

American Society of Civil Engineers

Issue No. 12 | November 2012

Hong Kong Section Newsletter

Contents

Message from the President P.1

AGM and Annual Dinner P.2

Section Activities Review P.4

Other Activities P.10

Message from the President

As President of the American Society of Civil Engineers ASCE (Hong Kong Section) for the session 2011-2012, I have met many challenges and yet enjoyed the memorable experiences. As my presidency approaches an end, I would like to outline what the Section has achieved.

In the session, we continued to maintain active communication with members through various channels including seminars and technical site visits. We are very proud that our Board arranged a total of 6 technical visits and 4 CPD seminars. We continued to actively promote closer collaboration among engineers in the region; we have initiated a formal visit to the Institution of Civil Engineers (Hong Kong Association) and will organize conference jointly with ICE (HKA) early next year. I am pleased to report that the institution visit proved to be very fruitful.

For our International Student Group (ISG) initiative, I am very pleased to see the official approval by ASCE Headquarters of the establishment of ISG at the University of Macau that has been active since 2007. On the other hand, the ASCE (Hong Kong Section) members are encouraged to contribute to the community and pass on their professional knowledge to students. During this session, we made two social service events for our members to participate in and also presented career talks for Hong Kong University of Science and Technology and Hong Kong Institute of Vocational Education students.



Finally, on behalf of ASCE (Hong Kong Section), I would like to take this opportunity to express my sincere gratitude and appreciation to the full assistance and support of Board members, especially to the secretary for his hard and outstanding work. I hope you will continue to support our Section in the coming years.

Dr Victor C M WONG President (2011-2012)

Board of Direction 2011-2012

President
Dr Victor C M WONG
victor.wong@arup.com

Immediate Past President Dr Jun YANG junyang@hkucc.hku.hk

President-Elect Dr Yu WANG yuwang@cityu.edu.hk

Vice President Dr Barbara W Y SIU barbara.siu@inet.polyu.edu.hk

Secretary
Mr Paul T K CHEUNG
paulctk1605@hotmail.com

Treasurer Dr Ryan W M YAN ryanyan@hku.hk

Directors
Dr Gang WANG
gwang@ust.hk

Dr K T WAN ktwan@chuhai.edu.hk

Dr H H TSANG tsang@chuhai.edu.hk

Mr Johnson L F PO johnson.po@arup.com

Co-opted Directors
Dr Patrick P C CHEUNG
patrick.cheung@arup.com

Dr S Y ZHU ceszhu@polyu.edu.hk

Mr Tsang WONG tsang.wong@fticonsulting-asia.com

Dr Chao LI chaoli@gmail.com

HKUST ASCEISG Representatives

Honorary Legal Advisor Mr Damon SO damon.so@hoganlovells.com

Our 13th Annual General Meeting and 14th Annual Dinner

The Annual General Meeting

The 13th Annual General Meeting was held on 10 November 2011 at the World Trade Center Club. The retiring President (2010-2011), Dr Jun YANG delivered his report on the activities of the session. Highlights included well-responded Continuing Professional Development (CPD) courses, technical visits and technical seminars. Special thanks were dedicated to the guest speakers and Board members who were engaged in arranging these CPD functions. Jun also expressed sincere gratitude to Ove Arup & Partners Hong Kong Limited for their kind assistance to the Section by offering meeting venue and other facilities for our Board meetings. New officers of the Board of Direction for Session 2011-2012 were elected during the meeting.



Members of the Board of Direction for Session 2011 -2012 in the photo after the Annual General Meeting on 10 November 2011 : (Starting from the left)

Dr Song Ye ZHU (Co-opted Director), Dr Gang WANG (Director), Mr Johnson PO (Director), Mr Paul CHEUNG (Secretary), Dr Jun YANG (Immediate Past President), Dr Victor WONG (President), Dr Yu WANG (President-Elect), Dr Ryan YAN (Treasurer), Dr Barbara SIU (Vice President), Dr Kai Tai WAN(Director),

Dr Hing Ho TSANG (Director) and Mr Tsang WONG (Co-opted Director).

The Annual Dinner

Many honorable guests and fellow members attended the Annual Dinner following the AGM, including delegations from the International Student Group (ISG) of the Hong Kong University of Science and Technology and of the University of Macau. Guests and members had a warm mix and exchange of ideas. Our Guest of Honor, Ir C C Chan, JP, Director of Drainage Services delivered a speech on the strategic plan for flood mitigation measures in urban area involving drainage tunneling works in Hong Kong such as the Hong Kong West Drainage tunnel, Lai Chi Kok Drainage tunnel and Tsuen Wan Drainage tunnel. During the dinner, the Section's annual Best Final Year Project Awards were presented to the recipients by our honorable guest Ir Dr Hon Raymond HO Chung-tai, Representative of Engineering Functional Constituency of the Legislative Council.



Ir CC Chan, JP, Director of Drainage Services delivered keynote speech in the annual dinner



Honorable guests and fellow members enjoyed the annual dinner

Best Final Year Project Award 2010

Name of student: Mr CHEN Wen

Supervisor: Dr Jun Yang

Institute: University of Hong Kong

Name of student: Mr CHEONG Kuok Hou

Supervisor: Prof K M Mok
Institute: University of Macau

Name of student: Mr FU Chi Wai

Supervisor: Dr H F Lam

Institute: City University of Hong Kong

Name of student: Mr LEUNG Chun To

Supervisor: Dr K T Wan

Institute: Chu Hai College of Higher Education

Name of student: Mr LU Hua Supervisor: Prof H K Lam

Institute: Hong Kong Polytechnic University

Name of student: Ms SUN Yi Chen Supervisor: Prof Christopher Leung

Institute: Hong Kong University Science and Technology



The honorable guest and the FYP winners and supervisors

Section Activities Review

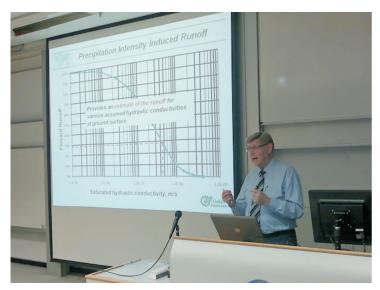
Technical Seminar on Seismic Codes and Geotechnical Engineering Perspectives (Jointly organized with ICE(HKA) (27 September 2011)

Dr Jun Yang, Immediate Past President, delivered a seminar on seismic codes and geotechnical engineering perspectives on 27 September . The seminar was jointly organized by ICE (Hong Kong Association) and ASCE (Hong Kong Section) and received over 150 registrations from practicing engineers and researchers.



Dr Jun Yang received souvenir from Ir Josiah K Y Leung, Chairman of ICE (HKA)

Technical Seminar on Quantification of Moisture Flux Boundary Conditions from Climatic Datasets (Jointly organized with HKUST) (24 November 2011)



Prof Delwyn G Fredlund offered technical seminar at HKUST

Prof Delwyn G Fredlund, who has spent over 40 years conducting research into the behavior of unsaturated and expansive soils, delivered a seminar at the Hong Kong University of Science and Technology. During the seminar, Fredlund introduced the procedures for computing the net flux boundary of the ground surface with moisture either entering the ground surface as precipitation or leaving the ground surface as vapor through evaporation or transpiration. There were about 50 participants in the seminar jointly organized with the University's Department of Civil and Environmental Engineering.

Open Day of Hong Kong Institute of Vocational Education (IVE), Tsing Yi (26 November 2011)

Dr Victor Wong, President, was invited as a guest speaker by the Hong Kong Institute of Vocational Education (IVE) to present a talk to introduce engineering to the IVE students on their Open Day on 26 November 2011. Dr Wong discussed on the choice of further study or career paths and highlighted issues that needed to be aware of once the choice was made. The sharing session was not only practical but also informative.

Outreach to the Secondary School Students (14 December 2011)

Dr K T Wan, Director, offered a talk to secondary school students during the Career Day at Ching Chung Hau Po Woon Secondary School. The audience included high school students and teachers. The purpose of the talk was to promote the civil engineering profession to the potential future engineers in their high school study. Most students cannot distinguish the role of civil engineers from architects. Also, they do not realize the hard work done by civil engineers for their convenient daily life. Dr Wan described the efforts of civil engineers behind the development of a Metropolitan city from the transportation infrastructures and landmark structures to water resources management, flood control and landslide prevention. After the introduction, the academic requirements of the various bachelor degree programs in the tertiary institutes of Hong Kong and the typical career paths of civil engineers in Hong Kong were reviewed.



School Principal Poon, Dr Victor Wong, Dr K T Wan and other guest speakers in the Career Day at Ching Chung Hau Po Woon Secondary School

Technical Seminar on Nuclear Radiation Impacts in Fukushima (Jointly organized with CIWEHK, HKIE Env Div & CIOB(HK)) (20 December 2011)

A technical seminar entitled "Current Nuclear Radiation Impacts to the Fukushima people and Environment" was jointly organized with The Chartered Institution of Water and Environmental Management Hong Kong, The Hong Kong Institution of Engineers Environmental Division and The Chartered Institute of Building (Hong Kong) on 20 December 2011 at the Hong Kong Productivity Centre. The speaker, Mr Eric Ma, is a nuclear engineer with extensive work experience in the nuclear power industry in the US and China. He visited the affected area in July 2011 following the Fukushima incident. In his talk, Mr Eric summarized his findings of nuclear radiation impacts to the local people and to the environment. He also shared his first-hand experience of the radiation leakage induced by the 31 July M6.4 earthquake that occurred during his stay in Japan. The seminar was attended by about 100 keen members of the participating engineering societies.



The speaker with Board Directors of ASCE (Hong Kong Section) and committee members of CIWEHK

President of ASCE (Hong Kong Section) Participation in Topic Discussion 'Enhancing Land Supply Strategy' (7 January 2012)

Our President, Dr Victor Wong, was invited to participate in the Government's Stage 1 Public Engagement exercise on 7 January 2012 and expressed views on enhancing the land supply strategy, particularly on reclamation outside Victoria Harbour and rock cavern development as mentioned in the Chief Executive's 2011-2012 Policy Address. Dr Wong expressed that environmental impact, cost effectiveness and planning flexibility should also be considered in the exercise.



Community Service for Single-parent Families and Rehabilitating Handicapped Youths (8 January 2012)

A community service activity with a main theme of social inclusion and empowerment was jointly organized with Mongkok District Youth Social Services Team of Chinese YMCA of Hong Kong Jordan Centre, The Parents' Association of Pre-School Handicapped Children and Hong Kong Single Parents Association. Two directors from our Hong Kong Section and five student members from HKUST-ISG participated in this activity. The service targets were 26 participants from low-income singleparents families. Meanwhile, we also encouraged and trained 15 rehabilitating handicapped youths to be volunteers. We visited Cathay City and Aviation Discovery Centre at Terminal 2 of Hong Kong International Airport, followed by a cable car ride of the Ngong Ping 360 from Tung Chung to a culturally themed Ngong Ping Village.



Board Directors and service participants at the Ngong Ping Village

Technical Visit to Tai Hang Tung Underground Flood Storage Tank (11 February 2012)

On 11 February 2012, a technical visit was organized and led by Hong Kong Section Board Directors, Dr Patrick Cheung and Mr Paul Cheung to the Tai Hang Tung underground flood storage tank. It is an innovative project of the Drainage Service Department involving construction of a large-scale flood storage tank underneath the Tai Hang Tung Recreation Playground to attenuate the peak runoff at downstream area during heavy rainstorm. Before the site tour, DSD staff members aptly explained to the visitors various aspects of this award-winning project.



Visitors in the completed Tai Hang Tung underground flood storage tank

Technical Seminar on Philosophy of River (13 February 2012)

Prof Zhaoyin Wang from the Department of Hydraulic Engineering at Tsinghua University delivered a seminar on the philosophy of river at the Hong Kong University of Science and Technology. In this function jointly organized by the Hong Kong Section and HKUST's Department of Civil and Environmental Engineering, Prof Wang talked about the rules that the river follows, whether the topology of river is recoverable, whether the river must carry sediments, whether dams are harmful or beneficial to rivers and whether the flow resistance can mitigate flooding.

Construction Management Talk at the University of Macau (17 February 2012)

The ASCE International Student Group at the University of Macau invited our President Dr Victor Wong and Coopted Director Mr Tsang Wong to present a professional talk entitled "Construction Management" for the Department of Civil and Environmental Engineering in February 2012. The talk was kicked off by Victor who shared his insights on the importance of ISG in ASCE and how Hong Kong Section could provide support to the Macau group. Tsang then presented a general picture of construction management and shared his vast working experience in construction dispute management with the attendees.



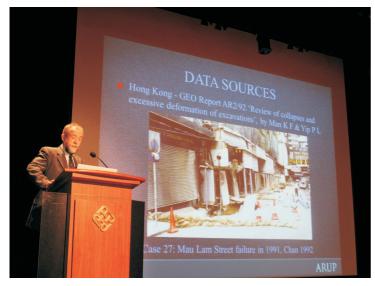
Board Director Tsang Wong offered construction management talk at the University of Macau

Joint Technical Seminar – Sustainability, Innovation and Recycling (Jointly organized with Engineers Australia Hong Kong Chapter) (23 February 2012)

A joint seminar "Sustainability, Innovation and Recycling" was held by Engineers Australia Hong Kong Chapter and ASCE (Hong Kong Section) on 23 February 2012. The speaker Mr Brian O'Donnell presented two case studies of sustainable practices in the State of Victoria, Australia, including a review of operation methods of the City of Greater Geelong, and outlining of the benefits of recycle usage in a Victorian bayside council.

One-day Workshop on Excavation and Lateral Support (Jointly organized with Hong Kong Polytechnic University) (29 February 2012)

On 29 February 2012, ASCE (Hong Kong Section) and the Department of Civil and Structural Engineering, Hong Kong Polytechnic University jointly organized a workshop on excavation and lateral support (ELS) engineering at the Hong Kong Polytechnic University. The workshop invited Ir Dr Jack Pappin, Ir James Sze & Ir Jack Yiu from Arup, and Ir Ian Askew & Ir David Sein from Gammon, to share their valuable experience. The workshop provided a forum for the exchange of experience in the design of ELS by limit state and partial factor approach as well as in checking requirements. Indepth discussions followed on the use of numerical analyses for ELS design. Over 180 practitioners attended the workshop. The response was again overwhelming when compared with a similar seminar one year ago.



A speaker in the workshop - Ir Dr Jack Pappin



More than 180 engineers attended the workshop on excavation and lateral support

Joint Technical Seminar on Problems with Offshore Wind Farms and Their Solutions (Jointly organized with ICE(HKA)) (15 March 2012)

A seminar with the Institution of Civil Engineers (Hong Kong Association) and ASCE (Hong Kong Section) as coorganizers was held on 15 March 2012 at the Hong Kong Productivity Council. The speaker, Dr Carlos Wong from the Zhuhai Q&G New Energy Engineering Ltd, presented the application of lightweight pre-stressed concrete for constructing the platform of offshore wind farm. The talk introduced the proposed innovative offshore wind farm structures and the cost-effective construction methods which could also drastically reduce the cost of bridge foundation.



Dr Carlos Wong offered technical seminar for ASCE (Hong Kong Section) & ICE (HKA)

Technical Visit to Tuen Mun Road Town Centre Section Improvement Project (17 March 2012)

This project aims to improve traffic condition by widening the 1.5 km long road from a dual 2-lane carriageway to a dual 3-lane carriageway. On 17 March 2012, the visit began with an excellent presentation by the contract's supervising staff Mr Simon Cheung and Mr Joseph Yau. A total of 20 participants including our Board Directors (Dr Yu Wang, Dr Barbara Siu, Dr K T Wan, Mr Paul Cheung) got an overview of the scope of works, current construction works, and challenges and solutions of this project. We then had an opportunity to visit the Community Liaison Centre where all the related information for Tuen Mun Road Project was illustrated on leaflets, display boards and models. The CLC visit was followed by a site tour for us to see the various construction works.



Participants at the project office of Tuen Mun Road Improvement Project on 17 March 2012

The 5th Architectural Technique Contest, University of Macau (25 March 2012)

In March 2012, Dr Victor Wong, President, was invited to serve as honorable judge at the "The 5th Architectural Technique Contest — Breaking Dawn", organized by the University of Macau's ASCE International Student Group. This contest aimed to promote and advance student's creativity and apply what they had learned in lectures. More than 60 contestants constructed tunnels in the contest venue during the fabrication days in February and carried out loading test on 25 March. The most spectacular model sustaining the heaviest load won best design award. More than 120 students and staff members participated in this great event.



Participants and judges at the 5th Architectural Technique Contest on 25 March 2012

Technical Visit to West Kowloon Terminus Station South (Express Rail Link Contract 810B) (21 April 2012)

The project involves creating a 30 m deep underground station enclosure with 4 basement levels. Part of the station enclosure, which encompasses the railway platforms, overruns, plant rooms, ventilation shafts and station car park, will be built underneath the West Kowloon Cultural District area. The April visit began with an excellent presentation by a liaison officer from MTRC. A total of 30 participants including our Director Dr K T Wan and HKUST ASCE International Student Group members got a complete overview of the scope of the whole Express Railway Link, as well as current construction works near the West Kowloon West Terminus, and challenges and solutions of this project.



Participants at the project office of XRL Contract 810B on 21 April 2012

American Society of Civil Engineers (Hong Kong Section) Formal Visit to the Institution of Civil Engineers (Hong Kong Association) (22 May 2012)

Dr Victor Wong, Dr Ryan Yan, Dr Barbara Siu of the Board visited Institution of Civil Engineers (Hong Kong Association) on 22 May 2012. Our board members met with the council members of ICE (HKA) to exchange ideas and to come up with strategies to further develop close cooperation between the two associations including CPD courses and technical seminars. The Board received many good ideas in this discussion. A joyful dinner with ICE (HKA) was organized by the council members of ICE (HKA) in the evening after the fruitful discussion. We express our sincere appreciation to ICE (HKA).



ASCE (Hong Kong Section) visited ICE (HKA)

Technical Visit to Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling (Stage 1 - between Ma Wo and Tai Hang) (14 July 2012)

In July 2011, we successfully organized a technical site visit to Highway Department's project of widening of Tolo Highway/Fanling Highway with more than 20 members participated. The visit began with an informative presentation by the project's site supervising staff on the project background and associated scope of works, followed by valuable experience sharing of the construction work implementing adjacent to major carriageways, and associated temporary traffic arrangement. During the site walk, our members were able to observe a wide variety of roadwork and geotechnical engineering

features. We would like to express sincere gratitude to the staff from the project's contractor, HABVJV, for the informative site tour.



Participants at the project office of the Widening of Tolo/Fanling Highway project on 14 July 2012

Technical Seminar on Seismic Resistant Strategies for Building Structures (14 July 2012)

Dr K T Wan, Director, delivered a talk to introduce the recent common seismic resistant strategies for building structures. The talk was part of the Civil Engineering Experience Certificate Programme (CEECP), which was a 3-day camp for secondary students organized by ASCE International Student Group at the Hong Kong University of Science and Technology. After the talk, the students participated in a competition in which the students formed groups to build up their own building models using provided materials and stipulated specifications. The building models would then be tested in a shaking table to test the seismic resistance.



Dr K T Wan offered technical seminar at HKUST

Elderly Home Visits with Bedquilt Distribution (27 October 2012)

Hong Kong Section took a leading role to invite Hong Kong Lutheran Social Service to participate in elderly home visits and bedquilt distributions on 27 October 2012 with more than 10 volunteers from Hong Kong Section Board Directors and Hong Kong Lutheran Social Service. During this three-hour visit, about 10 volunteers visited several households. With the volunteers' sincere care, the bedquilt and gift packs were distributed to the elderly who were happy and treasured the moments with our volunteers.



Social Service - Elderly Home Visit

Other Activities

- Our Vice President, Dr Barbara Siu, attended the annual dinner of Engineers Australia Hong Kong Chapter in March 2012.
- Our President, Dr Victor Wong, attended the annual dinner of the Hong Kong Institution of Engineers Geotechnical Division in March 2012.
- Our Secretary, Mr Paul Cheung, and Director, Dr K T Wan, attended the Annual Seminar of Hong Kong Institution of Engineers Environmental Division " EIA for Sustainable and Quality Living" in April 2012.
- Our President, Dr Victor Wong, attended the annual dinner of Institution of Civil Engineers Hong Kong Association in June 2012.
- Our Secretary, Mr Paul Cheung, attended the annual of Hong Kong Institution of Engineers Young Members Committee in June 2012.
- Our President, Dr Victor Wong, attended the annual reception of Hong Kong Institution of Engineers Environmental Division in September 2012.
- Our President, Dr Victor Wong, attended the annual dinner of Hong Kong Institution of Engineers Civil Division in November 2012.

Contacts Update:

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

http://www.asce.org/membership

Our website:

http://sections.asce.org/hongkong

E-mail:

asce@ust.hk

Mailing address:

P.O. Box 65269, Tseung Kwan O Post Office, Hong Kong

Editors of this issue of Newsletter: Dr Victor Wong, Dr K T Wan, Dr Patrick Cheung, Mr Paul Cheung