

ISSS'2011

International **S**ymposium on **I**nnovation & **S**ustainability of **S**tructures in Civil Engineering

October 28-30, 2011
Xiamen University, Xiamen, P.R.China



Organized by

**School of Architecture and Civil Engineering
Xiamen University**



Sponsored by

**National Natural Science
Foundation of China**



International Symposium on Innovation & Sustainability of Structures in Civil Engineering

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Prof. Ying Lei (Xiamen University, China)

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PREFACE

There are great challenges in Civil Engineering and innovation & sustainability of structures in civil engineering has become an increasingly important theme. In response to these challenges, the International Symposium on Innovation & Sustainability in Civil Engineering is dedicated to promoting related research and practice. As the on-going series symposia which were held sequentially in 2005 (Nanjing, China), 2007 (Shanghai, China) and 2009 (Guangzhou, China), the objective of this symposium (ISISS'2011) is still to provide an international forum for researchers, specialists, professionals and public administrators and for all concerned with the promotion and exchange of information on innovation in civil engineering, especially for sustainability of structures and disaster prevention & mitigation. The symposium is aimed at presenting and publishing the most recent research & development on innovative materials, metrologies and technologies, intelligent structure and monitoring and security monitoring, structural safety and durability, structures and systems with high performance and sustainable capacity. ISISS'2011 is organized by the School of Architecture and Civil Engineering, Xiamen University, and is sponsored by the National Natural Science Foundation of China (NSFC). On behalf of the Organizing Committee of the International Symposium on Innovation & Sustainability in Civil Engineering (ISISS'2011), we would like to welcome professionals involved in the related fields in civil engineering from all over the world to the City of Xiamen in China on Oct. 28-30, 2011 for ISISS'2011.

Xiamen City is at its proximity to the World Heritage Hakka Tulou. An International Workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou Forum 2011 is included as a special session of ISISS'2011. This workshop is being organized as the 2nd event of Hakka Tulou Forum Series. The workshop to take place in a city near the Hakka villages offers a unique opportunity for the workshop participants to witness the sustainability of Hakka architecture, and adapt the past for the world to come.

The Proceedings of ISISS'2011 contain the papers of invited keynote and plenary lectures from more than 20 distinguished international experts and technical presentations in 8 professional sessions under the topics of Monitoring, Damage Detection and Identification for Engineering Structures; Structural Seismic Analysis and Seismic-resistant Structural Systems; Composite Structures and RC Structures; Design, Construction and Analysis of Bridge Structures; Disaster Prevention and Mitigation for Civil Structures; Reliability, Probabilistic Assessment and Uncertainty evaluation; Novel Analytical and Experimental Methods for Civil Structures; and Rammed Earth Materials and Sustainable Structures & Hakka Tulou. The proceedings of ISISS'2011 highlight the state-of-the-art innovations in these fields.

ISISS'2011 has received enthusiastic responses from the worldwide. More than 220 papers had been submitted to the symposium, and 202 full papers were accepted for publishing in the proceedings, especially more than 20 distinguished international researchers have contributed their papers of keynote and plenary lectures. The final revised papers are from 15 countries and areas such as Australia, Canada, China, Japan, Iran, Italy, Saudi Arabia, Singapore, Sweden, Switzerland, the United Kingdom (U.K.), and the United States of America (U.S.A.).

We would like to express our sincere thanks to all the members of the International Scientific Committee, the International Advisory Committee as well as the Organizing Committee, whose dedication is the key for the success of ISISS'2011, especially some of them who spent so much time and effort in organizing technical sessions and the workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou. Thanks are due to all the contributors to the proceedings for their careful preparations of their manuscripts and all the invited keynote and plenary speakers for their special strong support, which makes the Proceedings of ISISS'2011 high level quality. We gratefully acknowledge the generous funding support from the National Natural Science Foundation of China (NSFC). We would also like to appreciatively thank the Longyan City Government and Yongding County Government of Fujian Province of China for providing the substantial funding for the International Workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou Forum 2011. We sincerely hope that all the participants to ISISS'2011 will have a good opportunity to meet colleagues from the world for technical and scientific discussions and enjoy their stays in Xiamen when attending ISISS'2011.

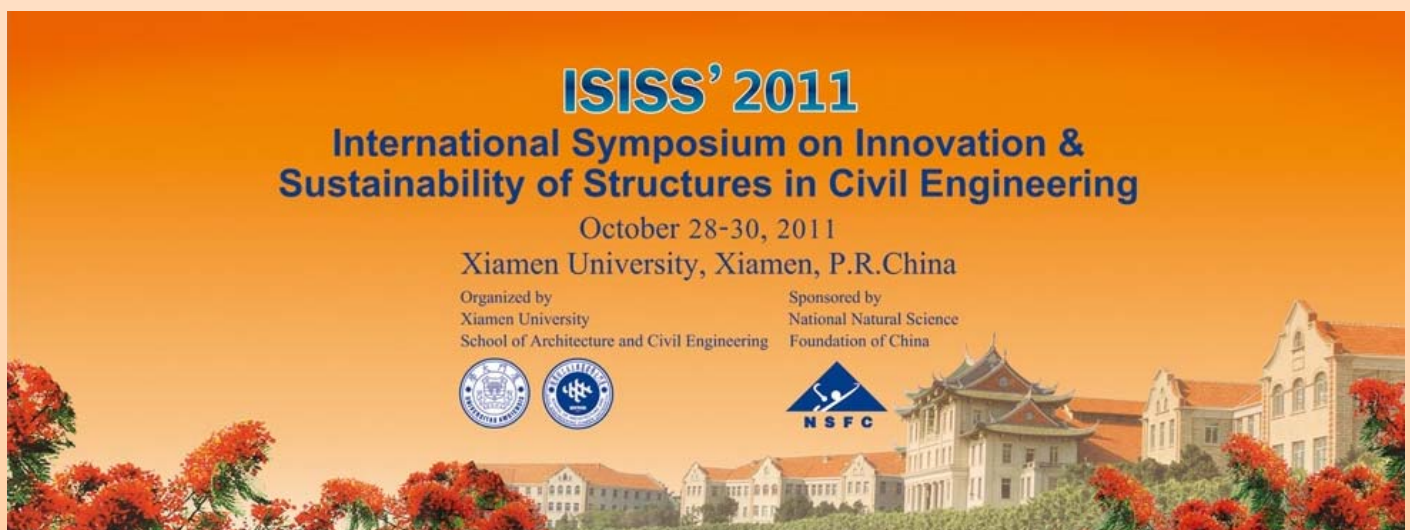
Prof. Jie Li (Tongji University, China)

Prof. Ying Lei (Xiamen University, China)

Prof. Zhi Shen Wu (Ibaraki University, Japan)

Prof. Rui Feng Liang (West Virginia University, USA)

August 27, 2011



GENERAL INFORMATION

Symposium Aims

- ◆ As the on-going series symposia which were held sequentially in 2005 (Nanjing, China), 2007 (Shanghai, China) and 2009 (Guangzhou, China), the objective of this symposium (ISISS'2011) is to provide an international forum for researchers, specialists, professionals and public administrators and for all concerned with the promotion and exchange of information on innovation in civil engineering.
- ◆ The symposium is aimed at presenting and publishing the most recent research & development on innovative materials, technologies, structures and systems with high performance and sustainable attributes, especially for disaster prevention and relief. In addition, a special session on Hakka Tulou/Rammed earth will also be included in this symposium.

Themes

- ◆ Monitoring, Damage Detection and Identification for Engineering Structures
 - ◆ Structural Seismic Analysis and Seismic-resistant Structural Systems
 - ◆ Composite Structures and RC Structures
 - ◆ Design, Construction and Analysis of Bridge Structures
 - ◆ Disaster Mitigation and Cost Management for Civil Structures
 - ◆ Novel Structural System and Experimental Methods for Civil Structures
 - ◆ Reliability, Probabilistic Assessment and Uncertainty Evaluation
 - ◆ Structural Analysis and Design Method
- ★ **International Workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou Forum 2011: Structures of Sustainability**

Opening Hour

- ◆ **Registration** Friday, October 28, 2011, 9:00-20:00
- ◆ **Conference** Saturday, October 29, 2011, 8:15-22:00
- Sunday, October 30, 2011, 8:00-20:00

Symposium Venue

The symposium will be held in **The Science and Art Center, Xiamen University.**



Registration Time

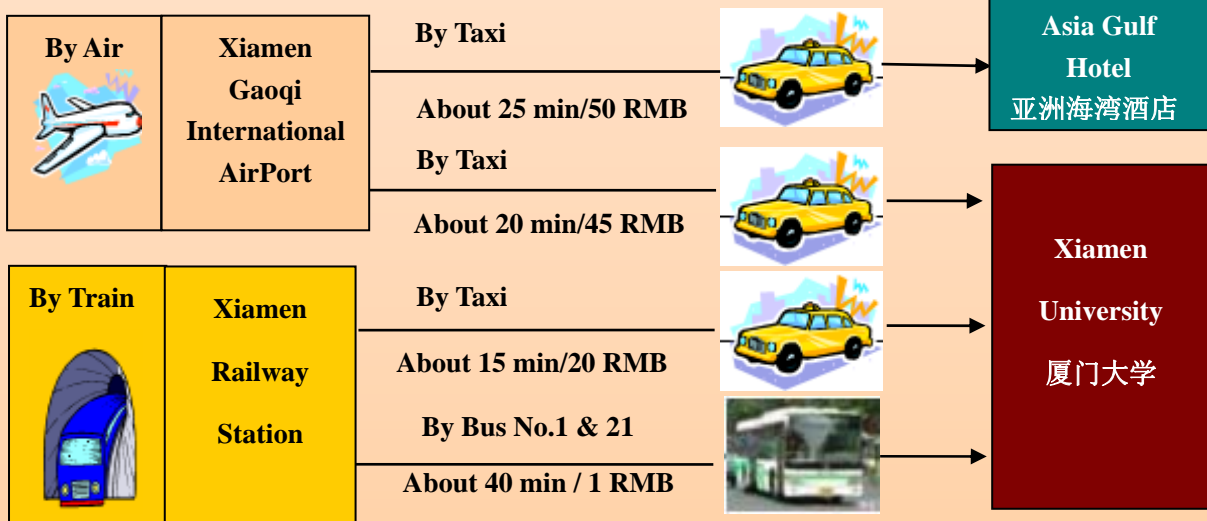
- ◆ 09:00-20:00, October 28, 2011
Yifu International Academic Exchange Center, Xiamen University .
- ◆ 8:15-12:00, October 29, 2011
The Science and Art Center of Xiamen University.

TRAFFIC INFORMATION

Access to Xiamen



How to Get to Xiamen University or Hotel



Yifu Hotel, Jianwen Hotel and Keli Hotel are located in Xiamen University.
Green Tree Inn Hotel and Xiamen Lvjing Hotel are located near the West Gate of Xiamen University.

Access to conference venue (3-D diagram of XMU Campus)



Contact Us

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Symposium Website: [http:// isiss2011.xmu.edu.cn](http://isiss2011.xmu.edu.cn)

Symposium E-mail: isiss2011@xmu.edu.cn isiss2011@live.com

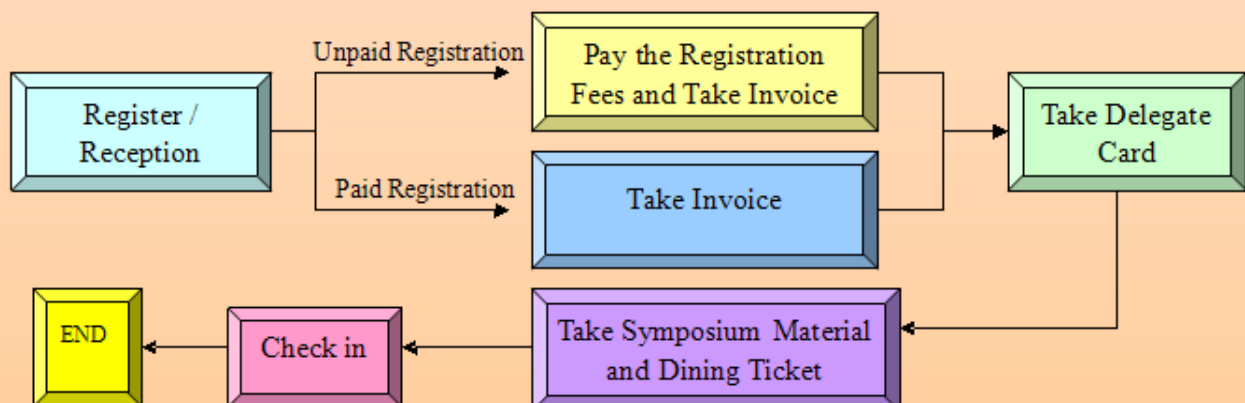
***For any inquiry, please ask the volunteers on-site.**

TECHNICAL PROGRAM

Symposium Program

October 28, 2011	9:00~20:00	Registration	Yifu International Academic Exchange Center, Xiamen University
	18:00~20:00	Welcome Reception	
October 29, 2011	8:15~8:45	Opening Ceremony	Music Hall, Science and Art Center, Xiamen University
	8:45~9:00	Taking Photo	
	9:00~10:15	Keynote Lectures	
	10:15~10:30	Tea Break	
	10:30~12:10	Keynote Lectures	
	12:20~13:30	Buffet	Yifu International Academic Exchange Center, Xiamen University
	13:30~16:25	Keynote Lectures	Music Hall/multifunctional hall, Science and Art Center, Xiamen University
	16:25~16:40	Tea Break	
	16:40~18:20	Invited Lectures	
	19:00~22:00	Banquet	Jiali Sea Food Restaurant on the Ring Road
October 30, 2011	8:15~10:20	Keynote Lectures	Music Hall, Science and Art Center, Xiamen University
	10:20~10:35	Tea Break	
	10:35~12:15	Keynote Lectures	
	12:15~13:30	Buffet	Yifu International Academic Exchange Center, Xiamen University
	13:30~14:00	Overlook of Xiamen University Campus on the Tallest Building	Song En Building, Xiamen University
	14:00~18:00	Parallel Technical Sessions	Conference Room, Science and Art Center/ Songen Building Xiamen University
	18:20~20:00	Buffet	Yifu International Academic Exchange Center, Xiamen University
International Workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou Forum 2011: Structures of Sustainability			
October 29, 2011	13:30~18:25	Conference Room 6, Science and Art Center, Xiamen University	
October 30, 2011	08:15~18:15		
October 31, 2011	06:30~20:30		

Registration Flow Chart



PROGRAM ON October 29, 2011

★ Opening Ceremony (08:15-08:45)	
Room: Music Hall, The Science and Art Center, Xiamen University	
Speakers: Organizing Chairman: Ying LEI Symposium Chairman: Jie LI President (or Vice President)of Xiamen University	
★ Taking Photo (08:45-09:00)	
★ Keynote Lectures (09:00-10:15)	
Chairman: Zhishen Wu, Hui Li	
09:00-09:25	<i>A.H-S. Ang, University of California, Irvine, California, USA</i>
	Seismic Risk Assessments and Risk-Informed Decisions For Major Infrastructure Systems
09:25-09:50	<i>Billie F. Spencer, University of Illinois at Urbana-Champaign, Urbana, USA</i>
	Recent Advances in Wireless Structural Health Monitoring of Civil Infrastructure
09:50-10:15	<i>Jie Li, Tongji University, China</i>
	Advances on Stochastic Damage Mechanics of Concrete
★ Tea Break (10:15-10:30)	
★ Keynote Lectures (10:30-12:10)	
Chairman: Jie Li, Billie F. Spencer	
10:30-10:55	<i>Youlin Xu, The Hong Kong Polytechnic University, Hong Kong</i>
	Structural Health Monitoring of Long-span Suspension Bridges: A Test Bed and Settlement Study
10:55-11:20	<i>Hongnan Li, Dalian University of Science and Technology, China</i>
	Studies on Structural Control of Civil Engineering
11:20-11:45	<i>Hui Li, Harbin University of Technology, China</i>
	Data compressive sampling and loss data recovery of wireless sensor networks
11:45-12:10	<i>Hota Gangarao, West Virginia University, USA</i>
	Advanced Fiber Reinforced Polymer Composites for Sustainable Civil Infrastructures
★ Buffet (12:20-13:30) Venue: Yifu International Academic Exchange Center, Xiamen University	

★ Keynote Lectures (13:30-16:25)	
Chairman: Hongnan Li, Youlin Xu	
13:30-13:55	<i>Kincho H. Law</i> , <i>Stanford University, Stanford, USA</i>
	Web Services in Civil and Structural Engineering Simulations
13:55-14:20	<i>Hanbin Ge</i> , <i>Meijo University, Japan</i>
	Safety Margins of the Capacity of Seismic Control Dampers in Steel Bridges against Multiple Earthquakes
14:20-14:45	<i>Fabio Casciati</i> , <i>University of Pavia, Italy</i>
	Design Constraints for A Wireless Network Architecture
14:45-15:10	<i>Weiliang Jin</i> , <i>Zhejiang University, China</i>
	Environmental Factors Influencing the Durability of Concrete Structures in Frost Environments
15:10-15:35	<i>Gangbing Song</i> , <i>University of Houston, USA</i>
	Civil Infrastructural Sustainability through Low Cost Piezoceramic Based Structural Health Monitoring
15:35-16:00	<i>Jerome P. Lynch</i> , <i>University of Michigan, USA</i>
	Long-Term Wireless Monitoring Systems for the Monitoring of Long-span Bridges
16:00-16:25	<i>Hongping Zhu</i> , <i>Huazhong University of Science and Technology, China</i>
	Dynamic Analysis of Structures Based on Spectral Element Method
★ Tea Break (16:25-16:40)	
★ Invited Lectures 1 (16:40-18:20)	
Room: Music Hall, The Science and Art Center, Xiamen University	
Chairman: Weiliang Jin, Hongping Zhu	
16:40-17:00	<i>Urs Meier</i> , <i>EMPA, Swiss Federal Laboratories for Materials Research and Technology, Switzerland</i>
	Sustainable Pedestrian Bridge Construction with Materials by Ccombination
17:00-17:20	<i>Shuzhi Lin</i> , <i>Xiamen Construction Management Bureau, China</i>
	Performance-based Structural Seismic Analysis of High-rise Building
17:20-17:40	<i>Jun Teng</i> , <i>Harbin Institute of Technology Shenzhen Graduate School, China</i>
	Research on Seismic Failure mode and Control of High-rise Diagrid Tube Structures
17:40-18:00	<i>Chao Zeng</i> , <i>Xiamen Road & Bridge Construction Group Company Limited, China</i>
	Key Technologies for Civil Engineering Construction of Xiamen Xiang'an Subsea Tunnel
18:00-18:20	<i>Ying Lei</i> , <i>Xiamen University, China</i>
	A Smart Wireless Sensor Network for Structural Damage Detection

★ Invited Lectures 2 (16:40-18:20)	
Room: Multifunctional Hall, 1st Floor of the Science and Art Center, Xiamen University	
Chairman: Limin Sun, Gangbing Song	
16:40-17:00	Wei qin Liu , <i>Nanjing University of Technology, China</i> Research and Application of Innovative Fiber Composite Structures
17:00-17:20	Obada Kayali , <i>University of New South Wales, Australia</i> Bricks, Pavers and Ceramics Made with Class F Fly Ash
17:20-17:40	Ta Lun Yang , <i>ENSCO Inc., Virginia, USA</i> Quality Assurance Methodology for High-speed Track Inspection Systems
17:40-18:00	Grace Yang , <i>Statistics Program, Division of Mathematical Sciences, USA</i> Variable Selection in Proportional Hazards Model: Determining Tuning Variable by AUC
18:00-18:20	Bin Xu , <i>Hunan University, China</i> Nonlinear Restoring Force and Dynamic Loading identification Approaches for Chain-like MDOF Structures by Power Series Polynomial Model
★ Banquet (19:00-22:00) Venue: Jiali Sea Food Restaurant on the Ring Road, Xiamen	

PROGRAM ON October 30, 2011

★ Keynote Lectures (08:15-10:20)	
Room: Music Hall, The Science and Art Center, Xiamen University	
Chairman: Kincho H. Law, Weixin Ren	
08:15-08:40	Wei qiu Zhu , <i>Zhejiang University, China</i> Optimal control of nonlinear random vibration
08:40-09:05	Jinguang Teng , <i>The Hong Kong Polytechnic University, Hong Kong</i> Recent Developments in FRP-based Hybrid Structures
09:05-09:30	Zhishen Wu , <i>Ibaraki University, Japan</i> Advancement of Basalt Fibers towards Infrastructural Applications
09:30-09:55	C. G. Koh , <i>National University of Singapore, Singapore</i> Innovative Design of Vibration Sensitive Buildings
09:55-10:20	Limin Sun , <i>Tongji University, China</i> Assessment Oriented Traffic Monitoring in SHMS
★ Tea Break (10:20-10:35)	

★ Keynote Lectures (10:35-12:15)		
Room: Music Hall, The Science and Art Center, Xiamen University		
Chairman: Jinguang Teng, Fabio Casciati		
10:35-11:00	Weixin Ren, HeFei University of Technology, China	
	Non-stationarity of Operational Vibration Measurements	
11:00-11:25	Bo Wu, South China University of Technology, China	
	Seismic performances of composite structural members with exterior steel and in-filled demolished concrete lumps	
11:25-11:50	Yiqing Ni, The Hong Kong Polytechnic University, Hong Kong	
	Structural Health Monitoring of Supertall Structures: An Engineering Paradigm and Technology Showcase	
11:50-12:15	Yunfeng Zhang, University of Maryland, USA	
	Sensor Degradation and Effect on Structural Health Prognosis	
★ Overlook of Xiamen University Campus on the Tallest Building (13:30-14:00)		
★ Parallel Technical Sessions (14:00-18:00)		
Venue: The Science and Art Center, Xiamen University		
First floor	multifunctional hall	Section 6 Novel Structural System and Experimental Methods for Civil Structures
	Conference Room 2	Section 3 Composite Structures and RC Structures
Second floor	Conference Room 4	Section 2 Structural Seismic Analysis and Seismic-resistant Structural Systems
	Conference Room 5	Section 1 Monitoring, Damage Detection and Identification for Engineering Structures
Third floor	Conference Room 7	Section 5 Disaster Prevention and Mitigation for Civil Structures
	VIP Room	Section 4 Design, Construction and Analysis of Bridge Structures
Venue: Song En Building, Xiamen University		
Second floor	220	Section 7 Reliability, Probabilistic Assessment and Uncertainty Evaluation
	115	Section 8 Structural Analysis and Design Method

Sessions 1: Monitoring, Damage Detection and Identification for Engineering Structures**Room :** Conference Room 5, Second Floor, Science and Art Center, Xiamen University**Chairman: Bin Xu, Shaofei Jiang**

No.	Time	Title	Authors
1	14:00-14:15	Best Practices for NI Structural Health Monitoring System	<i>Bin Ni</i>
2	14:15-14:30	ARMA (2, 1) Model Based on Improved EMD for Structural Modal Parameter Identification	<i>Chun Fu and Shao-Fei Jiang</i>
3	14:30-14:45	Research on corrosion monitoring of steel reinforced concrete structures using fiber optic Brillouin sensing technique	<i>Xuefeng Zhao, Jinping Ou</i>
4	14:45-15:00	Data-Driven Identification Methodology for Geotechnical Structures Using Long-Term Field Datas	<i>Hae-Bum Yun, Ganesh Sundaresan, Yoonhwak Kim and Lakshmi N. Reddi</i>
5	15:05-15:15	Temperature Distribution of Guangzhou New TV Tower Based on Structural Health Monitoring Data	<i>Peng Zhang, Yong Xia, Yi-Qing Ni and Wei-Yang Liao</i>
6	15:15-15:30	Output-Only Modal Parameter Identification of Bridge Structure Using Sobi Technique	<i>Ban-Fu Yan, Yu-Zhong Huang and Yang-Xi Liu</i>
7	15:30-15:45	Fatigue Reliability Analysis of Multi-Load Suspension Bridges Using a Nonlinear Fatigue Model	<i>Zhi-Wei Chen, You-Lin Xu and Xiao-Ming Wang</i>
8	15:45-16:00	Experimental Investigation on Smart Fiber Reinforced Polymer Anchor under Sand Anchorage Environments	<i>Ming-Hua Huang, Zhi Zhou, Shuai Yue, Jian-Ping He and Jin-Ping Ou</i>

16:00-16:15 Tea Break**Chairman: Hongpin Zhu , Jerome P.Lynch**

1	16:15-16:30	Smart-Label-Based Behavior Monitoring IOT System for the Infrastructures under Harsh Environments	<i>Zhi Zhou, Sheng-Hua Jiang, Ming-Hua Huang, Jian-Ping He and Jin-Ping Ou</i>
2	16:30-16:45	Application of smart aggregates for stress monitoring in building collapse process	<i>Shuang Hou, Peizhou Zhang</i>
3	16:45-17:00	The Research of Damage Detection of Gird-Slab Composite Bridge Based on Lifting Wavelet Entropy Indexes	<i>Zeng-Shou Sun, Ke-Ju Fan, Xu-Guang Yin and Peng-Jie Han</i>
4	17:00-17:15	Design and validation of fast inspection system for Bridge's global status using wireless sensor network	<i>Yan Yu, Xuefeng Zhao, Zhirui Li, Xingquan Mao, Jinping OU</i>
5	17:15-17:30	Study on Strong Wind Power Spectrum for Coastal Area of East China	<i>Hao Wang, Wen-Ping Deng, Zhou-Hong Zong, Ke-Guan Zou, Ai-Qun Li and B. F. Spencer</i>
6	17:30-17:45	Wavelet Transform Based Structural Damage Detection for Sudden Damage Situation	<i>Xin Zhao and Wen-Jian Yang</i>
7	17:45-18:00	Active Bolted Connection Performance Monitoring of a Concrete-steel Composite Girder with Piezoceramics	<i>Fan Jiang, Bin Xu and Gang-Bin Song</i>

Sessions 2: Structural Seismic Analysis and Seismic-resistant Structural Systems**Room :** Conference Room 4, Second Floor, Science and Art Center, Xiamen University**Chairman:** Jun Teng, Yongfeng Du

No.	Time	Title	Authors
1	14:00-14:15	Bridge Deflection Monitoring Using Acceleration Measurements	<i>Wei Lu, Ning-Shou Xu and Tian-Wei Ma</i>
2	14:15-14:30	High Temperature Behavior of Serial Isolation System and Fire Protection	<i>Yong-Feng DU, Jia-Liang Kou and Wei-Wei Kou</i>
3	14:30-14:45	Smart aggregates developed for seismic stress monitoring	<i>Shuang Hou , Haibin Zhang</i>
4	14:45-15:00	The evaluation on Seismic Resistance for a Typical Fire Station	<i>Jia-Yi Yen and Sheng-Nan Chang</i>
5	15:05-15:15	Seismic Performance of Partially Prefabricated Laminated Composite RC Walls: Simulations and Experiments	<i>Hong-Mei Zhang, Xi-Lin Lu and Jian-Bao Li</i>
6	15:15-15:30	A DC-Motor Based Active-Mass-Damper with Wireless Feedback for Structural Control	<i>Sara Casciati, Lucia Faravelli and Zhicong Chen</i>
7	15:30-15:45	Structural Damage Detection of the SHM Benchmark Problem Using a Two-Step Kalman Estimator Approach	<i>Ying Lei, Feng Chen and Yong-Qiang Jiang</i>
8	15:45-16:00	The Study of Performance on Base-isolated Design Parameters Through Entropy-based Classification	<i>Jia-Yi Yen, Shiuan Wan, Pei-Chuing Huang, Hsu-Hung Cheng</i>

16:00-16:15 Tea Break**Chairman:** Zhouhong Zong, Lucia Faravelli

1	16:15-16:30	The Remaining Service-Life Prediction of a Reinforced Concrete Girder Bridge Based on Time-Variant Reliability	<i>Zhou-Hong Zong, Zhou Chen and Hao Wang</i>
2	16:30-16:45	Analysis on Energy Demand for Inelastic SDOF Systems under Near-Fault Impulsive	<i>Di-Xiong Yang, Yi Liu and Wei Wang</i>
3	16:45-17:00	A Distributed Coaxial Cable Sensor for Crack Detection	<i>Peng Zhao, Zhi Zhou, Ming-Hua Huang and Jin-Ping Ou</i>
4	17:00-17:15	Application of Random Walking Force in Floor Vibration Serviceability Assessment	<i>Jun Teng and Xuan-Zhao Shen</i>
5	17:15-17:30	Seismic Response of Pile-Raft Foundation Constructed in Soft Clay	<i>Kang Ma</i>
6	17:30-17:45	The Study on Seismic Response with Pounding Effect of Continuous Bridges under Longitudinal Excitation of Traveling Seismic Wave	<i>Guang-Wei Zhou, Jian-Zhong Li and Chang-Ping Chen</i>
7	17:45-18:00	The Anti-Seismic Analysis of Lock-Up Device	<i>Ling-Jun Kong, Yan-Bei Chen, Hong-Xiang Li ,Qi-Bin Jiang</i>
8	18:00-18:15	Design, Testing and Anti-seismic Performance Analysis of Buckling-restrained Braces	<i>Zhen-xing Zhang, Xiang-liang Ning, Jun Liu, Wen-bin Li, Yan-bei Chen, Yu-xin Hu, Ming-jie Xu</i>

Sessions 3: Composite Structures and RC Structures**Room :** Conference Room 2, First Floor, Science and Art Center, Xiamen University**Chairman:** Weiqing Liu, Obada Kayali

No.	Time	Title	Authors
1	14:00-14:15	Self-Compacting High Strength Recycled Aggregate Concrete for Sustainable Construction	<i>Rasihah Sriravindrarah, Chng Xian Ming and Pek Qia Quan</i>
2	14:15-14:30	Comments on the Microplane Models for Concrete	<i>Jian-Ying Wu and Shi-Lang Xu</i>
3	14:30-14:45	Effect of Fly Ash on Capillarity of Self-Compacting Fly Ash Concrete	<i>J M Khatib, A Shaaban, O Kayali, S Kenai</i>
4	14:45-15:00	Optimization of Properties of Non-dispersible Underwater Concrete	<i>Hong-Mei Hu, Zhi-Xiong Yao, Yao Cheng, Gang Qian and Shao-Yin Zeng</i>
5	15:05-15:15	Deformation and Stress Redistribution of SRC Columns under Long-Term Axial Compression	<i>Zhou-Yi Chen , Yang Wang and Wei Chen</i>
6	15:15-15:30	Damage Model Based Nonlinear Analysis of RC Deep Beam	<i>Xiao-Dan Ren and Jie Li</i>
7	15:30-15:45	Shear Behavior of Reinforcement Concrete Beams with Corroded Stirrups	<i>Xin Xue and Seki Hirosh</i>
8	15:45-16:00	Experimental Study on Dynamic Hysteretic Behavior of RC Shear Walls under Different Loading Rates	<i>Ning Xu, Bin Xu, Xiang Zeng and Zhou Jiang</i>

16:00-16:15 Tea Break**Chairman:** Bo Wu, Weidong Zhuo

1	16:15-16:30	Experimental Study on Basic Mechanical Properties of Large Amount of Low-quality Fly-ash Concrete	<i>Weidong Zhuo, Ping ShangGuan, Xiaoping Lan, Xinyi Huang</i>
2	16:30-16:45	Experimental Study on the Behavior of Reinforced Concrete Columns under Static and Dynamic Loads	<i>Zhou Jiang , Bin Xu, Xiang Zeng and Ning Xu</i>
3	16:45-17:00	Experimental Studies of Cold-Formed Thin-Wall C-Section Steel-Lightweight Aggregate Concrete Composite Beam	<i>Gen-Tian Zhao and Jian-Hua Liu</i>
4	17:00-17:15	Universal Superposition Method for Calculating Bending Strength of Unsymmetrically SCC Column	<i>Shao-Quan Li</i>
5	17:15-17:30	Experimental Study on Performance of RC Beams without Stirrups under Various Loading Rates with Falling Weight Hammer	<i>Xiang Zeng and Bin Xu</i>
6	17:30-17:45	Numerical Simulation of Self-Centering Prestressed Concrete Beam-Column Connection with WEB Friction Devices	<i>Liang-Long Song and Tong Guo</i>
7	17:45-18:00	Producing Concrete Using Waste Foundry Sand	<i>J M Khatib, S Baig, O Kayali, S Kenai, B Menadi</i>

Sessions 4: Design, Construction and Analysis of Bridge Structures**Room :** VIP room, Third Floor, Science and Art Center, Xiamen University**Chairman:** Xianzhang Ling, Yiqiang Xiang, Ying Lei

No.	Time	Title	Authors
1	14:00-14:20	Invited Lecture: Behaviour of Rust Expansion Cracking of Concrete Deduced By Equivalent Corrosion Products of Steel Bar	<i>Yi-Qiang Xiang, Kun Cheng, Dong-Mei Guo, Wei Li, and Shi-Xu Lin</i>
2	14:20-14:40	Invited Lecture: Modeling of Dynamic Loading of Rail Traffic, and Vibration Response Analysis of Foundation	<i>Xianzhang Ling</i>
3	14:40-15:00	Invited Lecture: Seismic Fragility Analysis of Bridge based on Push-over method	<i>jinxin Gong</i>
4	15:00-15:15	Nonlinear Seismic Response Analysis of a Cable-Stayed Bridge	<i>De-Min Wei, Xiao-Nan Gao and Peng Kong</i>
5	15:15-15:30	Static Behavior of Long-span RC Cable-stayed Bridge with FRP Cables	<i>Xin Wang, Fan-Xing Zeng and Zhi-Shen Wu</i>
6	15:30-15:45	Seismic Assessment of Pile Shafts of Shuhe Bridge in Liquefiable Soils	<i>Lin Liu, Xue-Feng Zhang and Qing-Shan Yang</i>
7	15:45-16:00	Sustainable Design in Bridge Engineering	<i>Ya-Dong Li, Xun Zhang and Xiao-Zhen Li</i>

16:00-16:15 Tea Break**Chairman:** ChunSheng Wang, Jian Zhang

1	16:15-16:30	Adaptability Analysis on Present China Highway Bridge Design Vehicle Load	<i>Chun-Sheng Wang, Yu-Jiao Wang, Kai Xu, and Lan Duan</i>
2	16:30-16:45	Ambient Test and Structural Identification of a Long Span Suspension Bridge	<i>J. Zhang, J. Prader, F. Moon, A.E. Aktan and Z.S. Wu</i>
3	16:45-17:00	Parameter Analysis OF Prestressed Beam Bridges Construction Elevation on Highspeed Railway	<i>Jun-Qing Lei</i>
4	17:00-17:15	Simulation Study on Oblique Collision Inner Box of the Double Decked Continuous Box Girder Bridge	<i>Zheng-Feng Shen and Shen Chen</i>
5	17:15-17:30	The Behavior of Steel Orthotropic Bridge Deck under Wheel Load	<i>Chun-Sheng Wang, Zhuo-Ya Yuan, Tao Zhang and Bing-Ning Fu</i>
6	17:30-17:45	Investigation of Structural Behaviors of GFRP Reinforced Bridge Deck under Dynamic Traffic Loads	<i>Yu Zheng, Yun-Feng Pan and Guo-You Yu</i>
7	17:45-18:00	Stage Risk Forensic on Large-Scale Public Projects' Life-Cycle	<i>Li Lin, Wei-Dong Zhuo and Li-Chu Fan</i>

Sessions 5: Disaster Prevention and Mitigation for Civil Structures**Room :** Conference Room 7, Third Floor, Science and Art Center, Xiamen University**Chairman:** Yunfeng Zhang, Saleh Alsayed

No.	Time	Title	Authors
1	14:00-14:15	Dynamic Collapse Analysis of Steel Framed Roof Structure under Transient Wind Loading and Robust Enhancement Technique	<i>Yun-Feng Zhang and Lin-Jia Bai</i>
2	14:15-14:30	Strengthening of Seismically-deficient RC Beam-column Exterior and Interior Joints Using CFRP Composites	<i>Saleh Alsayed, Nadeem Siddiqui, Yousef Al-Salloum, Tarek Almusallam</i>
3	14:30-14:45	Experimental Study on Concrete Columns Confined by BFRP-PVC Tubes under Uniaxial Loading	<i>Shao-Fei Jiang, Tian-Jie Dai and Zhi-Lin Wu</i>
4	14:45-15:00	Study of the Blast Resistance Capacity of a New Multi-Arched Door Panel	<i>Wen-Su Chen and Hong Hao</i>
5	15:00-15:15	Parametric Study of Multi-arched Double-Layered Panel under blast load and Its Optimal Application in Blast Door Design	<i>Wen-Su Chen and Hong Hao</i>
6	15:15-15:30	Research and Application of Structure Health Monitoring System in Long-span Spatial Structure	<i>Qian Liu, Liang Ren, Hong-Nan Li and Dong-Sheng Li</i>
7	15:30-15:45	Experiment Study on Aseismic Behaviors of Chinese Ancient Structure Strengthened by Steel Components	<i>Qian Zhou and Wei-Ming Yan</i>
8	15:45-16:00	A New Approach for Integrating Structural Parameters Identification and Semi-Active Vibration Control	<i>Zhi-lu Lai, Ying Lei and Qiu-Shuang Lin</i>

16:00-16:15 Tea Break**Chairman:** Shuzhi Lin, Bo Song

1	16:15-16:30	Study on the Systematic Setting Method for Urban Disaster Prevention Sign and Their Identification with High Efficiency	<i>Bo Song, Yang Chen and Shu Jia</i>
2	16:30-16:45	Research of Stiffness Performance of Truss String Structure of a Large-Span Roof Structure	<i>Wen-Bo Sun and Wei Huang</i>
3	16:45-17:00	Application of a New Double-Arch-Support Structure in a Long-Span Space Structure	<i>Wen-Bo Sun, Jian-Wen Wang, Ting-Deng, Jun-Yi Jiang, Wei-Xing Zhou, Can Cui</i>
4	17:00-17:15	Shaking Table Tests of a Free-Standing Cultural Relic Strengthened by Nylon Lines	<i>Qian Zhou, Wei-Ming Yan, Jin-Bao Ji and Jing-Nan Zhou</i>
5	17:15-17:30	Application of Equivalent Beam-Column Method to Prediction of Ultimate Strength of CFST-CSW Arch	<i>Jing Gao and Bao-Chun Chen</i>
6	17:30-17:45	Innovative Research of High Performance and Sustainable Steel Bridges	<i>Chun-Sheng Wang, Lan Duan, Jing-Wei Zhu, and Xin-Xin Wang</i>
7	17:45-18:00	Using Fiber Bragg Grating Sensors to Measure Corrosion of Steels in Concrete —Lab Experimental Test and In-Field Application	<i>Zhu-Peng Zheng, Hong-Cheng Huang and Ying Lei</i>

Sessions 6: Novel Structural System and Experimental Methods for Civil Structures**Room :** multifunctional hall, First Floor, Science and Art Center, Xiamen University**Chairman:** Fuh-Gwo Yuan, Song-Ye Zhu

No.	Time	Title	Authors
1	14:00-14:15	Flexoelectric Strain Gradient Sensing Using Microcantilevers	<i>Wen-Bin Huang, Kyungrim Kim, Shu-Jun Zhang, Fuh-Gwo Yuan, Xiao-Ning Jiang</i>
2	14:15-14:30	Multi-Resolution Wavelet Analysis for Impact-Induced Damage Detection: Experimental Study	<i>Song-Ye Zhu, You-Lin Xu, Xiao-Hua Zhang and Sheng Zhan</i>
3	14:30-14:45	A Non Contact Displacement Measurement System Based on Vision System	<i>Fabio Casciati and Li-Jun Wu</i>
4	14:45-15:00	Explicit Expression for Tension Force Measurement of Sagged Cable with Vibration Absorber	<i>Ban-Fu Yan, Zhuo Wang, and Wei-Shan Zhang</i>
5	15:00-15:15	Comparison of Methods for Expanding Single Footfall Trace in 3d Dynamic Walking Load Experiment	<i>Yi-Xing Peng, Jun Chen, Ling Wang and Bo Chen</i>
6	15:15-15:30	Experimental Research on Mechanical Property of Beam-Column Endplate Connections for Portal Frame	<i>Jian Ye, Wei Zhang, Jian Xia, Cang-Lin Lai and Wen-Yao Zhang</i>
7	15:30-15:45	Experimental Study on Vibration Control of Beams with Viscoelastic Constrained Damping Foil	<i>Ying Yu, Bin Xu and Gang-Bing Song</i>
8	15:45-16:00	The Analysis of Examples on Solar Water Heating System Integrated Building Design	<i>Bo Wang</i>

16:00-16:15 Tea Break**Chairman:** Changping Chen, Hua Hu

1	16:15-16:30	Bridge Maintenance Optimization Based on Environmental Impact and Life Cycle Cost Analysis	<i>Xiao-Yan Sun, Wei-Wei Dong, Hai-Long Wang, Anne Kiremidjian and Jie Wang</i>
2	16:30-16:45	Experiments and Analysis on Vibratory Load Influencing the Shear Strength of Red Clay	<i>Hua Hu and Xiao-Zhen Zhou</i>
3	16:45-17:00	Study and Application of the Transverse Dynamic Behavior of the String in Beam-String-Structure	<i>Wen-Bo Sun and Wei Huang</i>
4	17:00-17:15	In-Situ Welding Distortion Prediction and Construction Control of a Steel Thick-Plate Box Girder	<i>Hai-Ying Wan and Yin Zhang</i>
5	17:15-17:30	Novel Techniques for Human-Induced Loading Experiment and Data Processing	<i>Ling Wang, Hao-Qi Wang, Yi-Xin Peng, Bo Chen and Jun Chen</i>
6	17:30-17:45	Experiment of Water Pipeline Considering Leakage	<i>Wei Liu, Lu-Na Huang and Jie Li</i>
7	17:45-18:00	Experimental Study on the Plant-Growing Properties and Application Benefits Analysis of Macroporous Concrete without Sand	<i>Yi Xing and Li-Mei Wang</i>

Sessions 7: Reliability, Probabilistic Assessment and Uncertainty Evaluation**Room :** 220, Second Floor, Song En Building, Xiamen University**Chairman:** Da-gang Lu, Quan Gu

No.	Time	Title	Authors
1	14:00-14:20	Invited Lecture: Fundamentals and State-of-the-Art of Finite Element Reliability Methods	<i>Da-Gang Lu</i>
2	14:20-14:35	Probabilistic Failure Analysis of Structures Using Importance Sampling-Based Markov Chains	<i>Xue-Ping Fan and Da-Gang Lu</i>
3	14:35-14:50	Reliability Assessment of Reinforced Concrete Grillage Girder Bridge	<i>Zhi Sun and Yi Zhang</i>
4	14:50-15:05	System Identification and Classification of Stochastic Change Detection of Uncertain Nonlinear Systems with Reduced-Order Models	<i>Aaron Rank, Hae-Bum Yun and Sami F. Masri</i>
5	15:05-15:20	A New Framework for Response Sensitivity Analysis of Soil-Structure Interaction (SSI) Systems	<i>Quan Gu</i>
6	15:20-15:35	A Non-Parametric Identification Methodology for Large-Scale Nonlinear Dynamic Systems with Uncertain Measurements	<i>Hae-Bum Yun, Aaron Rank, Sami F. Masri and Gianmario Benzoni</i>
7	15:35-15:50	Transient Stochastic Response of Quasi-Integrable Hamiltonion Systems with Viscoelasticity	<i>Zhong-Hua Liu, Jian-Hua Geng and Wei-Qiu Zhu</i>
8	15:50-16:05	Firstpassage failure of harmonically and randomly excited SDOF nonlinear oscillators with fractional derivative damping.	<i>Lincong Chen</i>

16:00-16:15 Tea Break**Chairman:** Cheng Su, Jian-Bing Chen


1	16:15-16:30	A Study on Time Domain Approach for Random Vibration Analysis of Structures Subjected to Non-stationary Excitations	<i>Cheng Su</i>
2	16:30-16:45	Nonlinear Optimal Control of Randomly Base-Excited Duffing Oscillators	<i>Yong-Bo Peng and Jie Li</i>
3	16:45-17:00	Frequency Domain Analysis of Time-Variant Tensile Axial Loading Cylinders under Random Wave Forces	<i>Song Lei, Wen-Shou Zhang, Jia-Hao Lin and Qian-Jin Yue</i>
4	17:00-17:15	Global Reliability of Civil Structures under Random Ground Motion	<i>Jie Li, Jian-Bing Chen and Jun Xu</i>
5	17:15-17:30	First-Passage Problem of 2DOF Strongly Nonlinear System under Combined Harmonic and Wide-Band Stochastic Excitations	<i>Yong-Jun Wu and Lei Zhang</i>
6	17:30-17:45	Influence of the Stochastic Damage Evolution in Concrete on the Flexural-Shear Failure Mode of Reinforced Concrete Beams	<i>Shi-Xue Liang, Jie Li</i>
7	17:45-18:00	Iterative Least-Square Estimation for Structural Nonlinearity and External Loadings Identification	<i>Jia He and Bin Xu</i>

Sessions 8: Structural Analysis and Design Method**Room : 115, Second Floor, Song En Building, Xiamen University****Chairman: Shi Yan, K.J. Shou**

No.	Time	Title	Authors
1	14:00-14:15	Stability Analysis of Bending Damaged Columns of Light-Weight Steel under Elevated Temperatures	<i>Shi Yan, Peng Li, Bao-Xin Qi, Lei Liu and Zhi-Qiang Xin</i>
2	14:15-14:30	A New Mindlin Plate Finite Element With Cracks	<i>Cheng-Yin Liu, John DeWolf and Jeong-Ho Kim</i>
3	14:30-14:45	The Impact of Topography and Geology on the Sediments in the Upstream of the Kao-Ping Catchment	<i>K.J. Shou , L.Y. Fei, M.M. Chen, C.Y. Wei, C.Y. Hung and Y.T. Huang</i>
4	14:45-15:00	A Mechanical Analogy to electromagnetic Shunt Damper	<i>Song-Ye Zhu, Wen-Ai Shen, You-Lin Xu, and Lee Wing-chung</i>
5	15:00-15:15	Investigations of Suspension Behaviors of Magnetorheological Fluid Using Large-Scale Molecular Dynamics Simulations	<i>Ying Feng, Yong-Bo Peng, Jian-Bing Chen</i>
6	15:15-15:30	An Assumed Strain Method for Isogeometric Finite Element Modeling	<i>Han-Jie Zhang and Dong-Dong Wang</i>
7	15:30-15:45	An Simplified FEM Analysis Method for Arc Member with Small Ratio of the Arc's Height to the Length of Chord	<i>Wen-Bo Sun and Wei Huang</i>
8	15:45-16:00	Finite Element Analysis on Steel Silo Reinforced with CFRP	<i>Zhi-Yong Yang, Song Zhao, Jun Hu, Zeng-Chan Lu</i>

16:00-16:15 Tea Break**Chairman: Dongdong Wang , Jun Chen**

1	16:15-16:30	A Novel Direct Iteration Method Tracing Load-Deflection Equilibrium Path for Nonlinear Truss Structure	<i>Shu-Tang Liu and Qi-Liang Long</i>
2	16:30-16:45	BP Neural Network Modeling of a Magnetorheological Damper	<i>Zhen Mei, Jian-Bing Chen, Jie Li and Jia Jia</i>
3	16:45-17:00	FEM Analysis of Mechanical Behavior of P.C. Continuous Curved Box Girder Bridges	<i>Shi-Sheng Fang, Kun Zhang, Shao-Jie Wu, Yao-Ming Wang and Xiang He</i>
4	17:00-17:15	Non-parametric Identification of Structural Nonlinearity with Limited Input and Output Measurements	<i>Ying Lei and Yang Liu</i>
5	17:15-17:30	A Hermite Reproducing Kernel Approach for Stability Analysis of Thin Beam	<i>Hui-Kai Peng and Dong-Dong Wang</i>
6	17:30-17:45	Vertical Random Responses of a Vehicle with Variable Speed Traveling Over a Bridge	<i>Dan-Yang Zhu, You-Wei Zhang, Ya-Hui Zhang, Jia-Hao Lin, Ai-Qin Tian</i>
7	17:45-18:00	Stiffness Analysis of Welded Spherical Joints with Rib Stiffeners	<i>Xing Wang</i>



International Workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou Forum 2011: Structures of Sustainability at International Symposium on Innovation & Sustainability of Structures in Civil Engineering

***October 28-31, 2011
Xiamen University, China***

***Organized by
Ruifeng Liang, West Virginia University, USA
Ying Lei, Xiamen University, China
Gangarao Hota, West Virginia University, USA***

***Supported by
Yongding County Government of Fujian Province, China
Longyan City Government of Fujian Province, China***

Program at Glance

October 28, 2011, Friday	09:00 - 21:00	Arrival and Registration	Yifu International Academic Exchange Center, Xiamen University
	19:00 - 21:00	Welcome Reception	
October 29, 2011, Saturday	8:15 - 8:45	Symposium Opening Ceremony	Music Hall, Science and Art Center, Xiamen University
	8:45 - 9:00	Taking Photo	
	9:00 - 10:15	Keynote Lectures	
	10:15 - 10:30	Tea Break	
	10:30 - 12:10	Keynote Lectures	
	12:20 - 13:30	Buffet	Yifu International Academic Exchange Center, Xiamen University
	13:30 - 14:00	Hakka Tulou Forum Opening Ceremony	Conference room 6, Science and Art Center, Xiamen University
	14:00 - 15:40	Workshop Session 1	
	15:40 - 16:00	Photo Taking of Forum Participants and Tea Break	
	16:00 - 18:25	Workshop Session 2	
	19:00 - 22:00	Banquet	Jiali See Food Restaurant on the Ring Road
October 30, 2011, Sunday	08:15 - 10:20	Workshop Session 3	Conference room 6, Science and Art Center, Xiamen University
	10:20 - 10:35	Tea Break	
	10:35 - 12:15	Workshop Session 4	
	12:20 - 13:30	Buffet	Yifu International Academic Exchange Center, Xiamen University
	13:30~14:00	Overlook of Xiamen University Campus on the Tallest Building	Song En Building, Xiamen University
	14:00 - 16:05	Workshop Session 5	Conference room 6, Science and Art Center, Xiamen University
	16:05 - 16:20	Tea Break	
	16:20 - 18:20	Workshop Session 6	
	18:20 - 20:00	Buffet	Yifu International Academic Exchange Center, Xiamen University
October 31, 2011, Monday	06:30 - 09:30	Journey to World Heritage Fujian Tulou • Hakka Yongding	
	09:30 - 12:00	Tour Gaobei Tulou Village	
	12:00 - 14:00	Lunch at Hukeng Town Visitor Center Special Field Session: Meeting Hakka Rammed Earth Masters and Showing "History Made for Tomorrow: Hakka Tulou"	
	14:00 - 16:00	Tour Hongkeng Folk Culture Village	
	16:00 - 17:30	Return Journey via Tianloukeng Tulou Village	
	17:30 - 20:30	Return Journey to XMU with a stop for dinner	

Technical Program

October 29, 2011, Saturday

★ Workshop Invited Lectures

Room: Conference room 6, Second Floor, Science and Art Center

Session 1 13:30 - 15:40	Co - Chairs: Ruifeng Liang and Paul Jaquin	
	13:30 - 14:00	Hakka Tulou Forum Opening Ceremony <i>Invited Guests</i>
	14:00 - 14:25	"History Made for Tomorrow: Hakka Tulous" <i>Richard Yelland, Curtis Birch Inc. USA</i>
	14:25 - 14:50	A History of Rammed Earth in Asia <i>Paul Jaquin, Director of Earth Building UK</i>
	14:50 - 15:15	Nondestructive Evaluation of Historic Hakka Rammed Earth Structures <i>Ruifeng Liang, West Virginia University, USA</i>
	15:15 - 15:40	Contemporary Rammed Earth Construction and Research in North America <i>Bly Windstorm, North America Rammed Earth Association, USA</i>
	15:40 - 16:00	Tea Break and Workshop Photo Taking
Session 2 16:00 - 18:25	Co - Chairs: Bly Windstorm and Miao Pang	
	16:00 - 16:25	Environmental Assessment and Preservation for Fujian Hakka Villages <i>Minoru Ueda, MU Design, Tokyo, Japan</i>
	16:25 - 16:50	Experimental Study of Cement Mortar - Steel Fiber Reinforced Rammed Earth Wall <i>Miao Pang, Zhejiang University, China</i>
	16:50 - 17:15	Heaven and Earth In Tulou Design <i>Keith Lowe, Tsung Tsin Association of Ontario, Canada</i>
	17:15 - 17:40	The Genes of Tulou: Preservation and Sustainable Development of Tulou <i>Shaosen Wang, Xiamen University, China</i>
	17:40 - 18:05	Structural Responses of Hakka Rammed Earth Buildings under Earthquake Loads <i>Hota Gangarao, West Virginia University, USA</i>
	18:05 - 18:25	Performance Observations of the Beijing Area's Great Wall "Rammed Earth and Rubble Core" <i>David Dark, Executive Director Even Pina Architecture Ltd. (HK)</i>
19:00 - 22:00	Banquet (Jiali Sea Food Restaurant on the Ring Road, Xiamen)	

October 30, 2011, Sunday

★ Workshop Invited Lectures

Room: Conference room 6, Second Floor, Science and Art Center

Session 3 08:15 - 10:20	Co - Chairs: Shaosen Wang and Daniela Ciancio	
	08:15 – 08:40	Distinctions of Architectural Morphology Between Tubao and Tulou in Fujian <i>Zhijian Dai , Xiamen University, China</i>
	08:40 – 09:05	Use of Rammed Earth in Aboriginal Remote Communities of Western Australia: a Case Study on Sustainability and Thermal Properties <i>Daniela Ciancio, University of Western Australia, Australia</i>
	09:05 – 09:30	Translational Research in Mechanics and Materials: Sustainability and Durability <i>Ken P. Chong, George Washington University, USA</i>
	09:30 – 09:55	Sustainable Technology Research and Demonstration Center for Earth Structures <i>Judy Ueda, MU Design, Tokyo, Japan</i>
	09:55 – 10:20	First experience in earthen construction in Tunisia after a training at CRATerre, France <i>Ladjili Karim, Studio Milou Architecture, Singapore</i>
	10:20 – 10:35	Tea Break
Session 4 10:35 - 12:15	Co - Chairs: Ken Chong and Daniela Ciancio	
	10:35 – 11:00	An Overview of Some Current Recommendations on the Suitability of Soils for Rammed Earth <i>Daniela Ciancio, University of Western Australia, Australia</i> <i>Paul Jaquin, Director of Earth Building UK</i>
	11:00 – 11:25	Erosion Damage of the Rammed Earth Wall of Fujian Earth Buildings Caused by the Wind - Driven Rain <i>Xingqian Peng, Huaqiao University, China</i>
	11:25 – 11:50	Spatial Order and Typology of Hakka Dwellings <i>Kazutoshi Katayama , Tokyo University of the Arts, Japan</i>
	11:50 – 12:15	Values of Fujian Yongding Hakka Tulou <i>Daxin Hu, Yongding Tulou Museum, Fujian Yongding, China</i>
	12:20 – 13:30	Buffet (Yifu International Academic Exchange Center , Xiamen University)
13:00 – 14:00	Overlook of Xiamen University Campus on the Tallest Building	

Session 5 14:00 - 16:05	Co - Chairs: Paul Jaquin and Bly Windstorm	
	14:00 - 14:25	Overview of Earth Building in Europe
		<i>Paul Jaquin, Director of Earth Buildings UK</i>
	14:25 - 14:50	Overview of Technics of Rammed Earth Wall
		<i>Cheng - Bin Zhou, Fuzhou University, China</i>
	14:50 - 15:15	Rammed Earth Construction Code and ASTM E2392
		<i>Bly Windstorm, North America Rammed Earth Association, USA</i>
	15:15 - 15:40	Traditional Environmental Knowledge in Hakka Weilongwu: from the view of Anthropology of Landscape
<i>Hironao Kawai, Sun Yat - sen University, China</i>		
15:40 - 16:05	Announcement of the 4th Toronto Hakka Conference and Hakka Tulou Forum 2012: Putting Sustainability into Practice, June 29 to July 1, 2012	
	<i>Keith Lowe, Tsung Tsin Association of Ontario, Canada</i>	
16:05 - 16:20	Tea Break	
Session 6 16:20 - 18:20	Co - Chairs: Ying Lei and Hota Gangarao	
	Roundtable Discussions and Programs Development	
	<i>Success Stories and Lessons</i>	
	<i>Specifications, Codes and Standards</i>	
	<i>Challenges and Opportunities (Future Directions)</i>	
	<i>Collaborative Projects</i>	
	<i>Summary of Action Items</i>	
18:20 - 20:00	Buffet (Yifu International Academic Exchange Center , Xiamen University)	

Exhibition Company

The following companies are making exhibitions on the
**Second Floor of the Science and Art Center at Xiamen
University on Oct. 29-30,2011.**

美国国家仪器（NI）有限公司



欧美大地仪器设备中国有限公司



江苏东华测试技术股份有限公司



长春新试验机有限责任公司

成都市伺服液压设备有限公司

杭州邦威机电控制工程有限公司



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from above companies to the symposium.



The Organizing Committee of ISISS'2011
Xiamen University
Xiamen, China

POST-SYMPOSIUM ACTIVITY

Fujian Nanjing Hakka Tulou (one-day tour)

Tianluokeng Tulou cluster which is located in Nanjing, Fujian consists of five tulous with a square "Buyunlou" at the center, surrounded by three rotunda tulous and an oval tulou, forming a pattern of "four dishes and a soup"

Fujian Yongding Hakka Tulou (two-day tour)

Fujian Hakka Tulou/Rammed Earth is "the most extraordinary type of Chinese rural dwellings" in the mountainous areas in southeastern Fujian, China. Among them Chuxi tulou cluster which is located in Yongding has been inscribed by UNESCO in 2008 as World Heritage Site, as "exceptional examples of a building tradition and function exemplifying a particular type of communal living and defensive organization in harmonious relationship with their environment".



Wuyi Mountains (two-three days tour)

The Wuyi Mountains are a mountain range located in the prefecture of Nanping, in the northern border of Fujian province with Jiangxi province, China. The mountains cover an area of 60 km². In 1999, Mount Wuyi entered UNESCO's list of World Heritage Sites, both natural and cultural. It is known for the most outstanding biodiversity conservation zone of Southeast China and numerous types of tea are produced around Mount Wuyi, including the real Da Hong Pao tea which is the most famous tea in China.





Phoenix Flowers are Blossoming



Ring Road



Chenggong Zheng Statue



Gulang Island



**October 28-30, 2011
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Xiamen, China**