# The 15th International Symposium on Structural Engineering (ISSE-15)

(Third Announcement) 24-27 October 2018 China Hangzhou





Sponsor: National Natural Science Foundation of China, China

Organizer: Zhejiang University, China

Co-organizer: Zhejiang University of Technology, China

Ningbo Institute of Technology, Zhejiang University, China

### **INTRODUCTION**

The 15th International Symposium on Structural Engineering (ISSE-15) will be held in Hangzhou on October 24-27, 2018. The ISSE-15 is sponsored by the National Natural Science Foundation of China (NSFC). It will be organized by Zhejiang University. The Symposium was derived from the International Symposium on Structural Engineering for Young Experts (ISSEYE) which was held in Leshan, China since 1990. It has been held biannually in China since in Harbin (1992), Shanghai (1994), Beijing (1996), Shenyang (1998), Kunming (2000), Tianjin (2002), Xi'an (2004), Fuzhou (2006), and Changsha (2008). In 2010, the title of the symposium was updated to "The International Symposium on Structural Engineering (ISSE)" and then held in Guangzhou (2010), Wuhan (2012), Hefei (2014) and Beijing (2016) with this title. Till now, it has been successfully held for 14 times. With more than 20 years' development, ISSE has become attractive to many young and middle-aged elite Chinese scholars all over the world with its distinct characteristics and features.

The ISSE-15 takes inheritance, development, openness and imagination as the tenet. The objective of ISSE-15 is again to provide a forum for experts from the research and engineering communities, who work worldwide in the broad areas of structural engineering and construction, to present recent progress in research and development; to exchange information on the topics of design theory about structural system and performance, construction and maintenance management, disaster impact, structural failure mechanism and behavior control, modern structural experiment, measurement and numerical simulation techniques; to discuss the application of innovative technologies and techniques for the safety and sustainable development of infrastructures; to promote close international collaboration and cooperation; to figure out the future development of structures in the coming 20 years.

### THEME

Major topics included (but not limited to):

- Structural system and design theories
- Green building and industrialization
- Theories and methods of structural performance analysis
- Advanced structural experimental techniques
- Advanced sensing technology, sensor networks, structural monitoring and control
- Disaster prevention and mitigation, protection of infrastructures
- Soil-structure interaction
- Large scale and complex infrastructure and spatial structures
- Reliability and durability of structures
- Structural rehabilitation, retrofitting and strengthening

- Heritage building performance and assessment
- Application of artificial intelligence in Civil Engineering

# **CONFERENCE PROGRAMME**

Date	Time	Activities
Oct. 24, 2018	13:00—22:00	Check In & Registration
Oct. 25, 2018	8:30—12:00	Opening Ceremony & Plenary Reports
	14:00—18:00	Invited Keynotes & Parallel Sessions
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Oct. 26, 2018	14:00—18:00	Invited Keynotes & Parallel Sessions
Oct. 27, 2018	8:30—12:00	Plenary Reports & Closing Ceremony
	14:00—17:00	Technical Tours

#### **LOCATION**

#### Hangzhou

Hangzhou's history dates back to 2,200 years ago during the Qin dynasty (221-206 BC). The city was chosen as capital of the Wuyue Kingdom (907-978 AD) and the Southern Song Dynasty (1127-1279 AD). It is one of the seven ancient capitals of China. Hangzhou is famous for its beautiful scenery, and crowned as the paradise on earth. Hangzhou benefited from the convenience of the Beijing-Hangzhou canal and trade ports, as well as its own developed silk and grain industry, which historically served as an important commercial distribution center. Thereafter, relying on the railway, as well as Shanghai's import and export trade, its industry experienced a rapid progress.

Hangzhou has a large number of cultural relics most of which scattered around West Lake, and the main representative among them include the West Lake culture, Liangzhu culture, silk culture, tea culture, etc. And a lot of stories and legendries are handed down, and become cultural representatives of Hangzhou.

#### PLENARY AND KEYNOTE REPORTS

The organizing committee has received more than 360 conference abstracts/papers. 12 plenary reports, 37 invited keynotes, and more than 160 parallel reports have been prepared, as follows:

#### **Plenary Reports** (In alphabetical order)

Reporter	Institute	Торіс
ZQ CHEN	Hunan University	索支承桥的多阶涡振问题研究
SL Dong	Zhejiang University	索穹顶体系创新研究及葵花双撑杆型索穹顶预 应力态分析
YL DU	Shijiazhuang Railway Institute	关于推进我国交通基础设施重大工程结构长寿 命安全保障战略的研究
CW LIAO	Southeast University	Study on Improvement Technology for Durability of Concrete
JP OU	Harbin Institute of Technology	Structural Health Monitoring and the Life Prediction and Maintenance of Civil Infrastructures

BF Spencer	UIUC	Topology Optimization of Seismically Excited
		Structures
JG TENG	Hong Kong Polytechnic	Structural Engineering Innovations with
JO ILNO	University	Emerging Materials
70 WH	Southeast University	Recoverability and Sustainability Enhancement of
ZS WU		Structures with Advanced FRP Reinforcements
	Institute of engineering	
LL XIE	mechanics, China	韧性城市: 从结构抗震到城市抗震
	seismological bureau	
YM XIE	RMIT University	Application of Topology Optimization Technique
IWIAIL		to Structural Engineering
	General institute of	
QR YUE	architectural research of	To be confirmed
	MCC	
CD VIIN	KAIST/ Zhejiang	ICT Convergence to Civil Infrastructural
CB YUN	University	Engineering
XH ZHOU	Chongqing University	To be confirmed

# Invited Keynote (In alphabetical order)

Reporter	Institute	Торіс
Yong BAI	Zhejiang University	Flexible Composite Pipes - Design & Structural Analysis
CS CAI	Louisiana State University	Performance investigation of low-rise buildings under hurricane wind loading
GD CHEN	University of Missouri Science and Technology	High Performance Bridges with Sustained  Materials, Automated Preservation, and Informed  Decision: a Life-cycle Perspective
JF CHEN	Queen's University Belfast	FRP confined seawater and sea-sand concrete
XL DU	Beijing University of Technology	To be confirmed
F FAN	Harbin Institute of Technology	Structural Performance of Latticed Shells with Semi-rigid Joints
Q FANG	PLA university of science and technology	冲击爆炸荷载作用下混凝土结构的数值模拟
HB GE	Meijo University	高性能阻尼器的力学特性及在地上和地下结构 中的减震机理与效能研究
XL GU	Tongji University	Time-dependent reliability analysis of corroded reinforced concrete beams considering non-uniform corrosion of steel bars
LH HAN	Tsinghua University	Behaviour of recycled aggregate concrete (RAC)- filled steel tubular columns

HP Hong	University of Western	Tower and Tower-line System Subjected to Wind
	Ontario	Loading and Their Reliability Evaluation
WL JIN	Zhejiang University	The Life-Cycle Analysis &Design of Concrete Structures and its Application
Y LEI	Xiamen University	Identification of Time-varying Structures by Integrated Wavelet Multiresolution Analysis and Kalman Filtering with Partial Measurements
GQ LI	Tongji University	Development of Structural Metal Dampers for Seismic Disaster Mitigation of Buildings
HLI	Harbin Institute of Technology	工程系统的智能流体动力学与流动控制
QS LI	City University of Hong Kong	Wind Profiles and Wind Effects on Skyscrapers during Windstorms
ZX LI	Tianjin University / Tianjin Urban Construction Institute	Progress on Development of Underwater Earthquake Simulation Shaking Table Array
JP LIU	Southeast University / Jiangsu Research Institute of Building Science	Shrinkage and Cracking Mitigation Technologies for Modern Concrete
WQ LIU	Nanjing University of Technology	To be confirmed
GX LU	Swinburne University of Technology / Tianjin Urban Construction Institute	Recent Studies on Energy Absorption of Origami Patterned Structures
Y LU	University of Edinburgh	Beam assemblies in a progressive collapse scenario: overview and some recent studies
YZ LUO	Zhejiang Univerisity	Finite Particle Method for the Analysis of Structural Complex Behaviors
GW MA	University of Western Australia / Hebei University of Technology	混凝土 3D 打印研究现状和展望
WX REN	Hefei University of Technology	Non-stationarity of Operational Measurements in Structural Health Monitoring
J TENG	Harbin Institute of Technology (Shenzhen)	Technologies and Challenges of SHM for Solving the Engineering Problems
CQ WU	University of Technology Sydney / Tianjin Urban Construction Institute	Cement-based and Geopolymer-based Ultra-High Performance Concrete under High Rate Loading
B WU	South China University of Technology	Mechanical properties of novel precast concrete structural members
G WU	Southeast University	Dry Connected Precast Concrete Structures and Non-Emulative Cast-in-Place Design Theory

JZ XIAO	Tongji University	Concept of composite concrete and its application
Y XIA	Hong Kong Polytechnic University	Sparse Recovery and Sparse Bayesian Learning for Structural Damage Detection
SL XU	Zhejiang University	韧性混凝土
QS YANG	Chongqing University	Recommendations in the Chinese Professional Standard for Wind Loads on Roof Structures
ЈН ҮЕ	China University of Mining and Technology	Fire test and numerical simulation investigation of mid-rise cold-formed steel composite shear wall structures
ZW YU	Central South University	混凝土损伤本构关系研究及应用
Y ZHOU	Guangzhou University	Design of lead-filled steel tube damper and its mechanical properties Research
HP ZHU	Huazhong University of Science and Technology	Structural condition assessment of long-span bridges based on precise local damage inspection technique
XQ ZHU	University of Technology Sydney / Tianjin Urban Construction Institute	Condition Assessment of Highway Bridges under Traffic Loadings

# **ADVISORY COMMITTEE** (In alphabetical order)

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Xuhong ZHOU, Chongqing University, China

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#### **ORGANIZING COMMITTEE**

**Chairmen:** Yuxi ZHAO, Yuanfeng DUAN, Zhejiang University, China **Co-chairmen:** Jian Guo, Zhejiang University of Technology, China;

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Xingfei YUAN, Tao MENG, Dawei ZHANG, Qinghua LI, Yanbin SHEN

**Organizing Committee and Contact Information** (in alphabetical):

Group	Committee Members
Propaganda	Leader: Hailong WANG (13957136640); Miao PANG, Tao MENG, Ye TIAN
Abstract	Leader: Xiaowei YE (15857113136); Dongming YAN, Yong CHEN
Registration	Leader: Mingfeng HUANG (15268107386); Jiyang Wang, Ye TIAN, Xinjun ZHANG
Accommodation	Leader: Jiyang Wang (13003635588); Tao JIANG, Ju CHEN
Catering	Leader: Xingfei YUAN (13868131161); Tao JIANG, Chuanqing FU
Conference Hall	Leader: Tao MENG (13606700877); Dawei ZHANG, Deyu KONG, Jiandong WANG
Transportation	Leader: Dawei ZHANG (18357126199); Ju CHENG, Haixiang CHEN, Fuyuan GONG, Tao SHI, Jianghong MAO, Jun ZHANG
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Conference Affair	Leader: Xiaorong SHENG (18767151549); Yinhui WANG, Jiaxing MA, Wenwen MA
Technical Tour	Leader: Yanbin SHEN (13033605591); Qin ZHAO

#### **CORRESPONDENCE**

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# REGISTRATION

# 1. Registration Fee:

Before 15 September 2018, Regular delegate: CNY 2100 (USD 330); Student delegate: CNY 1500 (USD 250).

After 15 September 2018, Regular delegate: CNY 2400 (USD 380); Student delegate: CNY 1800 (USD 300).

Conference fee includes conference proceedings, conference banquet, daily meals and coffee breaks.

#### 2. Application for Parallel Sessions Is Closed.

- 3. Payment Method:
  - ① QR Code Payment via WeChat;
  - ② Conference Homepage: <u>www.isse15.com</u>;
  - 3 Pay at Checking in.

Hangzhou zhejiang university tongli conference and exhibition industry management co., LTD will be in charge of issuing the meeting registration fee invoice; invoices are available for all payment methods.

Note: Delegates who have been registered and submitted papers on the conference homepage can log into personal accounts and finish the payment. Delegates who made no paper submission should register on the conference webpage first before payment. The collection of conference fees is supported by third-party platform. Please click the 'Back to Merchant' button after the payment. This will lead you back to the conference webpage and complete the payment steps.

- 4. **Accommodation**: Hotel reservation can be made while registering via the Wechat QR Code. Please contact us for booking if you pay through the website. The agreement price of the First World Hotel (conference venue) is 450 RMB/per day, the price of Jinma Hotel is 320-350 RMB/per day.
- 5. If you already paid but cannot attend the conference, please contact us before October 17 for refunding (relevant service charge will be deducted). No refund after October 17, 2018.
- 6. Sign up for the conference: This conference can sign up through conference webpage or WeChat QR Code. WeChat QR Code:



# REGISTRATION

Registration Time: October 24, 13:00-22:00; October 25, 8:00-18:00
Registration Location: Hangzhou, the First World Hotel- East Lobby
(No. 2555 Fengqing Avenue, Xiaoshan District)

#### TRANSPORTATION

	Option One:
	Taxi, around 100 RMB, 28 km, 45 minutes;
Hangahan Viasahan	Option Two:
Hangzhou Xiaoshan	Take the airport bus Xiaoshan urban line, get off at Xiaoshan Long-
Airport	distance Bus Station, walk 220 meters, take No. 716 bus at Xiaoshan
	Bus Terminal, get off at Xianghu Road Shuobo intersection, walk 840
	meters to Hangzhou First World Hotel.
	Option One:
Hangzhou East	Taxi, around 65 RMB, 19 km, 40 minutes;
Railway Station	Option Two:
	Subway Line 1 at East Railway Station, get off at Xianghu Station (C

	outlet), walk 250 meters, take No. 712 bus at Xiangbus bus station, get
	off at Hangzhou Paradise North Square Station, walk 150 meters to
	Hangzhou first World hotel.
Hangzhou City Railway Station	Option One:
	Taxi, around 50 RMB, 15 km, 40 minutes;
	Option Two:
	Subway Line 1 at City Railway Station, get off at Xianghu Station (C
	outlet), walk 250 meters, take No. 712 bus at Xiangbus bus station, get
	off at Hangzhou Paradise North Square Station, walk 150 meters to
	Hangzhou first World hotel.

# **Other Hotel Recommendation**

Hotel	Location
The First World Hotel	No. 2555 Fengqing Avenue, Xiaoshan District Conference Venue
Hangzhou Jinma International Hotel	No. 1 Wenhua Road (near Xiaoshao Road), Xiaoshan District 2.8 km away from the conference venue
Hangzhou Kaihao Hotel	No. 268 Tiyu Road, Xiaoshan District 2.4 km away from the conference venue
Hanting Express (Hangzhou Shixin Road)	No. 570-572 Middle Shixin Road, Xiaoshan District 3.8 km away from the conference venue
Hangzhou Blossom-Tour Hotel	No. 618 Middle Shixin Road, Xiaoshan District 4 km away from the conference venue
New Century Grand Hotel Hangzhou	No.818 Shixin Middle Road, Xiaoshan District 4.3 km away from the conference venue