

秘書長報告

2021/2022年度



過去數年，疫症肆虐，令社會承受沉重打擊。「不作改變，難言進步」，大抵是我們從疫症中汲取的最大教訓。一如我們身處的城市，學會必須在多方面徹底變革維新，才足以回應公眾對工程專業不斷提升的期望。因此，我們在過去一年的會期內積極接觸會員和持份者，收集他們的意見匯編成「香港工程師學會－專業維新」計劃，並於2022年6月正式公佈「香港工程師學會－專業維新路線圖」。路線圖不僅薈萃了超過1,500名會員的真知灼見，亦點出了學會日後的五大重點發展方向，包括推行數碼化、改進會員服務、提升專業水平、鼓勵創新，以及檢討管治狀況。

香港因應第五波疫情實施嚴格的社交距離措施，令我們不得不把今年的會員周年大會押後兩個月舉行。根據學會現有會章規定，會員必須親身出席並於大會現場投票。因此我們無法仿效其他活動現有的慣常做法，即採用網上或混合的模式投票。為避免因無法及時舉行會員周年大會而可能產生的憲制危機，學會特地成立工作小組探討應對措施，未雨綢繆。工作小組經深入研究和討論後，建議修訂會章以容許電子方式開會及投票，以備不時之需。這些修訂已於2022年8月24日的特別會員大會上通過，並於2022/2023年度起實施。

疫情下，互聯網是日常生活的必需品，亦證明學會按本年度主題著力推行數碼化的決定正確無誤。其主要工作就是提升日漸被淘汰的舊有資訊基建系統，包括更換舊有的防火牆、路由器、交換器等裝置，並重新設計電腦網絡，以及安裝微軟Office 365方案，從而改進現有服務。學會的數碼轉型，並不止於添置硬件和提升軟件，而是希望重塑營運模式，解決與數據庫、入會申請及活動管理系統有關的各種問題。學會亦設立了改革網站的專責小組，預計有關工作會於2024年1月完成。我們期望透過綜合平台管理及提供所有活動和服務，讓會員享有更全面的支援。現時，《學會會報》及《學會年鑑》兩份刊物已提供電子版本，方便閱覽。

學會向來視提升工程專業的整體形象為要務，致力通過建立Facebook及Instagram專頁，重整與外界的溝通策略，加強聯繫。深明短片對闡釋論述、建立聯繫和傳遞資訊可發揮巨大作用，我們因此推出了「我的夢工程」短片系列。我們於YouTube、Facebook及Instagram播放約40條由17家機構／公司製作的短片，由年輕工程師現身說法，截至2022年8月，錄得接近79,000人次收看。是次宣傳活動獲得公眾極大回響，因為短片不僅講解我們的工作，也記錄了工程師日常工作的真實點滴。學會謹

此感謝同業的支持；外界對新一代工程師分享的故事反應熱烈，亦使我們振奮不已。

上述成功經驗促使我們再接再厲，攝製題為《不世工程：將軍澳跨灣連接路》的短片系列，專題介紹政府土木工程拓展署的新晉工程師與私營機構的伙伴緊密合作，協力完成位於將軍澳的跨灣連接路。在善用新媒體之餘，我們亦與傳統媒體保持聯繫，於Recruit雜誌及Classified Post發表多篇關於工程的專業文章，前者更於2022年2月刊出學會會長的專訪。同時，學會網站的《香港工程寶庫》亦網羅了各項重要工程的資料。為方便市民深入瞭解工程師對香港的貢獻，此網上資料庫已於2021年10月全面升級，除採用新設計的版面，亦提供更多的先進功能。

我們一直致力與傳媒建立更緊密的合作關係。在2021年10月25日的傳媒午宴上，會長聯同多位理事、執委會成員、公共事務委員會主席和「師傳薈」成員，與來自十多家主流傳媒的記者聚會，討論一系列的工程議題。本年度我們共錄得157宗傳媒查詢，及153次的印刷及電子媒體報導，我們還發出了13份新聞稿。傳媒主要關注的議題包括與疫情有關的事項、土地及房屋供應、電纜橋大火、紅館演唱會意外、珍寶海鮮舫沉沒、世貿中心火警及港鐵銅鑼灣站幕門事故等。

學會的法定會員資格同時獲本地及國際認可。能晉身法定會員者，皆具備專業工程師所需的專業精神與技術知識。我們採用嚴謹的入會標準，要求申請人必須通過專業評核，以維護香港工程師的卓越聲譽。擔當專業資格的把關人之餘，我們還於2022年4月推出「導師計劃」，協助矢志成為學會正會員或仲會員的非法定會員或其他目標群體，並為有意同時加入另一專業界別的現有會員提供個別支援與指導。我們鼓勵法定會員踴躍參加這個計劃，擔任義務導師，更歡迎有興趣成為正會員或仲會員的人士登記為學員。學員參與導師計劃為期一般不超過兩年。



● 2021滙港科技合作研討會



● 媒體聚會

屋宇裝備、土木、電子、岩土及機械專業界別的考官報告(包含關於歷屆專業評估的統計數字及考官評語)已上載至學會網站供查閱,方便準備接受專業評核的考生參考。其他專業界別的考官報告,亦會於備妥後陸續上載至學會網站。2021年9月起,工程畢業生培訓計劃(Scheme "A")(經學會評審的課程及培訓界別)下21個專業界別及AM培訓計劃下6個專業界別的培訓日誌(Training Logbook)、培訓成效紀錄表(Record of Training Outcomes)及持續專業進修(CPD)紀錄的電子檔案,皆可於學會網站下載。為配合會員以電腦應考專業評核的筆試部分,我們在學會總部開闢了新的考試場地,並為此制訂指引。隨著土木專業界別開始全年接受申請人循「正規培訓」或「行業經驗」途徑申請成為會員,2022年7月1日起,採用任何途徑申請加入土木專業界別的人士,均可隨時遞交申請,靈活性因而大大提高。

與此同時,我們也於2022年4月1日引入了有關仲會員的「能力標準」。仲會員的申請人,必須通過涵蓋四大範疇的能力評核—應用工程知識、擬訂技術方案、管理工程實務,以及保持專業觸覺。這套能力標準適用於學會全數21個專業界別,並已獲納入6個專業界別的仲會員「正規培訓計劃」,包括建造、屋宇裝備、土木、電機、機械,以及製造、工業及系統。

學會持續與內地工程專業團體探討資格互認的安排。在2021年12月5日舉行的「2021大灣區工程師論壇」上,我們與廣東省電機工程學會簽訂了首份的資格互認協議。土木及岩土專業界別亦正與內地對口組織磋商,探討簽訂類似協議的可行性。繼2021年底完成《華盛頓協議》的定期覆審,「亞太工程師協議」及「國際專業工程師協議」的定期覆審亦於2022年初順利完成。學會在三份協議的成員地位亦獲延續6年。此外,我們欣悉《華盛頓協議》的覆審小組高度讚揚學會邀請海外成員加入學術評審政策委員會,妥善備存有關政策及程序的文件,以至學會秘書處於評審時展現充分準備、專業知識和勤奮態度。

舉凡影響工程界的重大事宜,我們力求令外界充份了解學會會員的專業見解。我們在年內發表了兩份具前瞻性的研究報告,均贏得包括政府在內的各方重視。在2022年3月發表的「關於工務工程合約和顧問合約採購政策研究」,我們詳細指出現行投標程序的不足,闡述這些弊病如何降低項目質素,甚至削弱年輕人投身工程專業的興趣。2022年4月,我們完成了有關「關於擴充工程人才庫以應付可見需求研究」的研究,預測香港或將面臨工程人才不足的危機,並建議各項可行的解決方案。另外,我們還向政府及各工程部門提交了7份意見書,範圍涉及各類工程事宜。

回顧過去一年,疫情反覆,不穩定因素充斥,人人莫不身心俱疲。然而,這也是收穫豐富的一年。憑著萬眾一心,學會「專業維新」的路線圖得以落實。即使面對複雜的技術及社會問題,我們仍有力克服困境,邁步向前。

會員所展現的堅韌與能力令我感到自豪,而尤其令人安慰的是,縱然時局不利,工程師永遠都是支持香港走出逆境的中流砥柱。正如我經常所言:「遇上困難,工程師總有解決方法!」

秘書長
韓志強工程師



● 「香港工程師學會—專業維新」工作坊

Chief Executive & Secretary's Report 2021/2022



If a major lesson is to be cited from the crippling impact of the COVID-19 pandemic in the last few years, it is that change is at the heart of improvement. Much like our city, it is vital for The Hong Kong Institution of Engineers (HKIE) to transform itself across functional areas, lest our profession should fall short of society's rising expectations. It was this realisation that led the HKIE to reach out to our members and stakeholders during the Session: The HKIE Time to Change Project. A distillation of the collective insights of more than 1,500 members who participated in its development, the "HKIE – Time to Change Roadmap" – which was launched in June 2022 – will steer the direction of the Institution in the coming years across five focus areas: Pursuing Digitalisation; Enhancing Services to Members; Boosting Professionalism; Facilitating Innovation; and Undertaking Governance Review.

Due to the stringent social distancing measures imposed to tackle the COVID-19's fifth-wave, we were compelled to defer this year's Annual General Meeting (AGM) for two months as our current constitutional arrangements – which are based on the "present and voting" requirement – precluded us from adopting any of the online or hybrid model that we are getting used to for many other activities. To avoid a possible constitutional crisis arising from our inability to hold our AGM in time, we set up a task force to look into possible measures to better manage such eventuality. After much research and deliberation, the Task Force

recommended some amendments to our Constitution to allow for the use of electronic means for meetings and voting when necessary. Approved at a Special General Meeting held on 24 August 2022, these changes will be implemented commencing in Session 2022/2023.

Forcing us to live much of our lives online, the pandemic validated the HKIE's decision to embark on a journey of digital transformation under the theme of this Session. Part of our efforts were devoted to upgrading our IT infrastructure, which was on the verge of becoming obsolete. This involved replacing old network devices including firewalls, routers and switches, redesigning our networks, and installing Microsoft Office 365 solutions to improve our services. Much more than new hardware and better software, our digital transformation aims at re-engineering the way we operate by eliminating pain points across our database, membership application and event management systems. We have also appointed a task force to refurbish our website, a process which is expected to be completed by January 2024. We aspire to provide multi-faceted support to our members through a comprehensive platform for managing and hosting events and services. Meanwhile, we have already digitalised the publication of *HKIE Transactions and HKIE Yearbook*.

Enhancing the image of our profession remains a priority and we worked hard to reinvent our engagement strategy by launching Facebook and Instagram pages and meet

people where they are. Recognising the power of videos to carry narratives, build connections and convey information to drive engagement, we successfully rolled out the "What Do Engineers Do?" video campaign. Featuring stories of young engineers, we posted nearly 40 videos contributed by 17 organisations and companies on YouTube, Facebook and Instagram, garnering around 79,000 views (as at August 2022). The campaign generated a very positive buzz amongst the non-engineering public, not only by showcasing our work, but by humanising engineers. We are grateful for the industry's support and heartened by the positive feedback received on the stories shared by our fellow youngsters.

This motivated us to launch 《不世工程：將軍澳跨灣連接路》，another video series featuring young engineers from the Civil Engineering and Development Department of the HKSAR Government and their colleagues from the private sector who shared their experience working together on the Cross Bay Link in Tseung Kwan O. We also engaged with traditional media and saw several engineering stories published in Recruit Magazine and Classified Post, with the former also featuring an interview with the President in February 2022. Dedicated to gathering information about notable engineering projects, the Hong Kong Engineering Archive online database – which was revamped with enhanced features and a new layout – was launched in October 2021 to help raise public awareness about how engineers contribute to life in Hong Kong.

We continued our efforts to build a stronger relationship with the media and held a media event on 25 October 2021 that saw our President, Officers, Executive members, Chairman of the Public Service Committee and President's Protégés discussing engineering topics with journalists from over 10 mainstream media outlets. In addition to handling 157 media enquiries and getting 153 responses published and broadcasted, we also issued 13 press releases. Many of these media interventions were devoted to issues including the pandemic, the supply of land and housing, the cable bridge fire incident, the accident at the concert at Hong Kong Coliseum, the sinking of the Jumbo Floating Restaurant, the World Trade Centre fire and the train door incident at the MTR Causeway Bay Station.



● 2021 Shanghai & HK Symposium on Science and Technology



● Media Gathering

Recognised locally and internationally, the HKIE Corporate Membership reflects the professionalism and technical knowledge of professional engineers. In order to maintain our reputation for excellence, the HKIE is committed to maintaining high-admission standards evidenced by the completion of rigorous Professional Assessments. Apart from this gate-keeping role, we introduced a Mentorship Scheme in April 2022 to offer individual support and guidance for non-Corporate Members or other target participants wishing to become Member or Associate Member of the HKIE, and for existing members seeking Additional Discipline. We encourage Corporate Members to join the Scheme as voluntary Mentors and individuals interested in becoming Members or Associate Members to join as Mentees. The duration of the Scheme for individual mentees is normally within two years.

The Examiner Reports of Building Services, Civil, Electronics, Geotechnical and Mechanical Disciplines – which contain information on assessment statistics and comments on previous Professional Assessments – are available on the HKIE website for reference by candidates to prepare for their own assessments. The Examiner Reports of other Disciplines will be uploaded on the HKIE website when available. Soft copies of the Training Logbook, Record of Training Outcomes and Record of CPD for 21 Disciplines in Scheme “A” and six Disciplines for AM Training are downloadable from the HKIE website from September 2021 onward. We also set up a new facility at the HKIE Headquarters to enable applicants to sit for the Written Part of Professional Assessment

by digital means and developed guidelines for this purpose. Starting from 1 July 2022, applicants for Membership in Civil Discipline via all admission routes can submit their applications at any time as applications via Formal Training Route and General Experience Route are now accepted by the Civil Discipline throughout the year.

Meanwhile, we introduced the HKIE Competence Standard for Associate Membership on 1 April 2022. Setting the standards to qualify as Associate Member, the process features a competence-based assessment covering four broad areas – Applying Engineering Knowledge, Developing Technical Solutions, Managing Engineering Work and Upkeeping Professional Acumen – now applicable to all 21 Disciplines. The competence standards have also been reflected in the Formal Training Scheme to Associate Membership for six Disciplines: Building, Building Services, Civil, Electrical, Mechanical and Manufacturing, Industrial & Systems.

We continue to seek mutual recognition with mainland engineering institutions and entered our first mutual recognition agreement with the Guangdong Society for Electrical Engineering during the 2021 Greater Bay Area Engineers Forum, held on 5 December 2021. Civil and Geotechnical Disciplines are currently negotiating with their mainland counterparts to explore similar agreements. We also successfully completed the Washington Accord periodic review in late 2021 and the combined APEC Engineer and IPEA periodic review in early 2022. Our Signatory status under the Washington Accord and our Authorised Member status under APEC Engineer and

IPEA have been approved for another six years. We note the high praise of the Washington Accord Review Team about our engagement of overseas members in the Accreditation Board, the comprehensive documentation of our policies and procedures relating to accreditation, and the performance of our well-prepared, knowledgeable and hardworking HKIE staff.

To make our voice heard on strategic issues impacting our profession, we have published two seminal research reports that have received a lot of attention, including from the Government. In March 2022, we released our “Research on Procurement Policy Review for Works Contracts and Consultancy Contracts” which details how weaknesses in the current bidding process not only undermine the quality of projects but also undercut our ability to attract young people to the profession. Meanwhile, in April 2022, we published our “Research on Augmenting Engineer Manpower to Cope with the Foreseeable Surge in Demand” which predicts that Hong Kong may soon face a lack of engineering manpower and suggests actionable recommendations about how to address this looming crisis. We also made seven submissions to the Government and the Works Departments on various engineering issues.

Defined by uncertainty and recurring COVID-19 outbreaks, this has been another exhausting year for all of us. It has also been incredibly rewarding. Made possible by the selfless efforts of all, the HKIE Time to Change Roadmap is a living testimony of our ability to beat the odds, even when facing complex technical and societal circumstances.

I am humbled by the resilience of our members and take comfort in knowing that Hong Kong can always count on our engineers in times of crisis. As I always say, whenever there is a problem, engineers will find a way to solve it.



● “Time to Change” Workshop

Ir HON Chi Keung
Chief Executive and Secretary