



Moving Asia into the Future

FINAL PROGRAM

The 3rd Civil Engineering Conference in the Asian Region

August 16-19, 2004 Sheraton Grande Walkerhill, Seoul, Korea



Organized by
The Asian Civil Engineering Coordination Council (ACECC)

Technical Program

The 3rd
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Program at a glance

Time Hr Min	Aug. 16 (Mon)	Aug. 17 (Tue)	Aug. 18 (Wed)	Aug. 19 (Thu)	
08					
09	Executive Committee Meeting	Opening Ceremony	Special Lecture IV	Technical Visits Course 1 (08:30~) Course 2, 3 (08:00~)	
		Keynote Address	Coffee Break		
10		Coffee Break	Special Forum 1		Parallel Session
		Special Lecture I			Break
11		Special Lecture II	Parallel Session		
12		Lunch	Special Forum 2		*Lunch (Student Essays)
13	Special Lecture III				Parallel Session
14	Break				
15	Parallel Session				Coffee Break
16	Registration	Coffee Break	Special Lecture V		
		Parallel Session	Closing Ceremony		
17		**	Break		
18	Welcome Reception	Parallel Session	Gala Dinner		
19	Presidential Meeting	Special Forum 2 Reception			
20			Technical Committee Meeting		

*Student Essays will be presented during lunch time on Aug. 18.

**10 min. Break

Schedule in Detail

Time	Contents	Place
Aug. 16 (Mon)		
09:00 ~ 15:00	Executive Committee Meeting / Presidential Meeting	Rose Room (2F)
14:00 ~ 18:00	Registration	Mugunghwa Ballroom Foyer (1F)
17:30 ~ 19:00	Welcome Reception <i>Chair: Prof. Jun-Haeng HEO, Yonsei Univ., KSCE</i> Welcoming Address: Dr. Kwang-II KIM, Chair of ACECC	Vista Hall (B2)
19:00 ~ 21:00	Technical Committee Meeting (TC-1) Presidential Meeting (hosted by KSCE President)	Camellia (2F) Ondal (B1)
Aug. 17 (Tue)		
08:00 ~ 09:00	Registration	Mugunghwa Ballroom Foyer (1F)
09:00 ~ 09:35	Opening Ceremony <i>Chair: Dr. Hyoseop WOO, Secretary General of LOC</i> Declaration of the opening: Prof. Jungho SONU, Honorary Chair of LOC Opening Address: Dr. Sung-Wan HONG, Chair of LOC Welcoming Address: Dr. Kwang-II KIM, Chair of ACECC Introduction of Presidents of ACECC member societies Congratulatory Remarks by Minister, Ministry of Construction & Transportation, Korea	Vista Hall (B2)
09:35 ~ 10:10	Keynote Address <i>Chair: Mr. Paul MITCHELL, Immediate Past Chairman, Civil College of EA</i> Speaker: Dr. Myungja KIM, Congress Woman; Former Minister, Ministry of Environment, Korea <i>Title: Environmental Issues and Sustainable Development in Northeast Asia</i>	Vista Hall (B2)
10:10 ~ 10:30	Exhibition Opening Coffee Break	Mugunghwa Ballroom Foyer (1F) Mugunghwa Ballroom Foyer (1F) Vista Hall Foyer (B2)
10:30 ~ 11:10	Special Lecture I <i>Chair: Prof. Shigeru MORICHI, President of JSCE</i> Speaker: Prof. Yutaka TAKAHASI, Univ. of Tokyo, JSCE <i>Title: The Suggestion of the Civil Practical Education by 'The Civil Picture Book Series'</i>	Vista Hall (B2)
11:10 ~ 11:50	Special Lecture II <i>Chair: Dr. P. N. AVENTAJADO, President of PICE</i> Speaker: Mr. Manuel M. BONOAN, Immediate Past President, PICE <i>Title: Department of Public Works and Highways Manila, Philippines Medium-term Dpwh Infrastructure Development Plan CY 2005-2010</i>	Vista Hall (B2)
11:50 ~ 13:30	Lunch	Kayagum Hall (B1)
13:30 ~ 14:10	Special Lecture III <i>Chair: Prof. Jenn-Chuan CHERN, President of CICHE</i> Speaker: Dr. Sheng-Fong LIN, Minister, Ministry-of-State, Republic of China <i>Title: National Sustainable Development Action Plan of Taiwan</i>	Vista Hall (B2)
14:10 ~ 14:30	Break	
14:30 ~ 15:50	Parallel Sessions T1-a T2 T5-a T7-a T7-d T3-a Special Forum 2	Vista Hall 1 (B2) Vista Hall 2 (B2) Vista Hall 3 (B2) Mugunghwa Ballroom 3 (1F) Cosmos Room (3F) Camellia Room (2F) Art Room (4F)
15:50 ~ 16:10	Coffee Break	Mugunghwa Ballroom Foyer (1F) Vista Hall Foyer (B2)
16:10 ~ 17:10	Parallel Sessions T1-b T6-a T5-b T7-b T7-e T3-b Special Forum 2	Vista Hall 1 (B2) Vista Hall 2 (B2) Vista Hall 3 (B2) Mugunghwa Ballroom 3 (1F) Cosmos Room (3F) Camellia Room (2F) Art Room (4F)

Parallel Sessions by Track

Aug. 17 (Tue)

	14:30 ~ 15:50 (80 min.)	16:10 ~ 17:10 (60 min.)	17:20 ~ 18:20 (60 min.)
Vista Hall 1 (B2)	T1 - a	T1 - b	T1 - c
Vista Hall 2 (B2)	T2	T6 - a	T6 - b
Vista Hall 3 (B2)	T5 - a	T5 - b	T5 - c
Mugunghwa Ballroom 3 (1F)	T7 - a	T7 - b	T7 - c
Cosmos Room (3F)	T7 - d	T7 - e	
Camellia Room (2F)	T3 - a	T3 - b	Young Engineers Session 1
Rose Room (2F)			T7 - f
Art Room (4F)	Special Forum 2	Special Forum 2	Special Forum 2

- Track 1 : Infrastructure
- Track 2 : Human Resources
- Track 3 : Natural Disasters
- Track 4 : Professional Issues
- Track 5 : Project Management
- Track 6 : Contracting Practice

Aug. 18 (Wed)

10:00 ~ 11:00 (60 min.)	11:20 ~ 12:20 (60 min.)	13:50 ~ 15:10 (80 min.)
T1 - d	T1 - e	
T8 - a	T8 - b	
T5 - d	T9 - a	T1 - f
T7 - g	T7 - h	T8 - c
T7 - i	T7 - j	T9 - b
Special Forum 1	Special Forum 1	Young Engineers Session 2
		T4
		T10

- Track 7 : Research and Development
- Track 8 : Mega Projects
- Track 9 : Inter-regional Cooperation
- Track 10 : Future of Engineering
- Special Forum 1 : Great Mekong Sub-region (GMS)
- Special Forum 2 : New Trends in Construction Industry

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Oral Presentation

Track	Session	Date & Time	Chair	Co - Chair	Paper No.	Authors	Title				
Keynote Address		Aug. 17(09:30-10:10)	Paul MITCHELL		KA	Myungja KIM (KSCE)	Environmental Issues and Sustainable Development in Northeast Asia				
Special Lecture I		Aug. 17(10:30-11:10)	Shigeru MORICHI		SL1	Yutaka TAKAHASHI and Hideki OGATA (JSCE)	The Suggestion of the Civil Practical Education by 'The Civil Engineering Picture Book Series'				
Special Lecture II		Aug. 17(11:10-11:50)	P. N. AVENTAJADO		SL2	Manuel M. BONOAN (PICE)	Department of Public Works and Highways Manila, Philippines Medium-term Dpwh Infrastructure Development Plan CY 2005-2010				
Special Lecture III		Aug. 17(13:30-14:10)	Jenn-Chuan CHERN		SL3	Sheng-Fong LIN (CICHE)	National Sustainable Development Action Plan of Taiwan				
Special Lecture IV		Aug. 18(09:00-09:40)	Liem Sy PHAM		SL4	Thai Quang NGUYEN (VIFCEA)	National Development Plan in Vietnam: Process and Perspectives				
Special Lecture V		Aug. 18(15:30-16:10)	Patricia GALLOWAY		SL5	Tomasz ARCISZEWSKI (ASCE)	Information Technology in the Context of Innovation and Computing in Civil Engineering				
Track 1	a	Aug. 17(14:30-15:50)	Kris R. NIELSEN	Sang-Hyo KIM	T1-1	Liem Sy PHAM (VIFCEA)	Infrastructure Development for Poverty Reduction in Vietnam				
					T1-2	Osamu SHINOHARA (JSCE)	Bridge Design Stream in Japan - from the Beauty and Landscape Points of View -				
					T1-3	Brian O' DONNELL (EA)	Sustainability - Practical Examples				
					T1-4	Mooyoung HAN and Sangrae KIM (KSCE)	Toward a Water Independent City through Rainwater Harvesting				
	b	Aug. 17 (16:10-17:10)	Patrick J. NATALE	Myung-Pil SHIM	T1-5	Kohji MICHIOKU and Tohru KANDA (JSCE)	Contamination of Reservoir Hypolimnion Caused by Chemically Stratified Flow				
					T1-6	Sidharth BHAT (ASCE)	Infrastructure Development				
					T1-7	Ethan (Rong-Yau) HUANG (CICHE)	Developments of Sustainable Construction in Taiwan				
	c	Aug. 17(17:20-18:20)	Patrick J. NATALE	Myung-Pil SHIM	T1-8	Chien-Yuan LIN and Wan-Kai LEE (CICHE)	A Comparative Analysis on the Integration of National Spatial Planning and Infrastructure Development				
					T1-9	Peter H. STEWART (EA)	Award Winnig Woronora Bridge				
					T1-10	Mitsuaki IZUMI (JSCE)	Environmental Problems in the Construction Industry				
	d	Aug. 18(10:00-11:00)	Tetsuya HANAMURA	Jong-Sung SIM	T1-11	Hidehiro KATSUI (JSCE)	Restoration of Tidal Flats Using Dredged Eutrophic Mud				
					T1-12	Chao-Heng TSENG and Ban-Jwu SHIH (CICHE)	Sustainable Development Oriented Practices in Civil Engineering				
					T1-13	Taketo UOMOTO and Misra SUDHIR (JSCE)	Maintenance of Concrete Structures - Introduction of Recommendations by JSCE Concrete Committee -				
					T1-14	Hyung Sik CHUNG, Gyu-Jin BAE and Seok-Won LEE (KSCE)	Tunneling in Korea				
					e	Aug. 18(11:20-12:20)	Yasuaki SHIMIZU	Jong-Sung SIM	T1-15	Nobuyuki SUZUKI and Junjiro AKIBA (JSCE)	Infrastructure Development and Protection of Environment (Sustainable Water Supply and Recycling of Construction Materials)
									T1-16	Danilo C. TERANTE (PICE)	The Role of Probability Density Models to Water Resource Management of Philippine Watersheds
	f	Aug. 18(13:50-15:10)	Tadahiko OKUMURA	Sung-Woo LEE	T1-17	Tae Wook KIM and Moon-Kyum KIM (KSCE)	Seismic Design of Underground Structures Considering Moderate Earthquake				
					T1-18	Katsuhide YOSHIKAWA and Yoshiharu NAMIKAWA (JSCE)	Measure Against Global Warming from the Viewpoint of National Land Management				
					T1-19	Andrew D. MCINTYRE (EA)	Utilising Support Tools for an Effective Asset Management Outcome - Queensland Main Roads				
					T1-20	Gen KATO (JSCE)	Collaboration Design Work in Railway Station Projects				
Track 2		Aug. 17(14:30-15:50)	P. N. AVENTAJADO	Young-Seok PARK	T2-1	Masafumi TATEDA (JSCE)	Comparison of Worlds between Nurses and Waste Management Workers -Finding a Clue for Improving Social Status				
					T2-2	John Chien-Chung LI (CICHE)	The Civil Engineering Education in Taiwan				
					T2-3	Sang-Il LEE (KSCE)	Web-Based Education in Civil Engineering : Contents Development and Performance Evaluation				
					T2-4	Hitoshi TANAKA and Syunsuke IKEDA (JSCE)	Civil Engineers' Qualification System of JSCE				
Track 3	a	Aug. 17(14:30-15:50)	Peter GODFREY	Woon Kwang YEO	T3-1	Fumihiko IMAMURA (JSCE)	Comprehensive Countermeasure for Tsunami Disaster Mitigation in Japan				
					T3-2	Chin-Hsiung LOH (CICHE)	Seismic Monitoring of Structures: An Important Element of Seismic Hazard Mitigation				
					T3-3	Hajime NAKAGAWA, Kazuya INOUE, Taisuke ISHIGAKI, Keiichi TODA and Yasunori MUTO (JSCE)	Inundation by River Water Flooding in Urban Cities - Experiments Using a Large Scale Inundation Model and Their Analyses -				
					T3-4	Takayuki SHIMAZU (JSCE)	Japan's Earthquake-Hazard Assessment at Prefectural and 12 Largest Cities' Levels				

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(continued)

Track	Session	Date & Time	Chair	Co - Chair	Paper No.	Authors	Title				
	b	Aug. 17(16:10~17:10)	Steve FINLAY	Jong-Se LEE	T3-5	Reiko AMANO, Shigeru HIRASHIMA and Hachiro UKON (JSCE)	Disaster Mitigation Technology in the Construction Industry				
					T3-6	Chi-Shou HSIEH (CICHE)	Cross Licensing of Professionals among ACECC Members				
					T3-7	Ikuo OGIWARA, Jun-ichi TANAKA, Kesao TOMIZAWA and Matsuo TAMURA (JSCE)	Strengthening Cutting and Embankment as Disaster Prevention for Rainfall in Nagano Shinkansen Line				
Track 4		Aug. 18(13:50~15:10)	Tomasz ARCISZEWSKI	Woong Seok YU	T4-1	Keun-Joo BYUN (KSCE)	Development of the Asian Concrete Model Code				
					T4-2	Tamon UEDA (JSCE)	Introduction of JSCE Guidelines for Performance-based Design of Steel-Concrete Hybrid Structures				
					T4-3	Peter J. GODFREY (EA)	Continuing Professional Development: Its Importance in Sustaining a Robust and Relevant Profession in Evolving Societies				
					T4-4	Moriyasu FURUKI (JSCE)	The Mission of JSCE in the Movement towards Globalization, Socialization, and Interdisciplinary Exchange				
Track 5	a	Aug. 17(14:30~15:50)	Lilia R. AUSTRACO	Moon-Kyum KIM	T5-1	D. Trang NGUYEN (ASCE)	The Construction of the Furama Resort Hotel in Da Nang, Vietnam				
					T5-2	Hong-Bo ZHOU and Jin-Ke SUN (ASCE)	Project Management of Terminal Building of Shanghai Pudong International Airport				
					T5-3	Raymond John GERKE (EA)	Managing Assets from Creation to Disposal				
					T5-4	Yusuke HONJO and Osamu KUSAKABE (JSCE)	Some Movements toward Establishing Comprehensive Structural Design Codes in Japan: 'Geo-code 21' and 'code PLATFORM ver.1'				
	b	Aug. 17(16:10~17:10)	M. M. BONOAN	In-Mo LEE	T5-5	Masato OTSUBO (JSCE)	Construction Management as a General Contractor				
					T5-6	M. Aslam MIRZA (ASCE)	Construction Project Success Monitoring and Control				
					T5-7	Keith CREWS, Bijan SAMALI, Steve BAKOSS and Chris CHAMPION (EA)	Testing and Assessment Procedures to Facilitate the Management of Timber Bridge Assets				
	c	Aug. 17(17:20~18:20)	M. M. BONOAN	Sangchul BANG	T5-8	Kris R. NIELSEN (ASCE)	Risk Management Techniques Evolving Project Management Tools for All Seasons				
					T5-9	Byung Kon KIM, Cheol Kyu LEE, Hei Sook NA and Jin Uk KIM(KSCE)	A Framework of Construction CALS/EC In Korea				
					T5-10	Tai Sik LEE, Jong-Hyun PARK, Jae-Ho CHOI and Hee-Suk CHUNG (KSCE)	A Study on Defining Factors that Affect on Construction Productivity : Based on the Relationship between General Contractor and Subcontractor				
					T5-11	Bruce E. PODWAL and James J. ROZEK (ASCE)	Program Management				
					d	Aug. 18(10:00~11:00)	P. N. AVENTAJADO	Chae-Sung GEE	T5-12	Masayoshi TAGA, Kimio TAKEYA, Taku MAEDA and Masahiro ARIIZUMI (JSCE)	The Movement and Assignment of Construction Project Challenge to Project Management Consultant
									T5-13	Jey K. JEYAPALAN (ASCE)	Creative Ways to Build Underground Power Cables and Broadband Networks through Strategic Partnerships among Utilities
Track 6	a	Aug. 17(16:10~17:10)	William HENRY	Kang-Won Wayne LEE	T6-1	Yin-Wen CHAN, Jenn-Chuan CHERN, Yung-Bin LIN, Yen-Ruey CHEN and Chen-Yuan LIN (CICHE)	An Innovated Sensing Technique for Concrete Materials Research using FIBER Optical Sensors				
					T6-2	Masato FUJII and Yasuhiko IWASAKI (JSCE)	Systems for Quality Based Selection on Public Works in Japan				
					T6-3	Soon-Byung LEE and Soon-Woong CHANG (KSCE)	Who Can Build My Project Best?				
	b	Aug. 17(17:20 ~ 18:20)	William HENRY	Kang-Won Wayne LEE	T6-4	Satoshi TANIGUCHI, Kazuhiko YOKOCHI, Tadayuki ABE and Shogo OTSUKI (JSCE)	Performance Specification and Value Engineering of the Paving Work in MLIT				
					T6-5	Chulho LIEU (KSCE)	Top Korean Civil Contractors				
					T6-6	M. A. AZIZ (ASCE)	Bangladeshi Bridge Builders Gearing up to Face International Competition				