Development of novel membranes and membrane processes for desalination, water reclamation, and energy and resource recovery.
Departmental Event

An informal gathering was organised for all MSc(Eng) students including the current students and the graduates of the Department on March 23, 2015 from 5:00 to 6:30 p.m. Around 15 students and 7 teachers joined the event. It was a good opportunity for our students to meet their teachers and discuss matters of interest or concern in an informal setting.

Staff Awards / Activities / News

Awards

Professor S.C. Wong was awarded the Bronze Bauhinia Star (BBS) for his meritorious public and community service, particularly his dedication and significant contributions to the work of the Town Planning Board, by the Hong Kong SAR Government.

Activities

Dr. C.Y. Tang delivered the following invited lectures/seminars:

- “Advanced membrane characterization: towards improved understanding of membranes and membrane failure mechanisms,” Invited Seminar, Zhejiang University of Technology, August 7, 2015, China.

- “Membranes for water, energy, and beyond,” Invited Seminar, Zhejiang University, August 7, 2015, China.


- “Membrane technology for clean water, energy, and resource recovery”, Invited Presentation, King Abdullah University of Science and Technology, March 10, 2015, Saudi Arabia.

Dr. C.Y. Tang co-organized and participated in the Intensive Workshop for Sustainable Seawater Desalination in Hong Kong: Membrane-based Desalination Processes,
Dr. A.T. Yeung chaired the 28th Executive Committee Meeting of the Asian Civil Engineering Coordinating Council (ACECC) held in Purbani Hotel International, Dhaka, Bangladesh, in his capacity as the Chair of the Executive Committee of ACECC on March 28, 2015. Moreover, he also attended the 17th Technical Coordinating Committee Meeting and 22nd Planning Committee Meeting of ACECC as the official representative of the American Society of Civil Engineers on March 27-28, 2015. ACECC was composed of twelve (12) worldwide civil engineering professional organizations including: (1) the American Society of Civil Engineers; (2) the Chinese Institute of Civil and Hydraulic Engineering; (3) Engineers Australia; (4) the Indonesian Society of Civil and Structural Engineers; (5) the Institution of Civil Engineers – India; (6) the Japan Society of Civil Engineers; (7) the Korean Society of Civil Engineers; (8) the Mongolian Association of Civil Engineers; (9) the Philippine Institute of Civil Engineers; (10) the Vietnam Federation of Civil Engineering Associations; (11) the Institution of Engineers, Bangladesh; and (12) the Institution of Engineers, Pakistan.

On March 28, 2015, Dr. A.T. Yeung gave the conclusive remarks at the Technical Seminar organized by the Institution of Engineers, Bangladesh at Purbani Hotel International, Dhaka, Bangladesh in his capacity as the ACECC Chair.

Dr. A.T. Yeung attended the inaugural Board Meeting of the Centre for Pavement Excellence Asia-Pacific held in Melbourne, Australia on June 22-23, 2015. The Centre was established to coordinate research to develop a better understanding of various soil characteristics and their relation to stabilize additives and the performance of such additives under traffic loadings and to climatic conditions. He was also appointed to be a member of the Board of the Centre. Other Board members include Dr. Richard Yeo, Executive Manager of ARRB (Australian Road Research Board) Group of Australia; Professor Anoop Swarup, Vice Chancellor of Jagran Lakecity University; Dr. Jun-Hwa Jeong, Director of Highway & Transportation Research Institute, Korea Institute of Civil Engineering and Building Technology; Dr. Pyeong Jun Yoo, Highway & Transportation Research Institute, Korea Institute of Civil Engineering and Building Technology; Professor Sujeeva Setunge, Head of Civil Engineering Discipline of RMIT University; Dr. Dilan Robert of RMIT University; Mr. Kishore Bardeja of Aetas Global Markets Limited; Mr. John McIntosh, National Deputy President of Engineers Australia; Mr. Paul Mitchell, FIEAP Representative of Engineers Australia; Mr. Brian O’Donnell, Managing Director/CEO of the CPEAP; and Mr. Jerzy Ordega, COO of the CPEAP.

Dr. A.T. Yeung and Dr. R.W.M. Yan were invited by the International Press-in Association to attend the 8th IPA Press-in Engineering Seminar and the 3rd International Seminar for Research Works held in Kochi, Japan. Presenters at the 8th IPA Press-in Engineering Seminar included Professor Malcolm Bolton of Cambridge University; Mr. Akio Kitamura, Honorary President of International Press-in Association; and Professor Masahiko Isobe, President of Kochi University of Technology. Professor Isobe’s lecture was on “Tsunami measures in Kochi based on lessons learned from the Great East Japan Disaster”. The Seminar also included three site visits: (1) bird’s eye view of Kochi from Gojoi-san; (2) Kochi shoreline levee reinforcement project; and (3) tsunami simulator at the headquarters of Giken Ltd. They also attended three site visits in the morning of July 15, 2015: (1) temporary implant bridge (single post bridge) at the Akoaka Test Field; (2) horizontal loading test of steel tube piles at the Niida-hama Test Field; (3) ECO park, mobile ECO cycle, factory, and experiment facilities at the headquarters of Giken Ltd. On July 15, 2015, Dr. A.T. Yeung presented an invited lecture “Pile Jacking Experience for Foundations in Hong Kong and Macau” at the 3rd International Seminar for Research Works. Other invited lecturers included Professor F.L. Peng of Tongji University, Professor C.F. Leung of the National University of Singapore; Dr. Azizi Yusoff of Universiti Tun Hussein Onn Malaysia of Malaysia; Associate Professor Supot Chulalongkorn University of Thailand; Dr. Manh Tuan Nguyen of Ho Chi Minh City University of Technology of Vietnam; and Associate Professor Jiro Takemura of Tokyo Institute of Technology of Japan.

Dr. A.T. Yeung presented an invited lecture “Sustainable Operation and Maintenance of Highway Systems” at the Asian Pacific Conference on Highway Development and the Environment on August 21, 2015. The conference was supported by the Research Grants Council of the Hong Kong SAR Government and organized by Chu Hai College of Higher Education.

Dr. A.T. Yeung made an invited presentation “Use of IT in Civil Engineering for Real-time Data Collection” at the International Roundtable Meeting of the 2015 JSCE Annual Meeting of the Japan Society of Civil Engineers at Okayama, Japan on September 16, 2015.

Professor B. Young delivered a keynote speech on “Cold-formed high strength tubular sections of steel grade up to 1100 MPa” at the Eighth International Conference on Advances in Steel Structures (ICASS’2015), which was
held jointly with the IJSDD 2015 Symposium on Progress in Structural Stability and Dynamics (IJSDD 2015) during July 22-24, 2015, Lisbon, Portugal. The international conference was well attended by more than 210 participants coming from 37 countries. The conference program included 9 ICASS2015 keynote lectures and 216 regular presentations.

**Professor Z.Q. Yue** participated in the 13th Congress of International Society for Rock Mechanics from May 9-14, 2015 in Montreal, Canada. He was invited to make two oral presentations as follows: (1) "Cause and Mechanism of Crustal Stresses and Earthquakes by Internal Dense Gas Loading and Implications", at the Meeting of ISRM Commission on Crustal Stress and Earthquake; (2) "Migration and Expansion of Highly Compressed Gas from Deep Ground for Cause of Large Rock Avalanches", at the Modelling and Assessment of Slope Failure Mechanisms. In addition, he was also invited to make a public seminar entitled “On Existence of a Thin Spherical Gas Layer between Crust and Mantle of the Earth” at Department of Civil Engineering and Applied Mathematics, McGill University on May 13, 2015.

**Professor S.C. Wong**

- was appointed as a member of the Road Safety Campaign Committee, The Government of HKSAR, for two years with effect from June 1, 2015.
- was re-appointed as a member of the Road Safety Research Committee, The Government of HKSAR, for two years with effect from June 1, 2015.
- was elected as a committee member of the Chartered Institution of Highways and Transportation (Hong Kong Branch) for the term 2015-2016.
- was elected as a member of the Logistics and Transportation Division Committee of the Hong Kong Institution of Engineers for the term 2015-2016.

**Professor B. Young** was appointed as an Editor of the Journal of Constructional Steel Research, Elsevier.

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**Updates on Project Mingde (March - August 2015)**

**Mingde Pan Cultural and Community Centre at Dabao Village**

After more rounds of discussions and meetings between the contractors, the project architect, The Project Team and the representatives of the villagers, the building scheme has been further modified to fulfil the villagers’ needs and the site constraints. All the construction works has been accomplished in September. A four-day trip will be arranged in mid-October for the completion and handover ceremony. About 50 guests including the participated students, Project Mingde Committee members, contractors and local villagers will be invited to join.

**Expansion of the teacher and student accommodations of Daping Primary School**

The Project Team has identified a potential project in Daping Village, in which about 13 students have joined a visit trip to there in April to explore the needs and feasibility of expanding the teacher and student accommodations for Daping Primary School. We have successfully approached a donor to support this project. The students are working on the architectural and structural designs. The construction works is
planned to commence in early July 2016. We have also contacted Guangxi University to seek for collaboration opportunity for Project Mingde. Our students from The University of Hong Kong will work with their students on the structural design in Guangxi for a week in October.

Students interviewed the Principal of Daiping Primary School about their needs.

Students helped the local construction workers for ground excavation work.

Visiting the existing student accommodation.

All participated students and the lavatory they helped construct in the past 7 weeks.

Professor L.G. Tham and students travelled by truck to Daiping Primary School.

Upon completion of the program, our students shared their experiences with others. Two students from the group attended a RTHK1 radio interview on August 22 (十萬八千里). Four student representatives met with the Sing Tao newspaper and the story was released in early September.

Sanitation of Tan Hung Secondary School, Vietnam

Project Mingde collaborated with the Faculty of Social Sciences and World Vision this year, to start up our first overseas project in Vietnam, to build sanitation facilities for a secondary school at Tien Lu (about 2 hours travel from Hanoi), with 8 students from Civil Engineering and 8 students from Faculty of Social Sciences participated. They have been deeply involved into the project acting as Assistant Resident Engineers to monitor and record the construction process of a one-storey high lavatory during their 7-week training. They also helped the local workers to complete part of the construction works on site. An inauguration and handover ceremony was held on July 28. About 200 schoolchildren benefit from this new lavatory by improving their basic hygienic standard.

Kenji (left one) and Marcus (left two) shared their stories in Vietnam.
Repair and Upgrade of the Hongdeng Primary School

Project Mingde collaborated with the Chinese University of Hong Kong introducing a 3-week summer camp in July and August 2015, with 17 students from The University of Hong Kong and 10 students from Guangxi University participated to work at Hongdeng Village. They helped supervising the construction works to repair and improve the existing primary school, and providing classes to the local schoolchildren.

May 24-27, 2015 (Dabao):
Ho Chak Hin Spark, Wong Pak Yue Martin, Lau Cheuk Yin Andrew, Tse Yat Sing Oliver, Chu Wing Nin Winson, Chan Wing Lam Wengcy, Yu Jiang Yee Jennifer (Geology)

June 14–July 31, 2015 (Vietnam):
Shin Jun Yu Joey, Yang Ziyuan Marcus, Lee Chak Fai, Miu Chun Yi Thomas, Wan Siu Yeung Sarn, Fung Kwun Tang Myron, Lee Chun Man Raymond, Chan Lok Tin Dayday, Fan Chun Ying Asta (Social Sciences), Gesang Zhuo Ma (Social Sciences), Ho Chun Yin Kenji (Social Sciences), Lai Yin Kwan Jane (Social Sciences), Leung Chung Yan Stephanie (Social Sciences), Ni Ming Hui Libra (Social Sciences), Shum Yan Yu Sarah (Social Sciences), Chang Ling Chi Gigi (Social Sciences)

July 27–14 August, 2015 (Hongdeng):
From the University of Hong Kong
Ho Chak Hin Spark, Yiu Cheuk Hang, Leung Man Hey Jackson, Chong Kin Lung, Hu Guanxiong Peter, Wong Yu Sum, Lam Hoi Chun, Tsang Tsz Yeung Franco, Yu Tsang Choi, So Chi Keung, Chan Sheung Chi Jason, Leung Kai Wang, Chan Wing Chuen Tom, Zhuo Zepeng Kudo, Ng Tsz Man, Chan Ka Yan Joanna, Wong Kin Yung Rose, Suen Lai Shan (Social Sciences), Guo Yuanfeng (Social Sciences)

From Guangxi University
覃钧，韦晓传，郭欣然，张春博，冯晓雯，甘雨，黄思净，黄新昌，董宏源，霍子龙

Interview with Professor Peter Mathieson
Following Vice Chancellor Professor Peter Mathieson’s participation in our 10th Anniversary Guangxi trip, an interview organized by the current members of Project Mingde was conducted on January 15, 2015. Professor Mathieson began with his belief that experiential learning would improve the education in HKU if it became a

Lists of students who joined the site visits in this period:
April 3-7, 2015 (Daping):
Chan Wing Chuen Tom, Lee Chak Fai, Lu Yulin Kim, Pung Chun Nok Samson, Tsang Siu Fung Joseph, Wong Pak Yue Martin, Yang Ziyuan Marcus, Lau Cheuk Yin Andrew, Chen Jingtao Jimmy, Xie Chen Ryan, Ng Tsz Wai Jason (Engineering), Yau Hiu Ying Viame (Education), Xu Menghan Amanda (Education)

Photo taken after the interview (From left to right): CHOU Sao Fung, LU Yulin, Professor Peter Mathieson, PUNG Chun Nok, WONG Pak Yue, YANG Ziyuan, and LAU Cheuk Yin
common module in various curriculums. Freshmen will be expected to engage in it, which also offers important opportunity for them to obtain experience from foreign countries. Regarding Professor Mathieson’s vision for Project Mingde, he believes that it is an excellent example of experiential learning and engagement with China. Professor Mathieson mentioned about the current political complications which increases our difficulty to cooperate with the Mainland. However, he is positive towards the nature of Project Mingde - interdisciplinary and non-political; students from different backgrounds can put efforts together to help the Mainland children. He further stated that experiential learning would solve the problems of geographical separation and lack of interdisciplinary between faculties in HKU.

Sharing Session of Project Mingde - Your light should light up others!

A sharing session delivered by the current members of Project Mingde was held on March 4, 2015 to promote Project Mingde within the campus and to recruit a new generation of student members.

There were altogether 30 participants and they are from different faculties, including Engineering, Law, Architecture, Business and Economics, and Science. Surprisingly, there are more than 45 students registered to become a member of Project Mingde within a week after the sharing session!

The session was composed of three parts. First of all, it was the sharing of our core members, Steve Ho, Bond Chong, Martin Wong and Samson Pung. They covered mainly the core values of Project Mingde and what they have done and learnt. From their sharing, we could see that they gained a lot from Project Mingde and the spirit of our slogan “We grow as we build” was vividly revealed. Project Mingde not only helps the impoverished children in the mainland, it also saves our students. They start to realise that they are the lucky ones and they should treasure what they have and help others in need. This is what Samson mentioned in the sharing, “Your light should light up others!”.

The second part was presented by Dr. C.P. Wong regarding the upcoming projects in Sancun Village, Daping Village and Vietnam. Then, it was followed by group discussions. Participants were touched with what Project Mingde did in the past ten years and a lot of them immediately registered as a member of Project Mingde! It was a meaningful evening and we all look forward to working with the passionate and enthusiastic new members!

Student Activity

Twelve undergraduate students from top universities in China were awarded HKU Civil Centennial Future Scholars 2015, and the awardees visited our Department from July 27 to August 21, 2015. The scheme was established to allow high calibre students who are interested in joining our Department as research postgraduate students to visit and conduct research with their potential supervisors. During their visit, seminars, discussion sessions and other activities were also held for the Scholars.
Student Awards

Mr. Chan Chung Lok (CivE 3 2014-15); Mr. Chan Shung Hin Caleb, Mr. Lam Wing Cheung, Mr. Leung Wang Yan, Mr. Li Pak Hei, Mr. Ma Wenlin, Mr. Wong Tsz Pui (CivE 3 2014-15) and Ms. Zhu Yuxi (CivE 2 2014-15) were awarded the Reaching Out Award under the HKSAR Government Scholarship Fund 2014-15.

Mr. Chai, Tsz Ho Ivan (2015 BEng graduate) won Second Runner-up in the AGS(HK) Final Year Projects Competition 2015. His project, conducted under the supervision of Dr. J. Yang, was entitled “Laboratory study of permeability of granular soils”.

Miss Chan Wing Lam (CivE 2 2014-15) was awarded the YS and Christabel Lung Undergraduate Scholarship for Engineering Students (Renewal in 2013-14).

Mr. Cheung Yan Long (CivE 3 2014-15) was awarded the HSBC Hong Kong Scholarship 2014-15.

Mr. Chong Shing Tak and Mr. Wong Kin Wai (CivE 3 2014-15) were awarded the Endeavour Merit Award under the HKSAR Government Scholarship Fund 2014-15.

Ms. Li Hiu Kwan Huky (2014 BEng graduate) won the “Award of Merit” in Geotechnical discipline in the G&S Papers Competition 2014 organized by the Institution of Civil Engineers Hong Kong Association. Her paper, supervised by Dr. J. Yang, was entitled “Triaxial compression behaviour of granular materials”. The award presentation ceremony was held on May 22, 2015.

Mr. Liang Jiahao and Mr. Tsui Tik Fung Dave (CivE 3 2014-15) was awarded the Hui Yin Hing Scholarships 2014-15.

Mr. Liu Junchang (June 2014 Graduate) was awarded the HKIE Geotechnical Division Prize and the AECOM Prize for Best Student of the Year 2014.

Ms. So Wing Sze (CivE 3 2014-15) was awarded the LPM Contractors Scholarship 2015.

Ms. Zhang Bei and Mr. Zhang Bolun (CivE 3 2014-15) were awarded the Undergraduate Research Fellowship Programme 2014-15 and Research Internship Awards.