

Annual Report for Session 2019/2020

1. Foreword

Session 2019/2020 was a challenging year for the Electrical Division. Many of our planned activities were affected by the social events in the second half of 2019 and the subsequent coronavirus disease 2019 (COVID-19) pandemic in the first half of 2020. Division's flagship events such as Annual Dinner, Electrical Model Design Contest, Energy Innovation for Smart City Competition, etc. were inevitably deferred or cancelled during this Session. However, with the dedication of our members, the Division Committee (the Committee) completed eleven meetings (including the upcoming Division AGM scheduled for 5 May 2020) in this Session to provide value added services to our members through innovation and latest technologies. We had launched several first ever activities in this Session which included the "The Current War" movie appreciation for our members, inviting a renowned local stand-up comedian to share with us innovation in our Annual Symposium, conducting online broadcasting of Membership Drive Talks to university students and arranging a webinar local technical seminar. We are also organising parallel lecture and webcasting sessions on professional short courses to our members, to be launched in June 2020. In addition, the Division on behalf of The HKIE successfully organised the 2019 ICEE Conference in Hong Kong. Details of activities for this Session are summarised in the following sections.

2. Annual Dinner (Chaired by Ir WS TAM)

In order to provide an opportunity for social gathering of members, the Annual Dinner 2020 was originally scheduled on 5 May 2020, right after the Annual General Meeting. In view of the COVID-19 situation, the Annual Dinner will be postponed to 13 October 2020.

3. 37th Annual Symposium (Chaired by Ir TK CHIANG)

The 37th Annual Symposium was held on 24 October 2019 at Sheraton Hong Kong Hotel & Towers. As a traditional annual get-together for electrical engineers and professional friends, the Symposium had a record-high attendance. The Symposium Organising Committee was chaired by Ir TK CHIANG. The Symposium theme was "Innovation for Engineering Advancement". The HKIE President, Ir Ringo YU, delivered an opening speech, followed by the keynote speech by Mr. K.K. LING, Director of Jockey Club Design Institute for Social Innovation, the Hong Kong Polytechnic University. Eight technical papers, divided into four sessions according to their scopes of discussion, were presented by speakers from different public and private sectors, academic institutes, utility power companies and Airport Authority. Mr. Vivek MAHBUBANI, a renowned local stand-up comedian, was also invited as a special guest to give a talk on innovation. The Symposium was concluded by Ir Professor H.C. MAN, Dean of Faculty of Engineering, the Hong Kong Polytechnic University, with his closing address. Over 300 participants attended the Symposium and their responses were overwhelming.

4. **Technical Programme Sub-committee** (Chaired by Ir Dr. Bryan PONG)

The Sub-committee had arranged to organise / co-organise a total of seven technical seminars in the session while several seminars were cancelled due to the social events and the coronavirus pandemic. There were more than 40 attendees on average for each event. Local and overseas experts in various areas of electrical engineering were invited to give talks on the state-of-the-art developments in the field. These ranged from hardware electrical system such as batteries and runway lighting system, to soft skills like project management and innovation & design thinking in engineering. Besides the seven traditional seminars, a special sharing session on “An Interesting Snapshot in the History of Electrical Engineering” was organised, after the movie show of “The Current War”, as an interesting story on the rivalry, known as the "War of Currents", primarily between Westinghouse AC and the Edison DC system in the United States in late 19th Century. All seminars and sharing received enthusiastic supports and served to provide members continuous professional development.

Date	Topic	Speakers
7 September 2019	An Interesting Snapshot in the History of Electrical Engineering	Ir W.K. LEE
18 September 2019	A brief introduction to batteries	Dr. W.L. CHAN
15 October 2019	Application of Innovation and Design Thinking in Engineering	Mr. Dick YIP
9 December 2019	Development of Runway Lighting System from Kai Tak to Chek Lap Kok	Ir James NG
6 January 2020	Role of Registered Professional Engineers in Private Healthcare Facilities	Ir Alvin LEE
15 January 2020	Agile Project Management for the VUCA World	Dr. Joseph WONG
8 May 2020	Online Technical Seminar - Innovative Ways to Execute E&M Projects	Ir Banson LAM
11 June 2020	Online Technical Seminar - How Electrical Engineers could have an easier life with digitization	Ir Ian LEE

5. **Local Technical Visit Sub-committee** (Chaired by Ir Andrew YAN)

The main theme of the local technical visits this year was innovation. Due to the massive social events and outbreak of COVID-19 since late 2019, most of the local technical visit planned had been deferred. The Sub-committee had organised two technical visits to places of technical interests for members up to end April 2020. E&M Inno Zone and Interactive Learning Centre at EMSD Headquarters and New World Victoria Dockside (K11 MUSEA) were visited. Response for each visit conducted was enthusiastic, with about 30 attendees on average.

Date	Place of Technical Visit
10 August 2019	E&M Inno Zone and Interactive Learning Centre at EMSD Headquarters
19 October 2019	Technical visit to New World Victoria Dockside (K11 MUSEA)

6. **Overseas Technical Visit Sub-committee** (Chaired by Ir Edward YEUNG)

A delegation of 37 visited Italy from 14 to 26 July 2019. During the visit to the Schneider factory at Strada Curagnata (Cairo Montenotte) near Genova, the factory experts showed and demonstrated different types of measuring transformers. The delegates visited the MV instrument transformer production line where they were shown how the high current and high voltage were measured and recorded safely and accurately by digitised computing devices.

For the visit to the SIEL uninterruptible power supply (UPS) factory, the plant experts briefed the delegates on the success stories of being a leading manufacturer of UPS, photovoltaic inverters and renewable energy solutions for customers in the highly critical areas of finance, health, data centres, industrial plants and telecommunications. The delegation also visited the Siemens laboratory, which has an open office. The stakeholders of smart energy, university students, utility engineers and start-ups, all gathered together to co-create value. They focused on the development of smart application riding on the Siemens open cloud based internet of things platform, such as “Electric Car Operation Centre”, “Distributed Energy Optimisation”, etc.

7. **Mainland China Technical Visit Sub-committee** (Chaired by Ir WS TAM)

In the 4-day technical visit to Xiamen, Fujian Province (福建省廈門市) from 6 - 9 September 2019, 15 participants visited a manufacturing plant of “ABB”, comprising a Technology Experience Centre and a production line for air circuit breakers, low voltage (LV) switchboards and medium voltage (MV) switchgear. Besides advanced technology development in the electrical industry, the implementation of a “green” environment in Xiamen was also observed. This included EV charging facilities and infrastructure to reduce pollution emissions from diesel vehicles even for rural areas. The visit enlightened the delegates to the fact that Xiamen is developing and creating an advanced technology as well as a “green” city.

8. **Membership Drive Sub-committee** (Chaired by Ir Ian LEE)

Seven membership drive talks were planned in 2019/2020 session via online broadcasting for students in Hong Kong Polytechnic University (HKPolyU), University of Hong Kong (HKU), School of Professional Education and Executive Development (SPEED), Technological and Higher Education Institute of Hong Kong (THEi) and the Hong Kong Institute of Vocational Education (IVE) in Chai Wan, Tsing Yi and Haking Wong. It was the first time for the Division to provide membership talks in the format of online broadcasting and the responses were enthusiastic. The presentation included an introduction on the HKIE and Electrical Division, career opportunities in the Government, power utilities, consulting and contracting sectors, and the need and path of joining the HKIE.

9. **Energy Innovation for Smart City Competition 2019/2020** (Chaired by Ir Siu Kwong HO)

The programme was sponsored by the CLP Power Hong Kong Limited and has been organised yearly since 2009 for secondary students. It aims to provide an opportunity for the students to propose and implement innovative projects on energy efficiency initiatives and promote energy efficiency to the community. It was firstly launched as the “Energy Innovation Project Competition” and was re-named as “Energy Innovation for Smart City Competition” to give more focus on smart use of energy in a modern city. Over 250 students joined the Competition in 72 teams this year, with 35 teams being selected to develop their ideas into projects. Although the Competition was cancelled after the 1st screening due to COVID-19 situation, the initial proposals submitted by the students were innovative and inspiring.

10. **Electrical Model Design Contest** (Chaired by Ir Stephen YIP)

For the past 8 years, the Division had been organising a contest for lower form secondary school students with an aim to promoting electrical engineering, enhancing the knowledge and awareness of renewable energy and encouraging low carbon living among them. This year, the Division continued to organise the same event with the main theme of solar energy. The event was supported by the Education Bureau, Electrical and Mechanical Services Department of the HKSAR Government, Construction Industry Council (CIC) and the Hong Kong Polytechnic University. In 2019/2020 session, overwhelming application responses were received from 90 lower form secondary school students from 29 teams. A briefing session for the contest cum visit to Zero Carbon Building of CIC was held on 4 January 2020 with over 20 teams attending. However, due to COVID-19 pandemic situation in Hong Kong, the Committee decided to cancel the contest for one year with supports of all co-organisers to ensure the safety of all participants.

11. **International Council on Electrical Engineering (ICEE) Conference**
(Led by Ir Dr. FC CHAN)

The ICEE Conference is jointly organised by the HKIE, the Chinese Society for Electrical Engineering (CSEE), the Institute of Electrical Engineers of Japan (IEEJ) and the Korean Institute of Electrical Engineers (KIEE) and each member institution takes turn to host the conference annually. This year, the host of the conference was HKIE. With the Electrical Division taking up the leading role, the ICEE Conference 2019 was successfully held from 2 to 6 July 2019 at the Hong Kong Polytechnic University in Hong Kong. More than 450 delegates from eight regions gathered in Hong Kong to share their experiences and debate new ideas. It offered a very good and precious opportunity for electrical engineers from all over the world with various specialties to meet, inspire each other, and share vision towards our sustainable future. The next ICEE Conference was originally hosted by the Institute of Electrical Engineers of Japan in Takamatsu, Japan from 28 June to 2 July 2020. However, due to the outbreak of COVID-19 pandemic, the IEEJ has decided to cancel the conference this year.

12. **Professional Short Course in Electrical Engineering** (Chaired by Ir Vincent LEUNG)

The professional short course with four classes, on the theme of “New Technology and Latest Regulations in Electrical Engineering”, will be held in end June 2020. Experienced engineers, professors and industry practitioners from academic institutions, consultants, government departments, suppliers and utility power companies were invited to give our members updated knowledge of technology and regulations in electrical engineering. The Course will be arranged as classroom lectures and online broadcasting simultaneously for participants to opt, in view of the current pandemic situation in Hong Kong.

13. **The HKIE Boards and Committees**

The Division actively participated in the work of the Institution and had representation/ex-committee members in the following Boards and Committees:

- Learned Society Board (represented by the Chairman, Ir Tony YEUNG)
- Public Service Committee (represented by the Deputy Chairman, Ir WS TAM)
- Council (represented by Ir YK CHU)
- Discipline Representative (represented by Ir Dr. Edward LO)
- Continuing Professional Development Committee (represented by Ir Raymond SZE)

14. **Learned Society Board (LSB)** (Represented by the Chairman, Ir Tony YEUNG)

Ir Tony YEUNG represented the Division to participate in the LSB to coordinate learned society activities and provide recommendation to the Council at strategic level. Four meetings were held in this session. Several issues were discussed and agreed in the meetings including the “Use of the HKIE Logo by Divisions/ Committees Co-organising / Supporting Activities”.

15. **Public Service Committee (PSC)** (Represented by Ir WS TAM)

The Public Service Committee is responsible to the Learned Society Board for developing and co-ordinating public relations policies; reviewing / revising these policies from time to time and enhancing the HKIE’s public image. In addition to the tasks in school ambassadors programme, editorial contributions, relationship with District Council etc., two working groups of the Public Service Committee were overseeing the co-ordination and planning of these activities.

16. **Council** (Represented by Ir YK CHU)

Ir YK CHU represented the Division in the Council. Five Council meetings were held so far in Session 2019/2020.

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17. **Discipline** (Represented by Ir Dr. Edward LO)

Ir Dr. Edward LO is the Discipline Representative who chairs the Electrical Discipline Advisory Panel. Being responsible to advise on aspects in relation to Qualifications and Professional Membership, major tasks of the Discipline in Session 2019/2020 include reciprocal recognition agreement of professional qualification between professional bodies, accreditation of engineering-related Bachelor and Master degree programme in Hong Kong and overseas, etc.

18. **Continuing Professional Development Committee (CPD)** (Represented by Ir Raymond SZE)

Ir Raymond SZE represented the Division in the CPD Committee providing updates to Division members on all matters relating to CPD requirements.

19. **Publication and Communication with Members** (Chaired by Ir Stanley LEUNG)

Ir Stanley LEUNG served as the authorised representative of the Division to notify members the activities and events of the Division through HKIE eNewsletters, the journal of the HKIE (*Hong Kong Engineer*) and divisional website (<http://el.hkie.org.hk>).

20. **Concluding Remarks**

It is no doubt that 2019/2020 Session was an unusual session to the Electrical Division. Being the Chairman of this session, I am impressed by the dedication and the “committed to serve” attitude of our Committee Members. Despite the difficulties and uncertainties we are facing when planning and organising activities, the Committee members could always come up with innovative ideas to continue to serve our members and to prepare contingency plans to cater for the unexpected. Through the guidance of our past Chairmen, the unfailing support from our Committee members and our concerted effort, we are able to continue to deliver our services to our members with minimal disruption. In addition, taking this opportunity, we have also worked out different ways to stay connected with our members through online services, which has inevitably laid down a solid foundation for us to reach out more members through these technologies in future.

Despite the challenges that we are facing, the Committee has not stopped organising different activities, such as technical seminars, local visits, overseas visits, symposiums and professional short courses, etc. to advance the profession of electrical engineering and support the professional development of our members. In addition, the Committee also successfully organised the ICEE conference 2019 in Hong Kong on behalf of the HKIE HQs. Furthermore, we also supported various initiatives of the HKIE HQs, such as the HKIE Quiz Competition, submission of articles for publication on Classified Post Website/JobsDB Online Platform, etc. All in all, we would continue the missions of the Division to add values to our members and the community.

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It is indeed my greatest honor and privilege to work with the Committee together through this difficult period. I would like to thank all Committee Members for their dedication and commitment to the Division. Without their unfailing support, I would not be able to lead the Division through this challenging and yet successful session. I would also like to extend my sincere thanks to our members and sponsors for their continuous support in the activities.

Immersed in a culture of dedication and continuous improvement and with the support from our members and sponsors, the Division is prepared to meet the needs and aspiration of our members in the coming sessions.



(Ir Tony YEUNG)
Chairman, Electrical Division Session 2019/2020
5 May 2020

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Electrical Division Committee Session 2019/2020

Chairman	Ir Tony YEUNG	
Immediate Past Chairman	Ir TK CHIANG	
Deputy Chairman	Ir WS TAM	
Honorary Secretary	Ir YH LEUNG	
Honorary Treasurer	Ir YK CHU	
Members	Ir Walter AU Ir Kit CHAN Ir YH CHAN Ir Alex FU Ir Ian LEE Ms. Candy LEUNG Ir Joseph LEUNG	Ir Mandy LEUNG Ir Stanley LEUNG Ir Dr. Bryan PONG Ir Raymond SZE Ir CL WONG Ir Andrew YAN
Ex-officio Members	Ir Y.K. CHU Ir Dr. Edward LO Mr. Indi WONG Ms. June YIP Ir Simon TSUI	(Council Member (Division)) (Discipline Representative) (AMC Representative) (YMC Representative) (SSC Representative)
Co-opted Members	Ir Hugo CHAN Ir Steve CHAN	Ir Stephen YIP
In Attendance	Ir CF CHAN Ir Dr. FC CHAN Ir Geoffrey CHAN Ir Simon CHUNG Ir CL LEUNG Ir Sai King HO Ir Siu Kwong HO Ir Gary KO Ir Albert TO Mr. Henry CHAN Mr. Jason CHAN Ir Dr. Ken CHAN Mr. Sheung CHAN Ir Dr. WL CHAN Mr. Jackie CHOI Ir WI HO Ir Yani KO	Past Chairman as advisor Past Chairman as advisor Ms. Jacqueline LO Mr. Stan MOU Ir Henry NGAI Ms. Ting Ting SUEN Ir Venus TAM Ir SS TANG Ir Sherman TONG Mr. Smith TSAI

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Ir Ben LAM
Ir Banson LAM
Ir Dr. Tony LEE
Ir WK LEE
Ir Tim LEUNG
Ir Vincent LEUNG
Ms. Jenny LIN

Mr. Franky WONG
Ir Dr. KC WONG
Ms. Karen WONG
Mr. Keith WONG
Ir Gordon WOO
Ir WH YAN
Ir Edward YEUNG