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# **CONFERENCE SCHEDULE OVERVIEW**

# The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

# 12 July 2011 (Tuesday)

Time	Event	Venue
1500-1530	Registration	M1607, 16/F, Core M, Li Ka
1530-1630	Welcome Cocktail Reception	Shing Tower

# 13 July 2011 (Wednesday)

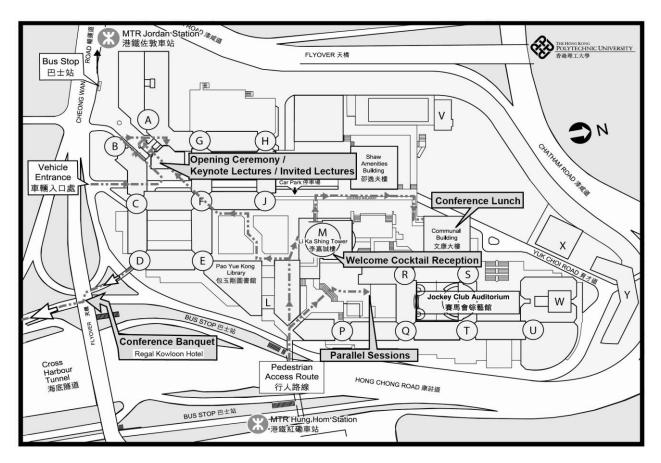
Time	Event	Venue
0830-0900	Registration	Chiang Chen Studio Theatre
0900-0930	Opening Ceremony	
0930-1130	Keynote Lectures	
1130-1210	Invited Lectures	
1210-1325	Lunch	Chinese Restaurant, 4/F,
		Core S, Communal Building
1325-1700	Invited Lectures	Chiang Chen Studio Theatre

# 14 July 2011 (Thursday)

Time		Event		Venue
0830-0900		Registration		Chiang Chen Studio Theatre
0900-1100	Keynote Lectures			
1100-1200		Invited Lectures		
1200-1300		Lunch		Chinese Restaurant, 4/F,
				Core S, Communal Building
		Parallel Sessions		Lim Por Yen Lecture
1300-1715	Geotechnical I	Structural I	Structural II	Theatres (N001-003)
	(Venue: N001)	(Venue: N002)	(Venue: N003)	
1830-1900		Cocktail Reception		Montparnasse room, 2/F,
1900-2130		Conference Banquet		Regal Kowloon Hotel

# 15 July 2011 (Friday)

Time		Event		Venue
0830-0900		Registration		Chiang Chen Studio Theatre
0900-1010	Keynote Lectures			
1025-1145		Invited Lectures		
1145-1305		Lunch		Chinese Restaurant, 4/F,
				Core S, Communal Building
		Parallel Sessions		Lim Por Yen Lecture
1305-1705	Geotechnical II	Structural III	Structural IV	Theatres (N001-003)
	(Venue: N001)	(Venue: N002)	(Venue: N003)	



### Welcome Cocktail Reception

Venue: M1607, 16/F, Core M, La Ka Shing Tower, PolyU

# **Opening Ceremony / Keynote Lectures / Invited Lectures**

Venue: Chiang Chen Studio Theatre, PolyU

### **Conference Lunch**

Venue: Chinese Restaurant, 4/F, Core S, Communal Building, PolyU

### **Parallel Sessions**

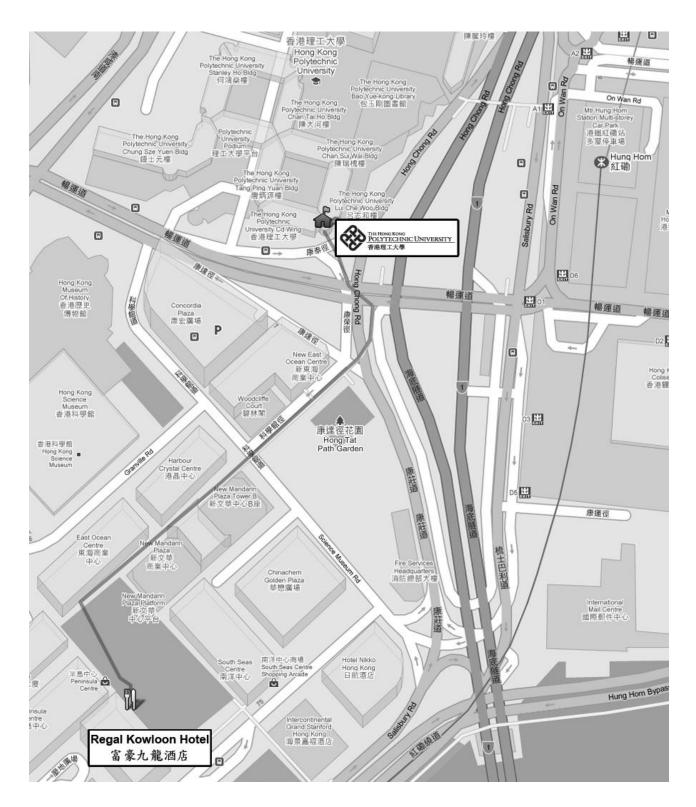
Venue: N001-N003, Block N, Lim Por Yen Lecture Theatres, PolyU

### **Conference Banquet**

Venue: Montparnasse room, 2/F, Regal Kowloon Hotel

# Conference Banquet

Venue: Montparnasse room, 2/F, Regal Kowloon Hotel



### **CONFERENCE PROGRAMME**

### The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

# 12 July 2011 (Tuesday)

## <u>Welcome Cocktail Reception</u> Venue: M1607, 16/F, Core M, Li Ka Shing Tower

1500-1530	Registration
1530-1630	Welcome Cocktail Reception

# 13 July 2011 (Wednesday)

### Registration

0830-1700 The Registration Counter will be open from 0830-1700

# <u>Opening Ceremony</u> Venue: Chiang Chen Studio Theatre

0900-0930	Welcome Address:	Alex Wai, Vice President (Research Development) The Hong Kong Polytechnic University
	Opening Address:	J.G. Teng, Dean, Faculty of Construction and Land Use The Hong Kong Polytechnic University
	Organization of SGE-5:	Y.Q. Ni, Co-chairman, Organizing Committee SGE-5

# <u>Keynote Lectures</u> Venue: Chiang Chen Studio Theatre

Chairpersons:	J.G. Teng, The Hong Kong Polytechnic University J.M. Ko, The Hong Kong Polytechnic University
0930-1005	Conceptualization of a Bridge Crossing Taiwan Strait (HK055) M.C. Tang Presenter: M.C. Tang, T.Y. Lin International
1005-1040	Application and Development of Modern Long-Span Space Structures in Mainland China (DL058) S.L. Dong, D. Xing & Y. Zhao Presenter: S.L. Dong, Zhejiang University
1040-1055	Tea Break
Chairpersons:	J.G. Teng, The Hong Kong Polytechnic University J.M. Ko, The Hong Kong Polytechnic University
1055-1130	Ground Vibrations due to Underground Trains by the 2.5D Finite/Infinite Element Approach (HK002) <i>Y.B. Yang &amp; H.H. Hung</i> <i>Presenter: Y.B. Yang, National Yunlin University of Science and Technology</i>

# <u>Invited Lectures</u> Venue: Chiang Chen Studio Theatre

Chairpersons:	M.C. Tang, T.Y. Lin International Z.Y. Shen, Tongji University
1130-1150	Innovation and Practice of China High-Speed Rail Stations (DL055) J. Zheng Presenter: J. Zheng, Ministry of Railways of the People's Republic of China
1150-1210	Diagnosis of Track Integrity (TW025) C.L. Liao, W.F. Chen & C.Y. Wang Presenter: C.L. Liao, China Engineering Consultants, Inc.

### Conference Lunch – Chinese Restaurant, 4/F, Core S, Communal Building 1210-1325

# <u>Invited Lectures</u> Venue: Chiang Chen Studio Theatre

Chairpersons:	K.J. Ma, Guizhou University K.T. Chau, The Hong Kong Polytechnic University
1325-1345	Recent Seismic Design and Retrofit Studies of Bridges at NCREE (HK030) K.C. Chang, H.H. Hung & K.Y. Liu Presenter: K. C. Chang, National Center for Research on Earthquake Engineering
1345-1405	Pseudo-Ductile Permanent Formwork for the Construction of Durable Concrete Structures (HK018) Christopher K.Y. Leung & C.L. Yu Presenter: Christopher K.Y., The Hong Kong University of Science and Technology
1405-1425	Design of Wind and Structural Health Monitoring System for Stonecutters Bridge (HK058) K.Y. Wong Presenter: K.Y. Wong, Highways Department, The Government of the HKSAR
1425-1445	The Evolution of Transversely Confined Structural Columns (HK014) Y. Xiao Presenter: Y. Xiao, University of Southern California
1445-1505	Spatial Ground Motion Modelling and Its Effect on Bridge Responses (HK008) H. Hao & K.M. Bi Presenter: H. Hao, The University of Western Australia
1505-1520	Tea Break
Chairpersons:	X.R. Ge, Shanghai Jiao Tong University C.F. Lee, The University of Hong Kong
1520-1540	Dynamic Mechanical Analysis of Magnetorheological Smart Nanocomposites (HK020) L.Z. Sun Presenter: L.Z. Sun, University of California, Irvine
1540-1600	A Theoretical Plate End Flexural Debonding Model for Plated Beams (HK019) J.F. Chen, V. Narayanamurthy, J. Cairns & D.J. Oehlers

	Presenter: J.F. Chen, The University of Edinburgh
1600-1620	Smart Aggregate-Based Damage Detection of FRP-Strengthened Columns under Reversed Cyclic Loading (HK037) H.C. Gu, R. Howser, Y. Moslehy, H. Dhonde, G.B. Song, Y.L. Mo & A. Ayoub Presenter: G.B. Song, University of Houston
1620-1640	On the Multi-Scale Modeling of Heterogeneous Geomaterials (HK009) J.F. Shao, A. Guery, T. Jiang, Q.Z. Zhu & D. Kondo Presenter: J.F. Shao, University of LILLE
1640-1700	Failure Types of Anchors and Anchored Slopes in Taiwan (HK043) H.J. Liao & S.H. Cheng Presenter: H.J. Liao, Taiwan University of Science and Technology

# 14 July 2011 (Thursday)

### Registration

0830-1700 The Registration Counter will be open from 0830-1700

# Keynote Lectures

# Venue: Chiang Chen Studio Theatre

Chairpersons:	S.L. Dong, Zhejiang University Y.B. Yang, National Yunlin University of Science & Technology
0900-0935	The Zhouqu Debris Flow (HK001) C.F. Lee Presenter: C.F. Lee, The University of Hong Kong
0935-1010	The Theory of Limit Analysis and the Method of Numerical Limit Analysis (HK004) Y.R. Zheng, X.S. Tang & S.Y. Zhao Presenter: Y.R. Zheng, Logistical Engineering University
1010-1025	Tea Break
Chairpersons:	S.L. Dong, Zhejiang University
-	Y.B. Yang, National Yunlin University of Science & Technology

# <u>Invited Lectures</u> Venue: Chiang Chen Studio Theatre

Chairpersons:	H. Hao, The University of Western Australia K.C. Chang, National Center for Research on Earthquake Engineering
1100-1120	Research Progress of Liquefaction Evaluation of Sandy Soils by Shear Wave Velocity (DL067) Y.M. Chen & Y.G. Zhou Presenter: Y.M. Chen, Zhejiang University
1120-1140	Design Theory and Application of Tubed Concrete Columns (DL054) X.H. Zhou & L.J. Peng Presenter: X.H. Zhou, Lanzhou University
1140-1200	The potential of structural health monitoring in operation of buried steel pipelines (HK066) J.J. Roger Cheng Presenter: J.J. Roger Cheng, University of Alberta
1200-1300	Conference Lunch – Chinese Restaurant, 4/F, Core S, Communal Building

# <u>Parallel Session – Geotechnical I</u> Venue: N001, Block N, Lim Por Yen Lecture Theatre

Chairpersons: Y.M. Chen, Zhejiang University

	X. Lu, Logistical Engineering University
1300-1315	A Study on Displacement-Based Earthquake Loss Assessment Adopting Equivalent Stiffness Linearization Method (DL076) J.T. Shi & L. Su
	Presenter: L. Su, Zhejiang University
1315-1330	Impact of Spatial Variability on Soil Shear Strength (TW012) J. Ching, K.K. Phoon & Y.G. Hu Presenter: Y.G. Hu, National Taiwan University
1330-1345	Adsorption and Desorption Behavior of Bivalent Nickel and Manganese Ions on Loess Soil
1000 10 10	(DL077) Y. Wang, X.W. Tang, H.Y. Wang & Z.F. Sun Presenter: Y. Wang, Zhejiang University
1345-1400	Uncertainty in Nonlinear Seismic Ground Response Analyses (TW018)
1343-1400	O.L.A. Kwok
	Presenter: O.L.A. Kwok, National Taiwan University
1400-1415	An Accurate Geological Model is an Essential Requirement for Geotechnical Engineering - A Case Study on the Geology of Tuen Mun to Tin Shui Wai Area, Hong Kong (HK005) <i>K.W. Lai &amp; H.M.S. Chan</i> <i>Presenter: K.W. Lai, Hong Kong Geological Survey</i>
	Tresenier. K.w. Lu, nong Kong Geologicu Survey
1415-1430	Upper Bound Limit Analysis of Soil Slope Stability Based on Rpim Meshless Method (HK022) <i>F.T. Liu, J.D. Zhao, Y.F. Fan &amp; J.H. Yin</i>
	Presenter: F.T. Liu, The Hong Kong University of Science and Technology
1430-1445	Characteristics of Damaged Dams and Influencing Factors in the Wenchuan 5.12 Earthquake (DL079)
	H.A. Liang, L.P Jing, Y.Q Li & C.H. Liu Presenter: H.A. Liang, China Earthquake Administration
1445-1500	Lessons Learned from 2011 Tohoku Earthquake and Tsunami (HK038) <i>K.T. Chau</i>
	<i>Presenter: K.T. Chau, The Hong Kong Polytechnic University</i>
1500-1515	Tea Break
Chairpersons:	J.F. Shao, University of LILLE J.J. Zheng, Huazhong University of Science and Technology
1515-1530	Accident Treatment on Large Differential Settlement Between Rigid and Flexible Pile Foundation in the Same Building (DL069) Z.M. Zhang & Q.Q. Zhang Presenter: Z.M. Zhang, Zhejiang University
1530-1545	Discussion of Active Earth Pressure's Coefficient Formula about the National Standard (HK015) X. Lu, Y.F. Wang & Y.R. Zheng Presenter: X. Lu, Logistical Engineering University
1545-1600	Deformation Character and Control Analysis for a Large-Section Twin Tunnel in

	Construction (HK011) Z.M. Li, Q. Feng, X.H. Zhu, F. Wu, L. Wan & J.L. Ou Presenter: Z.M. Li, Guangdong University of Technology
1600-1615	Scaling Earthquake Records for Seismic Performance Assessment of Buildings (TW008) Y.N. Huang Presenter: Y.N. Huang, National Taiwan University
1615-1630	Model Tests Study on Cast-In-Place X-Sectional Pile (HK026) G.Q. Kong, H.L. Liu & M.X. Zhang Presenter: G.Q. Kong, Hohai University
1630-1645	Performance Prediction of Lateral Response of Adjacent Single Pile Based on the Inclinometer Curves (HK042) <i>R.J. Zhang, J.J. Zheng, Y.T. Pan &amp; S. Yu</i> <i>Presenter: R.J. Zhang, Huazhong University of Science and Technology</i>
1645-1700	Geological and Geohazard Comparisons Between the 2008 Wenchuan Earthquake and the 921 Chichi Earthquake and Their Common Mechanism (HK033) <i>Z.Q. Yue Presenter: Z.Q. Yue, The University of Hong Kong</i>

# <u>Parallel Session – Structural I</u> Venue: N002, Block N, Lim Por Yen Lecture Theatre

Chairpersons:	K.C. Tsai, National Taiwan University C.C. Lin, National Chung Hsing University
1300-1315	A New Reliability Analysis Method Based on Uniform Design Method and Support Vector Machines (DL037) X.L. Yu, J.B. Yu, H.B. Zheng & Q.S. Yan Presenter: X.L. Yu, South China University of Technology
1315-1330	<ul> <li>Shaking Table Test of Semi-Active Friction Tuned Mass Damper for Structural Control (TW001)</li> <li>C.C. Lin, G.L. Lin, Y.B. Ho &amp; L.Y. Lu</li> <li>Presenter: C.C. Lin, National Chung Hsing University</li> </ul>
1330-1345	Establishment of Taiwan Pedestrian Suspension Bridge Management System (TW024) M.H. Chen, C.Y. Wang & C.L. Liao Presenter: M.H. Chen, China Engineering Consultant Inc.
1345-1400	Active Vibration Control of Cable-Strut Tensegrity Structures under Wind Excitation (DL063) N. Xiao, Y.Z. Miao & H.P. Chen Presenter: N. Xiao, Zhejiang University
1400-1415	Prediction of Residual Service Life and Through-Life Maintenance Costs for Hong Kong Public Rental Housing Estates (HK007) H.W. Pang, C.O. Chan & W.B Chan Presenter: H.W. Pang, Hong Kong Housing Authority
1415-1430	Technological and Economic Comparison of Two Super High-Rise Structural Systems (DL040) H.M. Zhou, J.C. Ye & Z.L. Xie

	Presenter: H.M. Zhou, Zhejiang Prov. Institute of Architectural Design & Research
1430-1445	<ul> <li>Wind-Induced Structural Dynamic Response Analysis for a Large Stadium Cable-Net Roof (DL044)</li> <li>W.J. Chen, T. Ren &amp; Y.L. He</li> <li>Presenter: W.J. Chen, Shanghai Jiao Tong University</li> </ul>
1445-1500	Analysis of Mechanical Behavior of Half-Through Arch Beam Combination Bridge with Swing Construction (HK036) Y.Q. Xiang, J.W. Chen, J.F. Wang, W.L. Yang & K. Cheng Presenter: Y.Q. Xiang, Zhejiang University
1500-1515	Tea Break
Chairpersons:	S.L. Xu, Zhejiang University Z.S. Wu, Ibaraki University
1515-1530	<ul> <li>Finite Element Study of Inelastic Local Web Buckling Capacity of Coped Steel I-Beam (HK027)</li> <li>Y. Qin, C.C. Lam, V.P. Iu &amp; K.P. Kou Presenter: Y. Qin, University of Macau</li> </ul>
1530-1545	A Refined Ultimate Bearing Capacity Analysis on Single Layer Latticed Domes with Welded Hollow Spherical Joints (DL072) F. Wu, M.Q. Ding, L. Gu, X.Y. Fu & X.C. Chen Presenter: L. Gu, Harbin Institute of Technology
1545-1600	Effect of Anchorage System in Identifying Modal Frequencies of Short Stay Cables (TW002) C.C. Chen, W.H. Wu & C.Y. Liu Presenter: C.C. Chen, National Yunlin University of Science and Technology
1600-1615	Analysis of Shear Performance of Concrete T-Beam Bridge Strengthened by External Prestressed Tendon (HK035) <i>Y.Q. Xiang, X.H. Zhu, T.J. Lou &amp; Q.Q. Wu</i> <i>Presenter: Y.Q. Xiang, Zhejiang University</i>
1615-1630	In-Plane Pure Shear Panel Test of Self-Consolidating High Performance Fiber Reinforced Concrete (SCHPFRC) (TW007) W.C. Liao Presenter: W.C. Liao, National Taiwan University
1630-1645	The Structural Design of Shanxi Sports Center Stadium (DL048) X.Y. Fu, Y.J. Zhu, Y. Zhou, X. B. Yang, Y.P. Cheng, T. Wang & J. Zhang Presenter: X.B. Yang, China Construction Design International (Beijing)
1645-1700	Design on the Sub-Structure of Shenzhen North Train Station (DL051) M.L. Meng, B. Wu, X.Y. Fu, Z.H. Chen, Y.W. Feng & J.W. Shao Presenter: M.L. Meng, China Construction (Shenzhen) Design International
1700-1715	Scouring Evaluation of Cable-Stayed Bridges Based on Ambient Vibration Measurements (TW003) W.H. Wu, C.C. Chen, F. Shi & S.W. Wang Presenter: W.H. Wu, National Yunlin University of Science and Technology

<u>Parallel Session – Structural II</u> Venue: N003, Block N, Lim Por Yen Lecture Theatre

Chairpersons:	X.Y. Fu, China Construction Design International D. Zhou, Shanghai Jiao Tong University
1300-1315	Revitalization of Historic Buildings – "Conversion of Yau Ma Tei Theatre and the Red Brick Building into a Xiqu Centre" (HK031) K.Y. Ma, Y.K. Chan & C.Y. Wong Presenter: Y.K. Chan, Architectural Services Department, HKSAR
1315-1330	Temperature Effect on Variation of Frequency of Beams: A Comparative Study (HK032) X. Q. Zhou, B. Chen & Y. Xia Presenter: Y. Xia, The Hong Kong Polytechnic University
1330-1345	Topology Optimization Using Stochastic Search Methods (TW005) J.Y. Guo & L.J. Leu Presenter: L.J. Leu, National Taiwan University
1345-1400	Analysis of the Kinematic Path of Load-Bearing Cable-Bar Mechanisms (DL070) H. Deng, Y.Z. Zu, X.S. Wu & B.W. Jiang Presenter: H. Deng, Zhejiang University
1400-1415	Application of Recursive Stochastic Subspace Identification in On-Line Bridge Monitoring System (TW013) J.H. Weng, C.H. Loh, S.S. Chao, K.C. Lu & C.H. Chen Presenter: J.H. Weng, National Taiwan University
1415-1430	Development of Multifunctional Laminar Shear Container for Shaking Table Test (DL078) H.F. Sun, L.P. Jing, N.W. Wang & X.C. Meng Presenter: H.F. Sun, China Earthquake Administration
1430-1445	Experimental Study on Crack Mode in Reinforced Concrete Structures with Rebar Corrosion (DL008) Y.X. Zhao, J. Yu & W.L. Jin Presenter: Y.X. Zhao, Zhejiang University
1445-1500	Experimental Study on Seismic Behavior of Autoclaved Aerated Concrete Block Composite Walls with Structural Columns (DL033) P.C. Ling, J. Zhao, B.Z. Zhou, H.G. Wu, Q.S. Miao, Y.Y. Zhu & J. Tu Presenter: J. Zhao, Beijing University of Technology
1500-1515	Tea Break
Chairpersons:	L.Z. Sun, University of California, Irvine G.B. Song, University of Houston
1515-1530	Seismic Resistant Design and Analysis of Vertical Boundary Elements in Steel Plate Shear Walls (TW010) K.C. Tsai, C.H. Li, J.T. Chang & C.H. Lin Presenter: K.C. Tsai, National Taiwan University
1530-1545	Application of Singular Spectrum Analysis to Health Monitoring of Bridge Structure (TW009)

	S.H. Chao, C.H. Loh, J.H. Weng, P.Y. Lin & C.H. Chen Presenter: S.H. Chao, National Taiwan University
1545-1600	FEM Analysis of Shear Connector Behavior of Continuous Steel-Concrete Composite Girder Bridge (DL013) H.Y. Cao, Z.J. Chen, H.P. Zhu & H.Y. Yang Presenter: H.P. Zhu, Huazhong University of Science & Technology
1600-1615	A Study on Damage Assessment of the Scoured Bridges (TW011) C.Y. Wang & Y.C. Sung Presenter: C.Y. Wang, National Taipei University of Technology
1615-1630	Wind Tunnel Test and Wind-Induced Structural Dynamic Response Analysis for a Steel Velarium Roof (DL045) H.F. Zhu, W.J. Chen, Y.L. He & S.L. Dong Presenter: H.F. Zhu, Shanghai Jiao Tong University
1630-1645	Load-Deformation Analysis of Reinforced Concrete Columns Including Shear Effects (DL023) Q. Zhang & J.X. Gong Presenter: Q. Zhang, Dalian University of Technology
1645-1700	Systematic Categorization of Structural Components in Stonecutters Bridge (HK045) K.C. Lin, X.W. Ye, Y.Q. Ni & K.Y. Wong Presenter: K.C. Lin, The Hong Kong Polytechnic University
1700-1715	Stability Behavior of Fixed-Roof Tapered-Wall Steel Tanks under Differential Settlement (DL061) Z. Wang, X. Lei, Y. Zhao & X.Y. Xie Presenter: Z. Wang, Zhejiang University

# **Cocktail Reception**

1830-1900 Venue: Montparnasse room, 2/F, Regal Kowloon Hotel

# **Conference Banquet**

1900-2130 Venue: Montparnasse room, 2/F, Regal Kowloon Hotel

# 15 July 2011 (Friday)

## Registration

0830-1700 The Registration Counter will be open from 0830-1700

# Keynote Lectures

# Venue: Chiang Chen Studio Theatre

Chairpersons:	Y.Q. Ni, The Hong Kong Polytechnic University C.Y. Wang, National Central University
0900-0935	Shaking Table Tests on Full-Scale Low-Rise Cold-Formed Thin-Walled Steel Residential Buildings Using Light-Gauge Composite Walls (HK028) Z.Y. Shen, Y.Q. Li, F. Liu, Y.F. Qing & S.D. Wu Presenter: Z.Y. Shen, Tongji University
0935-1010	Two Kinds of New Partial Pre-Stressed Space Steel Grid Structure with Super Large Span (150m×150m) (DL056) K.J. Ma, B. Shen & G.S. Feng Presenter: K.J. Ma, Guizhou University
1010-1025	Tea Break

# <u>Invited Lectures</u> Venue: Chiang Chen Studio Theatre

Chairpersons:	Christopher K.Y. Leung, The Hong Kong University of Science and Technology L.J. Leu, National Taiwan University
1025-1045	Key Technologies of Super-Tall & Long Span Structures (DL057) X.Y. Fu Presenter: X.Y. Fu, China Construction Design International
1045-1105	Rate Dependence of Ultra High Toughness Cementitious Composite in Tension (HK057) S.L. Xu & H.D. Li Presenter: S.L. Xu, Zhejiang University
1105-1125	Key FRP Technologies in Structural Retrofitting and Strengthening (HK056) Z.S. Wu, X. Wang & G. Wu Presenter: Z.S. Wu, Ibaraki University
1125-1145	A Reliability Based Simulation, Monitoring and Code Calibration of Vehicle Effects on Existing Bridge Performance (HK017) C.S. Cai, W. Zhang, M. Xia & L. Deng Presenter: C.S. Cai, Louisiana State University
1145-1305	Conference Lunch – Chinese Restaurant, 4/F, Core S, Communal Building

# <u>Parallel Session – Geotechnical II</u> Venue: N001, Block N, Lim Por Yen Lecture Theatre

Chairpersons:	Z.M. Li, Guangdong University of Technology
	Z.Q. Yue, The University of Hong Kong

1305-1320	Preliminary Study of the Influence of Underground Structures on Groundwater in the Centre of Guangzhou City (HK021) <i>H. Cao &amp; G.Y. Luo</i> <i>Presenter: H. Cao, South China University of Technology</i>
1320-1335	Reflection of Seismic Waves at Boundary of an Unsaturated Poroelastic Half-Space (DL031) W.Y. Chen, T.D. Xia & X.B. Kong Presenter: W.Y. Chen, Zhejiang University
1335-1350	Earthquake Loss Estimation of Building with Shallow Foundation due to Soil Liquefaction (TW019) C.C. Lu, J.H. Hwang, C.R. Huang & Y.D. Lu Presenter: C.C. Lu, Sinotech Engineering Consultants, Ltd.
1350-1405	A Quantitative Evaluation on Bridge Scouring Safety (TW022) H. Wang, C.Y. Wang, T.R. Wu, S.C. Hsieh, Y.Y. Ko, J.S. Chiou, M.Z. Chen, T.Y. Chen, C.H. Chen & C. Lin Presenter: H. Wang, China Engineering Consultants, Inc.
1405-1420	Influence of Pore Pressure on Tunnel Face Stability (DL080) W. Liu, X.W. Tang, H.Y. Wang & B. Huang Presenter: W. Liu, Zhejiang University
1420-1435	Installation Load and Working Capacity of Jacked Piles: Some Experiences in China (DL030) F. Yu & J. Yang Presenter: J. Yang, The University of Hong Kong
1435-1450	Effects of Presence of a Soft Soil Layer on Liquefaction Evaluation (DL039) C. Li, W.W. Yang, Y.C. Lo, S.H. Yung & C.H. Wong Presenter: C. Li, AECOM Asia
1450-1505	Resistance of Soil-Root System of Selected Native Plants in Hong Kong (HK060) F.T.Y. Leung, B.C.H. Hau, L.G. Tham & W.M. Yan Presenter: F.T.Y. Leung, The University of Hong Kong
1505-1520	Tea Break
Chairpersons:	H. Cao, South China University of Technology J. Yang, The University of Hong Kong
1520-1535	Guided Wave Interpretation of Impulse Responses for Deep Foundations with Emphasis on Cross-Sectional Profiles (TW023) <i>H. Wang, B.T. Chen &amp; T.P. Chang</i> <i>Presenter: H. Wang, China Engineering Consultants, Inc.</i>
1535-1550	Establishment of the New Failure Criterion of Soils (DL059) R.Q. Xu & X.C. Wang Presenter: R.Q. Xu, Zhejiang University
1550-1605	Numerical Evaluation of the Seismic Performance for a Ductile Fiber Reinforced Concrete Coupled Wall System (TW016) <i>C.C. Hung</i> <i>Presenter: C.C. Hung, National Central University</i>

1605-1620 Geotechnical Properties of Colluvial and Alluvial Deposits in Hong Kong (HK064) *K.W. Lai Presenter: K.W. Lai, Fugro (Hong Kong) Limited* 

# <u>Parallel Session – Structural III</u> Venue: N002, Block N, Lim Por Yen Lecture Theatre

Chairpersons:	J.J. Roger Cheng, University of Alberta C.C. Chen, National Yunlin University of Science & Technology
1305-1320	Multi-Located Tuned Mass Dampers for Vibration Mitigation of Tower-Like Structures with Whipping Effect (HK048) <i>Y.F. Duan, Y.Q. Ni &amp; J.M. Ko</i> <i>Presenter: Y.F. Duan, Zhejiang University</i>
1320-1335	Nonlinear Analysis and Calculation of Second-Order Effect of Sway-Restricted Columns (DL024) J. Xu & J.X. Gong Presenter: J. Xu, Dalian University of Technology
1335-1350	Nonlinear Stability Analysis for a Concrete-Filled-Steel-Tubular Arch/Continuous Beam Bridge Including Defects in Arch Rib (DL006) J.L. Hu, Q.S. Yan, Z. Chen & Y.H. Gao Presenter: J.L. Hu, South China University of Technology
1350-1405	Numerical Simulation of Wind Pressure and Wind-Resistant Optimization on Concave Roofed Low-Rise Building with Eaves (DL029) D. Zhou, J.H. Tu & J.L. Li Presenter: D. Zhou, Shanghai Jiao Tong University
1405-1420	Trace Analysis of Mechanical Response of Defect Member During Losing Overall Structural Stability (DL060) J.M. Guo, W.L. Xue, X.Q. Zhao & X.S. Wu Presenter: X.S. Wu, China Construction (Shenzhen) Design International
1420-1435	Introduction for Program Saptrans to Convert SAP2000 Model to ABAQUS and NASTRAN (HK053) X.Q. Yang, X.Y. Fu & Y.J. Huang Presenter: X.Q. Yang, China Construction (Shenzhen) Design International
1435-1450	<ul> <li>Walking Comfort Analysis on Station Building Floor System of Shen Zhen North Station (DL053)</li> <li>B. Wu, X.Y. Fu, M.L. Meng, Z.H. Chen &amp; J.X. Qu</li> <li>Presenter: B. Wu, China Construction (Shenzhen) Design International</li> </ul>
1450-1505	Integrate On-Line Recursive SSA and SSI-COV Algorithms for Operational Modal Analysis of Structures (TW014) Y.C. Liu & C.H. Loh Presenter: Y.C. Liu, National Taiwan University
1505-1520	Tea Break
Chairpersons:	C.S. Cai, Louisiana State University

	W.H. Wu, National Yunlin University of Science and Technology
1520-1535	Evaluation of the Potentiality of Bridge Scouring (TW020) S.H. Hung, C.Y. Wang, W.F. Lee, H.P. Lien & C.K. Huang Presenter: S.H. Hung, China Engineering Consultant Inc.
1535-1550	Recommending a Patent Technology of Reducing the Noise Induced by Rail Transit (DL065) <i>F. Lin, J.F. Gu &amp; G.Z. Qian</i> <i>Presenter: F. Lin, Zhejiang Construction Engineering Group Co., Ltd.</i>
1550-1605	Development of a Digital Camera System for Monitoring of Structural Displacement (HK061) F. Xu, Y.Q. Ni & X.W. Ye Presenter: F. Xu, The Hong Kong Polytechnic University
1605-1620	RC Moment Frame Buildings Column Loss Analysis: The Effect of Masonry-Infill Wall (DL041) S. Li, S.P. Liu, C.H. Zhai & L.L. Xie Presenter: S. Li, Harbin Institute of Technology
1620-1635	Seismic Response Analysis of Shen Zhen North Station under Multi-Dimension and Multi- Support Seismic Excitation (DL052) B. Wu, X.Y. Fu, M.L. Meng & J.X. Qu Presenter: B. Wu, China Construction (Shenzhen) Design International
1635-1650	Axial Load Carrying Capacity of Circular Reinforced Concrete Columns (HK025) Ivy F.Y. Ho & Eddie S.S. Lam Presenter: Ivy F.Y. Ho, The Hong Kong Polytechnic University

# <u>Parallel Session – Structural IV</u> Venue: N003, Block N, Lim Por Yen Lecture Theatre

Chairpersons:	J. Zheng, Ministry of Railways of the People's Republic of China J.F. Chen, The University of Edinburgh
1305-1320	Some Considerations on Five Technical Specifications of Steel-Concrete Composite Structure (DL064) Z.T. Tu, G.M. Teng & G.Z. Qian Presenter: G.Z Qian, Hangzhou Tianyuan Architectural Design and Research Institute
1320-1335	<ul> <li>Seismic Upgrade of Reinforced Concrete Beam-Column Joint under High Level Axial Load (HK024)</li> <li>B. Li &amp; Eddie S.S. Lam</li> <li>Presenter: B. Li, The Hong Kong Polytechnic University</li> </ul>
1335-1350	Structural Health Monitoring of RC Structures Subjected to Seismic Loading Using Piezoceramic-Based Sensors (TW017) W.I. Liao, Y.C. Sung, K.C. Chang & J.S. Hwang Presenter: W.I. Liao, National Taipei University of Technology
1350-1405	Smart Elasto-Magneto-Electric (EME) Sensors for Stress Monitoring of Steel Bars Using Magneto-Electric (ME) Sensing Units (HK049) <i>R. Zhang, Y.F. Duan, Y. Zhao, S.W. Or &amp; K.Q. Fan</i>

	Presenter: R. Zhang, Zhejiang University
1405-1420	Ultimate Strengths of Concrete Bridge Deck Slabs Reinforced with GFRP Bars (DL035) Y. Zheng, Y.F. Pan & G.Y. Yu Presenter: Y. Zheng, Dongguan University of Technology
1420-1435	Space Analysis of Long-Span Curved Continuous Rigid Frame Bridges with High Pier Under Gravity Load (DL028) Y.X. Yang, X.W. Hao & L. Sun Presenter: Y.X. Yang, Chang'an University
1435-1450	Stability Analysis Method for Lattice Shells Accounting for Member Buckling (DL012) W. Tian, Y. Zhao & S.L. Dong Presenter: W. Tian, Zhejiang University
1450-1505	Structure Design of Shanxi Olympic Gymnasium (DL049) X.B. Yang, Y. Gao, X.Y. Fu, X.M. Cui, T. Wang & J.R. Zhou Presenter: Y. Gao, China Construction (Beijing) Design International
1505-1520	Tea Break
Chairpersons:	H. Deng, Zhejiang University Q.S. Yan, South China University of Technology
1520-1535	<ul> <li>Applications of Non-Contact Measurement Techniques to Bridge Health Inspection (TW021)</li> <li>C.S. Wang, C.Y. Wang, Y.C. Sung, C.C. Cheng &amp; P.Y. Hung</li> <li>Presenter: C.S. Wang, China Engineering Consultant Inc.</li> </ul>
1535-1550	Vortex Shedding Suppression of Cylindrical Structures Near Plane Wall (DL046) J.S. Cui, F.P. Gao, Z.P. Zang & X.T. Han Presenter: F.P. Gao, Institute of Mechanics, Chinese Academy of Sciences
1550-1605	Revitalization of Existing Building Group by Using Dampers at Top Floor Level and Base Isolators (HK023) Z.D. Yang & Eddie S.S. Lam Presenter: Z.D. Yang, The Hong Kong Polytechnic University
1605-1620	Summary on the Structural Design of Shenzhen North Train Station (DL050) X.Y. Fu, B. Wu, Z.H. Chen, M.L. Meng, M. Guo, C. Sun, H.B. Jiang, Y.W. Feng, J.W. Shao, J.R. Zhou, J.X. Qu & Y.L. Liu Presenter: X.Y. Fu, China Construction Design International
1620-1635	Numerical Modelling of the Cyclic Behaviour of RC Columns Retrofitted with FRP Jackets (HK062) J.G. Teng, J.Y. Lu, L. Lam, G. Lin & Q.G. Xiao Presenter: G. Lin, The Hong Kong Polytechnic University
1635-1650	Direct Tensile Test of Normal Strength Concrete at Elevated Temperature (HK063) Eddie S.S. Lam & S. Fang Presenter: S. Fang, The Hong Kong Polytechnic University
1650-1705	An Innovative and Proven Solution for Repelling Water Ingress out of Concrete Structures (HK065)

E.C. Chang Presenter: E.C. Chang, Hydrotech Asia Limited, Hong Kong

\*The conference programme is subject to change without prior notice.

### **GENERAL INFORMATION**

### Hong Kong – a magnificent city

Hong Kong is a Special Administrative Region of the People's Republic of China. It is a territory of about 1070 sq.km. located at the trading crossroads of Asia. Hong Kong is one of the world's leading economies, a major manufacturing and international financial centre, the world's busiest container port and the main gateway to the Chinese mainland. The climate in July is pleasant and dry, with an average temperature of 25 to 33°C.

### **Conference Venue**

The Conference will consist of 3-day programme. The Conference will be held at The Hong Kong Polytechnic University (13-15 July 2011). The University campus is located in Hung Hom, Kowloon. It is just two minutes walk from MTR Hung Hom Station.

### **Presentation of Papers**

English or Chinese should be used for presentation of papers and discussions. Each speaker in a parallel session is allowed 15 minutes for presentation and discussion.

### Electricity

The voltage and frequency used in Hong Kong are 220 volts and 50 Hz, respectively.

### Communication

Hong Kong has one of the best communication networks in the world. Local calls are free to subscribers but cost HK\$1 when using public telephones. Participants are reminded that hotels charge a high levy for telephone calls made in-house.

# ACKNOWLEDGEMENTS

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