

HXAES FIRST



1994-2024

HKAES First 30 Years

1994-2024

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Hong Kong Academy of Engineering Sciences



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Message

I am delighted to congratulate the Hong Kong Academy of Engineering Sciences (HKAES) on celebrating its 30th Anniversary milestone, and its profound achievements in advancing the field of engineering sciences and promoting excellence in construction locally and around the region.

Last September, President Xi Jinping proposed the strategic direction of developing "new quality productive forces", to spur high-quality development. This direction will provide a more favourable environment and greater opportunities for the deeper and broader growth of innovation and technology in Hong Kong's engineering industry.

Renowned for its dynamic urban landscape and vibrant economy, Hong Kong has always been at the forefront of innovation and technological advancements. Under the unique "One country, Two systems" principle, our city enjoys important competitive advantages, including the rule of law, a free and enterprising business environment, world-class infrastructure, and established R&D capabilities with internationally-acclaimed institutions. In other words, Hong Kong possesses all the necessary elements to create "new quality productive forces", and the engineering industry plays a pivotal role in propelling our economy towards high-quality development.

To transform these visions into tangible achievements, the Government is set to establish and lead the Building Testing and Research Institute this year, for research and development into innovative materials, construction methods and technologies. The Institute will capitalise on Hong Kong's advantages to facilitate our country's construction technologies and related products to

go global and contribute to the development of the "Greater Bay Area (GBA) Standards" brand for different domains of construction, including construction material, design, and methods. This will help develop the GBA into a region with some of the most advanced construction technologies in the country.

HKAES has always been a close partner and firm supporter of the Government in promoting the development of engineering sciences and technology in Hong Kong. I commend HKAES for its unwavering support to the Government on engineering matters, along with its commitment to nurturing local talents and professionals. Since its founding in 1994, the Academy has played an invaluable role in driving revolutionary technological breakthroughs and productivity advancements in the industry. These remarkable achievements are also indispensable in propelling our country's development agenda of accelerating the development of "new quality productive forces".

My heartfelt congratulations to the HKAES on its 30th anniversary. I thank the Academy's members for their many valuable contributions over the years and I look forward to working together towards a future where our city thrives as a smarter, more sustainable, and liveable place for generations to come.

(John KC LEE)

Chief Executive

Hong Kong Special Administrative Region

In many countries, an academy of engineering exists as a distinguished learned society to promote the development of the engineering profession for societal benefit. At the national level, the Chinese Academy of Engineering (CAE) plays this pivotal role. In Hong Kong, a Special Administrative Region (SAR) of China, engineering researchers and practitioners can be elected into the Chinese Academy of Engineering, and in the meantime, under the "One Country, Two Systems" framework, Hong Kong has its own local academy for the engineering profession: the Hong Kong Academy of Engineering Sciences (HKAES).

HKAES was founded on 13 September 1994, as a non-tax paying charitable organisation in Hong Kong by a group of eight prominent leaders of the engineering profession as Founding Fellows of HKAES. The Founding President was Sir Sze-yuen Chung, who was an influential industrialist and politician widely known as Hong Kong's "political godfather", while Sir Charles Kao, who later won the Nobel Prize in Physics in 2009 for his work on the transmission of light in fibres for optical communication, served as the Founding Senior Vice President.

This booklet has been prepared to commemorate the 30th anniversary of HKAES. Over the past 30 years, in addition to the 8 Founding Fellows, 128 leaders in the field have been elected as Fellows of HKAES. The Academy currently has 96 active Fellows, covering a wide range of areas. This booklet provides an overview of the founding and development history of HKAES, its various activities and achievements, and its interaction with other learned societies. Notably, HKAES has received strong support and maintained a close relationship with CAE, with HKAES being the only designated nominating organisation in Hong Kong for the prestigious Guanghua Engineering Science and Technology Award of CAE. This booklet is a must-read for anyone interested in the history and work of HKAES.

A similar booklet was published to commemorate the 15th anniversary of HKAES in 2009, and the current booklet was produced by updating the 2009 booklet. This update was nevertheless a significant undertaking, as numerous developments have occurred over the past 15 years. The task was completed by Senior Vice-President Prof. Alfonso Ngan, with the help of the secretariat team of the Academy. On behalf of HKAES, I would like to extend my deep gratitude to Prof. Ngan for completing this important task for HKAES.

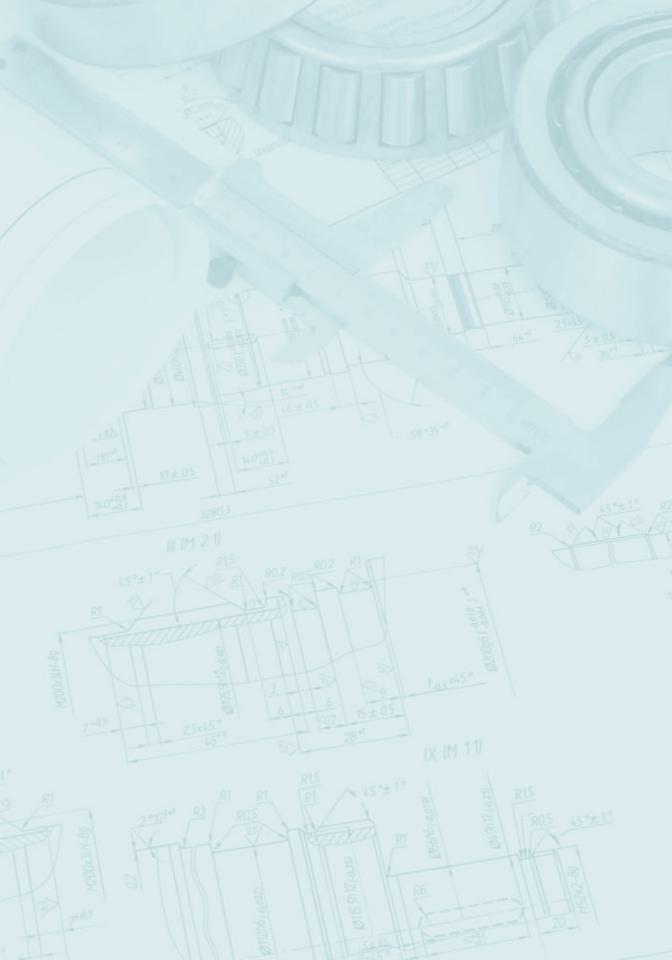
In the National 14th Five-Year Plan, the Central Government has expressed strong support for developing Hong Kong into an international innovation and technology centre, and the Hong Kong SAR Government has invested heavily in this area in recent years. HKAES, in particular, has received increased support from the Hong Kong SAR Government in recent years via its Innovation, Technology and Industry Bureau (formerly the Innovation and Technology Bureau), with the setting up of HKAES's own office at the Hong Kong Science Park being an excellent example. With these developments in mind, I firmly believe that HKAES is well-positioned to assume an even more significant role in contributing to the development of Hong Kong, the Nation, and the world.

Last but not least, I would like to extend my sincere gratitude to all those who have contributed to the success of HKAES, especially the Founding Fellows for establishing HKAES, all former Presidents of HKAES for leading its development, and the four patrons who, in their capacity as the Chief Executive of the Hong Kong SAR, have supported us during different periods: the Hon. Chee-Hwa Tung, the Hon. Chun Ying Leung, the Hon. Carrie Lam, and the Hon. John Lee Ka-chiu. As HKAES embarks on its next chapter, it will remain devoted to advancing engineering excellence and innovation for the betterment of society.

Jin-Guang Teng
President of HKAES







ORIGIN OF THE ACADEMY

HKAES was founded in 1994 as the highest body of a relatively small number of professional engineers in Hong Kong who have achieved great success in engineering, business, and public service. The origin and object of its establishment were stated clearly by the Founding President, Sir CHUNG Sze Yuen, in an article published in Asia Engineer: The Journal of the Hong Kong Institution of Engineers (April 1995, p. 56). In that article, Sir S. Y. began by saying that many developed countries in the world have the above-mentioned body of esteemed engineers, and in the UK, to which Hong Kong's sovereignty belonged at that time, that supreme body was established in 1976 as the Fellowship of Engineering, which then received a Royal Charter in 1992 to become the Royal Academy of Engineering (RAE). Sir S. Y. was the first Hong Kong engineer elected to the RAE in 1983, and by the early 1990s, the total number of Hong Kong-based Fellows of RAE (FREng) had increased to seven (S. Y. Chung plus Charles Kao, Kenneth Nai-keong Chan, David A. Morris, Yau-kai Cheung, Samuel Ping-wai Wong, and Stewart Morris John). Then, the Sino-British Joint Declaration for the return of Hong Kong's sovereignty to China was signed in 1984. Against this backdrop, in 1991, those seven Hong Kong-based FREngs together with a Fellow of the Royal Swedish Academy of Engineering Sciences (Bengt Delaryd) discussed plans to establish Hong Kong's own academy, anticipating that, after 1997, Hong Kong's engineers as Chinese nationals could only be admitted to the RAE in Britain as Foreign Members with consequential limitations and difficulties.

Then came the news in 1993 that China was planning to form the Chinese Academy of Engineering (CAE), thus urging Sir S. Y. and his colleagues to move forward. With the full support of both the Hong Kong Government and



the Hong Kong Institution of Engineers (HKIE), and after a long process of preparation, the Hong Kong Academy of Engineering Sciences was formally incorporated on 13 September 1994 as a non-tax-paying charitable organization in Hong Kong. Two of the important objectives in the Mission Statement of HKAES were:

- 1) to raise the awareness of the importance of engineering in the Government and the Community; and
- 2) to demonstrate to the Government and the Society the essential role of engineering in creating wealth and improving quality of life.

An interesting question concerns the name "Hong Kong Academy of Engineering Sciences" instead of the more usual "Academy of Engineering" as in the UK, US, or the subsequent Chinese counterpart. Sir S. Y's explanation in the 1995 Asia Engineer article was merely "as Hong Kong is a relatively small place, it is considered that its Academy should cover a wider field and hence follow the practice in Continental Europe by using the terminology 'Engineering Sciences." It is not known whether the minority member, Bengt Delaryd, whose home academy in Sweden bears the terminology "Engineering Sciences" played any dominating role over others who were all FREngs, but certainly this name did not create any objection, as the Hong Kong Academy of Sciences was not in existence until two decades later, in 2015.

In the first Session of HKAES in 1994–95, the roles of the eight Founding Fellows were as follows:

President: Sir Sze-yuen Chung FREng

Senior Vice President and Ir Professor Charles Kuen Kao FREng

Honorary Secretary:

Vice President and Honorary Treasurer: Ir Dr Kenneth Nai-keong Chan FREng

Vice President: Ir David Austin Morris FREng

Council Members: Ir Professor Yau-kai Cheung FREng

Ir Dr Samuel Ping-wai Wong FREng

Ir Bengt Delaryd FRSAES

Ir Stewart Morris John FREng



Sir S.Y. Chung FREng



Sir Charles Kao FREng



Prof. Yau-Kai Cheung **FREng**



Dr Kenneth N.K. Chan FREng



Ir David A. Morris FREng



Dr Samuel P.W. Wong **FREng**



Ir Bengt Delaryd FRSAES Ir Stewart M. John FREng



The eight Founding Fellows as listed in the Academy's Articles of Association (see Appendix 3) and their academy memberships at the time of establishment of HKAES in 1994.

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Academy's Roll of Fellows – the first eight Fellows were recorded as: Sze Yuen Chung, Charles Kao, Nai-keong Chan, David Austin Morris, Leroy Chang, Yau-kai Cheung, Bengt Delaryd, and Samuel Ping-wai Wong. (Steward M. John did not enter the Roll for some unknown reason.)

As per the objectives of the Academy, all Founding Fellows were eminent in the engineering profession not only by local but also by international standards. Sir S. Y. Chung was an influential industrialist and politician widely known as Hong Kong's "political godfather". Sir Charles Kao was well known for his invention of the optical fibre, for which he won the Nobel Prize in Physics in 2009. Prof. Yau-kai Cheung was an authority of the finite-element method and inventor of the finite-strip method. Dr Kenneth Nai-keong Chan was the first Chinese in Hong Kong appointed as Secretary for Lands and Works in 1983. Ir David Morris was President of HKIE in 1982–83 and an expert in railway construction, who contributed greatly to the construction of Hong Kong's MTR. Dr Samuel Ping-wai Wong was President of HKIE in 1989–90 and member of LegCo from 1991 to 1997. Ir Bengt Delaryd was a noteworthy corporate executive and successful entrepreneur, and Ir Stewart John was Director of Cathay Pacific Airways, Hong Kong's famous airline.

The Founding Fellows were quickly joined by six New Fellows admitted in December 1994, including five past Presidents of HKIE (H. K. Cheng (1978– 79), R. C. T. Ho (1987–88), Nels Kraunsoe (1988–89), J. R. Blake (1991–92), T. P. Leung (1993–94)) and a Member of the US National Academy of Engineering (Leroy Chang). Then another batch of five New Fellows were elected on 1 June 1995, "using a system very similar to that in the Royal Academy in Britain" (Asia Engineer, April 1995, p. 56). The Academy's first New Fellows' Dinner was held on 25 September 1995 at the Hong Kong Club, which has become an annual tradition.



"Swearing in" by New Fellows on 20 January 2012, in the Hong Kong Club



We, who have hereunto subscribed do hereby promise each for himself that we will endeavour to promote the objects of the Hong Kong Academy of Engineering Sciences and to pursue the ends for which the same was founded; that we will observe the Memorandum and Articles of Association and the regulations of the Academy. Provided under his hand that he desired to withdraw from the Academy, he shall be free from this obligation for the future.

Oath taken by Fellows on admission to the Academy







Academy's symbol – Fellows' ties

From inception to the years before 1997, HKAES maintained a strong link with HKIE. Sir S. Y. himself was a past President (1960–61) of the Engineering Society for Hong Kong, the forerunner of HKIE, and, as mentioned, Founding Fellows David Morris and Samuel Wong were Past Presidents of HKIE. Other past HKIE Presidents elected subsequently to HKAES include: L. T. Tao

(1981–82); W. S. Y. Chan (1985–86); E. H. C. Tao (1986–87); J. Chiu (1990/91); R. M. Kennard (1992–93); M. J. Matthews (1994–95); E. K. H. Leung (1995–96); B. J. Stubbings (1996–97); F. S. Y. Bong (1997–98); Otto Poon (1998–99); C. C. Chan (1999–2000); C. K. Lau (2002–03); Alex Chan (2003–04), and W. K. Lo (2007–08). In the 1995 Asia Engineer article, Sir S. Y. said that "The Hong Kong Academy will not seek to duplicate the effort of the Hong Kong Institution of Engineers, but rather to provide encouragement and influence to facilitate the work of the Institution." In his President Report of HKAES in 1995, he stated that the establishment of HKAES was announced at the 20th Annual Dinner of HKIE in March 1995 to approximately 1,000 engineers present, which probably was in the same tone as the content of the Asia Engineer article. One of the first projects of the academy was to jointly publish with HKIE a book titled Engineering Hong Kong: 50 Years of Achievements in 1997, which was to serve three purposes: (i) to mark the founding of HKAES, (ii) to celebrate the 50th anniversary of HKIE, and (iii) to commemorate the peaceful transfer of sovereignty of Hong Kong from Britian to China "as an unprecedented event in the modern world of politics." The book was eventually published by the Chinese University of Hong Kong Press under the auspices of Sir Charles Kao, who was the second President of HKAES in 1997.



Engineering Hong Kong: 50 Years of Achievements - the Academy's first publication in 1997, jointly with HKIE







MEMBERSHIP AND THE "FHKENG" LETTERS

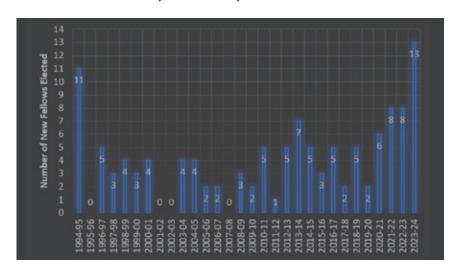
The use of post-nominal letters to indicate one's qualifications has been a tradition in the Western world for hundreds of years and throughout Hong Kong's history of over 180 years as well. The Academy's Articles of Association (see Appendix 3) stipulate that "the abbreviation of all grades of Fellows of the Academy shall be "FHKEng". Fellows of HKAES are therefore entitled and in fact encouraged to use the letters "FHKEng" on their name cards for professional communications, as is the case in many other counterpart academies throughout the world.

The initial planned size of HKAES was 60, on par with the initial size of RAE and the population ratio between Britain and Hong Kong. Admission of New Fellows was planned to not exceed eight in any one year – the RAE in UK with a population of 67 million targets at about 60 New Fellows elected per year, i.e. around one New Fellow per 1 million population. Hong Kong with a population of 7.4 million can therefore afford to have about seven or eight New Fellows per year.

However, in many years from 1994 to 2024, the number of New Fellows elected was far below the quota of eight. Discounting the eight Founding Fellows whose memberships were automatic, 128 New Fellow elections were made in the 30-year period, i.e. about 4.3 per year. The number in fact has increased in recent years: in the first 15 years from 1994 to 2008, 45 New Fellows were elected, an average of three per year, but in the second 15 years from 2009 to 2023, 77 New Fellows were elected, an average of 5.1 per year. The increase, however, does not mean a drop in standards from the original anticipated by the founders but reflects the growth in research strength

in local universities and standard and intensity of innovation-technology endeavours in Hong Kong. The average number of 5.1 new elections per year in the latest 15-year period is still well below the initial yearly quota of eight set by the founders. However, the HKSAR Government has recently identified innovation and technology as a new driver for economic growth, and to support and respond to this, the Academy resolved at its AGM in 2023 to increase the yearly quota to 16, to cater for the anticipated growth in the number of eminent engineering scientists and technologists coming to work in Hong Kong in the near future. As a result, the number of admissions to the Academy significantly increased to 13 in 2023, but the standard has not dropped. Currently, 22 out of 94 active Fellows (23%) hold memberships of other national engineering or science academies, indicating the high standard of HKAES against international benchmarks.

The academy has been a predominately male fellowship, which reflects the gender imbalance in the engineering profession in Hong Kong. The first female Fellow (Kei May Lau, Member of NAE) was admitted as late as in the 2016–17 session. Currently, the Academy has four female Fellows.



Statistics of New Fellow election*

^{*}The number does not equal the number of active Fellows due to resignation, death, and, very rarely, non-acceptance of membership after being elected.



Academy making history – admitting the largest number (13) of New Fellows in a single year in 2023, with two female Fellows, Stella W. Pang (third from left) and Irene M. C. Lo (sixth from right). The first female FHKEng, Kei May Lau (admitted in 2016), stands behind Stella Pang. Another female FHKEng, Qian Zhang (admitted in 2020), is not in the photo.

The Academy also has a Fellow grade which was initially known as "Foreign Fellow". However, after the establishment of the HKSAR in 1997, this terminology created confusion, since its original intention was for electing eminent figures who are non-residents of Hong Kong into the Academy. It would be inappropriate to call Fellows residing in mainland China "Foreign Fellows", as the HKSAR is a part of China. Therefore, in 2021, the Academy resolved to rename this membership grade as "Non-Resident Fellow". However, as at today, the Academy has yet to elect its first Non-Resident Fellow.







PATRONAGE AND OFFICERS

In the initial years of existence, HKAES did not have a Patron although many organizations in Hong Kong have a prominent figure playing the role of a Patron. After the establishment of the HKSAR, the Academy invited the first Chief Executive (CE), the Hon. Tung Chee Hwa, to be its first Patron, which he accepted in 1998. For some unknown reason, the second CE, the Hon. Donald Tsang, did not become the Academy's Patron. An opportunity to revive the succession arose in late 2011 to early 2012, when the HKSAR was preparing for the election of the third CE. During 1–2 December 2011, the Academy co-organized a "Science and Technology (S&T) Forum: Innovation for the Future of Hong Kong and the Pearl River Delta" together with the Hong Kong University of Science and Technology (HKUST) and the Hong Kong Institute of Science (HKIS). An "HKAES Position Paper on Science and Technology Policy" for Hong Kong was published in the programme booklet of the Forum and was widely distributed, and a copy was sent to Mr Leung Chun Ying as a candidate for the CE election. Subsequently, Mr Leung met President Joseph Lee and a few other HKAES Fellows at his election campaign office, to discuss various issues including the future directions of S&T policy, the need for infrastructure projects for Hong Kong's development, and Mainland-Hong Kong cooperation. Then, after Mr Leung's successful election and appointment as HKSAR's third CE, President Joseph Lee invited him to be the Patron of HKAES, which Mr Leung accepted on 27 June 2013. This revived the tradition of having the HKSAR CE as the Patron of HKAES, as subsequent CEs (Carrie Lam in 2017–22 and John Lee in 2022–present) were also invited and agreed to serve as Patron of the Academy.



Hon. Chee-Hwa Tung, GMB HKAES Patron (1998-2005)



Hon. Chun Ying Leung, GMB, GBS, JP, KCM **HKAES Patron** (2013-17)



Hon. Carrie Lam, GMB, GBS, JP HKAES Patron (2017-22)



Hon. John Lee Ka-chiu, GBM, SBS, PDSM, PMSM **HKAES Patron** (2022-present)

Patrons of HKAES

The Academy is led by a group of Officers who, under the provision of the current Articles of Association (see Appendix 3), consists of the President, up to two Senior Vice Presidents, up to three Vice Presidents, the Honorary Treasurer, and any number of Honorary Secretaries that the Academy may see fit. (However, from the beginning to now, the Academy has been having only one Honorary Secretary.) From the 1999 to 2000 session, an additional Officer of Immediate Past President was introduced, which was initially filled by Sir S. Y. himself. The Officers form the Executive Committee (ExCo), led by the President, and ExCo suggests issues for consideration and approval by the Council, which is responsible for making important decisions for the Academy and proposing Officers, Council Members, and New Fellows, as well as any amendments to the Academy's Memorandum and Articles of Association (M&A), to the general meetings (AGM and EGM) for voting. A set of robust rules is in place to ensure healthy rotation of the Officers and Council Members. The Academy's M&A (Appendix 3) also clearly stipulate the criteria and procedure for nomination and election of New Fellows.

Table 1: Succession list of HKAES Presidents

1994–97	Sir S. Y. Chung
1998–2000	Sir Charles Kao
2001	Dr Kenneth Nai Keong Chan
2002–04	Ir Prof. Y. K. Cheung
2005–07	Ir Prof. C. F. Lee
2008–10	Ir Francis Bong
2011–13	Ir Prof. J. H. W. Lee
2014–15	Ir Dr Y. L. Choi
2016–17	Ir Dr Andrew Chan
2018	Prof. Timothy Tong
2019–20	Ir Prof. P. C. Ching
2021–22	Ir Dr Otto Poon
2023 – present	Ir Prof. J. G. Teng



Council at work – Quarterly meetings usually held at the Hong Kong Club



RELATION WITH THE CHINESE ACADEMY OF ENGINEERING



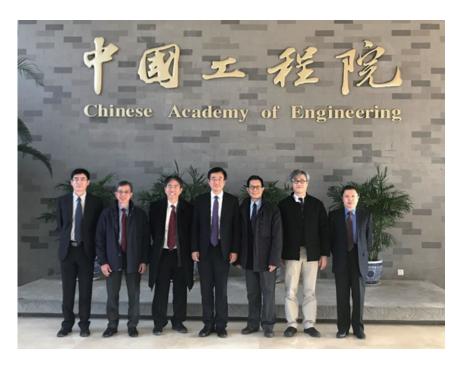
RELATION WITH THE CHINESE ACADEMY OF ENGINEERING

The CAE was established as the national engineering academy of China in 1994, and as mentioned, in the same year HKAES was independently established in Hong Kong to prepare for the handover of sovereignty in 1997 under one country, two systems provided by the Basic Law. As such, HKAES enjoys a special relation with CAE. HKAES is independent from CAE in all its operations including finance and the election of Fellows and Officers, but as Hong Kong is not a sovereign state, HKAES does not enjoy the similar status of CAE in international arena such as the International Council of Academies of Engineering and Technological Sciences (CAETS), in which each country has only one membership. Nevertheless, HKAES is well recognized by CAE in many aspects, as detailed below.

First, interactions and collaborations between HKAES and CAE have been frequent. The following are some examples:

- CAE President Zhu Guangya attended a dinner reception hosted by HKAES in October 1995.
- CAE Executive Vice President Zhu Gaofeng led a delegation of three to visit HKAES in January 1997.
- HKAES Vice President Dr Kenneth Chan let a delegation of three to visit to CAE in April 1997.

- HKAES and CAE jointly organized a Symposium on "Commercialization of High Technology" in Beijing on 16–17 April 1998, and a second one on "Commercialization of Innovation & Technology Com IT 2000" on 16–18 October 2000.
- HKAES President Charles Kao and Council Member C. C. Chan attended the Second Round Table Meeting of Engineering Academies hosted by CAE in November 1998 in Hangzhou.
- CAE President Zhou Guangzhao attended a dinner hosted by HKAES in November 2000.
- HKAES and the Management Division of CAE jointly organized a Forum on Engineering Management Education held at South China University of Technology on 12 September 2005.
- The two academies jointly organized two CAE-HKAES joint summits on the innovation and technology industry in Hong Kong and the Pearl River Delta in April 2015 and May 2017, both held in Hong Kong.
- HKAES President P. C. Ching let a delegation of four to visit CAE in November 2019.
- HKAES President Otto Poon visited CAE in September 2022.
- CAE President Li Xiaohong led a delegation to participate in an International Bay Area Summit organized by HKAES in February 2023.



Academy visit to CAE in November 2019

The fact that HKAES is well recognized in the Mainland and by CAE can be seen from the following examples:

Fellows of HKAES are entitled to services provided by 广东院士联合会 (原广东院士联谊会), which is a government-subsidized organization for liaising Members of the Chinese Academy of Sciences (CAS) and CAE, as well as those of overseas academies based in the Guangdong area. For instance, HKAES Fellows were invited to a forum on 8 September 2017 organized by 广东院士联合会 to share views on the development of the Guangdong-Hong Kong-Macau Greater Bay Area. In early 2019, HKAES was invited by 广东院士联合会 to join as a founding member of 粤港澳院士专家创新创业联盟.



- HKAES is a nominating organization for the Guanghua Engineering
 Science and Technology Prize (Table 2). This prize was established by
 CAE in 1996 as the highest prize in China for engineering science and
 technology, and since the 11th Guanghua Prize in 2015, HKAES has been
 tasked by CAE to nominate candidates from Hong Kong for this presti gious biennial award.
- Starting in 2015, CAE has been inviting HKAES to participate in the Global Grand Challenges Summits (GGCS) organized biennially by the three national engineering academies of CAE in China, NAE in the US, and RAE in the UK. An important part of the summit is a Student Pitch Competition, in which five teams from each of the three participating countries compete by presenting business plans for start-ups based on an idea or concept related to the NAE Grand Challenges for Engineering. For the five teams from China, CAE allocates one quota to Hong Kong, and HKAES is tasked with forming the team from among the universities in Hong Kong. Hong Kong participated in this way in the 2015, 2017, and 2019 GGCS held in Beijing, Washington, and London, respectively, and won third prize in 2015 and second prize in 2019.



CAE-HKAES Forum on Integrative Development of Innovation and Technology in Hong Kong and the Pearl River Delta, 27 May 2017



Table 2: Hong Kong recipients of the Guanghua Engineering Science and Technology Prize administered by the CAE. Except Professor J. Yu,* who was a medical recipient, all recipients were nominated by HKAES. Starting from the 15th Prize in 2023, HKAES added medicine to the nomination process.

2016	11th Guanghua Prize
	Ching Chuen Chan, FHKEng (Engineering Award)
	Patrick C. Yue (Youth Award)
2018	12th Guanghua Prize
	Jian Lu, FHKEng
	Ed X. Wu, FHKEng
	Youlin Xu, FHKEng
2020	13th Guanghua Prize
	Michael R. Lyu, FHKEng
	Alfonso H. W. Ngan, FHKEng
	Xiaoming Tao
2022	14th Guanghua Prize
	Yuguo Li, FHKEng
	Kwai Man Luk, FHKEng
	Jun Yu*



Academy Fellows winning Guanghua Awards: Youlin Xi, Ed X. Wu, and J. Lu receiving the 12th Guanghua Prizes in the annual academician meeting of CAS and CAE on 30 May 2018, accompanied by Hon. Secretary J. G. Teng (left) and Past President J. H. W. Lee (right)



ENGAGEMENT WITH OTHER ENGINEERING ACADEMIES IN THE WORLD



ENGAGEMENT WITH OTHER ENGINEERING ACADEMIES IN THE WORLD

In addition to CAE in the Mainland, HKAES has been actively interacting with other engineering academies in the world. In September 1996, HKAES hosted a lunch meeting with CAETS President Hans Forsberg and RAE President Sir David Davies. In November 1997, another lunch meeting was hosted for President Kurt Ostlund and Secretary Enrico Deiaco of the Royal Swedish Academy of Engineering Sciences. In June 1999, HKAES also hosted a lunch meeting for Governing Council Member J. Nanda of the Indian National Academy of Engineering (INAE). In October 2004, HKAES received the presidential delegation of the Hungarian Academy of Engineering, and in March 2006, it also received Professor Mauricio Porraz from the Mexican Academy of Engineering.

Then in June 2013, HKAES was invited by the Hungarian Academy of Engineering to attend the 2013 Annual Meeting of CAETS in Budapest. President Joseph Lee led a delegation of three other HKAES Fellows to attend and promote HKAES to other academies. The next CAETS Annual Meeting was held in Beijing in June 2014, and the CAE President also invited HKAES to send a delegation to attend as an Observer. Again, President Joseph Lee led a delegation of eight other HKAES Fellows to attend. HKAES similarly attended the next two CAETS Annual Meetings in New Delhi in 2015 and London in 2016 as Guest and Observer.





Academy dinner talk by Prof. Robert Mair, FRS, FREng, 3 November 2011



HKAES Delegation at the 2013 CAETS Annual Meeting in Budapest, June 2013



Hong Kong excels on world stage – The "China Hong Kong Team", formed and nurtured by the Academy and local universities, winning 2nd Prize in the Student Competition of the Global Grand Challenges Summit (GGCS) organized by RAE, CAE, and NAE, on 13 September 2019.



GOVERNMENT
ADVISORY,
PROJECTS, AND
COMMUNITY
ENGAGEMENT



GOVERNMENT ADVISORY, PROJECTS, AND COMMUNITY ENGAGEMENT

From the beginning, HKAES has been a think tank for the government, and Fellows actively participate in offering advice on important issues of society. In 1995–96, HKAES was invited by the Chinese government's Preparatory Committee to nominate candidates to serve on the Selection Committee of the new HKSAR Government, and two HKAES Fellows were subsequently selected. HKAES has also been an organizational Elector in the Technology and Innovation Functional Constituency of the HKSAR LegCo election since 2021.

HKAES position/proposal papers submitted to the government include:

- Building Hong Kong into an IT-City (Status, Business Model, Infrastructure, and Benefits), 1998-99
- The Environmental Impact of Road Transportation with Special Reference to Electric Vehicles — Building Hong Kong into an Electric Vehicle City, 1998-99
- Framework for Construction Policy Study, 2003
- Realizing Hong Kong's Development Vision, 2004
- HKAES-HKUST Science and Technology Forum Executive Summary, 2021
- Enhancing Engineering Excellence in Hong Kong with an Engineering Tribunal, 2021



- Policy Study on the Integrative Development of Innovation and Technology in the Guangdong-Hong Kong-Macau Greater Bay Area, 2018
- Land Supply Issues, 2018
- Proposal on Translational Fellowship Scheme, 2022



Academy's voices



Academy's voices – dinner talk by Sir Gordon Wu FHKEng, 26 March 2018

HKAES regularly organizes high-level summits to benefit policymakers and to help industry and academia to identify new developmental areas. In addition to the two CAE-HKAES joint submits on the innovation and technology industry in Hong Kong and the Pearl River Delta in 2015 and 2017, a major event was the International Bay Area Summit 2023 held on 20-21 February 2023. All these meetings were attended by high government officials, business leaders, Academy Officers and Fellows, and university presidents. The International Bay Area Summit 2023 was officiated by HKSAR Chief Executive and Academy Patron the



Competing for excellence - HKAES University Pitch Competition



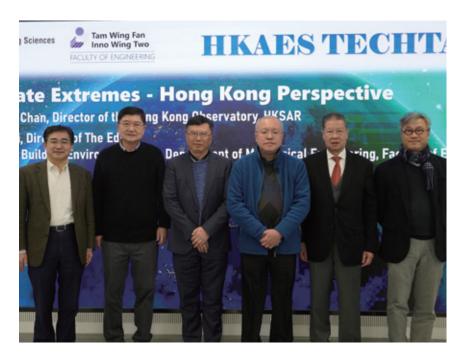
Hon. John K. C. Lee, and attended by a CAE delegation led by President Li Xiaohong, five university presidents, many industrial leaders, and government officials.

As a high-level body, HKAES is officially independent of the HKSAR Government. However, it has from time to time applied for and received government funding on a project-by-project basis. In 2014, HKAES was awarded a Public Policy Research (PPR) grant of HK\$737,150 from the Central Policy Unit of the HKSAR Government to conduct a project on "Enhancing Policy on Building Maintenance: Solving the Residential Seepage Problem". In 2021, with the support of Secretary for Innovation and Technology Mr Alfred Sit, HKAES secured an office in Hong Kong Science Park at nominal rent. Furthermore, HKAES has been securing projects from the General Support Programme of the Innovation and Technology Fund to run some of the activities mentioned above and below, including the International Bay Area Summit 2023, HKEST Award, Student Pitch Competition for GGCS and TechTalks.



Working through the COVID pandemic

– HKAES Forum on Translational Research and Commercialization, October 2022



Working with extreme weather - TechTalk on Climate Extremes on a freezing day in Hong Kong: -2.9°C recorded at Tai Mo Shan (speaker: Hong Kong Observatory Director Dr P. W. Chan, 23 January 2024)

HKAES has been organizing public lectures to promote excellence in engineering sciences and their importance to the society. In 2009 an "HKAES Distinguished Lecture Series" was launched. The Inaugural Distinguished Lecture was delivered by Prof. C. J. Tan titled "Does Hong Kong still have the innovative edge?", on 2 November 2009, together with the book launch of the academy's publication HKAES – The First 15 Years. Later on, the Distinguished Lectures were usually delivered by overseas visitors and HKAES Fellows. Examples include Prof. Yinxin Yu of CAE and Prof. Felix Wu of HKAES in June 2012, and Prof. Andy Hopper of RAE and Prof. Lionel Ni of HKAES in November 2013. More recently, Guanghua Prize recipients were invited to deliver the Distinguished Lectures, including Profs. Yuguo Li and K. M. Luk in June 2023, and Profs. Alfonso Ngan and Michael Lyu in November 2023.



In 2023, HKAES also launched a new TechTalk Series on contemporary research topics with substantial effect. The inaugural talk was delivered by Prof. Joseph Lee on 2 November 2023. Another major initiative to engage with the community is the launch of a new Hong Kong Engineering Science and Technology (HKEST) Award in 2023. This award serves to "recognize and commend outstanding contributions and excellence younger generations in the HKSAR for their dedication and achievements in the arena of engineering science and technology through research, development, innovation and/or entrepreneurship". The award is sponsored by the Innovation and Technology Commission of the HKSAR Government. The first award ceremony was held on 3 June 2023.



Witnessing national developments – Academy visit to Shenzhen on 28 February 2024







7

HKAES has gone through a remarkable 30 years of history from the visionary beginning by the founders in 1994. During the earlier part of this history, the Academy thrived to uphold a high standard in New Fellow election, to interact with CAE and counterpart academies worldwide, to fulfil its mission of being a think tank to the government, and to engage with the community at large. More recently, with the support of the HKSAR Government's Innovation and Technology (later named Innovation, Technology and Industry) Bureau, the Academy has embarked on a new phase of operation by setting up its own office in Hong Kong Science Park and to receive more stable funding from the General Support Programme of the Innovation and Technology Fund for organizing recurrent activities to promote engineering sciences and technology. This new phase of development tallies well with the HKSAR's determination to play a significant role in the national plan of the Greater Bay Area (GBA), and to establish innovation and technology as a new economic pillar for Hong Kong. The number of scientists, engineers, and technologists engaging in innovation and technology in Hong Kong and the GBA is therefore anticipated to grow rapidly in the near future, and it is on this basis that the Academy decided, at its 29th AGM in December 2022, to relax the maximum number of New Fellows elected per year from the original eight to 16.





Hong Kong Innovation and Technology Development Blueprint (courtesy of ITIB, HKSAR Government)



From here we serve – Academy's office at Hong Kong Science Park

As mentioned in Chapter 1, the founders envisioned the initial Academy to cover a wider field and hence named the Academy for "Engineering Sciences" following the practice in continental Europe. Thirty years on, as mentioned, the circumstances locally in Hong Kong and elsewhere have changed, and this has led the Academy to consider revising its name. First, the Hong Kong Academy of Sciences (HKAS) was established in 2015. Although HKAS focuses on natural and biomedical sciences, including "sciences" in the name



of HKAES does produce some confusion. Secondly, CAE does not have "sciences" in their name, and internationally, neither do counterpart academies in the US and the UK. Therefore, after lengthy deliberations lasting over a decade, the Academy eventually resolved, at its 30th AGM in December 2023, to change its name to the "Hong Kong Academy of Engineering". This will better align the Academy with its counterparts in the Mainland, the US, and the UK, and will avoid confusion with HKAS. The legal processes of the name change, however, will take some time to complete, but it is also remarkable that the resolution was made around the time the Academy celebrates its 30th anniversary.



Academy logos registered as trademarks in Hong Kong - (left) HKAES logo registered on 20 May 2021; (right) HKAE logo registered on 26 June 2023

Another major development of the Academy is the setting up of a Young Member Section (YMS), which was agreed by the Council in the 2023 for execution. The age limit of the YMS is proposed to be 45, and one objective, among others, is to better prepare candidates for eventual admission to the Academy.

All in all, the Academy with its planned expansion, name change, and the YMS, is determined to contribute to Hong Kong's drive in innovation and technology. This brings the Academy's mission back to that of the founders 30 years ago!



APPENDIX 1

Succession List of Officers and Council Members

Session 1994–95

President: Sir Sze-yuen Chung

Senior Vice President: Ir Professor Charles Kuen Kao

Vice Presidents: Ir Dr Kenneth Nai-keong Chan

Ir David Austin Morris

Honorary Treasurer: Ir Dr Kenneth Nai-keong Chan

Honorary Secretary: Ir Professor Charles Kuen Kao

Members: Ir Professor Yau-kai Cheung

Ir Bengt Delaryd

Ir Stewart Morris John

Ir Dr Samuel Ping-wai Wong

Session 1995–96

President: Sir Sze-yuen Chung

Senior Vice President: Ir Professor Charles Kuen Kao

Vice Presidents: Ir Dr Kenneth Nai-keong Chan

Ir David Austin Morris

Honorary Treasurer: Ir Dr Kenneth Nai-keong Chan

Honorary Secretary: Ir Professor Tin-pui Leung

Members: Ir Professor Leroy L. Chang

Ir Professor Yau-kai Cheung

Ir Bengt Delaryd

Ir Niels Anthony Kraunsoe

Ir Dr Samuel Ping-wai Wong

Session 1996–97

President: Sir Sze-yuen Chung

Senior Vice President: Ir Professor Charles Kuen Kao

Vice Presidents: Ir Dr Kenneth Nai-keong Chan

Ir David Austin Morris

Honorary Treasurer: Ir Dr Kenneth Nai-keong Chan

Honorary Secretary: Ir Professor Tin-Pui Leung

Members: Ir Ronald James Blake

Ir Professor Leroy L. Chang

Ir Professor Yau-kai Cheung

Ir James Chiu

Ir Bengt Delaryd

Ir Dr Raymond Chung-tai Ho

Ir Robert Moir Kennard

Ir Niels Anthony Kraunsoe

Ir Dr Samuel Ping-wai Wong

Session 1997–98

President: Ir Professor Charles Kuen Kao

Senior Vice President: Ir Dr Kenneth Nai-keong Chan

Vice Presidents: Ir David Austin Morris

Ir Professor Tin-Pui Leung

Honorary Treasurer: Ir Dr Kenneth Nai-keong Chan

Honorary Secretary: Ir Professor Tin-Pui Leung

Members: Ir Ronald James Blake

Ir Professor Ching Chuen Chan

Ir Professor Leroy L. Chang

Ir Hon-kwan Cheng

Ir Professor Yau-kai Cheung

Ir James Chiu

Ir Bengt Delaryd

Ir Dr Raymond Chung-tai Ho

Ir Robert Moir Kennard

Ir Niels Anthony Kraunsoe

Ir Dr Edwin Hsueh Chi Tao

Ir Dr Samuel Ping-wai Wong

Session 1998–99

President: Ir Professor Charles Kuen Kao

Senior Vice President: Ir Dr Kenneth Nai-keong Chan

Vice Presidents: Ir David Austin Morris

Ir Professor Tin-Pui Leung

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Tin-Pui Leung

Members: Ir Ronald James Blake

Ir Professor Ching Chuen Chan

Ir Professor Leroy L. Chang

Ir Hon-kwan Cheng

Ir Professor Yau-kai Cheung

Sir Sze-yuen Chung

Ir Dr Raymond Chung-tai Ho

Ir Robert Moir Kennard

Ir Niels Anthony Kraunsoe

Ir Dr Edwin Hsueh Chi Tao

Session 1999–2000

President: Ir Professor Charles Kuen Kao

Immediate Past President: Sir Sze-yuen Chung

Senior Vice President: Ir Dr Kenneth Nai-keong Chan

Vice Presidents: Ir David Austin Morris

Ir Professor Tin-Pui Leung

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Ching Chuen Chan

Members: Ir Ronald James Blake

Ir Professor Leroy L. Chang

Ir Hon-kwan Cheng

Ir Professor Yau-kai Cheung

Ir Dr Raymond Chung-tai Ho

Ir Robert Moir Kennard

Ir Edmund Kwong Ho Leung

Ir Dr Edwin Hsueh Chi Tao



Session 2000-01

President: Ir Dr Kenneth Nai-keong Chan

Immediate Past President: Ir Professor Charles Kuen Kao

Senior Vice President: Ir Professor Tin-Pui Leung

Vice Presidents: Ir Professor Ching Chuen Chan

Ir Professor Yau-kai Cheung

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Edmund Kwong Ho Leung

Members: Ir Ronald James Blake

Ir Professor Hsin Kang Chang

Ir Dr Raymond Chung-tai Ho

Ir Robert Moir Kennard

Ir Professor Wai Sun Leung

Ir Professor Otto Chui Chau Lin

Ir Dr Edwin Hsueh Chi Tao

Session 2001-02

President: Ir Professor Yau-kai Cheung

Senior Vice President: Ir Professor Tin-Pui Leung

Vice Presidents: Ir Professor Ching Chuen Chan

Ir Ronald James Blake

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Edmund Kwong Ho Leung

Members: Ir Professor Hsin Kang Chang

Ir Professor Ping Cheng

Ir Professor Che King Chow

Ir Professor William A. Gambling

Ir Dr Raymond Chung-tai Ho

Ir Robert Moir Kennard

Ir Hon Sang Kwong

Ir Professor Wai Sun Leung

Ir Professor Otto Chui Chau Lin

Ir Dr Edwin Hsueh Chi Tao

Session 2002–03

President: Ir Professor Yau-kai Cheung

Immediate Past President: Ir Dr Kenneth Nai Keong Chan

Senior Vice President: Ir Ronald James Blake

Vice Presidents: Ir Professor Ching Chuen Chan

Ir Professor Chack-fan Lee

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Yu-leuk Choi

Members: Ir Francis Shu-ying Bong

Ir Professor Hsin Kang Chang

Ir Professor Ping Cheng

Ir Professor Che King Chow

Ir Professor William A. Gambling

Ir Dr Raymond Chung-tai Ho

Ir Hon Sang Kwong

Ir Professor Wai Sun Leung

Ir Professor Otto Chui Chau Lin



Session 2003-04

President: Ir Professor Yau-kai Cheung

Senior Vice President: Ir Professor Chack-fan Lee

Vice Presidents: Ir Francis Shu-ying Bong

Ir Professor Otto Chui Chau Lin

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Yu-leuk Choi

Members: Ir Russell John Black

Ir Professor Hsin Kang Chang

Ir Professor Ping Cheng

Ir Che King Chow

Ir Professor Allen Tse Yung Chwang

Ir Hon Sang Kwong

Ir Edmund Kwong Ho Leung

Ir Professor Wai Sun Leung

Session 2004–05

President: Ir Professor Chack-fan Lee

Immediate Past President: Ir Professor Yau-kai Cheung

Senior Vice President: Ir Francis Shu-ying Bong

Vice Presidents: Ir Professor William A. Gambling

Ir Professor Joseph Hun Wei Lee

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Yu-leuk Choi

Members: Ir Russell John Black

Ir Che King Chow

Ir Professor Allen Tse Yung Chwang

Ir Hon Sang Kwong

Ir Dr Ching Kwong Lau

Ir Edmund Kwong Ho Leung

Ir Professor Wilson H. Tang

Session 2005-06

President: Ir Professor Chack-fan Lee

Immediate Past President: Ir Professor Yau-kai Cheung

Senior Vice President: Ir Francis Shu-ying Bong

Vice Presidents: Ir Professor William A. Gambling

Ir Professor Joseph Hun Wei Lee

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Yu-leuk Choi

Members: Ir Russell John Black

Ir Che King Chow

Ir Professor Allen Tse Yung Chwang

Ir Dr Raymond Chung-tai Ho

Ir Hon Sang Kwong

Ir Dr Ching Kwong Lau

Ir Edmund Kwong Ho Leung

Ir Professor Wilson H. Tang



Session 2006-07

Ir Professor Chack-fan Lee President:

Immediate Past President: Ir Professor Yau-kai Cheung

Senior Vice President: Ir Francis Shu-ying Bong

Vice Presidents: Ir Professor William A. Gambling

Ir Professor Joseph Hun Wei Lee

Ir James Chiu Honorary Treasurer:

Honorary Secretary: Ir Professor Yu-leuk Choi

Members: Ir Russell John Black

Ir Che King Chow

Ir Professor Allen Tse Yung Chwang

Ir Dr Raymond Chung-tai Ho

Ir Hon Sang Kwong

Ir Dr Ching Kwong Lau

Ir Edmund Kwong Ho Leung

Ir Professor Wilson H. Tang

Session 2007–08

President: Ir Francis Shu-ying Bong

Immediate Past President: Ir Professor Chack-fan Lee

Senior Vice President: Ir Professor Joseph Hun Wei Lee

Vice Presidents: Ir Professor Yu-leuk Choi

Ir Professor William A. Gambling

Honorary Treasurer: Ir Dr Andrew Ka-ching Chan

Honorary Secretary: Ir Dr Tat-lun Ng

Members: Ir Russell John Black Ir Professor Yau-kai Cheung

Ir James Chiu

Ir Dr Raymond Chung-tai Ho

Ir Dr Ching Kwong Lau

Ir Professor Chung-yee Lee

Ir Edmund Kwong Ho Leung

Ir Professor Wilson H. Tang

Session 2008–09

President: Ir Francis Shu-ying Bong

Immediate Past President: Ir Professor Chack-fan Lee

Senior Vice President: Ir Professor Joseph Hun Wei Lee

Vice Presidents: Ir Professor Yu-leuk Choi

Ir Professor Wilson H. Tang

Honorary Treasurer: Ir Dr Andrew Ka-ching Chan

Honorary Secretary: Ir Dr Tat-lun Ng

Members: Ir Russell John Black

Ir James Blake

Ir James Chiu

Ir Dr Raymond Chung-tai Ho

Ir Dr Ching Kwong Lau

Ir Professor Chung-yee Lee

Ir Edmund Kwong Ho Leung



Session 2009–10

President: Ir Francis Shu-ying Bong

Immediate Past President: Ir Professor Chack-fan Lee

Senior Vice President: Ir Professor Joseph Hun Wei Lee

Vice Presidents: Ir Professor Yu-leuk Choi

Ir Professor Wilson H. Tang

Honorary Treasurer: Ir Dr Andrew Ka-ching Chan

Honorary Secretary: Ir Dr Tat-lun Ng

Members: Ir James Blake

Ir James Chiu

Ir Dr Raymond Chung-tai Ho

Ir Hon Sang Kwong

Ir Dr Ching Kwong Lau

Ir Professor Chung-yee Lee

Professor Otto Chui Chau Lin

Session 2010–11

President: Ir Professor Joseph Hun Wei Lee

Immediate Past President: Ir Francis Shu-ying Bong

Senior Vice President: Ir Professor Yu-leuk Choi

Vice Presidents: Ir Dr Andrew Ka-ching Chan

Ir Dr Tat-lun Ng

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Jan Ming Ko

Members: Ir James Blake

Ir Dr Raymond Chung-tai Ho

Ir Hon Sang Kwong

Ir Professor Chung-yee Lee

Professor Otto Chui Chau Lin

Professor Mitchell Miendger Tseng

Session 2011–12

President: Ir Professor Joseph Hun Wei Lee

Immediate Past President: Ir Francis Shu-ying Bong

Senior Vice President: Ir Professor Yu-leuk Choi

Vice Presidents: Ir Dr Andrew Ka-ching Chan

Ir Dr Tat-lun Ng

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Jan Ming Ko

Members: Ir James Blake

Ir Tai Chong Chew

Ir Hon Sang Kwong

Ir Professor Chung-yee Lee

Professor Otto Chui Chau Lin

Ir Professor Chai Kwong Mak

Professor Mitchell Miendger Tseng

Session 2012–13

President: Ir Professor Joseph Hun Wei Lee

Immediate Past President: Ir Francis Shu-ying Bong

Senior Vice President: Ir Professor Yu-leuk Choi

Vice President: Ir Dr Andrew Ka-ching Chan

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Jan Ming Ko

Members: Ir James Blake

Ir Tai Chong Chew

Ir Professor Chung-yee Lee

Professor Otto Chui Chau Lin

Ir Professor Chai Kwong Mak

Ir Peter Yen Shou Pun

Professor Timothy Wai Cheung Tong

Professor Mitchell Miendger Tseng

Professor Ching Ping Wong

Session 2013–14

President: Ir Professor Yu-leuk Choi

Immediate Past President: Ir Professor Joseph Hun Wei Lee

Senior Vice President: Ir Dr Andrew Ka-ching Chan

Vice President: Professor Timothy Wai Cheung Tong

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Jan Ming Ko

Members: Ir James Blake

Ir Tai Chong Chew

Professor Jian Lu

Dr Jack Pappin

Ir Peter Yen Shou Pun

Professor Mitchell Miendger Tseng

Professor Ching Ping Wong

Session 2014–15

President: Ir Professor Yu-leuk Choi

Immediate Past President: Ir Professor Joseph Hun Wei Lee

Senior Vice President: Ir Dr Andrew Ka-ching Chan

Vice President: Professor Timothy Wai Cheung Tong

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Jan Ming Ko

Members: Ir James Blake

Ir Tai Chong Chew

Professor Jian Lu

Dr Jack Pappin

Ir Peter Yen Shou Pun

Professor Mitchell Miendger Tseng

Professor Ching Ping Wong

Session 2015–16

President: Ir Dr Andrew Ka-ching Chan

Immediate Past President: Ir Professor Yu-leuk Choi

Senior Vice President: Professor Timothy Wai Cheung Tong

Vice President: Ir Professor Wing Shing Wong

Honorary Treasurer: Ir James Chiu

Honorary Secretary: Ir Professor Jan Ming Ko

Members: Ir Dr Alex Siu Kun Chan

Ir Professor Pak Chung Ching

Professor Hoi Sing Kwok

Ir Dr Ching Kwong Lau

Ir Professor Victor On Kwok Li

Professor Jian Lu

Ir Peter Yen Shou Pun

Ir Professor Jin-Guang Teng

Ir Chi Sing Wai

Session 2016–17

President: Ir Dr Andrew Ka-ching Chan

Immediate Past President: Ir Professor Yu-leuk Choi

Senior Vice President: Professor Timothy Wai Cheung Tong

Vice President: Ir Professor Wing Shing Wong

Honorary Treasurer: Ir Dr Otto Lok To Poon

Honorary Secretary: Ir Professor Jin-Guang Teng

Members: Ir Dr Alex Siu Kun Chan

Ir Professor Pak Chung Ching

Professor Hoi Sing Kwok

Ir Dr Ching Kwong Lau

Ir Professor Joseph Hun Wei Lee

Ir Professor Victor On Kwok Li

Professor Jian Lu

Ir Chi Sing Wai

Session 2017–18

President: Professor Timothy Wai Cheung Tong

Immediate Past President: Ir Dr Andrew Ka-ching Chan

Senior Vice President: Ir Professor Pak Chung Ching

Vice President: Ir Professor Wing Shing Wong

Honorary Treasurer: Ir Dr Otto Lok To Poon

Honorary Secretary: Ir Professor Jin-Guang Teng

Members: Ir Dr Alex Siu Kun Chan

Professor Hoi Sing Kwok

Ir Dr Ching Kwong Lau

Ir Professor Joseph Hun Wei Lee

Ir Professor Wallace Woon Fong Leung

Ir Professor Victor On Kwok Li

Professor Jian Lu

Ir Professor Chai Kwong Mak

Ir Chi Sing Wai

Session 2018–19

President: Ir Professor Pak Chung Ching

Immediate Past President: Professor Timothy Wai Cheung Tong

Senior Vice President: Ir Dr Otto Lok To Poon

Vice President: Ir Professor Wing Shing Wong

Honorary Treasurer: Ir Professor Alfonso Hing Wan Ngan

Honorary Secretary: Ir Dr Alex Siu Kun Chan

Members: Professor Hoi Sing Kwok

Ir Dr Ching Kwong Lau

Ir Edmund Kwong Ho Leung

Ir Professor Wallace Woon Fong Leung

Ir Professor Victor On Kwok Li

Professor Jian Lu

Ir Professor Chai Kwong Mak

Ir Professor Jin-Guang Teng

Ir Chi Sing Wai

Session 2019–20

President: Ir Professor Pak Chung Ching

Immediate Past President: Ir Professor Timothy Wai-cheung Tong

Senior Vice Presidents: Dr Otto Lok To Poon

Ir Professor Jin-Guang Teng

Vice President: Ir Professor Wing Shing Wong

Honorary Treasurer: Ir Professor Alfonso Hing Wan Ngan

Honorary Secretary: Ir Dr Alex Siu Kun Chan

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Ir Professor Wallace Woon Fong Leung

Ir Professor Victor On Kwok Li

Ir Professor Chai Kwong Mak

Ir Professor Charles Wang Wai Ng

Ir Chi Sing Wai

Session 2020–21

President: Ir Dr Otto Lok To Poon

Immediate Past President: Ir Professor Pak Chung Ching

Senior Vice Presidents: Ir Professor Jin-Guang Teng

Ir Dr Alex Siu Kun Chan

Vice Presidents: Ir Professor Wing Shing Wong

Ir Professor Hoi Sing Kwok

Ir Professor Charles Wang Wai Ng

Honorary Treasurer: Ir Professor Paul Wai Yin Poon

Honorary Secretary: Ir Professor Alfonso Hing Wan Ngan

Members: Ir Professor Christopher Yu Hang Chao

Ir Professor Paul Kim Ho Chu

Ir Edmund Kwong Ho Leung

Ir Professor Wallace Woon Fong Leung

Ir Professor Chai Kwong Mak

Ir Chi Sing Wai

Session 2021–22

President: Ir Dr Otto Lok To Poon

Immediate Past President: Ir Professor Pak Chung Ching

Senior Vice Presidents: Ir Professor Jin-Guang Teng

Ir Dr Alex Siu Kun Chan

Vice Presidents: Ir Professor Hoi Sing Kwok

Ir Professor Charles Wang Wai Ng

Honorary Treasurer: Ir Professor Paul Wai Yin Poon

Honorary Secretary: Ir Professor Alfonso Hing Wan Ngan

Members: Ir Professor Christopher Yu Hang Chao

Professor Nim-kwan Cheung

Ir Professor Paul Kim Ho Chu

Ir Edmund Kwong Ho Leung

Ir Professor Wallace Woon Fong Leung

Professor John Chi Shing Lui Ir Professor Chai Kwong Mak

Session 2022-23

President: Ir Professor Jin-Guang Teng

Immediate Past President: Ir Dr Otto Lok To Poon

Senior Vice Presidents: Ir Dr Alex Siu Kun Chan

Ir Professor Alfonso Hing Wan Ngan

Vice Presidents: Ir Professor Hoi Sing Kwok

Ir Professor Charles Wang Wai Ng

Honorary Treasurer: Ir Professor Paul Wai Yin Poon

Honorary Secretary: Ir Professor Christopher Yu Hang Chao

Members: Professor Nim-kwan Cheung

Ir Professor Paul Kim Ho Chu

Ir Chi Keung Hon

Ir Michael Ka Yue Kwok

Ir Professor Kwai Man Kuk

Ir Edmund Kwong Ho Leung

Ir Dr Humphrey Kwong Wai Leung

Ir Professor Wallace Woon Fong Leung

Ir Professor Chai Kwong Mak

Professor John Chi Shing Lui

Professor Qian Zhang

Session 2023-24

President: Ir Professor Jin-Guang Teng

Immediate Past President: Ir Dr Otto Lok To Poon

Senior Vice Presidents: Ir Dr Alex Siu Kun Chan

Ir Professor Alfonso Hing Wan Ngan

Vice Presidents: Ir Professor Hoi Sing Kwok

Ir Professor Charles Wang Wai Ng

Honorary Treasurer: Ir Professor Paul Wai Yin Poon

Honorary Secretary: Ir Professor Christopher Yu Hang Chao

Members: Professor Nim-kwan Cheung

Ir Professor Paul Kim Ho Chu

Ir Chi Keung Hon

Ir Michael Ka Yue Kwok

Ir Professor Kwai Man Kuk

Ir Edmund Kwong Ho Leung

Ir Dr Humphrey Kwong Wai Leung

Ir Professor Yuguo Li

Professor John Chi Shing Lui

Ir Eric Siu Cheung Ma

Professor Qian Zhang



APPENDIX 2

List of Fellows as at 2024



Ir BLAKE James 1994



鄭漢鈞 Ir Dr CHENG Hon Kwan 1994



何鍾泰 Ir Dr HO Raymond Chung Tai 1994



趙雅各 Ir CHIU James 1995



簡立德 Ir Dr KENNARD Robert M. 1995



陳清泉 Ir Professor CHAN Ching Chuen 1996



周子京 Ir Professor CHOW Che King 1996



梁廣灝 Ir LEUNG Edmund Kwong Ho 1998



林垂宙 Professor LIN Otto Chui Chau 1998



柏立恆 Ir BLACK Russell John 1999



龐述英 Ir BONG Francis Shu Ying 1999



蔡宇畧 Ir Dr CHOI Yu Leuk 2000



李焯芬 Ir Professor LEE Chack Fan 2001



李行偉 Ir Professor LEE Joseph Hun Wei 2002



劉正光 Ir Dr LAU Ching Kwong 2003



米耀榮 Professor MAI Yiu Wing 2003



胡應湘 Sir WU Gordon Ying Sheung 2004



周松崗 Ir The Honourable Sir CHOW Chung Kong 2005



陳嘉正 Ir Dr CHAN Andrew Ka Ching 2006



吳宏偉 Ir Professor NG Charles Wang Wai 2008



倪明選 Professor NI Lionel 2008



徐揚生 Professor XU Yang Sheng 2008



唐偉章 Professor TONG Timothy Wai Cheung 2009



高贊明 Ir Professor KO Jan Ming 2009



周大滄 Ir CHEW Tai Chong 2010



程伯中 Ir Professor CHING Pak Chung 2010



胡醒楠 Ir HUSSAIN Naeem Ullah 2010



栢積祺 Dr PAPPIN Jack 2010



麥齊光 Ir Professor MAK Chai Kwong 2010



郭海成 Professor KWOK Hoi Sing 2011



周允基 Ir Professor CHOW Wan Ki 2012



衛炳江 Ir Professor WAI Alexander Ping Kong 2012



呂堅 Professor LU Jian 2012



黄永成 Ir Professor WONG Wing Shing 2012



張統一 Ir Professor ZHANG Tongyi 2012



陳正豪 Ir Professor CHAN Philip Ching Ho 2013



陳兆根 Ir Dr CHAN Alex Siu Kun 2013



李安國 Ir Professor LI Victor On Kwok 2013



Ir Dr the Honourable LO Wai Kwok 2013



文効忠 Ir Professor MAN Hau Chung 2013



滕錦光 Ir Professor TENG Jin-Guang 2013



史維 Professor SHYY Wei 2013



朱劍豪 Ir Professor CHU Paul Kim Ho 2014



顏慶雲 Ir Professor NGAN Alfonso Hing Wan 2014



潘偉賢 Ir Professor POON Paul Wai Yin 2014



韋志成 Ir WAI Chi Sing 2014



容啟亮 Ir Professor YUNG Kai Leung 2014



陳繁昌 Professor CHAN Tony Fan Cheong 2015



潘樂陶 Ir Dr POON Otto Lok To 2015



梁煥方 Ir Professor LEUNG Wallace Woon Fong 2016



山大偉 Professor HILL David John 2016



楊偉豪 Professor YEUNG Raymond Wai Ho 2016



劉紀美 Professor LAU Kei May 2016



金章教 Ir Professor KIM Jang Kyo 2017



吳學奎 Professor WU Ed Xuekui 2017



Ir Professor CHENG Edwin Tai Chiu 2018



呂自成 Professor LUI John Chi Shing 2018



徐幼麟 Ir Professor XU You Lin 2018



張翔 Ir Professor ZHANG Xiang 2018



趙汝恒 Ir Professor CHAO Christopher Yu Hang 2019



黃定發 Professor WONG Martin Ding Fat 2019



鄭光廷 Professor CHENG Kwang Ting 2020



張念坤 Professor CHEUNG Nim Kwan 2020



Ir Professor LETAIEF Khaled Ben 2020



梁廣偉 Ir Dr LEUNG Humphrey Kwong Wai 2020



劉紹強 Ir Professor LIEW Soung Chang 2020



張黔 Professor ZHANG Qian 2020



郭毅可 Professor GUO Yike 2021



韓志強 Ir HON Chi Keung 2021



郭家耀 Ir KWOK Michael Ka Yue 2021



李偉光 Mr LEE Wai Kwong 2021



劉錦茂 Ir Professor LIEW Kim Meow 2021





陸貴文 Ir Professor LUK Kwai Man 2021



呂榮聰 Professor LYU Michael Rung Tsong 2021



Professor SROLOVITZ David 2021



曹建農 Professor CAO Jiannong 2022



陳清焰 Professor CHEN Qingyan 2022



劉堅能 Professor LAU Vincent 2022



李向東 Professor LI Xiangdong 2022



李玉國 Ir Professor LI Yuguo 2022



馬紹祥 Ir MA Eric Siu Cheung 2022



穆樂思 Professor MURCH Ross 2022



申作軍 Professor SHEN Zuojun 2022



陳紹雄 Ir the Honourable CHAN Siu Hung 2023



莊哲義 Dr CHUANG Justin 2023



何安誠 Ir HO Thomas On-sing 2023



金澤培 Ir Dr KAM Jacob Chak Pui 2023



鄺得互 Professor KWONG Sam Tak Wu 2023



梁永基 Ir LEUNG Ricky Wing Kee 2023



劉雲輝 Professor LIU Yunhui 2023



勞敏慈 Ir Professor LO Irene Man Chi 2023



彭慧芝 Professor PANG Stella W. 2023



秦泗釗 Professor QIN Joe Si Zhao 2023



王鑽開 Professor WANG Zuankai 2023



巖晉躍 Professor YAN Jerry Jinyue 2023



張彤 Ir Professor ZHANG Tong 2023

Former Fellows

Name (English)	Name (Chinese)	Year of election; year of resignation* or death
Ir The Honourable Sir CHUNG Sze Yuen	鍾士元	Founding Fellow; deceased 2018
Ir Professor The Honourable Sir KAO Kuen Charles	高錕	Founding Fellow; deceased 2018
Ir Professor CHEUNG Yau-kai	張佑啓	Founding Fellow; deceased 2022
Ir Dr CHAN Nai Keong Kenneth	陳乃強	Founding Fellow; deceased 2003
Ir MORRIS David Austin	莫大偉	Founding Fellow; deceased 2021
Ir Dr WONG Samuel Ping-wai	黃秉槐	Founding Fellow; deceased 1997
Ir DELARYD Bengt		Founding Fellow; deceased 2012
Professor CHANG Li Gong Leroy	張立綱	Elected 1994; deceased 2008
Ir KRAUNSOE Neils A.	顧朗素	Elected 1994; resigned 2002
Professor HEINKE Gerhard W.	韓克	Elected 1995; resigned 1997
Ir Professor LEUNG Vincent Wai-sun	梁維新	Elected 1995; resigned 2013
Ir Dr CHAN Siu-yuen Wilfred	陳兆源	Elected 1996; resigned 2004
Ir MATTHEWS M. J.	馬文思	Elected 1996; resigned 2014
Esq TAO Liang-te	道良德	Elected 1996; resigned 2009
Professor CHANG Hsin-kang	張信剛	Elected 1997; resigned 2013
Dr CRIGHTON Gordon Stewart		Elected 1997; resigned 1999



Ir Dr NG Tat-lun	伍達倫	Elected 1997; deceased 2013
Ir DOWNER John William		Elected 1998; resigned 2006
Ir STUBBINGS Barry John		Elected 1999; resigned 2004
Professor CHENG Ping	鄭平	Elected 1999; resigned 2004
Professor KO Ping Keung	高秉強	Elected 2003; left Hong Kong
		before induction
Ir Professor CHIN Roland Tai-hong	g錢大康	Elected 2004; resigned 2020
Professor LEE Chung Yee	李忠義	Elected 2004; resigned 2023
Professor WU Felix Fulih	吳復立	Elected 2004; resigned 2019
Professor TAN Chung Jen	譚祟仁	Elected 2005; resigned 2017
Professor YUM Tak Shing	任德盛	Elected 2005; resigned 2011
Professor KUO Way	郭位	Elected 2009; resigned 2012
Professor WONG Ching Ping	汪正平	Elected 2010; resigned 2018
Professor WAH Benjamin Wan Sang	華雲生	Elected 2010; resigned 2022
Ir Professor WOO Chung Ho	胡仲豪	Elected 2012; resigned 2018
Dr LIAO York	廖約克	Elected 2015; resigned 2019
Professor TANG Ching W	鄧青雲	Elected 2016; resigned 2021
Ir Professor LEUNG Tin Pui	梁天培	Elected 1994; deceased 2007
Ir Dr TAO Hsueh-chi Edwin	陶學祁	Elected 1994; deceased 2002
Ir KWONG Hon-sang	鄺漢生	Elected 1998; deceased 2019

Professor CHWANG Tse-yung Allen	章梓雄	Elected 2000; deceased 2007
Professor GAMBLING William Alexander		Elected 2000; deceased 2021
Professor TANG Wilson	鄧漢忠	Elected 2003; deceased 2012
Professor CHEUNG Mo Shing	張慕聖	Elected 2006; deceased 2014
Ir Dr NIP Kam Fan	聶錦勳	Elected 2008; deceased 2021
Professor TSENG Mitchell Miendger	曾明哲	Elected 2008; deceased 2019
Ir PUN Yen Shou Peter	潘衍壽	Elected 2010; deceased 2016
Ir Dr WONG Kwok Keung Peter	王國強	Elected 2018; deceased 2023

^{*} Resignation normally due to leaving Hong Kong.



APPENDIX 3

Basic Documents of HKAES

Memorandum of Association (Revised in April 2024)

- 1. The name of the Company is "Hong Kong Academy of Engineering Sciences 香港工程科學院" (hereinafter called "the Academy").
- 2. The registered office of the Academy will be situated in Hong Kong.
- 3. The objects for which the Academy established are the pursuit, encouragement and maintenance of excellence in the whole filed of engineering to useful purpose in order to promote the advancement of the science, art and practice of engineering for the benefit of the public, and in respect thereof and without limiting the generality of the above:-
 - (a) to provide means of assessing the constantly changing needs of Hong Kong and its environs and technical resources that can and should be applied to them; to sponsor programmes aimed at meeting these needs; and to encourage such engineering research and its application, provided that the research findings are disseminated to the public and the recipients of the fund of the Academy which are organisations shall prohibit the distribution of their income and property amongst their members to an extent at least as great as is imposed on the Academy under or by virtue of Clauses 4 and 7 of this Memorandum;
 - (b) to explore means for promoting cooperation in engineering in Hong Kong and abroad, with a view to securing concentration on problems significant to society and encouraging research (provided that the research findings are disseminated to the public) and development aimed at meeting them;

- (c) to advise the legislature and the executive branch of the Government or any department or agency thereof, or any other body, on matters of importance pertinent to engineering and the engineering community;
- (d) to give advice on matters of importance pertinent to engineering and to cooperate and foster relations with other organisations and bodies whether cognate or not at home or overseas in pursuit of similar objects;
- to promote the education and training of engineers and the awareness of the role of the engineer among the young people and general public in Hong Kong;
- (f) to serve Hong Kong in other respects in connection with significant problems in engineering and technology;
- (g) to recognise in an appropriate manner outstanding contributions to Hong Kong by leading engineers;
- (h) to do all such lawful acts and things as shall further the attainment of the objects of the Academy or the exercise of any of the powers hereby conferred upon it;

ALL of which including the first paragraph of this clause are hereinafter called "the objects".

AND solely for the purpose of furthering the objects and not otherwise the Academy has power:

(i) to establish, form, equip, maintain, support or assist laboratories, workshops, factories or other buildings and plants (stationary or

- mobile) for the purpose of research, testing, experimenting and other scientific or technical work in relation to the objects;
- to establish, provide and maintain rooms, offices, museums, libraries, lecture-halls, and other facilities for the carrying on of the Academy's activities;
- (k) to arrange, conduct or participate in training courses, seminars, symposia, lectures, conferences and other activities in relation to or having any bearing upon problems related to the objects;
- to produce, publish and distribute all such books, pamphlets, posters, magazines, periodicals, films, tapes, discs and other publications and means of dissemination of knowledge and opinion as the Academy thinks necessary for or conducive to the carrying out of the objects of the Academy;
- (m) to collect, arrange, index and publish information as to materials, methods, processes, patents, machines, appliances, tools and other things used in or known in regard to the objects or likely to be used in or known in regard to the objects or likely to be useful in or in connection with the objects and to establish or maintain a bureau of information with regard to the aforesaid matters for the benefit of members of the Academy and others;
- (n) to establish, endow, maintain and support scholarships, bursaries, lectureships, readerships, professorships and other foundations and provisions to enable or assist the study of or research into or dissemination of knowledge relating to the objects, provided that the research findings are disseminated to the public and the recipients of the fund of the Academy which are organisations shall prohibit the distribution of their income and property amongst their members to an extent at least as great as is

imposed on the Academy under or by virtue of Clauses 4 and 7 of this Memorandum;

- (o) to apply to any Government, statutory authority, public body, local government or other authority, corporation, company or person for and accept grants of money, or of real or personal property of any kind, gifts, subscriptions and other assistance for the carrying out of the objects of the Academy, and in particular (without limiting the generality of the foregoing) to obtain any grant or other assistance from and to make any arrangements with any governmental department or authority, university, statutory body or other institution or person for the carrying out of any research (provided that the research findings are disseminated to the public) or other investigation or work in any way related to the objects;
- (p) to acquire by purchase, hire, lease, exchange, application, grant, gift or otherwise howsoever:–
 - any real property and any estate or interest therein, whether such property be held in fee simple or be leasehold property or property held under any other tenure,
 - (ii) any easement or other right or interest in any such property,
 - (iii) any personal property,
 - (iv) any patents, patent rights or inventions, copyrights, designs, trade marks, secret processes, technical information, licences, franchises and other rights, privileges or concessions.

- (q) to enter into any arrangements with any Government or authority that may seem conducive to the attainment of the objects or any of them, and to accept from any such Government or authority any rights, privileges and concessions which the Academy may think it desirable to accept, and to carry out, exercise and comply with any such arrangements, rights, privileges and concessions;
- (r) subject to Clause 4 of this Memorandum, to appoint, employ, remove or suspend such professional or technical officers, research workers, instructors, supervisors, managers, clerks, secretaries, workmen and other persons as shall be necessary for the objects of the Academy;
- to establish and support or aid in the establishment and support (s) of associations, institutions, funds, trusts and conveniences calculated to benefit employees or past employees of the Academy and to grant pensions and allowances; and to make payments towards insurance provided that none of the fund paid to such associations, institutions, funds, trusts and conveniences shall be paid or transferred to, directly or indirectly, by way of dividend, bonus or otherwise to the members thereof; and to subscribe or guarantee money for the objects of the Academy;
- (t) to construct, improve, maintain, develop, work, manage, carry out, alter or control any houses, buildings, grounds, works or conveniences which may seem calculated directly or indirectly to advance the Academy's interests, and to contribute to, subsidise or otherwise assist and take part in the construction, improvement, maintenance, development, working, management, carrying out, alteration or control thereof;

- in furtherance of the objects of the Academy but not otherwise to lend money with or without security at interest rates from time to time determined by the Council of the Academy (provided that tight internal controls are in place in lending money);
- (v) in furtherance of the objects of the Academy but not otherwise to invest the moneys of the Academy in a proper and prudent manner as is from time to time determined by the Council of the Academy;
- (w) to borrow or raise or secure the payment of money in such manner as the Academy may think fit and to secure the same or the repayment or performance of any debt, liability, contract, guarantee or other engagement incurred or to be entered into by the Academy in any way and in particular by the issue of debentures perpetual or otherwise charged upon all or any of the Academy's property (both present and future), and to purchase, redeem or pay off any such securities;
- to make, draw, accept, endorse, discount, execute and issue promissory notes, bills of exchange, bills of lading and other negotiable or transferable instruments;
- (y) in furtherance of the objects of the Academy but not otherwise to sell, improve, manage, develop, exchange, lease, dispose of, turn to account or otherwise, deal with all or any part of the property and rights of the Academy and to grant licences to use patents, copyrights, designs, secret processes or other property of the Academy;
- (z) in furtherance of the objects of the Academy but not otherwise to take or hold mortgages, liens and charges to secure payment of the purchase price or any unpaid balance of the purchase price,

of any part of the Academy's property of whatsoever kind sold by the Academy or any money due to the Academy from purchasers and others:

- to take any gift of property whether subject to any special trust (aa) or not, for any one or more of the objects of the Academy but subject to the proviso in paragraph (o) of this clause;
- (bb) In furtherance of the objects of the Academy but not otherwise to guarantee the contract, liabilities or obligations of an organization or body provided that such organization or body shall have the objects similar to the Academy and that its constitution shall prohibit the distribution of income and property amongst its members to an extent as great as is imposed on the Academy under Clauses 4 and 7 of this Memorandum.
- to pay the costs, charges and expenses of the formation and (cc) establishment of the Academy;
- to do any of the things mentioned in this clause alone or in (dd) conjunction or association or cooperation with any other persons or bodies corporate or unincorporate;
- (ee) to procure the Academy to be registered or recognised in any part of the world;
- (ff) to do all lawful things and carry on any activity which are or is incidental or conducive to the carrying out of any of the objects and the exercise of any of the powers of the Academy;

Provided that:-

- In case the Academy shall take or hold any property which may be subject to any trusts, the Academy shall only deal with or invest the same in such manner as allowed by law, having regard to such trusts;
- (ii) The objects of the Academy shall not extend to the regulation of relations between workers and employers or organisations of workers and organisations of employers;
- (iii) The powers set forth in the Seventh Schedule of the predecessor Ordinance (as defined in section 2(1) of the Companies Ordinance, Cap. 622, are hereby excluded.
- 4. The income and property of the Academy whencesoever derived shall be applied solely towards the promotion of the objects of the Academy as set forth in this Memorandum of Association, and subject to subclauses 4(a)(i), 4(a)(ii), 4(a)(iii), 4(a)(iv) and 4(a)(v) below none of the income or property of the Academy shall be paid or transferred, directly or indirectly, by way of dividend, bonus or otherwise howsoever to any member of the Academy.
 - (a) Nothing herein contained shall prevent the payment in good faith:-
 - (i) of reasonable and proper remuneration to any officer or servant of the Academy or to any member of the Academy not being a member of the Council or the management or governing body of the Academy, in return for services actually rendered to it,
 - (ii) of interest, at a rate per year not exceeding 2 percent above the prime rate prescribed for the time being by the

Hongkong And Shanghai Banking Corporation Limited for Hong Kong dollar loans, on money lent by any member of the Academy or of its Council or management or governing body,

(iii) of rent for premises demised or let by any member of the Academy or of its Council or management or governing body:

Provided that the amount of the rent and the other terms of the lease must be reasonable and proper; and such member must withdraw from any meeting at which such proposal or the rent or other terms of the lease are under discussion.

- (iv) to a member, officer or servant of the Academy by way of reimbursement of reasonable out-of-pocket expenses properly incurred by him for the Academy when engaged on the affairs or business of the Academy,
- (v) of remuneration or other benefit in money or money's worth to a body corporate in which a member of the Academy or of its Council or management or governing body is interested solely by virtue of being a member of that body corporate by holding not more than onehundredth part of its capital or controlling not more than a one-hundredth part of its votes.
- (b) No person shall be bound to account for any benefit he may receive in respect of any payment properly paid in accordance with sub-clauses 4(a)(i), 4(a)(ii), 4(a)(iii), 4(a)(iv) and 4(a)(v) above.

- (c) No member of the Council or management or governing body of the Academy shall be appointed to any salaried office of the Academy or any office of the Academy paid by fees, and no remuneration or other benefit in money or money's worth shall be paid or given by the Academy to any member of such Council or management or governing body, except interest on money lent as mentioned in sub-clause 4(a)(iii), reinbursement of expenses as mentioned in sub-clause 4(a)(iv) and such payment as mentioned in sub-clause 4(a)(v), of sub-clause 4(a) of this clause.
- 5. The liability of the Members is limited.
- 6. Every member of the Academy undertakes to contribute to the assets of the Academy, if it is wound up while he is a member of the Academy or within one year after he ceases to be a Member for payment of the debts and liabilities of the Academy contracted before he ceases to be a Member and the costs, charges and expenses of winding up and for the adjustment of the rights of contributories among themselves, such amount as may be required not exceeding the sum of one hundred dollars.
- 7. If upon the winding up or dissolution of the Academy there remains after satisfaction of all its debts and liabilities any property whatsoever such property shall not be paid to or distributed amongst the members of the Academy but shall be given or transferred to some institution having objects similar to the objects of the Academy and which shall prohibit the distribution of its income and property among its members to an extent at least as great as is imposed on the Academy under or by virtue of Clause 4 hereof and this clause of this Memorandum, such institution to be determined (subject as provided hereunder) by the members of the Academy at or before the time of dissolution and in default thereof by such Judge of the High Court of the Hong Kong

Special Administrative Region as may have or acquire jurisdiction in the matter, and, if and so far as effect cannot be given to the foregoing provision, to some charitable object.

- 8. No addition, alteration or amendment shall be made to or in the Memorandum and the Articles of Association for the time being in force, unless such addition, alteration or amendment has been previously submitted to and approved by the Registrar of Companies in writing or is made under a direction given under section 104(2)(b) or 105 of the Companies Ordinance, Cap. 622.
- 9. True accounts shall be kept of the sums of money received and expended by the Academy and the matter in respect of which such receipt or expenditure takes place and of the property, credits and liabilities of the Academy and, subject to any reasonable restriction as to the time and manner of inspecting them that may be imposed in accordance with the regulations of the Academy for the time being in force, those accounts shall be open to the inspection of the Members. Once at least in every year those accounts shall be examined by a properly qualified auditor or auditors.
- 10. In the construction of this Memorandum words importing the singular number include the plural and vice versa, words importing the masculine gender include feminine or neuter genders, and words importing persons include corporations.

Articles of Association (Revised in April 2024)

Interpretation

1. In these Articles-

"Academy" means Hong Kong Academy of Engineering Sciences 香港工程科學院.

"Council" means a group of members of the Academy elected at the Annual General Meeting in accordance with the election requirements in the articles hereinafter.

"Company directors" means the directors registered under the Companies Ordinance (Chapter 622). The number of company directors shall not be less than five and shall be elected among the Council members

"Member" means any member of the Academy admitted in accordance with these Articles.

"Ordinance" means the Companies Ordinance (Cap. 622) of the Laws of Hong Kong, including the related subsidiary legislations.

"objects" means the objects of the Academy as defined in the Memorandum of Association.

"reporting documents" means the reporting documents for a financial year as specified in section 357(2) of the Ordinance.

"seal" means the common seal of the Academy.

"Secretary" means any person appointed to perform the duties of the secretary of the Academy.

Expressions referring to writing shall, unless the contrary intention appears, be construed as including references to printing, lithography, photography, and other modes of representing or reproducing words in a visible form.

Words importing the singular number include the plural and vice versa; words importing the masculine gender include the feminine and neuter genders and vice versa and words importing firm include unincorporated associations of any kind.

Unless the context otherwise requires, words or expressions contained in these Articles shall bear the same meaning as in the Ordinance or any statutory modification thereof in force at the date at which these Articles become binding on the Academy.

Members

- 2A. The Academy may invite a distinguished person to be the Patron of the Academy for a specific period to be determined by Council provided that such Patron shall have no right to vote at any meeting and shall not have any executive power or function.
- 2B. The Members shall consist of Fellows, Founding Fellows, Honorary Fellows and Non-Resident Fellows. The abbreviation of all grades of Fellows of the Academy shall be "FHKEng".
- 2C. Persons not being Fellows who in the opinion of the Council have made or are making a distinguished contribution to the practice of engineering shall be eligible for election as Honorary Fellows. The number of Honorary Fellows shall not at any time exceed five. Engineers who are

not Hong Kong Permanent Residents but are in the opinion of the Council of international distinction in engineering shall be eligible to be elected as Non-Resident Fellows. The number of Non-Resident Fellows shall not at any time exceed ten.

- For the purposes of registration, the number of Members with which the Academy proposes to be registered is declared not to exceed 50, but the Council may from time to time register an increase of Members beyond the number aforesaid.
- 4. The Founding Fellows shall be as follows:

Sir Sze-yuen Chung, GBE, FEng, J

Dr. Kenneth Chan Nai-keong, CBE, FEng, JP

Professor Cheung Yau-kai, FEng

Professor Charles K. Kao, FEng

Mr. David A. Morris, FEng, JP

Mr. Stewart M. John, OBE, FEng

Dr. Samuel Wong Ping-wai, MBE, FEng, JP

Mr. Bengt Delaryd, MSc.

- 5. Subject to these Articles, the members of the Academy shall be the Founding Fellows named above and such other persons as the Council admits to membership under the regulations set forth in the Schedule to these Articles.
- 6. No person may hereafter become a Member unless he shall have been elected as such by the Academy in general meeting in accordance with these Articles and no candidate shall be put forward for election unless his name shall have been submitted to the Council in the manner prescribed in the regulations attached as the Schedule hereto, as amended

from time to time provided that not more than eight persons shall be elected as Members in any one year. A person who has not been elected in any year may be put forward for election in subsequent years as the said regulation provided.

- A person elected as aforesaid shall not become entitled to the privileges
 of membership until he has paid the appropriate entrance fee and
 subscription, signed the appropriate roll and agreed to abide by the
 Memorandum and Articles of Association of the Academy.
- 8. The Council may order the removal from the Roll of Members of the name of any Member whose subscription is in arrears for not less than three months provided that such Members' names shall be reinstated on the Roll of Members on payment of the outstanding subscriptions. The Council may also order the removal from the said roll of the name of a Member who in the opinion of the Council has been guilty of conduct unfitting in a Member of the Academy, provided that no person's name shall be removed from any roll for this reason unless he shall have been given a reasonable opportunity of calling witnesses and being heard in his own defence by a committee established by the Council comprising Members of which not less than one-third may be members of the Council. The Council may in its discretion restore the name of any person so removed and may impose conditions or requirements for such restoration. On the removal of the name of any person from the roll as aforesaid he shall cease to be a Member in all respects. Provided always that any Members whose name is removed from the Roll of Members pursuant to this Article 8 shall be entitled to appeal against such removal to and apply for reinstatement by the Members at the next General Meeting following such removal.
- 9. Members shall pay such entrance fees and annual subscriptions as the Council may from time to time determine and as may be authorised by the Academy in general meeting.

10. Every Member shall at all times so order his conduct as to uphold the dignity and reputation of the Academy and of his profession and shall comply with his obligations to the Academy and the Memorandum and Articles of Association of the Academy.

General Meetings

- 11. Subject to Section 107 of Schedule 11 to and sections 611, 612 and 613 of the Ordinance, the Academy must, in respect of each financial year of the Academy, hold a general meeting as its annual general meeting in accordance with section 610 of the Ordinance. The annual general meeting shall be held at such time and place as may be prescribed by the Council.
- 12. All general meetings other than annual general meetings shall be called extraordinary general meetings.
- 13. If the Council is required to call a general meeting under section 566 of the Ordinance, it must call it in accordance with section 567 of the Ordinance. If the Council does not call a general meeting in accordance with section 567 of the Ordinance, the Members who requested the meeting, or any of them representing more than one half of the total voting rights of all of them, may call a general meeting in accordance with section 568 of the Ordinance.

Notice of General Meetings

14. Not less than twenty one days notice in writing of all general meetings shall be given to every Member entitled to attend. The notice shall be exclusive of the day on which it is served or deemed to be served and of the day for which it is given, and shall specify the place, the day and the hour of meeting and, in case of special business, the general nature of that business and shall be given in the manner hereinafter mentioned

or in such other manner, if any, as may be prescribed by the Academy in general meeting:

Provided that a meeting of the Academy shall, notwithstanding that it is called by shorter notice than that specified in this Article be deemed to have been duly called if it is so agreed

- (a) in the case of a meeting called as the annual general meeting, by all the Members entitled to attend and vote thereat; and
- (b) in the case of any other meeting, by a majority in number of the Members having a right to attend and vote at the meeting, being a majority together representing not less than 95 per cent of the total voting rights of all the Members entitled to attend and vote at that meeting.
- 15. The accidental omission to give notice of a meeting to, or the non-receipt of notice of a meeting by, any person entitled to receive notice shall not invalidate the proceedings at that meeting.

Proceedings at General Meetings

- 16. All business shall be deemed special that is transacted at an extraordinary general meeting, and also all that is transacted at an annual general meeting, with the exception of the consideration of the accounts, balance sheets, and the reports of the Council and auditors, the election of members of the Council in the place of those retiring and the appointment of, and the fixing of the remuneration of, the auditors.
- 17. No business shall be transacted at any general meeting unless a quorum of Members is present at the time when the meeting proceeds to business and continues to be present until the conclusion of the meeting; save as herein otherwise provided, such number of Members present

in person as represents one-quarter in number of the total number of Members but in any event not less than 5 Members.

- 18. If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if convened upon the requisition of Members, shall be dissolved; in any other case it shall stand adjourned to the same day in the next week, at the same time and place, or to such other day and at such other time and place as the Council may determine, and if at the adjourned meeting a quorum is not present within half an hour from the time appointed for the meeting the Members present shall be a quorum.
- 19. The President of the Academy shall preside as chairman at every general meeting of the Academy, or if he shall not be present within 15 minutes after the time appointed for the holding of the meeting or is unwilling to act or is absent from Hong Kong or has given notice to the Academy of his intention not to attend the meeting, the members of the Council present shall elect one of their number present to be chairman of the meeting and in default of their so doing the Members present shall choose one of their number to be chairman of the meeting.
- 20. The chairman may, with the consent of any meeting at which a quorum is present (and shall if so directed by the meeting), adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.
- 21. At any general meeting a resolution put to the vote of the meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded:

- (a) by the chairman; or
- (b) by at least one-tenth of the Members present but in any event not less than 5 Members present in person or by proxy; or
- (c) by Members present in person or by proxy and representing not less than one-tenth of the total voting rights of all the Members having the right to vote at the meeting.

Unless a poll be so demanded a declaration by the chairman that a resolution has on a show of hands been carried or carried unanimously, or by a particular majority, or lost and an entry to that effect in the book containing the minutes of proceedings of the Academy shall be conclusive evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against such resolution.

The demand for a poll may be withdrawn

- 22. Except as provided in Article 24, if a poll is duly demanded it shall be taken in such manner as the chairman directs, and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded.
- 23. In the case of an equality of votes, whether on a show of hands or on a poll, the chairman of the meeting at which the show of hands takes place or at which the poll is demanded, shall be entitled to a second or casting vote.
- 24. A poll demanded on the election of a chairman, or on a question of adjournment, shall be taken forthwith. A poll demanded on any other question shall be taken at such time as the chairman of the meeting directs, and any business other than that upon which a poll has been demanded may be proceeded with pending the taking of the poll.

Votes of Members

- 25. Every Member present in person or by proxy shall have one vote whether on a poll or on a show of hands.
- 26. No Member shall be entitled to vote at any general meeting unless all moneys payable by him to the Academy in his capacity as Member, and which have been outstanding for more than one month after they fell due for payment, have been paid.
- 27. At any general meeting votes may be given either personally or by proxy. The instrument appointing a proxy shall be in writing under the hand of the appointor or of his attorney duly authorized in writing or, if the appointor is a corporation, either under seal or under the hand of an officer or attorney duly authorized. A proxy need not be a Member of the Academy.
- 28. The instrument appointing a proxy and the power of attorney or other authority, if any, under which it is signed or a notarially certified copy of that power or authority shall be deposited at the registered office of the Academy, not less than 24 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed for the taking of the poll, and in default the instrument of proxy shall not be treated as valid.

The Council

- 29. The President of the Academy shall as hereinafter mentioned be elected and shall hold office for not more than three years from the date of his election and shall not be eligible for re-election as President.
- 30. There shall be appointed not more than two Senior Vice-Presidents, not more than three Vice-Presidents, an Honorary Secretary and an Honorary

Treasurer who shall be elected and shall hold office as hereinafter mentioned.

- 31. The Academy may if it thinks fit elect from time to time Honorary Secretaries having such functions and designations as the Academy may determine, such as:
 - (a) A Honorary Secretary for Mechanical Engineering;
 - (b) A Honorary Secretary for Civil Engineering;
 - (c) A Honorary Secretary for Electrical Engineering;
 - (d) A Honorary Secretary for Process Engineering; and
 - (e) A Honorary Secretary for External Affairs.
- 32. The Council shall consist of:-
 - (a) the following ex-officio Members, namely the President, the Immediate Past President, the Senior Vice-Presidents and the Vice-Presidents, the Honorary Secretary and the Honorary Treasurer; and
 - (b) the number of the members of the Council including the exofficio Members should not be less than eight nor more than twenty-one and they are to be elected by the Members of the Academy in general meeting from among their own number provided that no person who is a paid official of the Academy shall be a member of the Council. Each of the members of the Council so elected shall be deemed to be the 'director' of the Academy for the purpose of the Ordinance.

Until such time as the above are elected, the Council shall comprise the Founding Fellows or such persons as are elected by the Founding Fellows. Notwithstanding the foregoing, the holder of any of the offices referred to above may concurrently hold any one or more other offices of the Academy including the office of Secretary.

- 33. (a) The President shall retire at the annual general meeting first occurring after the expiration of three years from the date of his appointment and shall not be eligible for re-election.
 - (b) the other ex-officio Members and one-third of the ordinary members of the Council for the time being shall retire from office at the annual general meeting first occurring after the expiration of three years from the incorporation of the Academy and at the annual general meeting in each subsequent year one third of the members of the Council for the time being, or if their number is not 3 or a multiple of 3, then the number nearest one-third, shall retire from office.
 - (c) The members of the Council to retire in every year shall be those who have been longest in office since their last election, but as between persons who became members of the Council on the same day those to retire shall (unless they otherwise agree among themselves) be determined by lot.
 - (d) A retiring member of the Council shall be eligible for re-election for only one further consecutive period of 3 years in the same capacity.
- 34. (a) Not later than one month before the next annual general meeting the Council shall prepare a list of candidates to fill all vacancies among the members of the Council and officers for the following year, whose election shall be effective from the date of the next

annual general meeting at which their names shall be submitted to the Academy for election together with the names of any other candidates which may have been submitted to the Secretary for inclusion in the ballot paper in accordance with article 34(b) below.

- (b) The list of candidates shall be sent out with the notice of the annual general meeting and notice shall be given to the Members that any six Members may nominate additional candidates for election and those will be added to the said list provided that the nominations are received by the Secretary not less than fourteen days prior to the annual general meeting.
- (c) The Council in preparing the said list shall take into account the fields of activity of the members of the Council so as to preserve so far as possible a reasonable balance among members of the Council and to reflect the inter-disciplinary character of the Academy.
- (d) The Council shall appoint scrutineers to count the votes in the event of a vote having to be taken in the election either of officers or other members of the Council.
- (e) In the event of a vote being taken as aforesaid the members of the Council shall be elected by simple majority vote subject only to the condition that in the resulting Council there shall so far as possible be not less than one Member from each of the following four branches of the engineering profession, namely Mechanical Engineering, Civil Engineering, Electrical Engineering and Process Engineering.

- (f) At the date of the coming into force of these Articles the said branches shall include the disciplines set out below:-
 - (i) Mechanical Engineering: Mechanical, aeronautical, marine and production engineering;
 - (ii) Civil Engineering: Civil, structural, and municipal engineering
 - (iii) Electrical Engineering: Electrical, electronic and control engineering
 - (iv) Process Engineering: Chemical, fuel, mining, process and metallurgical engineering
- (g) The Council may at any time with the approval of the Academy in general meeting declare that any of the aforementioned disciplines or another engineering discipline shall be considered or shall cease to be considered for the purposes of these Articles as comprised in any or a different branch (including any new branch) of the engineering profession and this Article shall thereupon take effect accordingly.
- 35. The Council may make, alter, add to or revoke regulations for the election of Members, officers and members of the Council, for the payment of subscriptions, the qualifications and conduct of Members and for the conduct of any activity of the Academy, provided that any such regulations shall be made consistently with the terms of the Memorandum and Articles of Association of the Academy and that such regulations may be modified or set aside by the Members in general meeting.



Powers and Duties of the Council

- 36. The management of the affairs and operations of the Academy shall be vested in the Council which, in addition to the powers and authorities expressly conferred upon it by these Articles, may exercise all such powers of the Academy as are not, by the Ordinance or by these Articles, required to be exercised by the Academy in general meeting, subject nevertheless to the provisions of the Ordinance or these Articles and to such regulations, being not inconsistent with the aforesaid provisions, as may be prescribed by the Academy in general meeting; but no regulation made by the Academy in general meeting shall invalidate any prior act of the Council which would have been valid if that regulation had not been made.
- 37. The Academy may from time to time and at any time to delegate part of its powers by forming a committee in which must comprise the members from the Academy or the Council, to do all things and carry on any activity which are or is incidental or conducive to the carrying out of any of the objects and the exercise of any of the powers of the Academy for such period and subject to such conditions as the Council may think fit provided that such committee shall follow all the directions and instructions imposed by the Council from time to time.
- 38. All cheques, promissory notes, drafts, bills of exchange and other negotiable instruments, and all receipts for moneys paid to the Academy, shall be signed, drawn, accepted, endorsed, or otherwise executed, as the case may be, by not less than two officers for the time being of the Council.
- 39. For the objects of the Academy as set out in Clause 3 of the Memorandum of Association, the Council may exercise all the powers of the Academy to borrow money and to mortgage or charge its undertaking and property, or any part thereof, and to issue debentures and

other securities whether outright or as security for any debt, liability or obligation of the Academy.

- 40. The Council shall cause minutes to be made in books provided for the purpose:
 - (a) of all appointments of officers and members of the Council made by the Council;
 - (b) of the names of the members of the Council present at each meeting of the Council and of any committee of the Council;
 - (c) of all resolutions and proceedings at all meetings of the Academy, and of the Council, and of committees of the Council;

and every member of the Council present at any meeting of the Council or committee of the Council shall sign his name in a book to be kept for that purpose.

Disqualification of Members of the Council

- 41. The office of a member of the Council shall be vacated if the member of the Council:
 - (a) holds any other office of profit under the Academy; or
 - (b) becomes bankrupt or makes any arrangement or composition with his creditors generally; or
 - (c) he shall cease to be a member of the Council or director under the Ordinance or under the Companies (Winding up and Miscellaneous Provisions) Ordinance, Cap.32, or is prohibited from being a director by law; or

- (d) he is found lunatic or becomes of unsound mind; or
- (e) resigns his office by notice in writing given in accordance with Section 464(5) of the Ordinance to the Secretary; or
- (f) shall for more than six months have been absent without permission of the Council from meetings of the Council held during that period and the Council resolves that his office be vacated; or
- (g) is directly or indirectly interested in any contract (being a contract of significance in relation to the Academy's operations) with the Academy and, if his interest in the contract is material, fails to declare the nature of his interest in a manner required by section 536 of the Ordinance; or
- (h) ceases to be a member of the Academy; or
- (i) is removed from office by a special resolution of the Academy passed in general meeting.

A Member of the Council shall not vote in respect of any contract in which he is interested or any matter arising thereout, and if he does so vote his vote shall not be counted.

- 42. The Academy may from time to time by ordinary resolution increase or reduce the number of members of the Council, and may also determine in what rotation the increased or reduced number is to go out of office.
- 43. The Council shall have power at any time, and from time to time, to appoint any person to be a member of the Council, to fill a casual vacancy. Any member of the Council so appointed shall hold office only until the next following annual general meeting, and shall then be eligible for re-election.

- 44. The Academy may by special resolution remove any member of the Council before the expiration of his period of office notwithstanding anything in these Articles or in any agreement between the Academy and such person.
- 45. The Academy may by ordinary resolution appoint another person in place of a member of the Council removed from office under the immediately preceding Article. Without prejudice to the powers of the Council under Article 43 the Academy in general meeting may appoint any person to be a member of the Council to fill a casual vacancy. The person appointed to fill such a vacancy shall be subject to retirement at the same time as if he had become a member of the Council on the day on which the member of the Council in whose place he is appointed was last elected a member of the Council.

Proceedings of The Council

- 46. The Council may meet together for the despatch of business, adjourn, and otherwise regulate its meetings, as it thinks fit. Questions arising at any meeting shall be decided by a majority of votes. In the case of an equality of votes the chairman shall have a second or casting vote. A member of the Council may, and the Secretary on the requisition of a member of the Council shall, at any time summon a meeting of the Council. It shall not be necessary to give notice of a meeting of the Council to any members of the Council for the time being absent from Hong Kong.
- 47. The quorum necessary for the transaction of the business of the Council may be fixed by the Council, and unless so fixed shall be one-third in number of the total number of the members of the Council but in no event less than 3 members of the Council.
- 48. The members of the Council may act notwithstanding any vacancy in their body, but, if and so long as their number is reduced below the

number fixed by or pursuant to the Articles as the necessary quorum of the Council, the members of the Council may act for the purpose of increasing the number of members of the Council to that number, or of summoning a general meeting of the Academy, but for no other purpose.

- 49. The President shall be the chairman for all Council meetings; but, if at any meeting the chairman is not present within ten minutes after the time appointed for holding the same, the members of the Council present may choose one of their number to be chairman of the meeting.
- 50. The Council may delegate any of its powers to committees consisting of such member or members of their body as they think fit; any committee so formed shall in the exercise of the powers so delegated conform to any regulations that may be imposed on it by the Council.
- 51. A committee may elect a chairman who shall preside at its meetings; if no such chairman is elected, or if at any meeting the chairman is not present within ten minutes after the time appointed for holding the same, the members present may choose one of their numbers to be chairman of the meeting.
- 52. A committee may meet and adjourn as it thinks proper. Questions arising at any meeting shall be determined by a majority of votes of the members present, and in the case of an equality of votes the chairman shall have a second or casting vote.
- 53. All acts done by any meeting of the Council or of a committee of the Council, or by any person acting as a member of the Council, shall notwithstanding that it be afterwards discovered that there was some defect in the appointment of any such person acting aforesaid, or that they or any of them were disqualified, be as valid as if every such person

had been duly appointed and was qualified to be a member of the Council.

54. A resolution in writing, signed by all the members of the Council for the time being entitled to receive notice of a meeting of the Council, shall be as valid and effectual as if it had been passed at a meeting of the Council duly convened and held.

Secretary

- 55. Subject to Clause 4 of the Memorandum of Association, the Secretary may be appointed by the Council for such term and upon such conditions as the Council may think fit; and any Secretary so appointed may be removed by the Council. The Secretary may hold other offices of the Academy concurrently with his appointment as Secretary provided that he should not receive any salary or remuneration or other benefit in money or money's worth from the Academy.
- 56. A provision of the Ordinance or these Articles requiring or authorizing a thing to be done by or to a director or member of the Council and the Secretary shall not be satisfied by its being done by or to the same person acting both as director or member of the Council and as, or in place of, the Secretary.

The Seal

57. The Council shall provide for the safe custody of the seal, which shall only be used by the authority of the Council or of a committee of the Council authorized by the Council in that behalf, and every instrument to which the seal shall be affixed shall be signed by a member of the Council and shall be countersigned by the Secretary or by a second member of the Council.

Accounts

- 58. The Council must keep accounting records that:
 - (i) comply with Subdivision 2 of Division 4 of Part 9 of the Ordinance, and
 - (ii) enable the members of the Council to prepare financial statements for each financial year in accordance with Subdivision 3 of Division 4 of Part 9 of the Ordinance.
- 59. The accounting records of the Academy shall be kept at the registered office of the Academy, or, subject to the provisions of the Ordinance, at such other place or places as the Council thinks fit, and shall always be open to the inspection of the members of the Council.
- 60. The Council shall from time to time determine whether and to what extent and at what times and places and under what conditions or regulations the accounts and books of the Academy or any of them shall be open to the inspection of Members not being members of the Council, and no such Members shall have any right of inspecting any account or book or document of the Academy except as conferred by statute or authorized by the Council or by the Academy in general meeting.
- 61. The Council shall from time to time in accordance with the provisions of the Ordinance, cause to be prepared and to be laid before the Academy in annual general meeting the reporting documents as are required by the Ordinance.
- 62. A copy of the reporting documents which is to be laid before the Academy in annual general meeting, shall not less than 21 days before the date of the meeting be sent to every member of the Academy:

provided that this Article shall not require a copy of those documents to be sent to any person of whose address the Academy is not aware.

Audit

63. Auditors shall be appointed and their duties regulated in accordance with the provisions of the Ordinance.

Notices

- 64. A notice may be given by the Academy to any Member either personally or by sending it by post to him or to his registered address, or (if he has no registered address within Hong Kong) to the address, if any, within Hong Kong supplied by him to the Academy for the giving of notice to him. Where a notice is sent by post, service of the notice shall be deemed to be effected by properly addressing, prepaying and posting a letter containing the notice, and to have been effected in the case of a notice of a meeting at the expiration of 48 hours after the letter containing the same is posted, and in any other case at the time at which the letter would be delivered in the ordinary course of post.
- 65. Notice of every general meeting shall be given in any manner hereinbefore authorized to—

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- (a) every Member except those Members who (having no registered address within Hong Kong) have not supplied to the Academy an address within Hong Kong for the giving of notices to them; and
- (b) the auditors for the time being of the Academy.

No other person shall be entitled to receive notice of general meetings.



66. Directors' Indemnity

- (1) Only in furtherance of the objects of the Academy but not otherwise, a director or former director of the Academy may be indemnified out of the Academy's assets against any liability incurred by the director to a person other than the Academy or an associated company of the Academy in connection with any negligence, default, breach of duty or breach of trust in relation to the Academy or associated company (as the case may be).
- (2) Article 66 (1) only applies if the indemnity does not cover
 - (a) any liability of the director to pay
 - (i) a fine imposed in criminal proceedings; or
 - (ii) a sum payable by way of penalty in respect of noncompliance with any requirement of a regulatory nature; or
 - (b) any liability incurred by the director
 - in defending criminal proceedings in which the director is convicted;
 - in defending civil proceedings brought by the Academy, or an associated company of the Academy, in which judgment is given against the director;
 - (iii) in defending civil proceedings brought on behalf of the Academy by a member of the Academy or of an associated company of the Academy, in which judgment is given against the director;

- (iv) in defending civil proceedings brought on behalf of an associated company of the Academy by a member of the associated company or by a member of an associated company of the associated company, in which judgment is given against the director; or
- in connection with an application for relief under section 903 or 904 of the Ordinance in which the Court refuses to grant the director relief.
- (3) A reference in Article 66 (2)(b) to a conviction, judgment or refusal of relief is a reference to the final decision in the proceedings.
- (4) For the purposes of Article 66(3), a conviction, judgment or refusal of relief
 - (a) if not appealed against, becomes final at the end of the period for bringing an appeal; or
 - (b) if appealed against, becomes final when the appeal, or any further appeal, is disposed of.
- (5) For the purposes of Article 66 (4)(b), an appeal is disposed of if
 - (a) it is determined, and the period for bringing any further appeal has ended; or
 - (b) it is abandoned or otherwise ceases to have effect.

67. Directors' Insurance

Only in furtherance of the objects of the Academy but not otherwise, the directors may decide to purchase and maintain insurance, at the expense of the Academy, for a director of the Academy, or a director of an associated company of the Academy, against –

- (a) any liability to any person attaching to the director in connection with any negligence, default, breach of duty or breach of trust (except for fraud) in relation to the Academy or associated company (as the case may be); or
- (b) any liability incurred by the director in defending any proceedings (whether civil or criminal) taken against the director for any negligence, default, breach of duty or breach of trust (including fraud) in relation to the Academy or associated company (as the case may be).

68. Restriction on formation of subsidiary

The Academy shall not form a subsidiary or hold a controlling interest in another body corporate, unless the formation of such a subsidiary or the holding of such a controlling interest has previously been approved by the Registrar of Companies in writing.

69. Declaration of directors' interest

A. Conflict of interest

- (1) This article applies if-
 - (a) a director is in any way (directly or indirectly) interested in a transaction, arrangement or contract with the Academy that is significant in relation to the Academy's operations; and
 - (b) the director's interest is material.
- (2) The director must declare the nature and extent of the director's interest to the other directors in accordance with section 536 of the Ordinance.
- (3) The director and the director's alternate must neither
 - (a) vote in respect of the transaction, arrangement or contract in which the director is so interested: nor
 - (b) be counted for quorum purposes in respect of the transaction, arrangement or contract.
- (4) Article 69A(3) does not preclude the alternate from
 - voting in respect of the transaction, arrangement or contract on behalf of another appointor who does not have such an interest;
 and
 - (b) being counted for quorum purposes in respect of the transaction, arrangement or contract.

- (5) If the director or the director's alternate contravenes Article 69A(3)(a), the vote must not be counted.
- (6) Article 69A(3) does not apply to-
 - (a) an arrangement for giving a director any security or indemnity in respect of money lent by the director to or obligations undertaken by the director for the benefit of the Academy;
 - (b) an arrangement for the Academy to give any security to a third party in respect of a debt or obligation of the Academy for which the director has assumed responsibility wholly or in part under a quarantee or indemnity or by the deposit of a security; or
 - (c) Subject to Clause 4 of the Memorandum of Association, an arrangement under which benefits are made available to employees and directors or former employees and directors of the Academy or any of its subsidiaries, which do not provide special benefits for directors or former directors.
- (7) A reference in this article to a transaction, arrangement or contract includes a proposed transaction, arrangement or contract.

B. Supplementary provisions as to conflicts of interest

- (1) Subject to Clause 4 of the Memorandum of Association, a director may hold any other office or position under the Academy (other than the office or auditor) in conjunction with the office of director for a period and on terms that the directors determine.
- (2) A director or intending director is not disqualified by the office of director from contracting with the Academy:–

- (a) with regard to the tenure of the other office or position mentioned in Article 69B(1); or
- (b) as vendor, purchaser or otherwise.
- (3) The contract mentioned in Article 69B(2) or any transaction, arrangement or contract entered into by or on behalf of the Academy in which any director is in any way interested is not liable to be avoided.
- (4) A director who has entered into a contract mentioned in Article 69B(2) or is interested in a transaction, arrangement or contract mentioned in Article 69B(3) is not liable to account to the Academy for any profit realized by the transaction, arrangement or contract by reason of
 - (a) the director holding the office; or
 - (b) the fiduciary relation established by the office.
- (5) Article 69B(1), (2), (3) or (4) only applies if the director has declared the nature and extent of the director's interest under the Article 69B(1), (2), (3) or (4) to the other directors in accordance with section 536 of the Companies Ordinance.
- (6) A director of the Academy may be a director or other officer of, or be otherwise interested in
 - (a) any company promoted by the Academy; or
 - (b) any company in which the Academy may be interested as shareholder or otherwise.
- (7) Subject to the Companies Ordinance, the director is not accountable to the Academy for any remuneration or other benefits received by the

director as a director or officer of, or from the director's interest in, the other company unless the Academy otherwise directs.

THE ELECTION PROCEDURE FOR MEMBERSHIP OF THE ACADEMY

- 1. The Council shall appoint, from among the Members, a Standing Committee of a chairman and four Members for the consideration of the list of candidates for the Academy ("the Membership Committee"). Each such Member shall be knowledgeable in a different one of the four principal fields of engineering referred to below.
- 2. The chairman, if not already a member of the Council, shall become a member of the Council ex-officio. It shall be the chairman's responsibility, from the deliberations of the Membership Committee, to submit a list of not more than eight names of candidates to the Council for approval before each annual general meeting.
- 3. Each Member shall undertake responsibility for consideration and promotion of candidates in his field being one of the four principal fields of engineering as follows:-
 - 3.1 Mechanical, aeronautical, marine and production engineering.
 - 3.2 Civil, structural, and public works engineering.
 - 3.3 Electrical, electronic and control engineering and computing.
 - 3.4 Chemical, fuel, process, mining and metallurgical engineering.

In the event that any candidate is involved in a field of engineering, whether newly established or not, which is not considered by the Membership Committee to be strictly within the four principal fields set out above, the Member responsible for the field of engineering which

the Membership Committee considers to be most akin to the field of engineering in which the candidate is involved, shall be responsible for the consideration and promotion of the candidate.

- 4. To assist them in their work each of the four members of the Membership Committee may nominate a panel with the prior approval of the Council ("the Panel") of not less than three nor more than eight Members ("the Panel Members") and each of these Panel Members shall be expert in the branch of engineering which falls to be considered by that Panel.
- Where one or more Panels are nominated in accordance with paragraph 4 above, the chairman of the Membership Committee shall have the right to attend, but without voting rights, the meetings of all such Panels.
- Taking one year with another, there shall be a rotation of the chairman
 and members of the Membership Committee and each of its Panels such
 that no one individual normally serves longer than three years in any
 appointment.
- 7. Except as prescribed in the procedure set out in paragraph 11 below, all candidates, who must have attained a status equivalent, in the opinion of the Membership Committee, to that of Fellows of the Hong Kong Institution of Engineers, shall be recommended by a citation on a prescribed form signed by four or more Members of whom two at least shall certify their recommendation from personal knowledge, but the chairman of the Membership Committee shall have power to sign a citation on behalf of a sponsoring Member upon receiving a request from him to do so. Provided always that all such candidates must, in the opinion of the Membership Committee, have contributed significantly to the advancement of engineering science, the engineering profession or

the engineering industry and have achieved a status of distinction in his particular field of engineering.

- 8. The citation shall specify the name, rank, profession, qualifications, nationality, date of birth and usual place of residence of the candidate. It shall also include a statement, not less than 100 nor exceeding 500 words, of the candidate's personal achievements in engineering.
- The citation when complete shall be delivered to the Secretary and shall be registered, with the date of delivery, in a book to be kept for that purpose.
- 10. Of the Members who sign a citation from personal knowledge one shall undertake the responsibility to act as, and he shall be the channel of communication with the candidate.
- 11. In January of each calendar year the Secretary to the Academy shall write to the President of the Hong Kong Institution of Engineers inviting the nominations of new candidates by him using the prescribed Proposal Forms. The form may be signed by the President of the Institution acting as proposer even if he is not a Member, but it must additionally be signed by three Members who are prepared to give support and who are able to speak with personal knowledge of the candidate.
- 12. The details of each candidate, after being registered by the Secretary, shall be circulated to all members of the Membership Committee which, after considering the advice of its appropriate Panel shall consider whether or not there is a case for submitting the candidate's name to the Council as one which should be considered for election by the Members at the annual general meeting.
- 13. The chairman of the Membership Committee shall submit to the Council for approval the list of names of candidates proposed to be put to the

annual general meeting for election. By majority vote any candidate referred back by the Council for further consideration shall not be replaced on the list by another candidate.

- 14. Not less than 28 days prior to the annual general meeting, the Secretary shall send to each Member the list, in alphabetical order, of those candidates together with supporting citations recommended by the Council for election to the Academy.
- 15. Each Member present and eligible to vote at the annual general meeting shall be given a single ballot paper with the full list of candidates for election printed on it. Each Member shall have the opportunity of deleting the names from the list of any candidates he considers unsuitable for election at that meeting and shall then place his ballot paper in the ballot box provided.
- 16. When all Members wishing to do so have voted, the ballot-box will be opened in the presence of at least two of the three scrutineers previously appointed by the Secretary and the scrutineers will record the number of times the name of any candidate has been deleted. The President, or in his absence the chairman of the annual general meeting shall then declare elected to the Academy all those candidates for whom the sum of the deletions does not exceed fifteen per cent of those Members present and eligible to vote.
- 17. If he is not elected to the Academy in the first year the citation of each candidate in the list shall be reconsidered in six successive years but after that time a new citation shall not be accepted until after three annual elections shall have taken place; such new citation shall not be valid for more than three successive elections; the cycle repeating thereafter.
- 18. Every person normally resident in Hong Kong who is elected a Member shall, wherever possible, appear for his admission at the New Members'

Dinner or otherwise by arrangement at the Academy's offices before the next annual general meeting after his election.

- 19. The admission of any Member into the Academy shall be in the following manner, he having first made the payments required by the Articles. He shall subscribe the obligation in the Register of Members and be introduced to the President.
- 20. No new Member shall be entitled to vote at any election or meeting of the Academy until he has been admitted in the manner specified above.
- 21. Every person elected to the Academy shall before his admission subscribe the obligation in the following words:–

"We, who have hereunto subscribed do hereby promise each for himself that we will endeavour to promote the objects of the Hong Kong Academy of Engineering Sciences and to pursue the ends for which the same was founded; that we will observe the Memorandum and Articles of Association and the regulations of the Academy. Provided under his hand that he desired to withdraw from the Academy, he shall be free from this obligation for the future."

(Any amendment will also require prior written approval from the Registrar of Companies under S.21(6)(a) of the Companies Ordinance.)

Criteria for Election to Fellowship (Adopted by Council in April 2024)

- 1. To fulfill its objectives and purposes, the Academy is, by design and necessity, a unique institution whose membership must be diverse across various engineering roles and disciplines.
- 2. Therefore, membership shall comprise individuals such as practicing engineers, educators, researchers, managers, and government officials

who have made notable personal contributions to a spectrum of activities, including education, research, innovation and translation to practice, production, operations, and management.

- 3. The main criteria for membership in the HKAES are outstanding personal contributions AND accomplishments in one OR both of these categories:
 - Engineering research, innovation, translation to practice, practice, or education, which may include, where appropriate, significant scholarly contributions to engineering literature.
 - b. Pioneering new engineering fields, making major advancements in traditional engineering fields, or introducing/developing/advancing innovative approaches to engineering education.
- 4. Such achievements may be in specific technical areas, or in the integration of various technologies, or in the noteworthy leadership of groups driving significant innovation or technological advancement, or a combination thereof. The achievements must be clearly delineated and validated by broad recognition within the pertinent engineering community.
- While professional integrity and service to the profession and public are commendable and important, these attributes alone do not meet the criteria for membership.
- Roles that are predominantly managerial, financial, or political in nature do not qualify as sufficient credentials unless they are accompanied by significant contributions to the field of engineering.
- 7. Holding fellowships in other professional organizations or societies does not automatically qualify an individual for membership in HKAES.

8. Achieving commercial success or holding a high position within a company, without direct technical or innovative engineering contributions, may not be considered as a qualifying achievement.

Guidance Notes for Election of Fellows

- The Proposer must clearly articulate the candidate's personal engineering achievements and ensure all sections of the submission are complete. The citation is the primary information for consideration in the election process. All citations and references are scrutinised and investigations, when necessary, are carried out by the Membership Committee and its Panels.
- 2. Candidates may be approached for a curriculum vitae (c.v.) and a summary of their engineering achievements throughout their career. Candidates may be informed that they are being put forward for possible election but the Proposer should emphasise that the election is not guaranteed. This approach is at the Proposer's discretion and the candidate will be expected to maintain total confidentiality. Any canvassing by the candidate, proposer and supporter may negatively affect their standing; furthermore, it will compromise the integrity of the election process.
- Four to five Fellows of the Academy must sign the citation. It is the
 responsibility of the Proposer to identify and co-ordinate the signing
 by Supporters. The WRITTEN COMMENTS of the Supporters are very
 important. These sections must be complete.
- 4. When citing a candidate's achievements, it is beneficial to reference their involvement in notable projects with engineering innovations and/or translations to practice, or their service on significant engineering committees at national, regional or international levels.

5. Considerations for proposers:

- Merely holding a high-ranking position in a technological firm does not suffice for Fellowship unless there is evidence of a substantial contribution to technology development;
- Management of a major engineering organisation, involving ultimate responsibility for the **technical decisions** taken, is valid supporting evidence;
- Establishment or management of an engineering school, however excellent, is valid justification only if the candidate has contributed to the advance of engineering technology;
- Research leading to a significant advancement of engineering technology is valid supporting evidence. Where security concerns prevent publication, alternative evidence should be considered.
- e. For **Practising Engineers** it is essential to detail their roles in major engineering projects or designs acknowledged by peers as outstanding.
- f. For Academic/Research Engineers, it is important to identify outstanding contributions to engineering research OR significant advances to engineering and practices derived from the candidate's research.
- 6. The Membership Secretary may contact the Proposer for additional information if needed. If a candidate is not elected, the Proposer will be informed by the Membership Committee and asked to provide an update for the candidate by the next closing date for citations. If the candidate is not successful in the first year, the citation will be considered for 3 additional years.

HKAES First 30 Years

1994-2024

The Hong Kong Academy of Engineering Sciences is the top engineering body in Hong Kong, as are similar academies of engineering in other economies. In 2024, the Academy is celebrating its thirtieth anniversary. This book reviews the history of the Academy and its work over the past three decades.

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