

主席簡報 Chairman's Message



In the last couple of months, AES has been working at full stretch to implement an ambitious programme including visits for all members and workshop for young engineers, such as visit to Hong Kong Observatory in June, visit to CLP Nuclear Resources Centre in September and technical visit to Kai Tak Cruise Terminal in December.

Workshop on Professional Assessments for Civil Discipline of The HKIE was held on 17 October 2013. Participants were those members who had applied for The HKIE Civil Discipline Professional Assessment this year. At the Workshop, they could better understand and familiarise themselves with the format and ways to equip themselves in the presentation and interviews by practising in a simulated environment of professional assessment.

The 5th Table Tennis Match, Engineering Cup 2013, which was one of the major events of the 10th Young Engineers Society (YES) Anniversary, was successfully held on 14 September 2013 at the Hong Kong Polytechnic University. This year there were altogether 18 teams running for the championship.

The 9th Extraordinary General Meeting(EGM) and the 16th Annual General Meeting (AGM) of the Association were held on 28 October 2013. We are very happy to report that

Ir Dr. HU Fa-kuang is now our Honorary President and Ir Prof. LO Yiu-ching is our new President. With their new roles, I am confident that AES will go from strength to strength in playing a significant role in the engineering and construction field.

YES has jointly organised a delegation to visit Zhuhai and Macau from 12 to 14 October 2013 with various engineering and construction professional organisations. The visit has provided the young professionals with the opportunities to have a better understanding of the latest planning and rapid development in Pearl River Delta.

A meaningful event, "Volunteering Service Day" was held on 7 December 2013. It was co-organised by YES and the People's Food Bank of St. James' Settlement. Our members assisted the process of preparing meal boxes in Kwun Tong and home delivery to the elderly in Sham Shui Po.

My sincere thanks to all Council Members for their input and contributions to AES! We need members' active participation to ensure AES can sustain its smooth and successful running of its affairs as in the past!

I wish you all the very best in the year of the Horse!

Designed by Architect, Dr Tao Ho (何弢博士) Raymond Ho



The 9th EGM and the 16th AGM







▲ The 9th Extraordinary General Meeting and the 16th Annual General Meeting were held on 28 October 2013.

Council Members List (理事會成員)

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Ir Dr CHUNG Sze-yuen

顧問 Advisors

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陳清泉教授、工程師

鄭漢鈞博士、工程師

張達烱工程師

蔣震博士

趙雅各工程師

周子京教授、工程師

高贊明教授、工程師

關治平工程師

劉正光教授、工程師

劉秀成教授

劉紹鈞教授、測量師

劉偉成教授、工程師

李焯芬教授、工程師

李行偉教授、工程師

李家仁醫生

李承仕工程師

梁海明工程師

梁美芬博士

盧偉國博士、工程師

石禮謙先生

譚華正博士

譚偉豪博士、工程師

黄澤恩博士、工程師

黄景強博士、工程師

黃國禮工程師

Ir Francis BONG Shu-ying

Ir Prof CHAN Ching-chuen

Ir Dr CHENG Hon-kwan

Ir Raymond CHEUNG Tat-kwing

Dr CHIANG Chen

Ir James CHIU

Ir Prof CHOW Che-king

Ir Prof KO Jan-ming

Ir Edgar KWAN Chi-ping

Ir Prof LAU Ching-kwong

Prof Patrick LAU Sau-shing

Prof Francis LAU Shiu-kwan

Ir Prof LAU Wai-shing

Ir Prof LEE Chack-fan

Ir Prof Joseph LEE Hun-wei

Dr LEE Ka-yan

Ir LEE Shing-see

Ir Raymond LEUNG Hai-ming

Dr Priscilla LEUNG Mei-fun

Ir Dr LO Wai-kwok

Mr Abraham SHEK Lai-him

Dr TAM Wah-ching

Ir Dr Samson TAM Wai-ho

Ir Dr Greg WONG Chak-yan

Ir Dr Peter WONG King-keung

Ir WONG Kwok-lai

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Ir Dr HU Fa-kuang

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Ir SIU Man-po

Ir Michelle TANG Ming-sum

Ir Kelvin TANG Sher-kin

Mr Gary TSE Shing-chun

Ir Charles TSE Kwok-chau

Ir WONG Chi-ming

Ir Mickey WONG Chi-wai

Mr Patrick WONG Pok-toh

Mr Conson YU Kin-ho

Ir Ringo YU Shek-man

當然理事 Ex-Officio Member

賴震暉工程師

Ir Alex LAI Chun-fai

Notice of Full Membership Annual Subscription Adjustment

The Council has decided to adjust the Full Membership Annual Subscription to HK\$500 with effective from 1 January 2014.

This is the first revision since establishment in 1995.



Ir Prof Louis LOCK Fat-shing, Senior Vice Chairman of AES for appointment of Honorary Professor of The Open University of Hong Kong.

致送錦旗與岑台長及宋主任

工程界社促會於 2013 年 6 月 8 日上午參觀位於九龍尖沙咀的香港天文台。一行十多人由主席何鍾泰博士率領,並榮獲天文台長岑智明先生接待。首先觀看一套約 3 分鐘短片,介紹天文台於 1883 年成立的背景,初期主要為航海及商界服務,觀測氣象及地磁;發展至現代的航空氣象、地震與輻射監察、及氣候服務。

接著由天文台高級科學主任李先生簡介全球氣候變化狀況-證據、後果、與香港的關係、及推算將來氣候會變成怎樣。其中提及 2001 至 2012 年所有年份都位列全球氣温自有記錄以來最暖的 13 年內,地球冰川質量 (mass) 及北極海冰面積均迅速減少,北極暖化引至大氣環流容易受阻塞系統影響,做成熱浪或寒潮。此外,全球暖化加劇水循環以至極端降雨雪增多,海水受熱膨脹及陸地冰雪融化亦令海平面升高。預料香港的年平均氣温在 2090 至 2099 年間會較 1980-1999 年的平均值高約 3.0℃至 6.8℃,每年酷熱日數會由 9 天升至 89 天。

之後由天文台高級科學主任宋小姐帶領參觀天氣預報中心及錄影室。中心內有多部顯示不同種類天氣圖的電腦顯示屏,包括氣象站位置及收集的數據、雷達監測的兩帶、衛星接收的雲圖、颱風位置等。中心的一邊牆上有一大幅由多張不同高度的氣象預報圖組成的天氣預報系統。宋小姐表示,這個系統將由一個大型電腦顯示屏(video wall)取代,會更快捷及環保。錄影室主要用於拍攝天氣報告、颱風報告及舉行記者會。天文台科學主任自 1987 年開始在電視主持天氣節目。錄影室內參觀會員扮演報天氣預報員,攝入鏡頭後,即時顯示在大螢幕上,背景為香港的天氣預告圖。扮演過後,何主席及會友都感到興奮及愉快!

宋小姐指出,市民隨了從電視、電台及上網獲得天氣資訊之外,亦可安裝手機應用程式「我的天文台(MyObservatory)」。其中一個特色是顯示出香港19個不同位置的攝錄機,即時播出該處的天色景象;天文台網頁及手機應用程式自成立以來,點擊率已達300億次!

隨後到展覽廳參觀。廳內有展板介紹温室效應與全球氣候變化、氣象觀測衛星、雷達、天氣預報、航空氣象監測、核能與輻射等範疇。由天文台科學主任許先生介紹颱風訊號(風球)的識別、香港過去主要風災的歷史、及介紹核電相關知識,輻射監察等。最後到戶外參觀各種探測及數據收集裝置,例如雨水收集器等。

參加者每人獲贈一份精美紀念品香港天文台成立 130 周年 紀念郵票小版張,內容介紹過去百多年天文台發展的里程碑及 亮點。

社促會何主席及各參加會友,非常感謝天文台長岑先生和 各位講者員工的熱情招待,及詳盡而精湛的講解。對是次天文 台參觀活動,留下極滿足及深刻的印象!







第五屆工程界友誼盃乒乓球邀請賽 2013 後記

杜俊傑先生、申存淼先生

本會舉辦之青年部十周年暨第五屆工程界友誼盃乒乓球邀請賽2013已於9月14日假香港理工大學邵逸夫體育館圓滿舉行,本會新任會長前環境、運輸及工務局常任秘書長盧耀楨教授工程師擔任頒獎嘉賓並致辭,眾多出席嘉賓包括土木工程叛署助理署長(行政)邱伯衡先生、渠香拓展署助理署長徐偉先生、中央人民政府駐香研員張巍先生、香港電燈有限公司工程建設科總經理劉志光先生及香港專業進修學校顧問陳潔貞博士等到場打氣及觀摩球技。

當天上午本會主席何鍾泰博士、工程師致歡迎詞後,便聯同各隊代表主持開球禮,比賽隨即開始。各隊參賽健兒施展渾身解數,切磋球技。更有會員帶同子女到場觀賽,為各隊加油打氣,場面熱鬧非常。



香港乒乓總會也是一如既往,支持本賽 事,提供專業的裁判團隊。

下午的比賽更加精彩。經歷了一上午的激烈淘汰,有四支隊伍晉級最後一輪比賽。這當中包括了傳統強隊香港電燈公司和香港鐵路公司,也包括了土木工程拓展署和主辦單位工程界社促會。各支隊伍紛拿出自己的拿手強項。其中工程界社促會表現頗為不俗。繼上午一路過關斬將之後,隊友們延續了一貫的沉穩作風。出就出人意料地擊敗了對手,晉級最後的挑戰,兩強相遇讓賽情精彩迭出。港燈先聲奪人

之勢不減,始終保持著一股強勁的衝力。 而工程界社促會面對對手凌厲的氣勢,有 條不紊,從容應對。整場決賽懸念不斷, 喝彩連連。最後,經歷一天的拼殺,港燈 捧得了冠軍的獎盃。工程界社促會榮登亞 軍寶座。香港鐵路公司和土木工程拓展署 取得了季軍的好成績。

比賽臨結束前,工程界社促會新一任 會長盧耀楨教授工程師為大會做了總結發 言。短短一天的比賽結束了,大家仍意猶 未盡,沉浸在比賽的興奮與喜悦中。









Technical Site Visit to the West Kowloon Terminal of

the Express Rail Link Hong Kong Section

Mr. Isaac HUI, Mr. Tony YEUNG, Ir Iris CHEUNG, Ir Samuel MOK, Ir Clifford LEUNG

A site visit to the West Kowloon Terminus (WKT) of the Express Rail Link (XRL) was organised by the AES YES on 1 December 2012 with twenty-six members participated in the event. Upon arrival at the MTR Site



Office, Ir Raymond TANG, Mr. Max LEUNG and Ir Vincent LEE, the representatives from Mass Railway Corporation (MTR), gave us a presentation on the project overview of the XRL and the construction of the WKT.

The 26km long XRL Hong Kong Section runs from West Kowloon Terminus and connects with the Mainland Section at the Shenzhen/Hong Kong Boundary. The WKT, which is located at the north of the West Kowloon Cultural District, is the only station in the XRL Hong Kong Section. With the commissioning of the XRL in 2015, we can reach the Guangzhou South Station in 48 minutes. Moreover, the XRL will connect with the 16000 km National High-Speed Railway Network in the Mainland China which covers most of the major cities in China.

The 11-hectare WKT situates at the north of the West Kowloon Cultural District and conveniently connects with the MTR Kowloon Station and Austin Station. The underground terminus has four stories which comprise the Custom, Immigration and Quarantine



passenger arrival halls, train platforms, Public Transport Interchange, parking and loading facilities. An 8900 sq. meters at-grade "green" cultural plaza will also connect with the ground floor of the WKT. The featured glass-roof top structure of the terminus and the open square will be a landmark in the heart of the West Kowloon District.

The underground terminus is constructed by "pseudo top-down method" (i.e. a combination of top-down and botton-up method). Diaphragm wall was built continuously along the site boundary which form part of the ELS system for the open-cut excavation and also act as the permanent structure of the terminus. Large diameter bored piles and socket H-piles were installed in the central portion, which would facilitate the construction of the station from bottom-up. The site occupies large amount of area in the busy Western Kowloon District and in order to minimize the traffic impact, the works are divided into various phases with top-down and bottom-up portions carried out concurrently such that the ground traffic can be maintained by a series of temporary traffic arrangement (TTA).

After the presentation, a guided tour to the WKT site was arranged. the MTR representatives explained that the excavation has now reached the formation level and part of the ground slabs have been completed and currently erected by pre-installed stanchions. They furthered pointed out the challenges of the construction of the WKT. First, careful construction planning and management must be implemented. Construction activities need to be phased and streamlined in order to meet the tight completion target. TTA must be carefully designed and implemented in stages to accommodate the construction of the huge underground station in the city centre. Second, environmental measures must be consolidated. For instance, the barging point is located outside the site boundary. Logistic of the truck and dust control measures need to be strictly taken for the huge volume of excavation works. Noise barrier will also be constructed along the site boundary close to the residential blocks. Third, the installation of the featured roof needs to be very precise. The steel truss for the roof will be fabricated off-site. Lifting and installation of the massive roof structure will be a challenge.

At the end of the technical visit, we were brought to the Visitor Centre of the XRL in the MTR Austin Station. Raymond elaborated to us the detailed architectural and functional layout of the terminus with the aid of a scaled model followed by a short video on the current construction progress of the XRL Hong Kong Section.







Ir Charles TSE

With a success on organising a workshop on professional assessments for Civil Discipline of The HKIE last year, YES conducted another workshop on 17 October 2013 for AES members who were going to sit for the professional assessment during October and November 2013. The aim of the workshop was to simulate the environment of the professional assessment, in which participants delivered presentation of their project report and then our mock interviewers asked questions about their presented projects and their experiences.

We would like to thank Ir Victor LO, Ir P. K. LEE and Ir Johnny CHAN, Advisors of YES, for being our mock interviewers of the workshop. Upon presentation on projects, the mock interviewers asked the participants a series of questions related to their projects to assess their professional qualifications and standard for being the class of Corporate Member of The HKIE. After the mock interviews, our mock interviewers provided comments on the participants' presentation in respect of types of contracts, cost control, contractual laws, engineering design principles, site safety, environmental issues, professional ethics, etc. They also shared their experiences and made recommendations for improvement in the coming professional assessment.

Professional assessment is a critical milestone of professional development of practicing engineers. A pass in the assessment requires not only sound engineering knowledge and adequate experiences but also good presentation, interview and writing skills. We do believe the workshop can help the participants to understand the requirements of the assessment and perform better in the coming professional assessment. Therefore, we look forward to organising similar workshops for our members who will sit for the coming professional assessment for civil or other disciplines of The HKIE as well as ICE in the near future.





Submissions and Public Engagements

List of AES Submissions during the year

- 1 於「立法會發展事務委員會 7 月 26 日特別會議」就「新界東北新發展區規劃及工程研究 修訂建議」提交意見,題目為「發展新界東北 應付房屋需求」
- **2** 於「立法會發展事務委員會 11 月 16 日特別會議」就「洪水橋新發展區規劃及工程研究」提交意見,題目為「洪水橋新發展 造福西北可不淺」

AES representatives attended the following events and public engagement sessions during the year to give support to the projects concerned:

- 1 Central Kowloon Route: Phase 2 Public Engagement Professional Forum on Cogent and Convincing Material (CCM) for Temporary Reclamation in Kowloon Bay and Public Forums in Yau Tsim Mong and Kowloon City
- 2 Planning and Engineering Study on Future Land Use at Ex-Lamma Quarry Area at Sok Kwu Wan, Lamma Island Feasibility Study Stage 1 Community Engagement Public Forum
- 3 Invitation for Focus Group Meeting: Feasibility Study on Relocation of Sha Tin Sewage Treatment Works to Caverns Stage 1 Public Engagement
- 4 Our Future Railway Stage 2 Public Engagement Focus Group Meeting Invitation.
- 5 Enhancing Land Supply Strategy Stage 2 Public Engagement in Tsing Yi and Sham Shui Po.
- 6 Panel on Development of the Legislative Council Special meeting on Enhancing land supply strategy: reclamation outside Victoria Harbour and rock cavern development Stage 2 public engagement.
- 7 Energizing Kowloon East: Kowloon Bay Business Area Pedestrian Environment Improvement Feasibility Study
 Stage 1 Public Engagement
- 8 Panel on Development of the Legislative Council Special meeting on re NENT NDA Project
- 9 Briefing Session to AES re Hung Shui Kiu NDA Planning & Engineering Study Stage 2 Community Engagement
- 10 Feasibility Study on Relocation of Sha Tin Sewage Treatment Works to Caverns Focus Group Meeting and Public Forum

