

## **FIRE DIVISION**

### **ANNUAL GENERAL MEETING of the HKIE FIRE DIVISION CHAIRMAN'S REPORT (Session 2023-2024)**

Hong Kong has been back to normal after more than three years of challenging conditions due to the outbreak of COVID-19 pandemic. I am honored and pleased to serve as the Chairman of Fire Division for Session 2023/2024. I would like to express my heartfelt gratitude to all committee members of the Fire Division for their unfailing support and contribution, which have led to the achievements of this Session. With relaxation of restrictions in traveling and anti-pandemic measures, more physical networking and learned society activities had been organized in this session for the members of Fire Division to participate, connect and contribute to the society and engineering industry.

In response to the mandatory Continuing Professional Development (CPD) requirement for Corporate Members of the HKIE, the Fire Division has made our endeavor to provide members with various CPD activities. Please refer to Appendix A for a summary of Fire Division's activities, which included technical talks, visits and seminars for the session 2023/2024. Highlights of some of the major activities are appended below :-

#### **AGM of Session 2022/2023**

The AGM of Session 2022/23 was held on 4 May 2023 and I took over the chairmanship from Ir Jeffrey K H LEUNG.



## Composition of the Committee

<b>Committee Members</b>	
Ir Anthony W K PAU	Chairman and LSB Representative
Ir Jeffrey K H LEUNG	Immediate Past Chairman
Ir Prof. S L CHAN	Deputy Chairman, Reviewer for Technical Articles and PSC Representative
Ir Prof. Eric W M LEE	Hon Secretary, Reviewer for Technical Articles and Spokesperson
Ir Gary P Y IU	Hon Treasurer and CPDC Representative
Ir Dr. Alfred M FONG	Committee Member
Ir Kenith K HO	Committee Member
Ir Anny IP	Committee Member
Ir Dr. Ray K L SU	Committee Member
Ir Gerald LEE	Committee Member
Ir S P FOK	Committee Member
Ir Dr. S K LAI	Committee Member
Ir K V VONG	Committee Member
Ir Horace LAM	Committee Member
Ir Jack YUE	Committee Member
Ir Angus C Y WONG	Committee Member
Ir Sunny H C WONG	Committee Member, Young Member
Ir Dennis C S POON	Committee Member, Young Member
Ir T K HUNG	Committee Member, Young Member
Ir Anthony C M LAM	Advisor
Ir Chales M C CHU	Advisor
Ir C K LAU	Ex-officio Member (Discipline Representative) and Spokesperson
Mr. Owen C C WAN	Ex-officio Member (YMC Representative)
Ir Dr. Fiona S C TSUI	Ex-officio Member (Council Member (Division))
Ir Kwok Cheong LAU	Ex-officio Member (SSC Representative)
Mr. Johnny SHING	Ex-officio Member (AMC Representative)
Ir Y K LAU	Co-opted Member
Ir Dr. Gary G H AU	Co-opted Member
Ir Kennis S Y WAN	Co-opted Member

### Fire Division Committee Meetings

To discuss various affairs of the Fire Division, a total of ten Divisional Committee Meetings were held from July 2023 to April 2024.

### Continuing Professional Development (CPD) Courses

With the lead of Ir Kennis Wan, we have successfully organized a series of CPD courses to cover six domains for fire safety engineering including (1) fire science; (2) active fire protection measures; (3) passive fire protection measures; (4) human psychology and physiology; (5) law, regulations, and standards; and (6) fire risk management.

This year, CPD training course which consists of 6 lectures has been successfully held between 25 January and 19 Marh 2024 with total attendance of more than 500 persons. In

addition, all these lectures are delivered by 13 distinguished professionals of the industry. In particular, it is also our honour to have great support from the Buildings Department and Fire Services Department to share common misunderstandings of building design and share the Registered Fire Engineer Scheme respectively.



#### 16<sup>th</sup> HKIE Fire Division Annual Dinner

The Annual Dinner was successfully held on 25 March 2024 at the JW Marriott Hotel Hong Kong. A keynote speech was delivered by the Principal Guest of Honour Mr. Victor TAI Sheung-shing, JP, Under Secretary for Housing, HKSAR Government.

Prominent guests and professionals joined this annual dinner and told the good stories of fire engineers. All the participants were happy and experienced pleasure in this particular circumstance.



#### Hong Kong Engineers Week 2024

The HKIE organized the Hong Kong Engineers Week 2024 (HKEW) with the theme “Be the Change • 不一樣”. The HKEW was comprised of various engaging events, such as The HKIE Grand Award 2024, “Our Future Engineers”, “Secondary Students Quiz Contest”, “Our Dream City”, “Primary Student Design Contest”, “Innovation Project Invitational Competition”, “Engineers Alliance”, Career Fairs, and the HKEW 2024 Carnival, which was part of the HKEW attracted over 45,000 visiting traffic.

The Fire Division actively participated in the HKEW Carnival event from 1 to 3 March 2024 by sponsoring and organizing game-playing / exhibitions at our booth. Through these activities, we

introduced the six domains of fire safety engineering and highlighted the roles of Fire Engineers in society via featured interaction with visitors.



### Registered Fire Engineer Scheme

We thank the FSD for delivering an introduction session to the Registered Fire Engineer Scheme in early September 2023 to our members. Presentation materials have been uploaded to Fire Engineering Digest for all HKIE members to access and review.

In March 2024, Fire Division conducted a survey, via HKIE Headquarters, to all members in Fire Discipline and Fire Division collecting their wills and expectations about the Scheme and how the Fire Division could assist members un their R.F.E. application. Survey results have been feedback to FSD for consideration.

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### Promotion to Youngsters

Fire Division has nominated three members (宣道會陳瑞芝紀念中學 - Sunny Wong; 啟基學校- Celsius Chung; 培正小學-Angus Wong) participating in 中小學創新工程教育計劃 of HKIE; the scheme will continue in the year of 2024 to 2025.

Sponsorships were given a young member of Fire Division Committee for this study tour to Beijing and Tianjin (粵港澳大湾区青年 工程師京津交流學習團) during 19-22 Jan 2024. Through exchanges and interactions among those young engineers and senior leaders of HKIE, friendship and network have been laid down for future collaboration across multi disciplines. Also, the experience shared by engineers in Beijing, Tianjin and GBA on the challenges and solutions encountered in engineering practices greatly inspired and provided valuable insights to our young engineers for their work and learning.

We also nominated a young member of Fire Division Committee to attend a HKIE delegation, with around 50 participants, visiting Guangzhou on 12 August 2023 for studying and networking with other young engineers.



### Promoting Fire Engineering

In an effort to attract new talents to our discipline and promote the field, we have enlisted the services of a production house to create a video providing a brief overview of the Fire Discipline and the role of Professional Fire Engineers. The video production in Cantonese had been completed in 2023 and uploaded onto the Fire Division's website. During the Session, two additional languages, Mandarin and English are added.

Furthermore, preparation of another video of Sustainable Development Goals (SDGs) in progress and tentatively to be completed in June 2024.



## Fire Engineering DIGEST

To promote fire safety engineering in the community and for knowledge management, Ir Charles CHU, with the support by a group of committee members and helpers, spearheaded the revitalization of the Fire Engineering DIGEST - a digital archive of fire engineering materials, in July 2021. Following the completion of both Phases I and II revitalization, which involved the collection and uploading of documents, event photos and videos, members of HKIE were invited to access the system and download the relevant information.

The screenshot displays the Fire Engineering Digest website interface. At the top, the HKIE logo and navigation menu are visible. The main content area features a search bar, a sidebar with 'PICK A TOPIC' options, and a grid of document thumbnails. Each thumbnail includes a title, author information, and metadata such as source, type, author, keywords, and abstract. The search results show a total of 273 records, sorted by Year (Newest).

**Document Search** Please input content    Advanced Search

Search Result: Total 273 Records Sort By:  Year(Newest)  Year(Oldest)  A-Z  Z-A  Author  All Resources Max  Thumbnail  Listing

**Fire Safety Engineering Process**  
Recent Fire Research and its implications for fire safety engineering  
Fire Safety Engineering Process  
Prof David Charters, PhD, CEng, FIFireE, MIMechE  
Director of Fire Engineering  
Visiting Professor of the Fire Risk Centre at the University of Exeter  
Honorary Past International President of the Institution of Fire Engineers

source /Publisher : HKIE Fire Division  
Type : Symposium / Seminar  
Author : David Charters  
Keywords : Fire Safety Engineerin...  
Abstract :  
Mth/Yr Mar/2007 Page 0

**Overview of CFD Fire-Smoke Modeling and Simulations and some ad hoc Benchmark Cases**  
Overview of CFD Fire-Smoke Model and Simulations and some ad hoc Benchmark Case  
Dee H. Wong, MTRC  
Dicken K.H. Wu, PBA

source /Publisher : HKIE Fire Division  
Type : Symposium / Seminar  
Author : Dee H. Wong & Dicken K...  
Keywords : Computational Fluid D...  
Abstract :  
Mth/Yr Mar/2007 Page 0

**Practical Application of BS EN 12845 Automatic Sprinkler Installations**  
Practical Application of BS EN 12845 Automatic Sprinkler Installations

source /Publisher : HKIE Fire Division  
Type : Symposium / Seminar  
Author : K.M. Leung  
Keywords : BS EN 12845, Automa...  
Abstract :  
Mth/Yr Mar/2007 Page 0

**A Post-fire Survey for Pre-evacuation Responses**  
A Post-fire Survey for Pre-evacuation Responses  
S.M. Lo  
Department of Building and Construction  
City University of Hong Kong

source /Publisher : HKIE Fire Division  
Type : Symposium / Seminar  
Author : S.M. Lo  
Keywords : Post-fire Survey, Pre-fi...  
Abstract :  
Mth/Yr Mar/2007 Page 0

**Novoc - A New Class of Chemical Introduced to the Fire Protection**

**Performance-based Approaches for Fire Safety Design of Refuge**

**Fire Detection and Fire Suppression Systems**

**Necessity of developing a heat release rate database for local**

## Overseas Technical Visit to Sydney, Australia

An overseas visit to Sydney would be held from 13 to 19 May 2024. We would be visiting the Opera House, the Art Gallery of NSW, ICC Sydney, Motor Centre – St. Peter, Surry Hill Village and University of New South Wales, etc. The visit aims at enriching participants' knowledge on the state-of-the-art fire engineering technology, fire safety and firefighting operations as well as networking with fire professionals in Australia.

## 15<sup>th</sup> HKIE Fire Division Annual Symposium 2024

The Annual Symposium 2024 of Fire Division was held on 9 April 2024 at the Hong Kong Convention and Exhibition Centre. The main theme of the Symposium this year is "Codification, Technology and Governance for Fire Engineering". The Principle Guest of Honour, Ir YEUNG Yan-kin Andy, FSDSM, Director of Fire Services, Fire Services Department of the HKSAR Government delivered a keynote speech at the opening ceremony. Prominent speakers from overseas, Mainland China, Buildings Department and Fire Services Department had been invited to present interesting technical papers, share their valuable experiences and insights with local experts in the Symposium.



### HKIE Boards, Committees and Taskforces

The Division also takes an active role in the Institution with committee members serving in the following Board and Committees.

- (i) Learned Society Board – Ir Anthony W K PAU
- (ii) Public Services Committee – Ir Prof. S L CHAN
- (iii) Continuing Professional Development Committee – Ir Gary P Y IU
- (iv) Major Infrastructure Working Group – Ir Prof. Eric W M LEE and Ir Thomas CHUNG
- (v) Taskforce on Reviewing the Temporary FSI requirements for Construction Sites – Ir K V VONG and Ir K C LAU

### Future Additional Focus

The Fire Division will continue to strive for the following foci :-

- (i) Continue to enhance our collaborations with the trade, government departments and other fire professionals;
- (ii) Develop fire safety engineering knowledge with more research efforts;
- (iii) Encourage more youngsters to get involved in fire safety engineering; and
- (iv) Enhance the liaisons with Mainland China and overseas fire professionals.

Last but not least, I would like to thank all committee members of the Fire Division for their great support and assistance throughout the entire Session, and wish the Division would achieve better achievements in the Sessions to come.

Ir Anthony W K PAU  
 Chairman (Session 2023/2024)  
 The HKIE Fire Division

**ACTIVITIES OF FIRE DIVISION 2023/2024**

<b>Date</b>	<b>Type of Activity</b>	<b>Name of Activity</b>	<b>Organizer(s)</b>
22.7.2023	Visit	HKIE's President and Division Chairmen visited The Macau Institute of Engineers, The Macau Institution of Electrical and Mechanical Engineers and HKIE Members Cocktail Reception.	HKIE HQ
12.8.2023	Study Tour	A Young Member joined HKIE's delegation with around 50 participants from various divisions to Guangzhou for studying and exchange with counterpart.	HKIE Headquarters
17.8.2023	Online Seminar	Introduction to Fire Services Installations in Buildings, Maintenance & Inspection Practices for Tier-2 Property Management Practitioners	HKFSD, HKIE Fire Division and PMSA
19.9.2023	Technical Talk	Technical Talk on "Fire Services System Design for Data Center" in hybrid mode	HKIE Fire Division
23.9.2023	Technical Visit	Technical Visit to a Data Centre in Tsuen Wan	HKIE Fire Division
9.9.2023	Seminar	FSD's presentation to HKIE's members on "Introduction of the Registered Fire Engineer Scheme"	HKIE Fire Division
14.11.2023	Technical Talk	"Fire Safety in Electrical Vehicles" in hybrid mode	HKIE Fire Division
9.12.2023	Technical Visit	Technical Visit to a Fire Services Installations Prefabricate Workshop and Fire Extinguisher Refilling Plant	HKIE Fire Division
17-20.12.2023	Study Tour	HKIE VP, CE and Division Chairmen / Deputies to visit Shanghai and Hangzhou	HKIE Headquarters
20.2.2024	Technical Talk	Technical Talk on "Under Innovative Construction Trend, an Integrated Fire Stopping Solution from Design to Handover"	HKIE Fire Division
29.2.2024	Online Seminar	IFE Seminar on "Fire Safety Design during Construction for Macau Mega Projects"	IFE Hong Kong and HKIE Fire Division
2.3.2024	Technical Visit	Technical Visit to SKYCITY Transport Terminal and K11 Atelier 11 SKIES at CLK International Airport	HKIE Fire Division
9.4.2024	Annual Symposium	Annual Symposium themed "Codification, Technology and Governance for Fire Engineering"	HKIE Fire Division
13-19.5.2024	Overseas Visit	Technical Visit to Building / Infrastructure Projects applying Fire Engineering	HKIE Fire Division
25.1.2024	CPD Course	Rethinking the Façade Systems – Fire Safety	HKIE Fire Division
25.1.2024	CPD Course	Recent Development in Fire Resistance Tests and Assessment Approach on Building	HKIE Fire Division
22.2.2024	CPD Course	Fire Science Exploring from Fundamentals to Advancements	HKIE Fire Division

22.2.2024	CPD Course	Fire Risk Assessment	HKIE Fire Division
29.2.2024	CPD Course	Fire Risk Management in Building	HKIE Fire Division
7.3.2024	CPD Course	Evacuation in Cavern	HKIE Fire Division
14.3.2024	CPD Course	Introduction to Registered Fire Engineer Scheme	HKIE Fire Division
23.2.2024	CPD Course	Common Misunderstanding of Code of Practice for Fire Safety in Building 2021	HKIE Fire Division
4.6.2024	Technical Talk	Fire Safety for Hydrogen	HKIE Fire Division, Gas & Energy Division and The Department of Building Environment and Energy Engineering, HK PolyU
8.6.2024	Technical Visit	Technical visit to RED Laboratory in Huizhou City, Guangdong Province for fire test requirement and assessment criteria	HKIE Fire Division and CIBSE Hong Kong Region