

會長報告

2020/2021



二零二零年是非比尋常的一年。

新型冠狀病毒肆虐全球，疫情至今仍然持續，而世界好像在疫情中停擺。

工程師是生活種種問題的「解決師」，遇難解難是我們的特質。作為香港工程師學會2020/2021年度會長，我時常鼓勵作為工程師的「我們」，必須積極裝備自己，為面對未來挑戰做好準備。

疫情爆發至今，工程師竭盡全力，為減低病毒擴散默默付出。當中，工程師運用「組裝

「智慧健康站」，並在多個政府部門及機構內安裝了超過二百五十套「智能發燒偵測系統」，設置扶手電梯殺菌器、調整升降機的內循環氣流系統等，以去除塵粒和為使用者進行全身消毒。工程師還參與開發「安心出行」應用程式，提出技術方案以增加口罩生產能力，以及設計渠管檢查方法和建議安裝活渠門等，有助追蹤及截斷傳播鏈，防止病毒走進社區。

在控制病毒傳播，公眾教育甚為重要。我和幾位工程師在疫情嚴峻時期，透過傳媒向公眾解說有關渠務、通風及換氣系統等專

在抗疫過程中，工程師出謀獻策，以保障公眾健康和 safety。我們應給予工程師更多支持和鼓勵，幫助他們發揮各自的獨特潛力。

創新是振興經濟的一大動力。一個革新創意能否轉化為創新產品和服務，取決於社會有沒有造就一個環境，給有志者勇氣，讓其能堅定意志，實踐創新概念。學會本年度的主題為「相信 可 看見 - 創新 成 蛻變」，希望藉一系列活動，培養年輕工程人才，鼓勵會員追求夢想，讓他們在未來大放異彩。

為支持工程師將創科理念實踐，我帶領一個包括本人在內的十人工作小組，成立了「工程企業家平台」(The Enginpreneurs Hub)，平台旨在識別創科問題和痛點，尋求解決方案，並確定相關方案所需的技術，以協助會員發展創新，將創意變成現實。當中，我們將多位工程師實踐創新的寶貴經驗結集成「工程師實踐創新創業路線圖」，把創意構思、原型開發、生產以至商業化應用等階段一一歸納，為有意向創科發展的會員提供具體資料。

該路線圖於二零二零年九月二十八日在中環 Eaton Club 舉行的「Championing Innovation」年度活動啟動典禮中首次發表，並同時介紹了學會一連串年度主題活動。學會十分榮幸邀請到創新及科技局局長薛永恒工程師、太平紳士擔任主禮嘉賓，並由兩位來自創新界的嘉賓 - 陳易希先生



● 香港工程師學會周年典禮暨頒獎大會承蒙香港特別行政區行政長官林鄭月娥女士及醫院管理局主席范鴻齡先生分別擔任主禮嘉賓及大會榮譽嘉賓

合成」建築方法興建了竹篙灣檢疫營舍；並在短短四個月內完成北大嶼山醫院香港感染控制中心項目，這座符合國際標準的臨時醫院，能提供逾八百個床位。除此之外，為減低病毒傳播風險及提升醫療效率，工程師利用電子化智慧醫院概念，實行自助式

業資訊。我亦獲食物環境生署邀請，擔任食肆換氣量規定工作小組主席，就推行食肆換氣量的規定作出建議。我們將繼續與其他專家合作，協助政府制定指引，確保能為市民提供安全的室內用餐環境。

和高永賢博士、工程師作分享，講述他們在創科路上遇到的挑戰及寶貴經驗。

此外，作為「工程企業家平台」計劃的一部分，我們邀請了創新及科技專家、企業家及投資者主講一系列專題講座，內容包括創新方法、知識產權保護、創業投資，以至粵港澳大灣區的相關機遇等，學會亦已與來自大灣區的創科孵化中心簽署合作意向書。

「工程企業家平台」的另一個主要目標是支持會員落實其創新創科意念，因此工作小組亦會向有需要的會員給予個別指導。

以「工程闖未來」為題的香港工程師學會創科博覽是本年度的焦點壓軸活動。創科博覽於二零二一年六月中旬在建造業零碳天地舉行，結合網上虛擬及實體活動模式。創科博覽舉行前已先由一系列的講座以及為中、小學生和專大學生、學會會員及工程專業而設的比賽揭開序幕。是次博覽是學會首度利用網上平台結合現場活動，為參加者提供即時互動體驗。博覽活動還包括主題講座，及網上虛擬展覽，展示本地及國內創科成果。會員及各界對創科博覽反應熱烈，相信有助年輕人認識工程專業，吸引他們投身工程師行列。

大灣區的發展為香港提供了機遇，有助鞏固和提升香港的競爭優勢。在二零二一年一月一日起生效的《香港工程建設諮詢企業和專業人士在粵港澳大灣區內地城市開業執業管理暫行辦法》，便利與工程建設相關的香港企業和專業人士到大灣區九個城市直接提供服務。學會不遺餘力協助會員 - 尤其是年輕會員，在大灣區探索新機遇。二零二一年



會長接受多個傳媒訪問向公眾解說不同空氣淨化設備



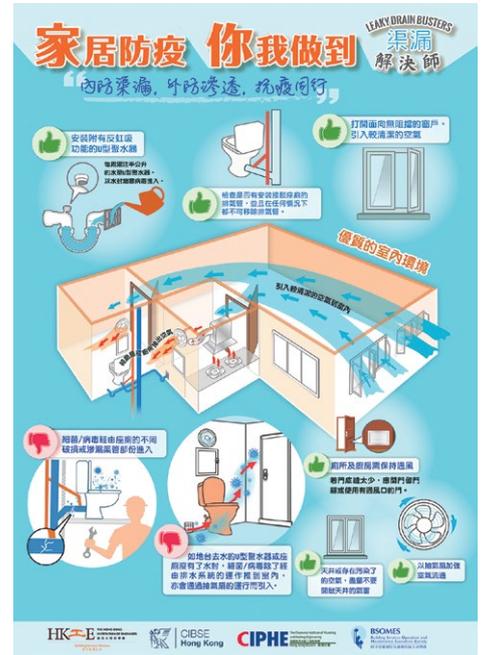
香港工程師學會與廣東省大灣區孵化器及科技企業合作意向書簽署儀式

二月四日，學會聯同立法會工程界功能界別議員盧偉國博士、工程師及發展局舉辦「香港工程建設專業機構及人士大灣區執業備案辦法簡介會」。是次簡介會的講者來自發展局、廣東省住房和城鄉建設廳、深圳市前海深港現代服務業合作區管理局及珠海經濟特區橫琴新區建設環保局，他們向數百位參加者詳細講解新措施備案方法及細則。此外，學會各分部和委員會亦先後舉辦有關大灣區的專題講座。

為有意晉身專業工程師行列的申請人士提供高質服務，我們成立了專責小組，檢視學會會員申請流程及相關事項。專業界別顧問小組支持就專業評核時間框架設定目標上限，並已於二零二一年二月實施。目前，我們正探討開發入會申請追蹤系統，及研究提供更多相關資訊協助申請人準備專業評核。我們亦在探討使用電子培訓日誌及增設電子形式進行專業評核。

新型冠狀病毒疫情或多或少對學會在本地及海外的推廣工作有所影響，因此，我們透過科技應付社交距離措施的挑戰，務求能與世界各地連繫。原定於去年十月舉行的會長就職演說及晚宴受疫情影響取消，我決定改以預製錄像形式發表，與會員及各界友好分享我的年度計劃以及對創新創科的熱誠。此外，我也在多個國際活動以視訊參與發言，包括在創新峰會2020，以及在北京市科學技術協會於二零二零年九月舉辦的2020年「首都海智」創新連結專題研討會介紹「工程企業家平台」。

二零二零年對大部分人來說，可算充滿著挑戰。會員在面對艱鉅考驗時，以謙卑態度，



聯同相關學會製作簡易明海報推廣「貼地」方式讓大眾及基層掌握容易保護自家能做到的抗疫資訊

迎難而上，展現出無私的氣魄，令我深受啟發。要總結過去一年的會長任期，單憑隻字片語實難以盡述。

「變幻原是永恆」。

當我們享受當下或緬懷美好過去的時分，我們應從經驗中學習。藉著「創新」，主動迎接變化不定的現實世界，把握機遇，為社會、國家，以至世界成就更美好的未來。



The Enginpreneurs Award 2021 評判及得獎者合照

源栢標

會長
源栢標教授、工程師



President's Report

Session 2020/2021

While 2020 has been a truly exceptional year, it would be too early to cast judgment on 2021 especially when the COVID-19 pandemic still lingers on. Regardless of what lies ahead, my mission as President of Session 2020/2021 is to ensure that while the world remains at a standstill due to COVID-19, engineers are gearing up to make their imprint on the future.

Challenging time begets innovation for engineers who are fundamentally action-driven problem solvers. Indeed, we need all the ingenuity and creativity we can muster to deal with the challenges of the time.

Unbeknown to most of the public, engineers have been in the vanguard of the fight against COVID-19. In addition to building the quarantine camp at Penny's Bay by using Modular Integrated Construction (MiC) technology and the North Lantau Hospital Hong Kong Infection Control Centre – an 800-bed make-shift hospital built to international standards in just four months, we worked on the “smart hospital” concept and deployed technological solutions like “E-Smart Health Stations” to reduce infection risks and make medical care more efficient and accessible. We also installed more than 250 sets of Smart Fever Screening System across various government departments and public organisations; set up disinfection devices for escalators; adjusted internal airflow systems for dust removal and full-body disinfection in lifts; contributed to the development of the “LeaveHomeSafe” mobile application; designed testing programmes for sewage; helped enhance mask production capacity; and promoted the use of drain guards to keep the virus from entering homes.

We recognised early on the importance of educating the public about key sanitary

and public health issues related to our expertise. I and many engineers did our utmost to bring our message on drainage arrangements, ventilation and air exchange systems to the public by engaging with the media across print, online and electronic news programmes. I was also appointed by the Food and Environmental Hygiene Department of the HKSAR Government as Chairman of the Working Group on Implementing the Requirement on Air Change or Air Purifiers in Dine-in Restaurants to make recommendations about the implementation of ventilation measures for infection control in restaurants. We will continue working with other professionals to assist the Government in formulating guidelines to ensure a safe dine-in environment for the public.

If the fight against the pandemic showcased the myriad ways engineers can contribute to health and safety, it also demonstrated that there is so much more we can do to harness the untapped potential of engineers.

We must rely on innovation to rejuvenate our economy. “Believing is Seeing - Innovation

for Transformation” (相信可看見 - 創新成蛻變), the theme of this Session, not only reflects the harsh reality that converting disruptive ideas into innovative products and services depends on having a culture that rewards entrepreneurship, risk-taking and the will to embrace change, but also shows our eagerness to help our fellow engineers pursue their dreams and prepare our young talents to thrive in tomorrow's world.

We formed a dedicated 10-member Working Group led by myself and launched the “Engineers Hub” (EP Hub) to support engineers in their innovation endeavours. Under the guidance of the Working Group, the EP Hub seeks to identify problems in need of innovative solutions, pinpoint the skill sets required to develop these solutions and offer an enabling programme for converting them into reality. Crafted together with a select group of engineers with a history of innovation, we presented an



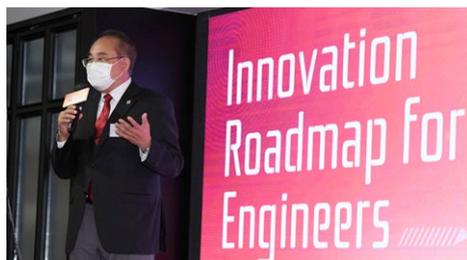
• “Championing Innovation” Kick-off Ceremony for Events and Activities for Session 2020/2021



• Attended the “Accountability” (星期六問責) and “Letter to Hong Kong” (香港家書) programmes of RTHK as Chairman of Working Group on Implementing the Requirement on Air Change or Air Purifiers in Dine-in Restaurants and the HKIE President

“Innovation Roadmap for Engineers” to help members navigate the innovation journey, from conception and prototyping to production and commercialisation.

The Roadmap was released at the “Championing Innovation” Kick-off Ceremony for events and activities for Session 2020/2021, which was held on 28 September 2020 at the Eaton Club in Central to introduce our new initiatives under the yearly theme. The event was graced by the presence of Ir the Hon Alfred Sit, JP, Secretary for Innovation and Technology of the HKSAR Government as Guest of Honour and two distinguished innovators – Mr Stark Chan and Ir Dr Albert Ko, who were invited to share their unique innovation and entrepreneurial journey.



• Launch of “Innovation Roadmap for Engineers” at the “Championing Innovation” Kick-off Ceremony

As part of the activities under the EP Hub, we launched an ongoing series of webinars delivered by innovation experts, entrepreneurs and investors on topics ranging from innovation methodologies and IP protection to venture capital and the potential of the Greater Bay Area (GBA). Going forward, we are contemplating MOUs with incubation centres active in the GBA. To help members get their ideas off the ground – another major initiative of the EP Hub, the Working Group’s expertise has proved instrumental in guiding individuals who submitted innovative ideas for consultation.

Themed “Engineering into Future”, the HKIE Innovation Expo (the Expo) was the signature event marking the end of this Session. Preceded by a series of activities ranging from webinars to competitions for primary, secondary, university students, HKIE members and engineers, it culminated in the main event, which was held both virtually and physically at the CIC-Zero Carbon Park in June 2021. The Expo was the first time that the Institution mixed online events with in-person activities as a virtual platform was used to provide real time interactive online experiences to participants. Featuring keynotes and exhibitions while showcasing members’ achievements over the years, the Expo was well received by our members and the public

and provided an opportunity for young people to understand engineering as an exciting career option.

The GBA offers Hong Kong an opportunity to leverage and scale its strengths and competitive advantages. Effective from 1 January 2021, the “Interim Guidelines for the Management of Hong Kong Engineering Construction Consultant Enterprises and Professionals Starting Business and Practising in the Guangdong-Hong Kong-Macao Greater Bay Area Cities” enable Hong Kong enterprises and professionals active in construction-related areas to provide direct services across the nine GBA cities. We spared no effort to help our members, especially the younger ones, explore new opportunities in the GBA. On 4 February 2021, the Institution, in collaboration with Ir Dr the Hon Lo Wai-kiwok and the Development Bureau of the HKSAR Government, hosted a webinar entitled “香港工程建設專業機構及人士大灣區執業備案辦法簡介會” during which speakers from the Development Bureau, Department of Housing and Urban-Rural Development of Guangdong Province, Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone, and Construction & Environment Protection Bureau of Hengqin New Area in the Zhuhai Special Economic Zone shared information with hundreds of enthusiastic participants. Other webinars on GBA topics were also organised by the Institution and Divisions/Committees.

Striving for continuous improvement, we established a Task Force on HKIE Membership Application to review various matters relating to the membership application process. In our efforts to standardise the timeframe of membership application procedures, the Discipline Advisory Panels supported the introduction of the “Target Maximum Time Frame for Professional Assessment Procedures” which was implemented in February 2021. We are currently exploring the development of an online application tracking system and ways of enhancing the quality of the information that we provide to candidates in order to facilitate their preparation for Professional Assessment. We are also studying the possibility of using electronic tools for training logbook and as an alternative method of conducting Professional Assessment.

While COVID-19 impaired our efforts to elevate the profile of the Institution both locally and globally, we overcame these obstacles by using technology to bridge social distancing measures across the globe. Forced to physically cancel the Presidential Address and Dinner in October 2020, I opted to share my initiatives



• Invented and fabricated the first MiC high standard isolation ward

and passion for innovation via a video speech in the hope of inspiring the audience. I also made videos about the international activities of the Institution and to introduce the EP Hub as part of the Innovation Summit 2020 and E-town Global Innovation Partner Conference, which was organised by the Beijing Association of Science and Technology in September 2020.

The year of 2020 has been incredibly challenging for everyone and it is hard to think of a single word that could accurately encapsulate this Session of my presidency in its entirety. One can only be humbled by the difficult task ahead yet truly inspired by the selfless willingness of our members to meet such demanding ordeals.

Change is a constant we must all learn to live with. As we mourn yesterday and cherish today, we must also be ready for a tomorrow that is already upon us. The need to adapt is very much part of the human condition. To “Be Innovative” is the only way we can apply the lessons of the past and leverage the foundations of the present to build a better future for our society, our country and indeed the world.



Ir Prof P L YUEN
President