USMCA2013 PROGRAM

8 - 11 October, 2013

Hilton Hanoi Hotel & NUCE Campus, HANOI, VIETNAM

Technical visits & si	ght seeing - pre conference day		
9:00	Visit THANG LONG ROYAL CITADEL		
10:30	Visit Van Mieu - Imperial Academy - Vietnam's first university		
12:00	Lunch		
13:00	Technicial Visit: Nhat Tan Bridge		
18:00	Registration at Hilton Hanoi Hotel		
19:30	Welcome dinner		
OAY 1: October 9, 2	013		
8:00 - 12:00			
OCATION:	Hilton Hanoi Hotel, Ballroom	MC: Dr. Nguyen Hoang Giang	
8:00	REGISTRATION		
8:30	WELCOME Speech (Dr. Le Van Thanh - President of National University of Civil Engineering)		
8:35	WELCOME Speech (Prof. Meguro - Director of ICUS, The University of Tokyo)		
8:40	Opening Remark (Mr. Hideo Suzuki, Deputy Chief of Mission of Japan Embassy in Vietnam)		
8:45	Opening Remark (Dr. Nguyen Thanh Nghi - Deputy Minister of Construction)		
8:50	Opening Remark (Mr OKIURA Fumihiko - Senior Representative of JICA Vietnam)		
8:55-9:25	Keynote speaker 1: Dr. Hiroshi DOBASHI - President, Shutoko Engineering Co., Ltd, Japan		
	Advanced technologies for safety of underground expressway network in Tokyo metropolitan area	1	
9:25 -10:15	Group photo-COFFEE BREAK & EXHIBITIONS		
10:15 - 10:45	Keynote speaker 2: Prof. Phan Quang Minh - Dean of Building & Industrial Engineering Departn	nent - NUCE	
	The structural design trend of supertall buildings in Vietnam		
10:45 - 11:15	Keynote speaker: Delta Corporation:		
	Construction technologies for royal city complex		
11:15-11:30	Keynote speaker: JFE Steel Corporation		
	Advanced steel technologies for infrastructure		
11:30-11:40	Sponsor awards		
11:40-13:00	LUNCH		
	13:00 - 17:30	13:00 - 17:30	
	LECTURE HALL 1	LECTURE HALL 2	

Session	n 1 - A (Chairmen: Dr. Takaaki Kato / Dr. Dinh Van T	huat)	Session 2 - B (Chairmen:Prof. Reiko Kuwano / Dr. Nguyen Hoang Giang)							
No	TITLE	Authors	No	TITLE	Authors					
79	method for urban fire according to fire spread	YoungJin KWON BongChan KIM InHyuk Goo	154		Hoang Ngoc Minh Hanoi Metropolitian Railway management board					
4		Adnan ENSHASSI Mohammed ABU ZAITER	155	Concrete pouring of pile caps for 52 hours in a row Lotte bulding Hanoi	Cha Han II - Lotte E&C					

Hiroyuki SHINSAI, Roles of self-help and mutual and local Midori YAMAGUCHI, Structure maintenance methods and disaster Shinji KONISHI, government aid in community-based disaster Chiaki TAKEKUMA measures of Tokyo Metro KouichiKAWAKAMI, mitigation Yoko TOWATARI Yoshihiko MUTOU Sustainable safety and security in private rental NGUYEN Thi Mai For the safety and the sustainable development of 137 Ngoc Tran NGUYEN properties for students in Hanoi: the tenants' PHUNG Anh Quan Ho Chi Minh City NGUYEN The Quan perspective Shinji KONISHI Tsunami evacuation facilities in the damaged Osamu MURAO History and recent trend of Tokyo Metro's tunnel Satoshi ITO 25 areas due to the Great East Japan Earthquake: construction technology Takashi HIRANO before and after Kazufumi NOYAKI A new parking concept for a living quarter in High-raised urban expressway to mitigate Yukitake SHIOI Quang Minh NGUYEN 13:00-15:00 congested heavy traffic Hiroshi KUDOH

43	Land use of super levees along the Arakawa River in the low-lying areas of Tokyo	Hitoshi NAKAMURAI Takaaki KATO	78	Application of water screen fire prevention systems	Hideaki KUWANA Reiko AMANO Takuzo IDA Osamu IMAZEKI Toshihide TSUJI
X9 I	Anomaly detection of seasonal and annual environment changes of the world	Haruo SAWADA	107	Evaluation of applicability of steel pipe piles in Vietnam	Shunsuke USAMI Dinh Van THUAT Yasushi WAKIYA Eiji KATAYAMA Dinh Van HIEP
126	Analysis on urban fire hazard and risk zones, assessment mapping in Bangkok, Thailand	Praopanitnan CHAIYASANG Nitin Kumar TRIPATHI	147	Contemporary timber building in Japan, 2013	Mikio KOSHIHARA
135	Ground anchors for revetment	Haruka SAITO	8		Thanh Long NGO, Van Gon BUI, Dinh Sung PHAM, Quoc Dung NGUYEN, Chi-Chen TSAI

15:00-15:30

Session 3-C (Chairmen: Dr. Taketo Uomoto / Dr. Nguyen Hung Phong)

COFFEE BREAK & EXHIBITIONS

Session 4-D (Chairmen: Prof. Haruo Sawada / Prof. Pham Quang Hung)

139	Recycled glass concrete beams under bending and shear	Kiang Hwee TAN	56	Savar building tragedy in Bangladesh: Way forward	Mehedi Ahmed ANSARY Naima RAHMAN	
44	Strength of beam-column joint in soft-first story RC buildings	Toshikatsu ICHINOSE Sefatullah HALIM Susumu TAKAHASHI Masaomi TESHIGAWARA Takashi KAMIYA Hiroshi FUKUYAMA	81	Secular changes in people's consciousness regarding earthquake early warning -Based on national survey(2009-2012) in Japan	Miho OHARA Atsushi TANAKA	
112	Parametric study for displacement based analysis of unreinforced brick masonry walls subjected to lateral loads	Archanaa DONGRE Pradeep K RAMANCHARLA	124	Prediction on sediment related disaster through the satellite rainfall data	YoshikazuSHIMIZU Toshio OKAZUMI2 Tadanori ISHIZUKA	
143	A study of the influence of the bending radius of reinforcement bar on the failure mechanism of L-shaped beam column joint by 3D discrete model	Kohei NAGAI Liyanto EDDY Koichira IKUTA		Effect of foreign government advisories on foreigners' post-disaster action after the 2011 Great East Japan Earthquake	Akiyuki KAWASAKI Michael HENRY Ichigaki TAKIGAWA Kimiro MEGURO	
84	An experimental investigation of a self-oscillating multi-heat pipe using pure water and alumina nanofluid, respectively	Dao Danh Tung Shuichi Torii	5	Further modification and working stress design using K-stiffness method on soft and hard foundations	Sowarapan DUANGKHAE Dennes T. BERGADO Pankaj BARAL Barry T. OCAY	
129	Earthquake behavior of reinforced concrete framed buildings on hill slopes	Ajay K SREERAMA Pradeep K RAMANCHARLA	42	Survey of sub-surface cavities in the liquefied ground caused by the Great East Japan Earthquake	Ryoko SERA Yutaka KOIKE Haruto NAKAMURA Reiko KUWANO Jiro KUWANO	
102	Using surface roughness as a performance parameter for RC wastewater pipes	Rahul YADAV Himanshu SINGH Sunil SINHA Sudhir MISRA	41	Model tests simulating sub-surface cavities formed in the liquefied ground	Reiko KUWANO Jiro KUWANO Shinpei TAIRA Mari SATO Ryoko SERA Yutaka KOIKE	
109	Capacity factors for implementing urban infrastructure projects in India	Yehyun AN Ralph HALL	132	Climate change effects in Chindwin River basin, Myanmar	Win Win ZIN Khin Than YU	
120	Using GFRP for repair and rehabilitation of RC frames	AMARENDRA Kunwar K BAJPAI Sudhir MISRA Durgesh C RAI	46	Seismic stability of reinforced soil walls in the 2011 Tohoku Earthquake	Jiro KUWANO Yoshihisa MIYATA Junichi KOSEKI	
			152	Ideal regional disaster management plan based on the experience from the 2011 Great East Japan Earthquake	Kimiro MEGURO	
		BANQUET & Traditional	Music	Performance- 18:00 - 22:00		

15:30-17:30

DAY 2: October 10, 2013 at Campus of National University of Civil Engineering LOCATION: **Lecture Hall, National University of Civil Engineering** Library building: 2nd floor Environmental Inst: 2nd floor G3 building 1st floor Session 5-E1 (Prof. Nguyen Viet Anh / Prof. Sudhir Misra) Session 7-G1 (Prof. Mehedi Ahmed Ansary / Prof. Do Huu Thanh) Session 6-F1 (Prof. Jiro Kuwano / Dr. Le Quang Hanh) Nguyen Chau LAN Information collection and vulnerability of Michael HENRY, Response characteristics of R/C buildings Ho CHOI Scale effects on the shear strength of Toru INUI Akiyuki KAWASAKI, 74 considering impulsive force of tsunami drifting foreign students during the 2011 Tohoku Kazuto MATSUKAWA waste in coastal landfill sites Kazuki IKEDA Earthquake and 2011 Thai Flood Kimiro MEGURO Yoshiaki NAKANO TakeshiKATSUMI Triaxial tests for elastic wave Risks from in-city construction works to NGUYEN Duy Cuong Laxmi Prasad SUWAL Yusuke ODA NIOM analysis of vertical array records observed measurement with associated matric Reiko KUWANO Hidenori MOGI urban inhabitants' safety in Hanoi: the city MA Xuan Minh 16 suction on the unsaturated fine content in RC structure buildings Takeshi SATO Hideji KAWAKAMI **NGUYEN The Quan** residents' perspective sandv soil Chunri QUAN Pham Thi Hong Increasing community awareness of Residual seismic capacity evaluation of RC frame Ho CHOI Effect of permeability of dam body and Thi Dieu Chinh LUU earthquake risk through children education: Pennung Warnitchai with weak-beams based on energy absorption Noriyuki TAKAHASHI foundation on free surface A case study of Dien Bien City in Vietnam Akiyuki Kawasaki capacity Yoshiaki NAKANO Kazuto MATSUKAWA Tomoya MATSUMOTO Yoshiaki OKUI Dung Anh NGUYEN Public housing after hurricane: Urban Tho TRAN Experimental application of biogrout to Tsubasa Sasaki Low temperature behavior and modeling of renewal or removal? The case study of Shannon VAN ZANDT Md. Shafquat HASAN sand with fines Reiko Kuwano High damping rubber bearings Kaho TAKAHASHI Beaumont and Galveston, Texas, U.S.A. Walter G. PEACOCK Hiroshi MITAMURA Takashi IMAI Flood adaptive cities towards climate change The structural performance of traditional frames Hiromi SATO The deformation of flexible pipe buried in Ngoc Duyen NGUYEN 9:00-10:30 adaption and urban development in Mekong Thu Trang LE Mikio KOSHIHARA with through columns about townhouses in soil with different degree of compaction Reiko KUWANO Tatsuya MIYAKE Analysis on influencing factors of community participation in disaster countermeasures Maria Bernadet Karina regarding land subsidence and climate Mari SATO **luko TSUWA** Triaxial test for the evaluation of internal Modeling and earthquake response analysis of Dewi 61 Reiko KUWANO Mikio KOSHIHARA change case study: North Jakarta (Indonesia) erosion traditional timber frames including Kumimono Takaaki KATO and Shinkoiwa Community, Katsushika City, Tokyo (Japan) Thuy Diep DUONG Adnan Mahmood DAR Optimization of PP-band mesh connectivity for Tomofumi IKENAGA **Hung Quang PHAM** Saleem M. UMAIR Assessment of multi-hazard risk in mega A study of bored pile bearing capacities at cost and time effectiveness in seismic cities in Japan Miho OHARA some locations in Hanoi, Vietnam Hieu Duc KIM Muneyoshi NUMADA retrofitting of masonry structures Kimiro MEGURO Lam Thai GIANG A technique of image processing analysis Development of an innovative stormwater Monitoring system for Nguyen Van Troi -Tran Duong Du Bui recommended for research of laterally **Khoa Dang Pham** NGUYEN Phuong Duy management framework toward building Thi Ly stay cable bridge during construction and Kieu Duy Tran TRAN Minh Phuong loaded pile using a system of X-ray CT Jun Otani cities resilient to climate change in Vietnam for service stage Thanh Ngoc Tong scanner Tung Son NGUYEN Asessment of urbanization impact to Assessment of potential greenhouse gas Practical evaluation method of collapse limit Kazuto MATSUKAWA temperature, rainfall and flooding emission of domestic solid waste treatment Minh Giang HOANG Vu Minh Cat displacement based on seismic damage of Masaki MAEDA situation of Hanoi city taken into account structural members in Hanoi, Vietnam climate change COFFEE BREAK 10:30-10:45 Session 5-E2 (Dr. Miho Ohara / Dr. Dinh Van Hiep) Session 7- G2 (Prof. Mikio Koshihara / Dr. Dao Danh Tung) Session 6-F2 (Prof. Tan Kiang Hwee / Dr. Tran. T. Viet Nga)

Optimisation of indoor environmental quality Study on carbonation and pore structure Ryosuke HIRAI Nguyen Cong Thang Ultra high performance concrete using a Hikaru ISOZAKI combination of silicafume and limestone in and energy consumption within urban office Tran Ngoc Quang of cementitous materials exposed to 104 Nguyen Van Tuan Shingo ASAMOTO Vietnam Pham Huu Hanh buildings supercritical CO2 A basic study on future strategy for effective Effect of the application of surface Analytical and experimental study for seismic Niwat APICHARTBUTRA Nozomu SOMEYA disaster information dissemination: Case penetrations on the mass transport design of a typical bridge pier according to Pham Hoang KIEN Miho OHARA Yoshitaka KATO study in Thailand properties of concrete Vietnamese earthquake design code

10	:4	5-	1	1	:2	5
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114		Muneyoshi NUMADA Kimiro MEGURO	34	Influence of coexistent ions in seawater on the chloride permeability of concrete	Toshiya CHIBA Katsuya MITA Yoshitaka KATO	122	Influence of climate change to loads and actions to buildings	NGUYEN Vo Thong
15:	Planning tool for urban sustainable development management in Vietnam cities	Nguyen Thi Thanh MAI	35	Performance of crack self-healing concrete by development of semicapsulation technique for functional effective ingredients	Vu Viet Hung Toshiharu Kishi Tae-Ho Ahn	141	Test methods for evaluation of sulfate resistance of limestone powder replacing cement mortars	Ittiporn SIRISAWAT Warangkana SAENGSOY Lalita BAINGAM Pitisan KRAMMART Somnuk TANGTERMSIRIKUL

11:30 - 12: 00 Campus tour

12:00 - 13:30		11.50 - 12. 00 Campus tour			LUNCH					
		Library building: 2nd flo			Environmental Inst: 2n			G3 building 1st floor		
Ī		Session 5-E3 (Dr. Kohei Nagai / Prof. Ph	nam Thuy Loan)		Session 8 (Dr. Akiyuki Kawasaki /	Dr. Win Win Zin)		Session 9 (Dr. Takaaki Kato / Dr. Pham	Hoang KIEN)	
	26		Anh Nguyet DANG Akiyuki KAWASAKI	65	Hanoi towards 2030 - Substance flow analysis supporting the planning process	Viet Anh NGUYEN Jan-Olof DRANGERT Manh Khai NGUYEN Thi Ha NGUYEN Hans Bertil WITTGREN Celeste ZIMMERMANN	142	Crack identification in frame structures by using the wavelet analysis of mode shapes	TranVan Lien Trinh Anh Hao	
	30	china's growing civil society for disaster	Xiaoge XU Koide OSAMU Takaaki KATO	11	by anammox process using different	TRAN Thi Hien Hoa, LUONG Ngoc Khanh Kenji FURUKAWA	150	Mechanical behavior of high damping rubber bearings at low temperatures	Dung Anh NGUYEN Yoshiaki OKUI Md. Shafquat HASAN Hiroshi MITAMURA Takashi IMAI	
	45	Survey on current system for disseminating disaster early warning by cellphones in Japan	Takanori SAWARA Miho OHARA	21	Investigation of residential water end-use in urban areas of Hanoi	Huyen T.T. DANG Nga T.V. TRAN		landslide in Vietnam	Do Ngoc Trung Nobolu Fujii Seiichi Hujiwara Shinro Abe	
	49	Assessing recovery: existing practices and evaluation measures	Yasmin BHATTACHARYA Takaaki KATO	22		Ha D. TRAN Huyen T.T. DANG	53	Ultra rapid strength development in dry-mix shotcrete for emergency support and harsh mining conditions	Jean-Daniel LEMAY Marc JOLIN Richard GAGNÉ Benoît BISSONNETTE	
	54		Ayaka NISHIGUCHI Miho OHARA	3 6	countermeasure for enhancing traffic	Do Duy DINH Aya KOJIMA Hisashi KUBOTA		with complex arrangement of reinforcing bars	Liyanto EDDY Kohei NAGAI	
	58	considering street blockades- Case study of	Fei JIANG Miho OHARA	50	Some research on air quality of	O.Enkh-Uyanga P.Chimedtseren G.Solongo	66	Effects of crystalline admixture on compressive strength and shrinkage of concrete with pozzolanic materials.	Viet TRAN HUU Raktipong SAHAMITMONGKOL Somnuk TANGTERMSIRIKUL	
	Xh		LE Thi Hoai An PHUNG Anh Quan	71	Investigating future yield and adaptation measures in rice production under climate change scenarios in Quang Nam province, Vietnam		110		Yuto HARAGUCHI Michael HENRY Ivan Sandi DARMA Takafumi SUGIYAMA	
13:30-15:50	92	analyzing the pattern between the regional	Tomoko MATSUSHITA Muneyoshi NUMADA Kimiro MEGURO	27	bioreactor (AnMBR) for ecentralized municipal wastewater treatment in	T. T. V Nga Vu Duc Canh M. Kobayashi S. Wakahara	125	Introduction of CAESAR's research activity	Akiko HIROE Hidetaka HOMMA Yoshitomi KIMURA	

9	Proposed solutions to quality improvement and integrated operations of technical infrastructure systems for new urban areas in Vietnam	Ngoc Khoa HO Hong Hai TRAN Nguyen Van Phuong PHAM	99	HAN-Sense: a solution for traffic air pollution monitoring in Hanoi City using wireless sensor network	Quang Duc LE Phong Thanh BUI Thieu Nga PHAM Nguyet Thi THAI Thuy Duong LE Dang Hai HOANG Thorsten STRUFF	133	Performance of different sacrificial anode materials on corrosion protection of reinforcing steel	Pakawat SANCHAROEN Aris MAHASIRIPANA Somnuk TANGTERMSIRIKUL
10	Study on applicability of remote building damage assessment system for large-scale earthquake disasters - Focused on the photo upload system	Makoto FUJIU Miho OHARA Kimiro MEGURO	118	Towards sustainable transportation through introduction of eco-drive management system for vehicle fuel efficiency	Dinh Van HIEP Manabu OHNO Yosui SEKI	134	Investigation on performance of concrete and mortar using active compound powder	Parnthep JULNIPITAWONG Chalermchai WANICHLAMLERT
10	Safe and sustainable energy use in tall residential buildings in Hanoi: Practices and orientation	PHAM Thuy An NGUYEN The Quan	98	Compressive strength of ordinary and bridge high performance steel plates: Proposal of nominal design value and corresponding partial safety factor	Viet Duc DANG Yoshiaki OKUI	97	A simple method to determine the unsaturated soil shear strength with respect to a wide range of matric suction	Hoang Viet NGUYEN Thi Dieu Chinh LUU
13	Development of simulation exercise for emergency response headquarters focused on management by objectives	Shinya KONDO	23	Hybrid technology of up-flow anaerobic filter and membrane bio-reactor for recovery energy from rich organic waste stream	Thu Hang DUONG Duc Ha TRAN Hoai Son TRAN Thi Viet Nga TRAN Bich Ngoc HOANG Thuy Lien NGUYEN	111	Large prefabricated pile foundation, a solution for high-rise buildings in Hanoi	Bao Viet NGUYEN
4	Comparing benefits of hydropower development in two boundary systems in the Mekong	Seemanta Sharma Bhagabati	138	The risk assessment by the AHP method and characteristics of the landslides in Sa Pa ,Lao Cai province northern Vietnam.	Takami KANNO Hiroyuki YOSHIMATSU Do Ngoc Trung Nguyen Quoc Hung	3	Sustainability in the concrete industry for construction of cega cities	Kiên TONG Thành LE Lanh PHAM
8	Optimization the use of rice husk ash to increase bearing capacity of difficult soil foundation for low cost housing in Semarang's urban areas.	Silvia Fransisca Herina				10	Slump control of fresh concrete by re-dosing polycarboxylic based superplasticizer and comparison with naphthalene based	Ram Hari DHAKAL Akarawit NARONGKUL Chalermchai WANICHLAMLERT Pitisan KRAMMART

15:50-16:00 COFFEE BREAK
G3: Hall : 2nd floor Chairman: Dr. Nguyen Hoang Giang

16:00-16:30 Keynote speaker 3: Prof. Taketo Uomoto - Chief Executive, Public Works Research Institute / Professor Emeritus, University of Tokyo

Utilization of unused and/or non-familiar materials for construction

16:30-17:00 Keynote Speaker 4: Prof. Nguyen Viet Anh - National University of Civil Engineering

Water management in Vietnamese cities: present status and vision to future

Keynote Speaker 5: Prof. Hiroshi Naito - Architect / Emeritus Professor, the University of Tokyo Sanriku Tsunami and reconstruction of cities

17:30-18:30 CLOSING CEREMONY AT G3 Hall

Young award ceremony

Announcement of USMCA 2014

NUCE's closing speech

ICUS's closing speech

Closing Banquet & Music

DAY 3: October 11, 2013 08:00 AM - 20:00 PM (Field trip)

17:00-17:30

LOCATION:

Hilton Hanoi Hotel's front door

8:00 Starting from Hilton Hanoi Hotel to Ha Long bay

12:00 Lunch on board in Ha Long bay and other technical activities

16:00 Return to Hanoi

20:00 Arrive Hiton Hanoi Hotel

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