

INTERNATIONAL ASSOCIATION OF HYDRAULIC ENGINEERING AND RESEARCH
(HONG KONG CHAPTER)

國際水力學會香港分會

<http://web.hku.hk/~iahrhk>



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**Symposium on “Advances in Water Resources Management”
cum 10th Anniversary Celebration of IAHR-HK Chapter**

Year 2008 is the tenth anniversary year of our Hong Kong Chapter of International Association of Hydraulic Engineering and Research (IAHR-HK). To celebrate the occasion, a special Symposium with the theme “Advances in Water Resources Management” was held during March 25-27, 2008.

We are deeply grateful to the Bureau of Hydrology, Changjiang Water Resources Commission (CWRC-BOH) who kindly acted as the key sponsor of the Symposium. We would also like to thank the Croucher Laboratory of Environmental Hydraulics of The University of Hong Kong for organizing the event.

The opening of the Symposium was held in the morning of March 25 and it was officiated by Professor Joseph J.W. Lee, who served as the Symposium Chairman. Mr. C.K. Wong, Director of Drainage Services, representing Hong Kong SAR Government; Mr. J. WANG, Director General CWRC-BOH, and Professor C.W. Li, Chairman of IAHR-HK, also delivered opening addresses. Representing The University of Hong Kong, Prof. John G. Malpas, Pro-Vice-Chancellor and Vice President, also welcomed the participants to the event.

On March 25 and 26, more than 20 invited lectures covering issues of flood forecasting and control, total water management, climate change, river restoration and sedimentation control were presented by experts in the areas. The speakers were representatives from the academia, CWRC-BOH and several government departments of Hong Kong including DSD, EPD, WSD and HKO. In the morning of March 27, many participants attended a technical visit to “Yuen Long Bypass Floodway Project” hosted by the Drainage Services Department.

The symposium was targeted at researchers, scientists, engineers and officials working in the area of water resources management. There were more than 100 participants to the symposium and with the generous support of the sponsors, the registration fee (including the technical sessions, technical visit and refreshment) for all participants were waived.

Among the many topics discussed, one major objective of the lectures and panel discussion was to discuss the emerging challenges facing the management of Yangtze River. Many of these challenges were caused by rapid socio-economic development and increased human impact in the region. CWRC-BOH, being the authority responsible for the monitoring, assessment and forecast of the water resources of Yangtze River, was seeking innovative solutions to these challenges. The symposium succeeded to provide a forum for participants to

exchange ideas and best practices of river basin management together with international experts and colleagues in Hong Kong.

Detailed program of this successful symposium can be found in the following website:
http://www.hku.hk/civil/water_symposium/index.html.



Tenth Annual General Meeting

Our 10th AGM was held during the anniversary symposium on the late afternoon of 26 March 2008. About 50 members were present and the committee members for the term of 2008-2009 were elected.

Technical Visits

Following the success of the first technical visit jointly organized by IAHR-HK and CIWEM-HK in 2007, two one-day technical visits were organized jointly again by the two organizations in 2008. The focus of the visits is on treatment and recycling of water and wastewater in Hong Kong and the Pearl River Delta (PRD) Region. Another report on the visits can be found in the January 2009 newsletter of CIWEM-HK which is available on their website: http://www.ciwem.org/branches/hong_kong/

The first visit 6 September 2008 was to two water reclamation plants in Panyu and Dongguan, PRD. In the morning, about 30 members from the two organizations went across the border to Panyu to visit a sewage effluent recycling plant for Jetta Co. Ltd. This is a toy OEM employing over 50,000 workers in different factories in Guangdong. In the Panyu factory, a sewage treatment plant with a design capacity of 8,000 m³/day was set up to treat the domestic sewage produced from the worker dormitories. Recently, a membrane filtration system was added to recycle 1,800 m³/day treated effluent for re-use in toilet flushing and irrigation.



Recycled water used for irrigation in the Panyu factory



Team members explained on the Panyu treatment plant process

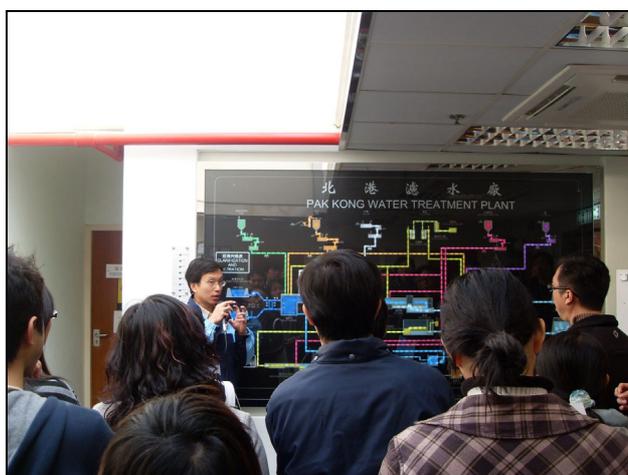
In the afternoon, the team visited an industrial wastewater recycling plant in Dongguan. The plant serves Red Board Ltd., a large printed circuit board manufacturer. The industrial wastewater recycling plant, set up in 2007, works on ultra-filtration and reverse osmosis. Out of 8,000 m³ wastewater generated from the production per day, 5,000 m³ can be recycled back to the production as process water. This can dramatically cut down the factory's wastewater discharge by 63%, and it is considered to be one of the largest industrial wastewater recycling plants in China.

Both plants were commissioned by the Hong Kong Productivity Council.

The next joint technical visit with CIWEM-HK was held on 6 December 2008 during which around 20 participants paid a visit to Pak Kong Water Treatment Works of Water Supplies Department (WSD).

Pak Kong Treatment Works was commissioned in 1989 and expanded in 1992 to its present treated water output of 800,000 m³/day. The Works serves Tseung Kwan O, Sai Kung, East Kowloon and northern part of Hong Kong Island. Raw water coming from Plover Cove Reservoir, High Island Reservoir and the nearby catchment areas is mixed with lime, alum, activated carbon, polyelectrolyte and disinfectant in steps for removing metals, organic matters, odour and to suppress microorganisms. The water then passes through clarifiers where sludge is collected and conveyed to sludge thickening tanks for further treatment before disposal. Settled water from the clarifiers then flows through constant rate rapid gravity dual media. Chlorine, lime and fluoride are dosed into the filtered water to disinfect, control alkalinity and provide dental protection respectively to the final treated water.

The visit was in line with WSD's open day of the Treatment Works. Upon arrival, the participants were received by the colleagues of the WSD and guided through a designated route of visit. The team was shown the various treatment processes, leakage management, water science, water meters. Introduction was also given on the programme for replacement and rehabilitation of water mains, Quality Water Recognition Scheme for Buildings, and Total Water Management. We would like to express our sincere gratitude to the WSD especially Mr Victor Lo for coordinating the guided tour of this technical visit.



16th Congress of Asia and Pacific Division of IAHR, October 2008

The 16th IAHR-APD Congress was successfully held in Nanjing during October 20-23, 2008. IAHR-HK always supports this biennial congress series of APD. This time, many of our committee members, together with many student members, attended the congress in Nanjing. The congress was held in Hohai University with the theme "Water and Humanity – Friendship, Harmony and Sustainable Development". In the evening of October 22, two lectures were organized and targeted at students in China. Both lectures were delivered by our committee members. Prof. Joseph Lee talked on "How to write a good quality paper for a top international journal" and Prof. Mohamed Ghidaoui followed on the talk on "Journal of Hydraulic Research – Everything the author needs to know!". The attendance of the lectures was surprising and the 500-seat lecture theatre was packed with seated and standing students. We hope that the lectures are instrumental in raising the tactic and ethic of academic paper writing in China.

Sponsorship of Events

2nd International Symposium on Shallow Flows, December 10-12, 2008, HKUST

IAHR-HK sponsored the 2nd International Symposium on Shallow Flows which was organized by the Department of Civil and Environmental Engineering, Hong Kong University of Science and Technology. Professor Mohamed Ghidaoui is the Chairman of the Organizing Committee. The symposium was successfully held with attendance of about 120 participants from all over the world. Excellent keynote lectures were given by world-renowned experts including H.S. Fernando (Arizona State University), Gary Parker (University of Illinois), Gerhard H. Jirka (University of Karlsruhe), Lord Julian Hunt (University College London) and Vincent H. Chu (McGill University). Details and photographs of the symposium can be found in the following website: <http://www.ce.ust.hk/issf/>.



Workshop on “Re-naturalization of concrete flood channels in urbanized areas”, Feb. 27, 2009, PolyU

IAHR-HK sponsored the Department of Civil and Structural Engineering, Hong Kong Polytechnic University to hold a workshop entitled “Re-naturalization of concrete flood channels in urbanized areas”. The speakers of the workshop include Ir. Prof. Joseph Atkinson, Ir. Dr. James Lo, Mr. John Tran, and Ir. Prof. Onyx Wai. Prof. Atkinson is a professor in the Department of Civil, Structural and Environmental Engineering, and Director of the Great Lakes Program at the University at Buffalo (New York). His work spans broad areas of environmental modeling. Dr. James Li is an associate professor in the Department of Civil Engineering, Ryerson University, Toronto, Ontario, Canada. He has conducted many hydrologic and hydraulic studies in the Canadian Great Lakes basins. Mr. John Tran, CET, is an environmental engineering professional with decades of municipal experience in design, construction, and maintenance of water management structures. Onyx Wai is the Vice-Chairman of our Chapter. In the workshop, case studies were presented on stream restoration in urbanized areas. In addition, the workshop contents include an overview of natural channel designs, restoration principles of flood control channels, design, construction and maintenance of restored streams in flood control channels. The workshop was well attended by about 60 participants.

Upcoming Events

Annual Seminar of IAHR-HK, 2009 and 11th Annual General Meeting

An annual seminar of IAHR-HK is planned in April 2009. The tentative title is “Engineering and Environmental Applications of Hydraulics”. The 11th AGM will be held during the Symposium.

Symposium on “Sustainable Development of Wetlands for Hong Kong Ahead of 2010”

IAHR-HK will sponsor the above symposium to be held in May 2009. The symposium is organized by CIWEM-HK, City University of Hong Kong and Hong Kong Institute of Environmental Impact Assessment.

Obituary

We are shocked and saddened by the sudden departure of Dr Yu Daeyoung. This active member of our Chapter passed away suddenly during a squash game on March 27, 2009.



Dr. Yu Daeyoung was born in 1969 in Seoul, Korea. He received his BSc, MSc, and Ph.D. degrees, all in Civil Engineering and Hydraulics, from Seoul National University. After working in the Water Resources and Environmental Research Division of the Korea Institute of Construction Technology for two years, Dr. Yu joined the Department of Civil Engineering of The University of Hong Kong as Research Associate and works for Professor Joseph Lee.

At The University of Hong Kong, Dr. Yu has been working in the Croucher Laboratory of Environmental Hydraulics as a key member on experimental hydraulic research and hydraulic modeling. In particular, over the past three years he was introduced to and contributed to the hydraulic modeling of several major government flood control projects – notably the Hong Kong Island West Vortex Intake Study and the Lai Chi Kok Transfer Scheme. In 2005, he helped unravel the causes of the puzzling flooding on Smithfield Road – with a solution that worked in practice. These practical projects stimulated basic research that led to a new theory for the design of tangential vortex intakes – this work just appeared in the March 2009 issue of the Journal of Hydraulic Engineering of the American Society of Civil Engineers. He also lectured in a one-day Continuing Professional Development (CPD) course on “Vortex Intakes” given in September 2008 to over 30 practicing engineers working on the design of vortex drop structures.

Dr. Yu has been an active member of IAHR-HK. He has joined in many field trips organized by our Chapter as well as many hydraulic conferences in Mainland China and overseas. Just in October 2008, he attended the 16th IAHR-APD Congress in Nanjing and served as a link between the Chinese colleagues including those from Hong Kong and the many Korean colleagues who attended the Congress. He was very much attracted by the challenges and opportunities in water environment engineering in Mainland China and the region.

Dr. Yu was a devoted husband and father, spending time with the family during the weekends. His younger son was born in Hong Kong and both of his sons are studying in Hong Kong. He enjoyed writing blogs and photography with his elder son.

He will be sorely missed by his family, colleagues, friends, students and IAHR-HK.