

# Newsletter

Issue No. 14 October 2014

# **American Society of Civil Engineers**

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# Message from the President

It is my great honour and privilege to be elected as the President of ASCE Hong Kong Section at our 15th Annual General Meeting. I am very fortunate to have a very dedicated and capable team to work with me in serving our fellow members and the engineering community in the Session 2013 – 2014.

We were established as the ASCE International Group in 1997 and later became an International Section in 1998. The mission of ASCE Hong Kong Section, in line with the mission of the ASCE Headquarters, is to provide essential value to our members and partners, to advance civil engineering, and to serve the public good. In the past 16 years, the vision and excellent leadership of our past presidents, we have had remarkable achievements in facilitating the advancement knowledge and technology, encouraging lifelong learning, and promoting professionalism and engineering profession.

We kick started the Session 2013 - 2014 with our Annual General Meeting and Annual Dinner. The annual dinner is one of our society's most important events, aiming to facilitate exchange between our members and guests and strengthen partnership in a friendly atmosphere. During the year, we organized technical seminars, construction site visits and one geological field trip. We also worked closely with sister organizations and successfully delivered a joint one-day international conference titled "Global overview on procurement strategies: striving better values" in March 2014. Moreover, we co-sponsored 5 prestigious international conference and continuing professional development workshops.

ASCE Hong Kong Section is committed to the nurturing of future civil engineers.



We are now overseeing international student groups (ISGs) in Hong Kong (HKUST), Macau (UMac), Beijing (Tsinghua University), Shanghai (Tongji University) and Sichuan (Chongqing University). In February 2014, we received a delegation from Tongji University and Zhejiang University, and the Board visited the student group at the UMac in April. ASCE Hong Kong section also presents annual Best Final Year Project Award and biannual Best Master Thesis Award to encourage excellence in student research.

Time flies! The Session 2013 - 2014 is approaching its end. This newsletter summarizes major functions activities during the session. If you are interested in collaborating with ASCE Hong Kong Section, please feel free to approach our directors; in the meantime, we always welcome you to join our Board of Directors, I can assure you this is going to be a rewarding experience. Last but not least, I would like to express my most sincere thanks to the selfless devotion and unfailing support of the past presidents and the Board of Directors. I am looking forward to another fruitful year under leadership of our new president, Mr. Johnson Po.

Barbara W.Y. SIU, PhD President ASCE Hong Kong Section, 2013 – 2014

### Board of Directors 2013-2014

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# The 15th Annual General Meeting and 16th Annual Dinner

# The Annual General Meeting

The 15th Annual General Meeting was held on 14 November 2013 at the World Trade Center Club. The retiring President (2012 -2013), Dr Yu WANG delivered his report on the activities of the session. Highlights included well-responded Continuing Professional Development (CPD) courses, site visits and technical seminars. Special thanks were dedicated to the guest speakers and the Directors who were engaged in organizing these CPD functions. Yu also expressed sincere gratitude to Arup for the kind assistance to ASCE Hong Kong Section by offering meeting venue and other facilities for our Board meetings.

New officers of the Board of Directors for Session 2013-2014 were elected during the Meeting.



Members of the Board of Directors for Session 2013-2014 in the photo taken after the Annual General Meeting on 14 November 2013: (Start from the left)

Dr Gang Wang (Treasurer), Ir Johnson Po (Predsident-Elect),

Dr Victor Wong (Past President), Mr Paul Cheung (Secretary),

Dr Yu Wang (Immediate Past President), Dr Song Ye Zhu (Director), Dr Barbara Siu (President),

Dr Ryan Yan (Vice President), Dr Chao Li (Director), Dr Kai Tai Wan (Director) Mr Henry Yeung (Co-opted Director) and Dr Denvid Lau (Director).



The immediate past president Yu Wang reported the section status in the AGM

#### The Annual Dinner

The guests and members had a warm mix and exchange of ideas. Our Guest of Honor, Mr. Victor SO Hing-woh, JP, Chairman of the Urban Renewal Authority delivered a speech on the pressing needs in reconstruction and rehabilitation of old buildings, and challenges in redeveloping old urban areas. During the dinner, the Section's Best Final Year Project Awards were presented Ir Dr the Hon LO Wai Kwok, Member of the Engineering functional Constituency, Legislative Council.



Mr Victor So delivered a keynote speech before the dinner

#### Best Final Year Project Award 2013

Student: CHEN Wen

Institute: The University of Hong Kong

Project Title: Permanent Deformation of Sand under

Cyclic Loading

Supervisor: Dr Jun Yang

Student: CHEONG Kwok Hou Institute: The University of Macau

Project title: *Updating the Surface Roller Formation Model of Hydraulic Jump with the Bayesian Spectral* 

Density Approach

Supervisor: Prof. K.M. Mok

Student: FU Chi Wai

Institute: The City University of Hong Kong

Project title: Tall Building Design via Numerical Optimization Algorithm with the consideration of

the Second Order Effects supervisor: Dr. Paul H.F. Lam

Student: LEUNG Chun To

Institute: Chu Hai College of Higher Education

Project title: Investigation of the Applicability of an

OTDR Based Fiber Optic Corrosion Sensor

Supervisor: Dr . K.T. Wan

Student: LU Hua

Institute: The Hong Kong Polytechnic University

Project title: Estimation of Instantaneous Travel Times on Urban Roads Using Video Detection Data

Supervisor: Prof. William H.K. Lam

Student: SUN Yi Chen

Institute: The Hong Kong University of Science and

Technology

Project title: Concrete Behavior Under Biaxial

**Loading Conditions** 

Supervisor: Prof. Christopher Leung



The awardees and their supervisor of the Best Final Year Project Award 2013



Other honorary guests and members of the Board of Directors

#### **Section Activities Review**

### 6th International Conference on Structural Health Monitoring of Intelligent Infrastructure

(9-11 December 2013)

ASCE Hong Kong Section was the supporting organization of the 6th International Conference on Structural Health Monitoring of Intelligent Infrastructure (SHMII-6) organizered by Hong Kong Polytechnic University in Intercontinental Grand Stanford Hotel in Hong Kong.

# International Symposium - Design of Steel & Composite Structures according to Eurocodes

(13 December 2013)

ASCE Hong Kong Section was the supporting organization of the International Symposium about Design of Steel and Composite Structures according to Eurocodes organized by the Department of Civil Engineering of the University of Hong Kong and the School of Engineering and Science of Curtin University of Sarawak Malaysia.

## Judge Panel of the 11th Infrastructure Model Building Competition

(15 March 2014)

Dr. Barbara Siu was invited to serve as a member of judging panel in the 11th Infrastructure Building Competition for Secondary Schools on 15 March. The event was jointly organized by the Hong Kong Institute of Vocational Education (VTC), Faculty of Engineering, the University of Hong Kong, and Hong Kong Construction Association. Secondary school student designed and assembled cantilever beams with the given materials and glue, the beams were contested according to their appearance, structural strength, and strength/ weight ratio.



Students in the Infrastructure Model Building Competition

# Conference on Global Overview on Procurement Strategies: Striving Better Values

(28 March 2014)

Continuing the success on the joint conference last year, ASCE Hong Kong Section and Institute of Civil Engineers – Hong Kong Association co-organized our second joint conference "Global Overview on procurement strategies: striving better values" at the Mira Hotel on 28 March.

The conference was opened by the Guest of Honour, Mr Chi-sing Wai, IP, the Permanent Secretary for Development (Works). Keynote lecture conference was given by the Mr Peter Hansford, who currently is the chief construction advisor to the UK government. He shared with the audience several government papers discussing the way forward in UK infrastructure development and strategies in reduction of cost, carbon emission, and time. His talk was followed by a number of presentations on various topics. They included Mr. Wai Tsui from the Drainage Services Department of the HKSAR Government who presented some projects under the DSD department with the NEC; Mr Scott Mackenzie from the Mass Transit Railways Corporation Limited who shared how the company addressed challenges in the recent rail development projects through procurement strategies; Mr. Albert DiBernardo from Weidlinger Associates showcased the historical States) who development of Design-Build contracts in the US; Mr Keith Buckley from Hsin Chon Engineering (Macau) who has shown how to deal with casino jobs in which time is the first priority; and last but not least Dr. Morgan Yang from AECOM who concluded the conference by introducing the creative solutions that can be applied in transit-oriented development. Panel discussions after the talks were moderated by Dr Thomas Ng from the University of Hong Kong, who is an expert in contracts and procurements. Enthusiastic discussions were received.

The conference was well attended by over 120 participants. It provided an excellent opportunity for academia and practicing engineers to share views and experience on the topic.



The audiences in the conference on Global Overview on Procurement Strategies: Striving Better Values



Organizing committee and the speakers in the conference on Global Overview on Procurement Strategies: Striving Better Values



Panel discussion in the conference on Global Overview on Procurement Strategies: Striving Better Values

# Seminar on Innovative Solutions in Engineering and Construction

(29 March 2014)

We are very happy to have invited Mr. Albert DiBernardo, Principal of Weidlinger Associates (United States) to deliver a seminar titled "Innovative Solutions in Engineering and Construction" at the Hong Kong Polytechnic University. Mr. DiBernardo is a licensed professional engineer and has over 35 years of experience in multi-disciplinary civil engineering experience on projects including airports, dams, bridges, ports, military construction and environmental remediation. Mr. DiBernardo spent the first 25 years of his career with Tippetts-Abbett-McCarthy-Stratton (later TAMS Consultants, Inc.), and international design firm. He worked on projects in Africa, Middle East, North including America and Asia the Tarbela Dam/Hydroelectric Project in Pakistan, once the largest earthen embankment dam in the world. He shared with over 100 audiences on the development of designbuild contracts in the United States, and the cuttingedge innovations in structural engineering.



Mr Albert DiBernardo in the seminar on Innovative Solutions in Engineering and Construction

## Visit to University of Macau

(12 April 2014)

Dr. Barbara SIU and Dr. KT Wan represented ASCE HK to attend the inauguration dinner of the ASCE International Student Group at the University of Macau. students showcased During the dinner, achievements in the past year, Dr. Siu and Dr. Wan were warmly welcomed by faculty members at the University of Macau –Dr Stephen QUACH (department head), Prof. IU Wai Pan, Prof. Walter WAN, and Dr. KOU Kun Pang. We exchanged ideas on how to enhance students' learning experience through the student group and explored possibilities of collaboration between student groups in the greater China region.



The inauguartion dinner of ASCE ISG of University of Macau



Gang Wang intoduced the geological background to the participants in Ma Shi Chau

#### Technical Visit to Hong Kong GeoPark: Ma Shi Chau

(31 May 2014)

Ma Shi Chau, Permian rock garden of Hong Kong, is located on the southwest shore of Tolo Channel. Ma Shi Chau preserves a great variety of sedimentary rocks dated back to 280 million years, which are the second oldest rocks and extremely rare in this region. On 31 May 2014, a group of 12 ASCE Hong Kong Section members and engineers visited the site, led by Dr Gang Wang from HKUST. The visit team studied formation of a variety of sedimentary rocks at this site, including mudstone, siltstone, sandstone, and conglomerate, as well as local geology features such as differential erosion.



Group photo in Ma Shi Chau after the geology field trip

## Motor Vehicle Emissions Control Workshop 2014

(24 June 2014)

ASCE Hong Kong Section is one of the supporting organizations of Motor Vehicle Emissions Control Workshop organized by the Ministry of Environmental Protection of China, the Environmental Protection Department of the government of Hong Kong and the Hong Kong Polytechnic University.

#### Symposium on Green Building Materials

(27 June 2014)

ASCE Hong Kong Section co-organized Symposium on Green Building Materials with, Nano and Advanced Materials Institute Limited, Hong Kong Trade Development Council and Construction Industry Council.



Group photo of the speakers in the Symposium on Green Materials

### Technical Visit to the Foundation Construction Site of Hong Kong Science Park Phase 3

(16 August 2014)

On 16 August 2014, about 20 participants attended a technical visit to Hong Kong Science Park Phase 3 Foundation Construction Site. As a green hub, Phase 3 will offer the 150 businesses located there one of the best R&D eco-systems in the region for developing and commercialising their products. The development is itself one of the largest showcases of sustainable construction practice in Hong Kong. The facilities at Phase 3 have been designed to be carbon neutral over its lifetime, using the key design principles of reduction, efficiency and generation. Bored Pile foundation design was adopted in this project and Bentonite is used to facilitate the drilling process in constructing the piles.



Group Photo at the construction site of Hong Kong Science Park Phase III

## **Student Group Activities**

## Delegation visit from Zhejiang University and Tongji University

(18-21 February 2014)

Groups of students from Zhejiang University and Tongji University visited Hong Kong in February. The Zhejiang group was led by Dr. LU Caofeng and Dr. XU Xiaofeng, while the Tongji group was led by Dr. LI Gang. The delegation visited HKUST on 18 Feb and HKU on 20 Feb respectively to attend lectures, lab tours, as well as exchange with students and staffs. A company visit to ARUP has been arranged on 19 Feb to allow students understanding more about the latest civil engineering projects and practices in Hong Kong. ASCE Hong Kong Section and the past presidents hosted a welcome dinner at the City University of Hong Kong, during the dinner ASCE HK shared possible student activities that can be organized by the student groups, kinds of support that can be received from ASCE HK, and initiated student groups' discussion on further collaboration.

### More news from us...

The International Student Group at Tongji University ranked first in the ASCE 2014 Mid-Pacific Student Conference held at Fresno, California in April.

The Mid-Pacific Conference is an annual event for Civil Engineering students to demonstrate leadership and technical knowledge in several competitions (concrete canoe, steel bridge, etc.) since the 1940's. See

For competition results, please visit: http://www.ascemidpac.org/past-conferences/2014/2014-results

and, for photos, please visit:

http://news.tongji.edu.cn/classid-10-newsid42569-t-show.html

# **Contacts Update:**

To stay in touch with ASCE and the ASCE Hong Kong Section, please update your email and mailing address with ASCE at:

http://www.asce.org/membership

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