum (APRSAF) titled "Disaster Reduction through Effective Space Technology Utilization in the Asia Pacific Region" was held at Malaysian Centre for Remote Sensing (MACRES), Kuala Lumpur from May 24 to May 26, 2005. APRSAF was established jointly by Japan Aerospace Exploration Agency (JAXA) and local space agencies of the region. APRSAF12 will be held in Kitakyushu-city, Japan in October, 2005.

The main themes of APRSAF can be divided into two categories: (1) activities of local space agencies, and (2) international cooperation for disaster reduction. As an example of local activities, the National Institute of Aeronautics and Space (LAPAN), Indonesia reported about the remote sensing applications in disaster management in Indonesia. It has been trying to improve the capability for early detection, warning and response to natural disasters, especially "Weather/climate anomalies", "Droughts", "Floods" and "Land/Forest fires". LAPAN has developed several systems such as "Potential flooded area monitoring system", "Fire danger rating system" and "Smoke dispersion modeling". Most of the systems combine satellite data such as MODIS (spatial resolution 250m, 500m and 1km) and NOAA (spatial resolution 1.1km) images, and meteorological data. LAPAN also pointed out current problems, e.g. lack of expertise for interpretation of the results, shortage of supporting field data for validation, and lack of models and algorithms for the disaster specific. LAPAN informed that it needs technical trainings on modeling and database creation for remote sensing/Geographic Information System (GIS), and regular update of database and national/international collaboration.

From the viewpoint of an international cooperation, capacity building and development of data sharing network were mainly discussed. JAXA has been supporting activities for capacity building of remote sensing and GIS through Geoinformatics Center, Asian Institute of Technology (AIT). From the current fiscal year, these activities are being implemented through "Mini-project" as per local needs. Trainees are expected to acquire the knowledge and skills through mini-projects conducted by themselves under the supervision of AIT. Data sharing is also one of the most important issues in terms of disaster reduction. "AIT/JAXA Digital Asia" project plans to develop a data network. It will require "nodes" in different countries to distribute the necessary data efficiently. The project plans to set up a data server at each node, and the server will be managed by local space agencies. Many countries expressed their willingness to participate, and installation of servers and training of personnel are in progress. Such international collaboration is regarded as an indispensable activity for the utilization of remote sensing data for disaster reduction.

Opening session of APRSAF

(by J. Susaki)

Current Status and Countermeasures for Asbestos Problem

Professor Motoyasu Kamata of The University of Tokyo, one of the best experts in asbestos removal techniques in Japan, was interviewed about the state of asbestos related problems in Japan and the measures being taken to deal with them.

Recently, the damage caused by asbestos has been in the news in Japan. Asbestos is the general term used for fibrous inorganic silicate minerals belonging to the serpentine and amphibole groups with a length over 5μm and a thickness less than 3μm. People tend to mistakenly believe that asbestos itself is a toxin, but the substance itself exists in nature and is not toxic. However, it is extremely fine and can get lodged in the lung alveoli and other organs, and it is said to be the cause of mesothelioma. Fibers over a certain size are naturally expelled from the body, but those as fine as asbestos accumulate within the body and lead to problems. Also, the latency period of asbestos is extremely long (sometimes over 30 years) so it is often difficult to prove a causal relationship with the illness. Asbestos is highly fire-resistant and has excellent heat insulating properties. Moreover, it is inexpensive. These have led to its extensive use; it has been used in construction materials such as fireproofing boards and roofing materials, ceiling spray, water pipes, and so on. In line with increasing awareness of the damage caused by asbestos, use of spraying asbestos was banned by amendments to the Industrial Safety and Health Law's Ordinance on the Prevention of the Hazards due to Specified Chemical Substances in 1975. It is said that if asbestos is solidified and is not dispersed, it is not harmful, but it is inevitable that a certain amount is released during repair works and demolition. Therefore, construction works must be conducted with full attention so that the asbestos is not dispersed into the air. At present, the Building Center of Japan is conducting inspection and certification (previously these inspections and certifications were conducted with approval from the Minister of Construction, but now they are done voluntarily by the Building Center) of methods that care about prevention of asbestos contamination and asbestos removal. However, there are presently no punitive provisions and application of these methods is still largely up to the goodwill of the developer and construction companies. A legal solution is required for this matter as soon as possible.

Spray asbestos (Asbestos center, Japan)

(by R. Ooka)

The 9th ICUS Open Lecture

The 9th ICUS Open Lecture was held at Convention Hall of IIS in the afternoon of September 29, 2005. The title of the lecture was "Safety Problems of Structures in Japan." About 100 people attended the lecture. There were three speakers, Dr. Tadayoshi Ishibashi, Dr. Makoto Kaneuji and Prof. Terunobu Fujimori.

The topics were as follows:

1. Dr. Tadayoshi Ishibashi, Associate Director, East Japan Railway Company (JR East): "Seismic Damage and Retrofitting of Railway Structures".
2. Dr. Makoto Kaneuji, Renewal Group Leader, Technology Development Department, Kajima Corporation: "Asset Management and Safety of Motorway Bridges".
3. Prof. Terunobu Fujimori, Professor, Institute of Industrial Science, The University of Tokyo: "Construction Safety in Japan from a Historical Viewpoint ".

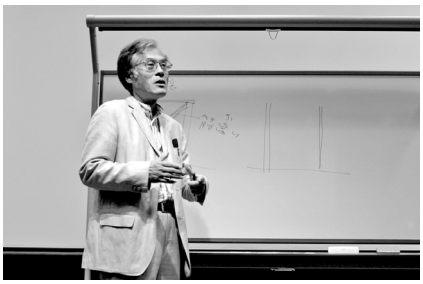
Participants of the Open Lecture

All the three presentations were very new and impressive to all the participants. Dr. T. Ishibashi explained the details of the damage to railway concrete structures caused by Niigata-Chuetsu earthquake happened on October 23, 2004 (see Newsletter Special Issue, Jan. 2005). Dr. M. Kaneuji explained how the asset management of motorways are now being done in Japan. Prof. T. Fujimori explained the changes of design concept for buildings since 14th century till now. Finally, Professor K. Meguro of ICUS made concluding remarks on this Open Lecture and expressed gratitude to the participants.

(by T. Uomoto)

Dr. T. Ishibashi

Dr. M. Kaneuji



Prof. T. Fujimori

CHAIN OF SURVIVAL AND AED

Coordinating with Tokyo Emergency Association, Tokyo Fire Department, ICUS conducted a training seminar on Emergency procedures and the use of AED (Automated External Defibrillator). The tutors explained that during emergency response, the most important things to keep in mind are 'speed' and 'appropriateness' of the response. In these cases, Sudden cardiac arrest (SCA) has been found to be one of the leading causes of death, can kill up to 50% of the patients within the first 3 minutes (M. Cara, 1981). The cardiac 'Chain of Survival' is an important methodology for increasing the victim's chance of survival. It consists of 4 main steps as follows.

(i) Early access to care (Call 119 or other Emergency No.)

(ii) First Aid and Heart Massage (cardiopulmonary resuscitation, CPR)

(iii) Early Defibrillation – use of AED

(iv) Move quickly to Hospital. The tutors explained, demonstrated and got the participants to practice these procedures.

An AED is a device about the size of a laptop computer that analyzes the heart's rhythm for any abnormalities and, if necessary, directs the rescuer to deliver an electrical shock to the victim. This shock, called defibrillation, may help the heart to re-establish an effective rhythm of its own. AED is easy to operate as it uses voice prompts to instruct the rescuer on when to apply the shocks. It was really a good experience to have this training in CPR and AED skills. There were about 20 participants and we thank ICUS for organising it.

(by K. S. Rajan, Researcher, Shibasaki Lab. IIS)

Training of cardiac massage

救 命 技 能 認 定 証

普通救命講習を修了し、救命技能を有することを認定します。

氏 名

認 定 番 号

東京消防庁 消 防 総 監

認 定 年月日 平成17年 7月 27日

Certification of Emergency procedure training

Receiving a Doctor's Degree from the University of Tokyo

The recent incidences of damaging earthquakes have clearly revealed that retrofitting of low earthquake-resistant houses is the key issue for earthquake disaster reduction. However, the homeowners possess various reasons not to retrofit their houses and retrofitting are not carried out widely especially for private houses. Ms. Miho YOSHIMURA was awarded Ph.D degree for her study on new strategies for providing incentives for retrofitting vulnerable houses. Based on the analysis on current problems through questionnaire survey for

homeowners, a new system for providing incentives for retrofitting was proposed. Its main concept is that the government guarantees a portion of the housing repair and reconstruction expenses if retrofitting is implemented by the owner following the guidelines before the earthquake and in spite of this, the structure is damaged. Its effectiveness was verified by simulation. In several earthquake prone countries.

(by K. Meguro)

ICUS New Staff

We are glad to introduce our new colleague Dr. Hisashi Kanada, who joined ICUS as Project Research Associate from August 1, 2005. He received D. Eng. Degree from the University of Tokyo in September 2004.

His research interests include non-destructive inspection using spectros-copy, and he received an incentive award of 2nd invention contest at Institute of Industrial Science, the University of Tokyo in 2004.

A remote non-destructive method that can detect deterioration factors such as carbonation, chloride content or sulfuric acid attack would be an out-standing innovation in inspection methodologies. In his research, remote non-destructive material detection of concrete was attempted using near-infrared spectroscopy. This enables us to obtain chemical information of concrete by just sensing reflected nearinfrared rays from the measuring plane.

Dr. Hisashi Kanada

In the case of civil infrastructures, the inspection area is large, and environmental condition or location may be tough; therefore, it often requires high labor and cost in order to inspect concrete structures. Near-infrared spectral imaging system was also introduced to scan distribution or concentration of deleterious substances two-dimensionally. This method would prove to be a very effective technique for inspectors.

Recently, he is involved in developing a new remote and non-destructive testing method for concrete structures. Results of research are expected to be applied for field inspection.

(by T. Uomoto)

ICUS Activities

- *First student seminar was held and 25 students in ICUS reported current research results (Jul 20).*
- *Prof. Uomoto attended ConMat'05 Third International Conference on Construction Materials: Performance, Innovations and Structural Implications, in Vancouver (Aug 21-26), Korea-Japan Joint Workshop on the Assessment of Infrastructures at Cheju (Sep 3-5) and 2nd ICI-Asian Conference on Ecstasy in Concrete in Mumbai.*
- *Prof. Meguro visited Columbo, Sri Lanka for a workshop on '2004 Tsunami Impact' (Sep 15-19).*
- *Dr. Ooka attended The Sixth Asia-Pacific Conference on Wind Engineering (APCWE-VI) in Seoul (Sep 11-14) and 8th International Symposium on Fire Safety Science (IAFSS) at Peking (Sep 18-23).*
- *Dr. Oki visited Visiting TMD, RID, Phitsanulok site in Thailand for meeting (Jul 24-27) and attended the Hydrology 2020 Meeting in Stockholm (Aug 20-25).*
- *Dr. Kato stayed at Asian Institute of Technology for his research work at RNUS and education (May 24 - Jul 21, Aug 1 - Sep 8).*

Awards

- *Prof. Uomoto received the Merit Award from Japan Concrete Institute.*
- *Dr. Ooka won the Excellent Presentation Award (Poster) for 'Development of a Three Dimensional Human Thermal Model Accounting for Direction of Blood Flow' at the 3rd International Conference on Human-Environment System.*
- *Mr. Masanori Ito, researcher of Prof. Uomoto's Laboratory, won the Incentive Award for the paper of Annual Conference of the Japan Concrete Institute.*
- *Dr. Elkholy Said Abd-elffatah Said, a researcher of Prof. Meguro's Laboratory, won the Excellence Presentation Award at the 7th International Sum-mer Symposium of Japan Society of Civil Engineering.*

Editor's Note

A giant earthquake hit Pakistan on October 8, 2005. An article of newspaper Bangkok Post on November 14, 2005 tells that more than 86,000 people are known to have died in the earthquake.

World Food Programme (WFP) requested rich nations for funds to deliver vital aid to the damaged areas. But delivery is facing severe logistic problems. Because roads to mountain villages are crumpled, covered with landslides or have already been swept away, helicopters cannot reach the destinations to deliver food and shelter. People are still carrying on their backs. A series of news remind us of severity caused by disasters.

After about a year of the Indian Ocean Tsunami of December 26, 2004, a five-day international workshop hosted by Asian Disaster Preparedness Centre (ADPC) was held in Bangkok from October 2. Most of the participants, about 30 participants from 10 Asian countries, were senior health professionals and people involved in policy formulation. The agenda focused on the lessons from tsunami, e.g. disaster preparedness and management procedures for dealing with the dead and missing.

As I have been in Bangkok and working at Asian Institute of Technology (AIT), located at a suburb of Bangkok, for these nine months, I had many chances to discuss tsunami with Thais including AIT staff as well as the public. The discussions showed that nowadays many Thais know what tsunami is and regard it as a terrible disaster.

A TV news program reported that there was a drill of an evacuation for tsunami in Phuket island, Thailand. Many people were running after an emergency notice was announced, and some of them were smiling while walking.

We Japanese have experienced such drills many times since childhood. The drill conducted in Thailand, however, may be recognized as a milestone from a viewpoint of disaster education. As Prof. Meguro has repeatedly insisted, disaster education is quite important to improve people's ability to imagine disasters' effects and make proper decisions after a disaster happens. As a result of tsunami aftermath, it seems that the public is ready to be proactive for disaster preparedness and mitigation. I strongly hope that the concept of "preparedness" for disasters will be recognized widely not only in Thailand but also in other Asian countries.

(by J. Susaki)

International Center for Urban Safety Engineering, ICUS
Institute of Industrial Science, The University of Tokyo
4-6-1 Komaba, Meguro-ku, Tokyo 153-8505, Japan
Tel: (+81-3)5452-6472, Fax: (+81-3)5452-6476
E-mail:icus@iis.u-tokyo.ac.jp
http://icus.iis.u-tokyo.ac.jp/

PRINTED MATTER

International Center for Urban Safety Engineering