Head's Message

Time has changed. The civil engineering profession in Hong Kong has changed to become more international than before as many Hong Kong engineers are nowadays working on projects in Mainland China, South East Asia, Middle East, Australia and even Europe. The construction industry in Hong Kong has bloomed again largely due to ten mega-infrastructure projects that are being planned with their construction to commence soon. The society at large has changed to become more demanding in terms of public involvement, environmental protection, heritage conservation, energy efficiency and sustainable development. On the other hand, increasing globalization has rendered the construction business extremely competitive.

In response to these changes, the Department is also changing. We are changing to provide broader education, outcome-based and student-centered teaching and learning, more opportunities for student exchange, and internship both inside and outside Hong Kong. We have changed to common admission so that undergraduate students may choose their degree programs after one semester of broad engineering study. We are preparing for the upcoming 4-year undergraduate degree curriculum and a more systematic framework for major-minor and double-major options. We are also offering degree programs more in tune with societal needs.

The Department puts equal emphasis on basic and applied research. Regarding basic research, we have maintained a high success rate in securing research funding from the Research Grants Council and have been producing high quality publications in top journals. Regarding applied research, we are developing a water quality forecast and management system for Hong Kong and health monitoring systems for our long span bridges. We have also been studying the characteristics of the local concrete and soil, and exploring the uses of new materials, such as fibre reinforced polymer composites, high-strength concrete and self-consolidating concrete, in Hong Kong.

The Department has been participating actively in Government committees, public bodies and professional institutes to help resolve contemporary issues, set standards, improve the quality and performance of our infrastructure and raise the competitiveness of our construction industry. Furthermore, our professorial staff members are nowadays much more active in taking sabbatical leaves or paying short visits to other universities, so as to increase their exposure and develop more international collaboration.

Perhaps more importantly, the Department has grown in size by recruiting a number of young professorial staff members. These new staff members are being nurtured for the sustainable development of the Department.

Albert K.H. Kwan
Head, Department of Civil Engineering
The Department of Civil Engineering of The University of Hong Kong and the Department of Civil Engineering of The Hong Kong University of Science and Technology (HKUST) jointly organised the 9th International Symposium on Environmental Geotechnology and Global Sustainable Development held in Hong Kong during June 1-4, 2008. The chair of the organizing committee was Dr. A.T. Yeung and the co-chair was Professor Irene M.C. Lo of HKUST. The Symposium was well attended by more than 110 participants from 26 economies. Keynote lectures were delivered by Ir Albert Lai of the Professional Commons and Professor Robert W. Gillham of the University of Waterloo of Canada.
A group in the Department led by Dr. F.T.K. Au was awarded a research contract by the Highways Department on the “Establishment of Bridge Rating System for Kap Shui Mun Bridge” in May 2008.

Dr. S.T. Smith received the CICE 2008 Best Paper Award in the category of “FRP Strengthening of Existing Structures” at The Fourth International Conference on FRP Composites in Civil Engineering, CICE 2008, July 22-24, 2008, Zurich, Switzerland for the paper entitled “Field testing of RC slabs with openings strengthened using CFRP” (by H.M. Sellem, E.A. Sumner, R. Seracino and S.T. Smith).

Dr. S.T. Smith (right) received The President’s Award for Excellent Services to the International Institute for FRP in Construction (IIFC). The award was presented at the final session of The Fourth International Conference on FRP Composites in Civil Engineering, CICE 2008, July 22-24, 2008, Zurich, Switzerland.

Professor J.H.W. Lee and Dr. Wenping Wang (Department of Computer Science) have been awarded a three-year $29.8 million inter-disciplinary project by the Hong Kong Jockey Club Charities Trust to develop WATERMAN – a water quality forecast and management system for Hong Kong.

Dr. T.S.T. Ng (left) received The Chartered Institute of Building (CIOB) Prize for the Best Project Management Paper at the B&H 8th International Postgraduate Research Conference 2008. The paper was entitled “Optimising Construction Time and Cost in Construction Material Logistics” co-authored by Ms. Fang Yuan.

Dr. H.H. Tsang was awarded the Hsai-Yang Fang Research Award by the International Society of Environmental Geotechnology (ISSEG), for the paper entitled “Utilization of Scrap Tires for Earthquake Hazard Mitigation”, co-authored with Professor S.H. Lo, Miss Fiona H.Y. Fong (2006 graduate) and Miss X. Xu (MPhil student). ISSEG is headquartered at the Global Institute for Energy and Environmental Systems of the University of North Carolina at Charlotte, U.S.A.

Professor J.H.W. Lee gave a keynote lecture on “Real time beach water quality forecasting systems” at the 3rd National Congress on Hydraulics and Hydroinformatics, October 18-20, 2007, Hohai University, Nanjing; and a plenary lecture on “Real-time hydro-environmental modelling and visualization system for public engagement” at the 5th International Symposium on Environmental Hydraulics, Arizona State University, December 4-7, 2007. He also gave an invited lecture on “Identification of Critical Factors Affecting the Bacteriological Water Quality of Hong Kong Beaches”, Environmental Protection Department, February 1, 2008.

Dr. A.T. Yeung was appointed as the moderator of the 3rd James K. Mitchell Lecture. The Mitchell Lecture was established by TC 16 of the International Society for Soil Mechanics and Geotechnical Engineering to honor James K. Mitchell, Emeritus Professor of the University of California-Berkeley and Emeritus Professor of Virginia Tech. Professor Mitchell has made significant contributions in the area of in-situ testing related to the development of testing methods, their interpretation as well as advancements in environmental geotechnics, ground improvement, and soil behavior. The lecture was delivered by Professor R.G. Campanella of the University of British Columbia on “Geoenvironmental site characterization” on April 1, 2008 in Taipei.
Dr. H.H. Tsang was invited by Sowers Action to deliver a fund-raising public lecture entitled “Understanding Earthquake Disaster” at the Chiang Chen Studio Theatre of The Hong Kong Polytechnic University on June 1, 2008. The funds raised will be used to support the reconstruction of school buildings in China after the Sichuan Earthquake on May 12, 2008.

Dr. H.J. Pam, Dr. R.K.L. Su and Dr. H.H. Tsang delivered training seminars on “Seismic Design of Building” at the Headquarters of the Hong Kong Housing Authority on May 5-6, 2008.

Dr. H.H. Tsang was invited by Sowers Action to deliver a fund-raising public lecture entitled “Understanding Earthquake Disaster” at the Chiang Chen Studio Theatre of The Hong Kong Polytechnic University on June 1, 2008. The funds raised will be used to support the reconstruction of school buildings in China after the Sichuan Earthquake on May 12, 2008.

Dr. A.T. Yeung delivered the feature lecture “Electrokinetics for soil remediation” on June 2, 2008 at the 9th International Symposium on Environmental Geotechnology and Global Sustainable Development held in Hong Kong.

Dr. R.K.L. Su and Dr. H.H. Tsang delivered invited seminars entitled “Lessons Learnt from the Sichuan Earthquake” at the Headquarters of the Hong Kong Institution of Engineers and the Hong Kong Housing Authority on June 3 and July 4, 2008, respectively.

Dr. F.T.K. Au (pictured) attended the international conference “Language Issues in English-medium Universities: A Global Concern 2008” organised by The University of Hong Kong on campus from June 18-20, 2008 and presented a paper entitled “A Tale of Two Classes: Language Issues in Teaching Civil Engineering”. The paper reported a study of the language issues in teaching the course “Theory and Design of Structures I” at the University and the Zhuhai Campus of Sun Yat-Sen University in the year 2006-07.

From left: Dr. J. Chen, Dr. J.H. Zhu, Dr. B. Young, Professor K.J.R. Rasmussen and Professor G.J. Hancock

Dr. B. Young served as a member of the International Scientific Committee of the 5th International Conference on Thin-walled Structures held in Brisbane, Australia, June 18-20, 2008. He chaired a technical session and presented a paper at the conference. Furthermore, Dr. B. Young also served as a member of the International Scientific Committee of the 5th International Conference on Coupled Instabilities in Metal Structures, Sydney, Australia, June 23-25, 2008. He also chaired a technical session and presented a paper at the conference.

Professor L.G. Tham and Drs J. Chen, A. Koenig and S.T. Smith travelled to Xian, Nanjing, Jinan and Hangzhou, respectively, from June 27 to July 1, 2008, as members of HKU’s Mainland Admission Scheme team to interview Mainland students for admission into undergraduate programmes at HKU.

Dr. S.T. Smith served as a member of the International Scientific Committee of the Fourth International Conference on FRP Composites in Civil Engineering, CICE 2008, which was held in Zurich, Switzerland, July 22-24, 2008. He attended this conference and chaired two technical sessions and delivered a technical paper.

Dr. A.T. Yeung has been appointed as an External Examiner of the Civil Engineering degree (honours) Program of Chu Hai College of Higher Education 2007-2009.

Professor S.C. Wong was re-appointed as a member of the Transport Advisory Committee, The Government of HKSAR, for two years with effect from April 1, 2008.

Mr. P.K.K. Lee (left) received the HKU Long Service Award at the Presentation Ceremony held in Convocation Room on May 6, 2008. Mr. Lee has served the University for 38 years.

Dr. S.T. Smith was appointed to the International Editorial Board of the Journal of Composites for Construction, American Society of Civil Engineers (ASCE), in July 2008, for a term of two years. He was also re-appointed as Secretary of the International Institute for FRP in Construction (IIFC), in July 2008, for a term of two years.

Dr. J. Yang was on an ASCE team carrying out field investigations in mid July 2008 into the infrastructure damage caused by the Sichuan earthquake. A report on the investigations was published by ASCE and can be accessed at http://content.asce.org/08ChinaQuakeTeam.html.

Professor J.H.W. Lee has been elected as Fellow 2008 of the Royal Academy of Engineering.

Professor S.C. Wong was elected as a member of the Civil Division Committee of the Hong Kong Institution of Engineers for the term 2008-2009. He was also elected as a committee member of the Institution of Highways and Transportation (Hong Kong Branch) for the term 2008-2009.

Dr. A.T. Yeung was appointed by the Senate to the Committee of Enquiry into Possible Good Cause of the University (2008-2010). He was appointed by the Council to be a member of the University Health Services Committee. His term will expire on June 30, 2010. He was also a member of the Assessment Panel for Selection and Short-listing of Consultants and Contractors for The University of Hong Kong chaired by PVC Professor Malpas.

Professor J.H.W. Lee was recently appointed Vice-chairman of the China Ocean Engineering Society, and re-appointed an editorial board member of the China Ocean Engineering Journal.

Dr. A.T. Yeung was appointed to be a member of the Membership Subcommittee of the Asian Civil Engineering Coordinating Council (ACECC). He attended the 16th Executive Committee Meeting of the Council (ACECC) on February 25-26, 2008 in Sydney. ACECC was founded in 1999 to schedule Asian forums where civil engineers worldwide may jointly develop programs of coordination and mutual action in designated matters affecting the interests of civil engineers and related professions. Current Members are American Society of Civil Engineers, Chinese Institute of Civil and Hydraulic Engineering, Japan Society of Civil Engineers, Korean Society of Civil Engineers, Philippine Institute of Civil Engineers, Vietnam Federation of Civil Engineering Associations, Engineers Australia, and Mongolian Association of Civil Engineers.

Dr. A.T. Yeung was appointed to be an Honorary Counselor of the International Society for Environmental Geotechnology (ISEG). The ISEG has evolved as a registered non-profit professional society of researchers, policymakers, educators, corporate personnel and representatives of organizations who are active or interested in the advancement and application of knowledge in the geoenvironmental sciences and engineering to sustainable development of all regions of the world. He was also appointed to be a member of the International Activities Committee of the American Society of Civil Engineers.
‘BUILDING RIVANS’ Workshop

This Workshop, held on May 31, 2008, aimed at ‘Boosting Value by Building RIVANS’. In short, the RIVANS (Relationally Integrated Value Networks) research project aims to develop a holistic framework for ‘relational’ integration of hitherto mutually suspicious project participants in disjointed supply chains, into cross-linked mutually beneficial ‘value networks’. Jointly identifying and then focusing on ‘network values’ (common value objectives) is expected to empower the optimal integration of project teams, and also to synergies through relationally integrated processes. This goes well beyond the mere ‘structural integration’ in procurement modalities such as DB (Design-Build). It also goes well beyond the basic relationship building expectations from ‘partnering’.

Centre for Infrastructure & Construction Industry Development

“BUILDING RIVANS”
WORKSHOP
Boosting VALUE by Building RIVANS
(Relationally Integrated Value Networks)
31 May 2008

40 participants from the Hong Kong construction industry and academia, together with Prof. Derek Walker from RMIT, Australia, spent an interesting and invigorating Saturday morning in building RIVANS up to new levels. For a summary, see http://www.hku.hk/cicid/3_events/68/68_RIVANS_Workshop_IL_Report.pdf.
Student Awards / Activities

Awards

Miss Heung Man Kuen (2007 graduate) received the Best Final-Year Project Award 2007 from HKIE-Geotechnical Division. Her project, completed under the supervision of Dr. J. Yang, was on “Overburden Pressure and Initial Static Shear Correction Factor in Liquefaction Analysis”. The award was presented at the HKIE Geotechnical Division Annual Dinner which was held on February 29, 2008.

Mr. Leung Ho Kwun Michael (Year 2 BEng student, 2007-08) was awarded the Providence Foundation Outward Bound Training Awards 2007-08.

The Hong Kong Institution of Engineers named Professor C.K. Chow (1955 graduate) as its Gold Medal winner for 2008 in recognition of his outstanding contributions and achievements in the field of engineering. The award was presented on March 11, 2008 at the HKIE’s 33rd annual dinner held at the Hong Kong Convention and Exhibition Centre.

HKU Civil Engineering Graduate won Young Engineer of the Year Award 2008 – Certificate of Merit in Hong Kong Institution of Engineers (HKIE)

Mr Johnson K.C. Lee graduated from HKU in civil engineering in 2001 and subsequently obtained his second degree in Law from the University of London through an external programme in 2006. He now works as an engineer in the Water Supplies Department (WSD), responsible for ensuring the safety of dams and impounding and service reservoirs.

Since 2002, Johnson has been serving the HKIE and was elected as the Chairman of the Young Members Committee for session 2006-2007, overseeing the interest of 8000 young engineers (age under 35). He has led young engineers to organise and participate in various local and international events, including the World Engineers’ Convention 2004. As an engineer, Johnson has also helped to inspect and to improve the structural conditions of the schools in region of poverty in China, including those in the recent Sichuan earthquake disaster area.

In recognition of his contribution and achievement to the engineering profession, to the HK community and to the HKIE, Johnson was awarded the captioned Certificate of Merit.
Dr. R.K.L. Su led a post-earthquake reconnaissance team to Sichuan Province from June 29 to July 3, 2008. Team members included Dr. H.H. Tsang, Mr. W.H. Siu (PhD student), Mr. M.H. Cheng (2007 graduate), Miss. M.L. Chu (2007 graduate) and three delegates from the Australian Earthquake Engineering Society of The Institution of Engineers Australia. The team investigated the building damages at various cities such as Chengdu, Dujiangyan, Mianyang and Yingxiu. The team was invited to visit the Department of Civil Engineering at Sichuan University and a series of presentations was given.
The Completion and Handover Ceremony of ‘Ge Wu Lou’

‘Ge Wu Lou’, the second ‘Ming De Projects’ of the Department of Civil Engineering, The University of Hong Kong, was completed and handed over to the Rong Shui Vocational Training School at the end of August 2008. In the new academic year 600 students from nearby ethnic minority groups will begin to move into the new dormitory.

‘Ge Wu Lou’ was made possible by the generous donation of Dr. Nicolas Yeung (1971 graduate) and his wife. The building was designed by our Department’s Year 3 students under the guidance of professionals. The students spent over 4 months to design the building in order to meet with the Mainland’s requirements. Since the project commenced in mid 2007, our students have visited the site four times to supervise the progress, to inspect the quality of work and to work out problems with the construction workers, thus making this venture one of the best quality construction projects in the area. Over 40 of our students were involved in the project from its design to construction stage.

On August 29, 2008, the Rong Shui Vocational Training School organised a completion and handover ceremony for ‘Ge Wu Lou’. Professor A.K.H. Kwan, Head of the Civil Engineering Department, led a team of 18 delegates to attend the event. Dr. and Mrs. Nicolas Yeung were also present at the Ceremony to share in the students’ joy. Before the Ceremony, students of our Department performed the final site inspection before occupation. Some students may even spend a night in the dormitory to enjoy the fruits of their labour.

Despite his busy schedule, Professor C.F. Lee, former Pro-Vice-Chancellor, who has been taking active interest in the ‘Ming De Projects’ over the years, also joined the Ceremony.
Fellowships

Professor Guangqian Wang, Tsinghua University, visited the Department from March 24-30, 2008 under the auspices of the Environmental Hydraulics Visiting Fellowship. His public lecture entitled “Sediment Research for the Three Gorges Project” was delivered on March 28, 2008 and seminars entitled “Digital Water Transfer System for the Middle Route of the China South-to-North Water Diversion Project” and “Digital Yellow River Model” on March 26 and 27, 2008 respectively.

Announcements and Upcoming Events

The Second International Symposium on Innovative Design of Steel Structures is organised by the Department of Civil Engineering. The details of the International Symposium are as follows:

Date: December 5, 2008 (Friday)
Time: 9:00am - 5:00pm
Venue: Intercontinental Hotel, Grand Stanford
CPD certificate: The Symposium is recommended for one full CPD day
Registration fee: $1,180
(fee includes a lunch and three tea/coffee refreshments as well as a copy of the Proceedings and a copy of CPD certificate)
[More details can be found at: http://www.hku.hk/civil/conference/ISIDSS-2008/ISIDSS.pdf]

The ISRM International Symposium on Rock Mechanics (SINOROCK2009) is sponsored by the Chinese Society for Rock Mechanics and Engineering and The University of Hong Kong. The details of the International Symposium are as follows:

Date: May 19-22, 2009
Venue: The University of Hong Kong
Registration fee: Authors and Delegates HK$2,400 (US$300); Students HK$1,200 (US$150)
[More details can be found at: http://www.hku.hk/sinorock/]

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