

# YRGS 2010

2<sup>nd</sup> Asia-Pacific Young Researchers and Graduates Symposium

**Advance in Structural Engineering**



**27-28, March 2010**

**Zhejiang University, Hangzhou, P. R. China**

*Sponsored and Organized by*



**Zhejiang University, China**



**Tongji University, China**

We are privileged to be hosting the 2<sup>nd</sup> Asia-Pacific Young Researchers and Graduates Symposium (YRGS2010) at Zhejiang University. The objective of the symposium is to provide a forum for young experts from research and practicing engineering communities working in structural engineering and construction to present their latest development, to exchange the information, to discuss the current problems and address the future challenges in structural engineering. This symposium is also aiming to establish a collaborative network for researchers and engineers in structural engineering within Asia-Pacific area.

The 1<sup>st</sup> Asia-Pacific Young Researchers and Graduates Symposium was held in Kunsan, Korea on 27-28 February 2009. The 2<sup>nd</sup> symposium, organized by Zhejiang University and Tongji University, is held in the city of Hangzhou, one of the seven ancient capitals in China. Hangzhou is also a city with historical and cultural heritage, a city for sightseeing and tourism, and a metropolis in Yangtze delta.

On behalf of the Organizing Committees of YRGS2010, we cordially invite you to attend and contribute to this symposium. At the same time, we are indebted to all authors for their contributions in the field of structural engineering. Appreciation is also due to members of the Advisory and Academic Committee for their advice in preparation of the symposium. Grateful thanks are also due to the members of the Organizing Committees, for the amount and quality of their work—their advices, constant support and encouragement were essential to the success of YRGS2010.

Yuxi ZHAO  
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### Registration Desk

Time: 13:00—18:00, 26<sup>th</sup> March

Location: Lobby of Zijingang Hotel

### Conference Secretariat

The conference secretariat is located in **Room 1208, Zijingang Hotel** from 26<sup>th</sup> to 28<sup>th</sup> March.

Email: YRGS2010@zju.edu.cn

Website: [www.ccea.zju.edu.cn/YRGS2010/index.html](http://www.ccea.zju.edu.cn/YRGS2010/index.html)

### Accommodation

Zijingang Hotel

798 Shenhua Road, HangZhou

Phone: 86-571-88969999, 89977006

Fax: 86-571-89977008



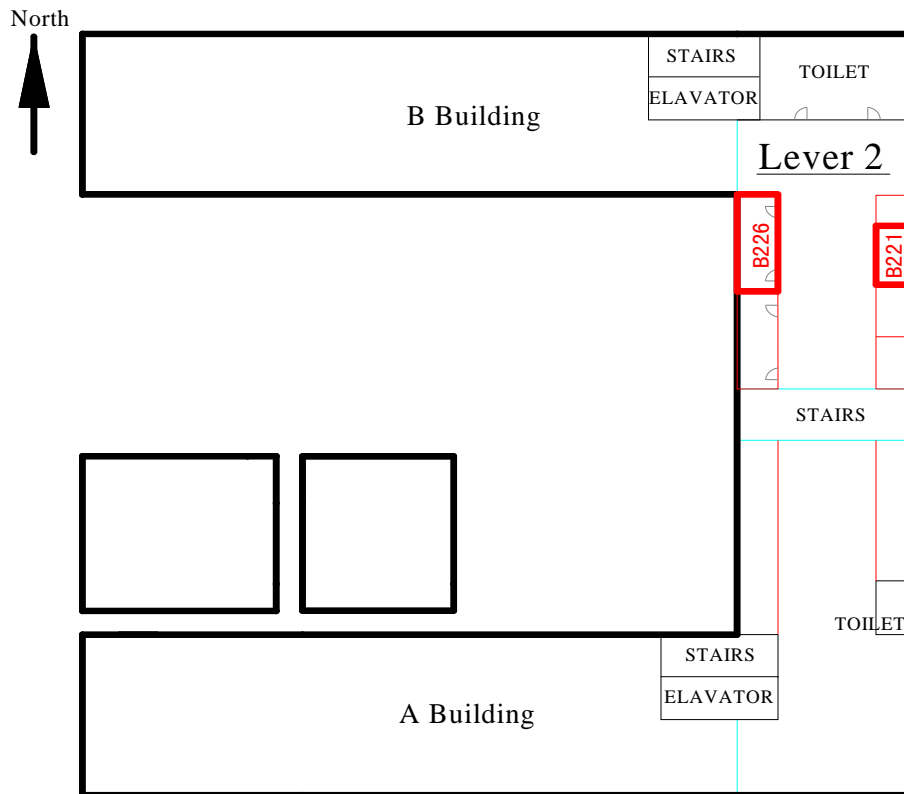
### Weather

Typical weather of late March in Hangzhou is about 19°C high and 10°C low. For the latest weather forecast, please go to <http://www.worldweather.org/001/c00556.htm>

### To Venue

The symposium will be held in An-Zhong Building (see the front page), Zijingang Campus of Zhejiang University. It takes 15~20 minutes walking from Zijingang Hotel to An-Zhong Building (see the map below).





Map of conference room (Room B226, An-Zhong Building)

### Presentation time control

- Please bring your presentation file with a memory stick and upload it to the PC 10 minutes before the session starts.
- Please note that the presentation time for speakers is 20 minutes. At the end of each session, please leave 5 minutes for questions and discussion. For a typical 20-minute presentation, the first reminding of time will occur once 15 minutes have elapsed. Therefore, please time well in order to finish your presentation on time.

### Name Badges

Delegates are required to wear their name badges at all time. Please wear the **delegate name badges** when attending the symposium.

### Mobile Phones

Please ensure your mobile phone is switched off or in 'silent' mode during all conference sessions.

### Internet Room

Wireless internet access is available in **Room B221, An-Zhong Building** during the symposium.

**Lunch**

Time: 12:30—13:30(27<sup>th</sup> March)

12:30—13:30(28<sup>th</sup> March)

Location: Lin-Hu Restaurant of Zijingang Campus, Zhejiang University

Please bring the **lunch tickets** into the restaurant.

**Welcome Reception**

Time: 18:00—20:00(26<sup>th</sup> March)

Location: **Room 303** of Prince Restaurant, 798 Shenhua Road

**Banquet**

Time: 18:00---20:00(27<sup>th</sup> March)

Location: Seven-color Shine Restaurant, 398 Tianmushan Road.

**Dinner**

Time: 18:00—20:00(28<sup>th</sup> March)

Location: Tianjie Garden Restaurant, 370 Tiyuchang Road.

**Emergency Phone Number**

If you have some trouble during the symposium, please call

**86(0)13857154591 or 86(0)13761804958.**



# Program at a glance

<b>Friday March 26</b>	<b>Saturday March 27</b>	<b>Sunday March 28</b>
<b>13:00—18:00</b> <b>Registration</b> <b>&amp;</b> <b>18:00—20:00</b> <b>Welcome Reception</b>	<b>9:00—9:15</b> <b>Opening ceremony</b>	<b>9:00—10:40</b> <b>Session 5</b>
	<b>9:15—10:30</b> <b>Session 1</b>	<b>10:40—11:00</b> <b>Tea Break</b>
	<b>10:30—10:50</b> <b>Photographing</b>	<b>11:00—12:15</b> <b>Session 6</b>
	<b>10:50—12:30</b> <b>Session 2</b>	<b>12:15—12:30</b> <b>Closure</b>
	<b>12:30—13:30</b> <b>Lunch</b>	<b>12:30—13:30</b> <b>Lunch</b>
	<b>13:30—15:35</b> <b>Session 3</b>	<b>14:00—17:00</b> <b>Hangzhou Tour</b>
	<b>15:35—15:55</b> <b>Tea Break</b>	
	<b>15:55—17:35</b> <b>Session 4</b>	
	<b>18:00—20: 00</b> <b>Banquet</b>	<b>18:00—20:00</b> <b>Dinner</b>





<b>Saturday March 27</b>
<b>Opening ceremony (9:00—9:15)</b> <b>Chairperson: Yuxi ZHAO</b>
<b>Session 1 (9:15—10:30)</b> <b>Chairperson: Hua DENG</b>
<p>9:15—9:40 <i>Active vibration control of building structures using lattice pattern control based on learning algorithm</i> <b>Presenter: Dookie KIM</b></p> <p>9:40—10:05 <i>GDEE-based stochastic optimal control of hysteretic structures</i> <b>Presenter: Jianbing CHEN</b></p> <p>10:05—10:30 <i>First-order elastic-plastic analysis of multi-story building frames by numerical modelling</i> <b>Presenter: Wanjala R. SALIM</b></p>
<b>Tea Break and Photographing (10:30—10:50)</b>
<b>Session 2 (10:50—12:30)</b> <b>Chairperson: Chungche CHOU</b>
<p>10:50—11:15 <i>Analysis of stability criteria of pin-jointed bars mechanisms</i> <b>Presenter: Hua DENG</b></p> <p>11:15—11:40 <i>Investigation on the aerodynamic stability of long-span suspension bridges with 3D cable system</i> <b>Presenter: Xinjun ZHANG</b></p> <p>11:40—12:05 <i>Buckling response of submarine pipelines under combined tension and bending</i> <b>Presenter: Shunfeng GONG</b></p> <p>12:05—12:30 <i>Design of aluminum compression members of plain and lipped channel sections</i> <b>Presenter: Jihua ZHU</b></p>
<b>Lunch (12:30—13:30)</b>
<b>Session 3 (13:30—15:35)</b> <b>Chairperson: Dookie KIM</b>

13:30—13:55

*Investigation of as-built vibration serviceability of long-span floor by field measurement under human-induced excitation*

**Presenter: Jun CHEN**

13:55—14:20

*Three-dimensional seismic tomography with tetrahedral element on isoparametric mapping*

**Presenter: Yoshikazu KOBAYASHI**

14:20—14:45

*Study on anti-seismic construction with bamboo engineering materials*

**Presenter: Qingfang LV**

14:45—15:10

*Seismic vulnerability assessment through explicit consideration of uncertainties in structural capacities and structural demands*

**Presenter: Quanwang LI**

15:10—15:35

*Experimental and analytical studies of a full-scale post-tensioned precast RCS frame under earthquakes*

**Presenter: Chungche CHOU**

**Tea Break (15:35—15:55)**

**Session 4 (15:55—17:35)**

**Chairperson: Yew Chin KOAY**

15:55—16:20

*Recent development in tomography techniques for non-destructive evaluation of concrete*

**Presenter: Hwa Kian CHAI**

16:20—16:45

*On-site permeability test of prestressed concrete containment of nuclear power stations*

**Presenter: Tingyu HAO**

16:45—17:10

*Condition monitoring and retrofitting strategies of daqing dongfeng underground commercial square structure subject to soil-groundwater-foundation and environmental interactions*

**Presenter: Chunwei ZHANG**

17:10—17:35

*Nonlinearity identification for a frame model structure with mr dampers under limited excitations*

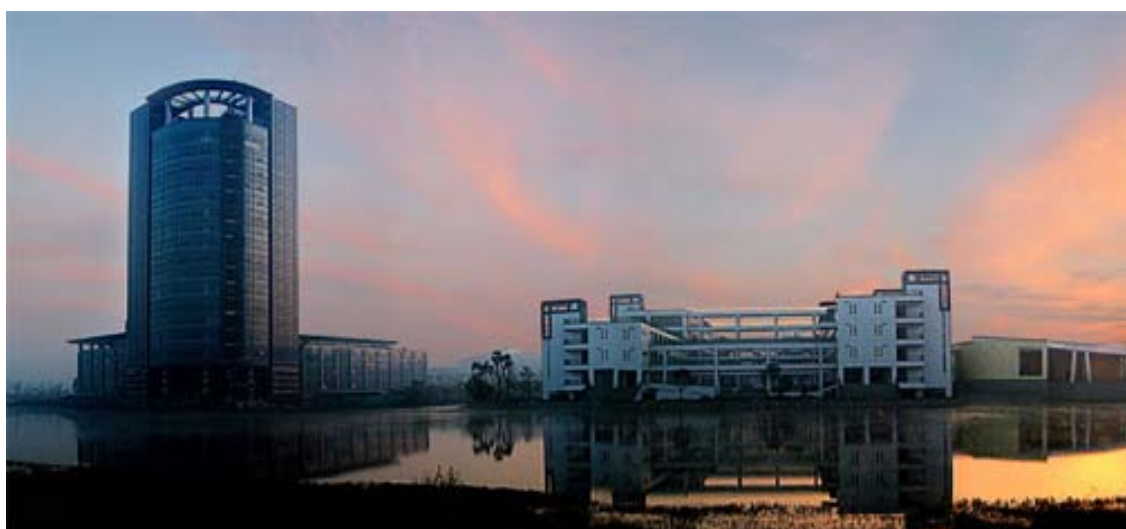
**Presenter: Jia HE**

**Banquet (18:00—20:00)**

<b>Sunday March 28</b>
<b>Session 5 (9:00—10:40)</b> <b>Chairperson: Tingyu HAO</b>
<p>9:00—9:25 <i>Some recent research on frp composites for the strengthening of concrete structures under normal and extreme loading action</i> <b>Presenter: Jianguo DAI</b></p> <p>9:25—9:50 <i>Novel cementitious materials research at Queen's university Belfast</i> <b>Presenter: Yun BAI</b></p> <p>9:50—10:15 <i>Influence of hardening properties on the durability of concrete</i> <b>Presenter: Yufang FU</b></p> <p>10:15—10:40 <i>Engineering properties and durability of high performance rice husk ash concrete</i> <b>Presenter: Yew Chin KOAY</b></p>
<b>Tea Break(10:40—11:00)</b>
<b>Session 6 (11:00—12:15)</b> <b>Chairperson: Jianguo DAI</b>
<p>11:00—11:25 <i>Corrosion of mortar by sulfuric acid — experiment and theoretic analysis</i> <b>Presenter: Zhigang SONG</b></p> <p>11:25—11:50 <i>Electrochemical realkalisation treatment using impressed current for the repair of carbonated reinforced concrete – 2.5 years durability</i> <b>Presenter: Yunyun TONG</b></p> <p>11:50—12:15 <i>Recent study on concrete cracking due to reinforcement corrosion</i> <b>Presenter: Yuxi ZHAO</b></p>
<b>Closure (12:15—12:30)</b> <b>Chairperson: Jianbing CHEN</b>
<b>Lunch (12:30—13:30)</b>
<b>Hangzhou City Tour (14:00—17:00)</b>
<b>Dinner (18:00—20:00)</b>

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- Scientific Program 7



## Financial supporting organizations

- **Shanghai Envan Testing Equipment Co. Ltd**  
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- **Wuxi Sunan Experimental Equipment Co. Ltd**  
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