

9<sup>th</sup> -10<sup>th</sup> November 2015 SCUT, Guangzhou







# 7<sup>th</sup> Conference of the Urban System and Environment (USE) Joint Research Centre between SCUT and TU Delft "NEW LIFE OF AGEING CITIES"

9<sup>th</sup> -10<sup>th</sup> November 2015 SCUT, Guangzhou

#### Introduction

South China University of Technology (SCUT) and Delft University of Technology (TU Delft) established the Urban System and Environment Joint Research Centre (USE-JRC) in 2013. It has been sponsored by the two universities to act as a platform for the development of joint research projects and related activities across a number of themes related to urban system. Since 2013 joint activity has grown and departments and individual researchers have developed strong and durable relationships with the promise of great benefits to both parties. USE is also engaging with government, private and civil society actors in both the Netherlands and China who have shown great interest in the partnership.

There are now 13 PhD candidates engaged in research that involves both universities, a double PhD programme has been agreed, and there is a growing record of joint publication and submission of research proposals. Two TU Delft staff have been appointed as visiting professors at SCUT. Other joint activities have included a summer school and PhD workshop.

The objectives of the USE Platform are to facilitate contact between the universities, and to encourage dialogue and joint research and related education ventures in a number of academic fields. The current successful projects supported by the platform are pursuing research on durable and sustainable materials, the engineering of large complex building structures, and more sustainable and resilient regional and urban planning. Other potentially fruitful collaborations are developing and will be discussed at this conference.

This is the seventh joint conference which continues on the theme of 'new life of ageing cities' which was discussed first at the April 2015 conference in TU Delft. A report of the proceedings of the April conference is available.

#### **Forum Schedule**

#### Sunday 8th November

All day Arrival in Guangzhou, check in the hotel

12:30-14:00 Welcome Luncheon hosted by Vice President ZHU Min at Honder International

Hotel

2 Floor V3, No. 2, Dongguangzhuang Lu, Tianhe District, 22119000

Attendance

TU Delft: Prof. Ena Voûte, Prof. Peter Russell, Ms. Krista Knopper, Prof. Vincent Nadin,

Prof. Martin de Jong, Dr. YE Gunag, Mrs. Lily

SCUT: VP ZHU, Prof. SU Cheng, Prof. WU Kechang, Prof. ZHANG Guangzhao, Ms.

Jasmine Yao

18:00-20:00 Welcome Banquet hosted by Vice President QIU Xueqing at Xihu Hotel 1st Floor

Attendance

TU Delft: All Participants of the Conference

SCUT: VP QIU, Prof. SU Cheng, Prof. ZHANG Qinyuan, Prof. SUN Yimin, Prof.

 $ZHANG\ Guangzhao,\ Prof.\ WU\ Kechang,\ Prof.\ XIAO\ Yiqiang,\ Prof.\ YIN\ Suhong,\ Prof.$ 

FAN Xu, Ms. Jasmien Yao, etc.

Monday	09 <sup>th</sup>	November
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08:30-08:45 Pick-up

09:00-9:30 Opening Ceremony hosted by Executive Vice President PENG Xinyi at Multi-Media

Classroom (No. 6 Building 1st Floor)

Attendance

TU Delft: All Participants

SCUT: Executive VP PENG, Prof. SU Cheng, Prof. SUN Yimin, Prof. WU Kechang,

Prof. ZHANG Guangzhao, Director Dr. WANG Qingnian, Ms. Jasmine Yao

Welcome by Executive Vice President PENG Xinyi Remark by Dean of Industry Design Ena Voûte

Signing of extension of MoU

09:30-10:00 Group Photo

10:00-10:10 Break

10:10-12:35 TU Delft-SCUT Keynote Speech hosted by Prof. Vincent Nadin at Multi-Media

Classroom (No. 6 Building 1st Floor)

10:10-12:20 **1. Prof. Vincent Nadin** *Review of JRC USE* 

(20min)

2. Prof. Yimin Sun Review of JRC USE

(10min)

Looking for a durable structure

(Urban design, 20min)

3. Prof. Peter Russell Automation and city planning

(Digital design, 20min)

4. Prof. Janet Askew Ageing city, ageing policy: challenges for London

(Urban Policy, 20min)

5. Dr. Jiang Feng Selected Memory, Reinvented History:

Stories about Urban Heritage Conservation in PRD

(Culture Heritage, 20min)

6. Prof. Jan Rots Modelling of ageing masonry structures for

Groningen induced seismicity

(Civil Engineering and Materials, 20min)

7. Dr. Lei Wang Flexible OLED Displays, from Lab to Company

(Civil Engineering and Materials, 20min)

12:20-12:35 **Panel discussion** (15 min)

12:50-13:50 Lunch at Xihu Hotel 1st Floor

14:30-16:00 Joint Meeting Between SCUT and TU Delft hosted by Vice President ZHU Min at

Minglun Hall (Liwu Building 12<sup>nd</sup> Floor)

Attendance

TU Delft: Prof. Ena Vo ûte, Prof. Peter Russell, Ms. Krista Knopper, Prof. Vincent Nadin,

Prof. Martin de Jong, Ms. Lily, Dr. Guang Ye

SCUT: VP ZHU, Prof. SU Cheng, Prof. ZHANG Guangzhao, Prof. SUN Yimin, Prof.

WU Kechang, etc.

Presentation by Prof. Martin and Dr. Qingnian Wang

16:00-17:30 Visit of State Key Lab Luminescent Material and Device

Visit of State Key Lab of Subtropical Architecture Science

14:00-18:20	TU Delft-SCUT Seminar Session I at Multi-Media Classroom (No. 6 Building 1st				
14:00-14:55	Floor) Urban Design Part hosted by Dr. Yawei Chen				
11.00 11.55	1. Mr. Tieliu Wu	Revitalization as a Social Project: Cases in Hong Kong (15min)			
	2. Dr. Shaoyun Li	Panoramic city: Urban design in Guiyang city China (15min)			
	3. Mr. Harry den Hartog Question (10 min)	The ageing of New Towns (15min)			
14:55-15:35	Digital Design Part hosted by Dr. Lu Xiong				
	1. Dr. Michela Turrin	Computational Design for Performative Architecture (15min)			
	2. Dr. Ping Su	Digital architecture in SCUT: From research to practice (15min)			
	Question (10min)				
15:35-16:30	Urban Policy Part hosted by Dr. Zhaohua Deng				
	1. Prof. Cor Wagenaar	Impact of ageing cities on health and the built environment (15min)			
	2. Prof. Peter Ho	Preparing Chinese Cities for the Future: Relevance of Housing and Land Property Rights (15min)			
	3. Prof. Jianyun Zhou	Aging characteristics of Chinese cities and urban regeneration strategies (15min)			
	<b>Question</b> (10 min)				
16:30-16:40	Break (10 min)				
16:40-17:20	Culture Heritage Part hosted	ure Heritage Part hosted by Dr. Wenhao Xuan			
	1. Prof. Vincent Nadin	Erosion of culture heritage and place identity in the ageing city (15min)			
	2. Dr. Haohao Xu	Unofficial heritage (15min)			
	Question (10 min)				
17:20-18:15	Civil Engineering and Mater	ivil Engineering and Materials Part hosted by Dr. Guang Ye			
	1. Prof. Andrei Metrikine	Vibrations and noise induced by high-speed trains in the built environment: methods of analysis, hazards and solutions (15min)			
	2. Director Dr. Ton van Beek	Ageing of materials and its effect on the city infrastructure (15min)			
	3. Dr. Jiangmiao YU	Low-noise Ultra-thin Green Wearing Course Used as Maintenance Technology for Ageing City Roadway (15min)			
	Question (10 min)				
18:15-18:25	Summary (10 min): Dr. Yawei Chen, Dr. Lu Xiong, Dr. Zhaohua Deng, Dr. Wenhao Xuan, Dr. Guang Ye				
18:30-20:00	Banquet at Xihu Hotel 1st Floor hosted by Executive Vice President Peng Xinyi Attendance				
	TU Delft: All Participants of the Conference				
	SCUT: Excecutive VP PENG, Director Dr. WANG Qingnian, Prof. SUN Yim XIAO Yiqiang, Prof. LI Jing, Dr. YU Feng, Dr. HU Jie, etc.				

### Tuesday 10<sup>th</sup> November

08:00-08:15	Pick-up			
08:30-12:20	TU Delft-SCUT Semin	U Delft-SCUT Seminar Session II at Multi-Media Classroom (No. 6 Building 1st Floor)		
08:30-09:20	Urban Design Part hosted by Dr. Yawei Chen			
	1. Prof. Martin de Jong	City-branding to force off ecological modernization (10min)		
	2. Dr. Yawei Chen	Beyond world workshop: Re-profiling Chinese cities in the Pearl River Delta (PRD) (10min)		
	3. Dr. Lei Qu	Urban regeneration in Shenzhen, a city as a lab of Urbanism (10min)		
	4. Dr. Yan Fei	A Probe into Localized Urban Design Approach Case Study of Design for Guangzhou International Financial City (10min)		
	Panel discussion (	(10 min)		
09:20-10:10	Digital Design Part hosted by Dr. Lu Xiong			
	1. Prof. Jing	Evaluation of green building performance in SCUT (10min)		
	Wang 2. Dr. Tianxiang	DIM and Consut Puilding (10min)		
		BIM and Smart Building (10min)		
	Leng	Modular Integrated Duilding Design with Digital Tools (10min)		
	3. Mr. Guanqiu Zhong	Modular Integrated Building Design with Digital Tools (10min)		
	4. Dr. Lu Xiong	Integrated Computational Optimization for the Layout of the Playing Hall in the Gymnasium (10min)		
	Panel discussion (10 min)			
10:10-10:20	Break	Break		
10:20-11:10	Urban Policy Part hosted by Dr. Zhaohua Deng			
	1. Dr. Marcin	Climate change and the obsolescence of urban planning and		
	Dabrowski, Dr.	policies, Guangzhou and Shenzhen (10min)		
	Yu Feng, Dr.			
	Jinghuan He			
	2. Dr. Li Sun	From informal to formal elderly care in Chinese cities: the implications of international social policy diffusion (10min)		
	3. Dr. Dongjin Qi	Dilemma of China planning system (10min)		
	4. Dr. Zhaohua	World Workshop's Search for New Life (10min)		
	Deng			
	Panel discussion	(10min)		

11:10-11:50 Culture Heritage hosted by Dr. Wenhao Xuan

**1. Dr. Robertino Design for people** (10min)

Cavallo

2. Dr. Wenhao Heritage conservation under the influence of new media (10min)

Xuan

3. Dr. Rui Liu An Analysis of Land Use Changes in Old Beijing City Based on

G.I.S. Technology (10min)

Panel discussion (10 min)

11:50-12:20 Civil Engineering and Materials Part hosted by Dr. Jie Hu and Dr. Guang Ye

1. Dr. Guang Ye Anti ageing construction materials and structures by self-healing

(10min)

2. Dr. Jie Hu Novel methods for extending the service life of reinforced concrete

structures (10min)

Panel discussion (10 min)

12:30-13:45 Lunch at Xihu Hotel 1st Floor

14:00-15:30 "Living and Study at TU Delft" at Multi-Media Classroom (No. 6 Building 1st Floor)

**Attendance:** 

TU Delft: Prof. Vincent Nadin, Prof. Martin de Jong, Dr. Guang Ye, Ms. Lily, Dr. Roberto Cavallo

16:00-17:45 The Board Meeting of SCUT-TU Delft Joint Research Centre on Urban System and

**Environment at Minglun Hall (Liwu Building 12<sup>nd</sup> Floor)** 

Attendance:

TU Delft: Prof. Vincent Nadin, Prof. Martin de Jong, Dr. Guang Ye, Ms. Lily

SCUT: Prof. SU Cheng, Director Dr. WANG Qignnian, Prof. SUN Yimin, Prof. FAN Xu, Prof.

YIN Suhong, Dr. HU Jie

18:00-20:00 Dinner at Xihu Hotel 1st Floor

#### **Map of Location**



Location

#### **Photo of Building**



No.6 Building



Liwu Building



Xihu Hotel

#### Civil Engineering Seminar Session of the 7<sup>th</sup>Conference of Urban System and Environment (USE) Joint Research Centre between SCUT and TU Delft Saturday, 7<sup>th</sup>Nov 2015

#### Morning Seminars: 8:30~12:00, Location: conference room at No.7 building

8:30~9:00Welcome speech by Prof. Cheng Su, speech by Prof. Bert Geerken

Session Chair: Prof. Bo Wu

9:00~9:15Presentation by Prof. Bert Geerken(Civil engineering and geosciences)

9:15~9:45Presentation by Prof. Cheng Su (An explicit time-domain approach for random

vibration of large complex structures under seismic excitations)

9:45~10:30Presentation by Prof. Jan Rots(Structural engineering, earthquake engineering)

10:30~10:45Group Photo, Coffee Break

Session Chair: Prof. Jan Rots

10:45~11:15 Presentation by Prof. Bo Wu (Recycling concrete)

11:15~11:45 Presentation by Prof. Andrei Metrikine (Thoughts on potential cooperation between SCUT and TU Delft in the field of dynamics of structures: structural response to shallow earthquakes and vibration-based monitoring of structures)

11:45~12:15 Presentation by Prof. Xiaolei Han (Overview and Practice of Performance-Based Seismic Design of Building Structures in China)

## Afternoon Seminars and Activities: 14:30~17:30, Location: labs and conference room at No.7 building

Moderator: Prof. Zhan Wang

14:30~15:30 Lab visiting in School of Civil Engineering and Transportation

Session Chair: Prof. Andrei Metrikine

15:30~15:50Presentation by Dr. Guang Ye(Durable and sustainable construction materials)

15:50~16:10 Dr. Ton van Breek (Aginginfrastructure)

16:10~16:40Presentation by Prof. Yi Yang (Wind engineering research in SCUT)

Moderators: Prof. Cheng Su, Prof. Bert Geerken

16:40~17:30 Cooperation discussion

- Discussion of a joint seed funding for professors who want to build cooperation between two faculties.
- Attracting more professors to joint Double PhD program.

Discussion on double master program education.