

Annual Report for Session 2016/2017

1. Foreword

Session 2016/2017 was a very fruitful year of the Electrical Division. Including the upcoming Division AGM scheduled for 5 May 2017, the Division Committee held eleven meetings in Session 2016/2017 to plan, implement, and review activities (both locally and overseas) for HKIE members.

2. Technical Programme Sub-committee (Chaired by Ir Dr Edward LO)

The Sub-committee had organised/ co-organised a total of eleven (11) technical seminars/ talks/ tutorials in the session. There were 80 attendees on average for each event.

Date	Topic	Speakers
22/7/2016	Seminar on High Current Contacts – Characteristics, Testing & Application	Mr Oliver SEMLING, Multi-Contact Alischwil, Switzerland
21/9/ 2016	Seminar on Express Rail Link (XRL) High Speed Train Ready to Run	Ir CL LEUNG, MTRC
4/10/2016	Seminar on The Code of Practice for the Electricity (Wiring) Regulations (2015 Edition) & Case Sharing of Recent Electrical Incidents	Ir HO Wai-leung, EMSD
22 /11/2016	Seminar on UK Transmission System Operation and Planning – A Brief	Dr Siqi BU, PolyU-EE
28/11/2016	Workshop on HV Insulation Diagnosis by means of PD Detection/Measurement Methods	Hosted by IEEE-HK PES JC, supported by HKIE-EL Div
8/12/2016	Seminar on Contract Law for Engineers	Ir Barry CY CHIN
12/12/2016	Seminar on Winter Residential Optional Dynamic Electricity Pricing: British Columbia, Canada	Prof CK WOO, HKBU
8/2/2017	Seminar on Solar Photovoltaic (PV) Application sin HK	Francis YUEN of CLPE
21/3/2017	Seminar on Review of Wind and Solar Photovoltaic Power Generation Technologies and Their Applications	Dr Jerry HU of PolyU-EE
18/3/2017	1-day Conference on Railway Systems	Hosted by EEAA of PolyU, IEEE-HK PES JC & EE Dept of PolyU

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10/4/2017	Seminar on Carbon Trading and Power Laundering: Evidence from the Western USA	Prof CK WOO, of EdU-HK
16/6/2017	Seminar on New Technologies on LED	HKU LED Research Team

3. 34th Annual Symposium (Chaired by Ir PK CHAN)

The 34th Annual Symposium was held on 25 October 2016 at Sheraton Hong Kong Hotel & Towers. The Symposium Organising Committee was chaired by Ir PK CHAN, with Ir YK CHU as the Symposium Secretary. The Symposium theme was “Innovations for Smart City” for which ten papers were presented. The HKIE President, Ir Joseph KH Choi delivered an opening address. Ir Allen Yeung, JP, Government Chief Information Officer and Ms Brenda Au, Head of Energising Kowloon East Office delivered the keynote speech and closing address respectively. Over 300 participants attended the Symposium and their responses were overwhelming.

4. Local Technical Visit Sub-committee (Chaired by Ir Tony YEUNG)

The Sub-committee had organized five technical visits to places of technical interests for members up to end April 2017. Another one was scheduled for the coming June. The visit to EMSD Headquarters and District Cooling System at Kai Tak Development was tailor-made for secondary school students in connection with the Electrical Model Design Contest to promote electrical engineering among younger generation. Apart from visiting facilities of technical interests in Hong Kong, the Division also organized a technical visit to Yinlong Energy Co. Ltd – EV and Li-ion Battery Manufacturing Plant in Zhuhai. Response for each visit was enthusiastic. 28 attendees on average attended each visit.

Date	Place of Visit
1 Oct 2016	Technical Visit to Ho Man Tin Station
22 Oct 2016	Technical Visit to Technical Visit to Ocean Park Station (South Island Line) and Wong Chuk Hang Depot
21 Jan 2017	Technical Visit to Siu Ho Wan PV Project
18 March 2017	Technical visit to EMSD Headquarter and District Cooling System at Kai Tak Development
22 April 2017	Technical Visit to Yinlong Energy Co. Ltd – EV and Li-ion Battery Manufacturing Plant in Zhuhai
June 2017	Gleneagles HK Hospital

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

In the 5-day technical visit to Xuzhou (徐州) during 6-10 September 2016, 17 participants visited a 110kV and a 220kV power distribution substations and a newly developed residential estate to appreciate the application of new technologies in power systems and households metering.

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

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During the technical visit to the West Coast of USA from 10 to 20 July, 2016, the delegation was glad to see one of the world's largest solar thermal power plant in Ivanpah which serves more than 140,000 homes in California. In San Francisco, the delegation visited the Hoover Dam, which was built in 1936 generating more than 4 million kWh of hydro-electricity a year. In addition, the delegation visited the newly commissioned UCSF Benioff Children's Hospital at Mission Bay with 289 beds built at a cost of US\$1.5 billion. The power supplies are all backed up by emergency generators to enable the hospital to maintain services for 4 days (against the special earthquake requirement of 3 days in San Francisco). It is very impressive to note that the data centre of the hospital complex deploys energy efficient free-cooling air-conditioning system to save energy consumption of the hospital complex.

7. International Conference on Electrical Engineering (ICEE) 2016 (Led by Ir Prof CC CHAN)

The International Conference on Electrical Engineering (ICEE) 2016 with the theme "Future Technology for Bridging Nations" was held in the Okinawa Prefecture Municipal Center, Okinawa, Japan during 3-7 July 2016. 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. There were over 400 papers presented with attendance of 600 delegates from 14 regions.

8. Membership Drive Sub-committee (Chaired by Ir YH CHAN)

Five membership drive talks were organized in 2016/2017 session at IVE (Chai Wan), IVE (Tsing Yi), IVE (Haking Wong), HKU and HK PolyU. The presentation included an introduction on the HKIE and Electrical Division, career opportunities in the Government, power utilities, consulting and contracting sectors, the need and path of joining HKIE. The responses were enthusiastic.

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

The programme was sponsored by the CLP Power Hong Kong Limited and had been organised for 8 academic years since 2009 for the benefits of secondary students. It aimed to provide an opportunity for the students to propose and implement innovative projects for 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" in 2016 to give more focus on smart use of energy in modern city. Over 300 students joined the Competition in 70 teams for 2016/17 competition session, with 30 teams competing in the second round. Ten teams would then enter the Competition Final on 13 May 2017.

10. Electrical Model Design Competition (Chaired by Ir Tony YEUNG)

For the past 5 years, the Division had been organizing 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 continues to organize the same event with the main theme of solar energy. The event was supported by the Education Bureau of the HKSAR Government and the HK PolyU with encouraging sponsorships from The Hongkong Electric Co., Ltd. and CLP Power Hong Kong

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Ltd. In 2016/17 session, over 130 lower form secondary school students from 29 schools participated in the contest.

11. Professional Short Courses in Electrical Engineering (Chaired by Ir Mandy LEUNG)

Four professional short courses covering various aspects of electrical engineering were held in March 2017. As in previous years the courses attracted 265 registrations and the Committee was greatly encouraged by the overwhelming response. The professional short courses of 2016/17 continued to be endorsed by EMSD as satisfying with the requirements of “CPD Module 2: Technical Knowledge Training” for the registration of Registered Electrical Worker. The Division also invited EMSD to conduct a seminar on “CPD Module 1: Safety Law and Regulation” scheduled for 6 June 2017.

12. Annual Dinner (Chaired by Ir CF CHAN)

In order to provide an opportunity for annual gathering of members, the Annual Dinner 2017 was scheduled for 5 May 2017 after the Division AGM.

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 Board and Committees:

- Council (represented by Ir HO Siu Kwong)
- Discipline Representative (represented by Ir Gary KO)
- Learned Society Board (represented by the Chairman, Ir CF CHAN)
- Public Relations Committee (represented by the Deputy Chairman, Ir Dr Edward LO)
- Community Service Committee (represented by the Hon Secretary, Ir TK CHIANG)
- Continuing Professional Development Committee (represented by Ir Dr Bryan PONG)

14. Learned Society Board (LSB) (Represented by the Chairman, Ir CF CHAN)

Ir CF CHAN co-ordinated learned society activities and represented the Division to participate in the LSB to provide recommendation to the Council at strategic level. Two past Chairmen joined the Mainland visit organized by the LSB under the Belt and Road Initiative.

15. Public Relations Committee (PRC) (Represented by Ir Dr Edward LO)

Ir Dr Edward LO represented the Division in the Public Relations Committee and led Division members to support the activities in promoting public relations of the HKIE.

16. Community Service Committee (CSC) (Represented by Ir TK CHAIANG)

Ir TK CHIANG served as a link between the CSC and the Division to provide prompt and constructive comments to consultation papers issued by the HKSAR Government and other statutory/professional bodies.

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17. Continuing Professional Development Committee (CPD) (Represented by Ir Dr Bryan PONG)

Ir Dr Bryan PONG represented the Division in the CPD Committee providing updates to Division members on all matters relating to CPD requirements.

18. Publication and Communication with Members (Chaired by Ir Steve CHAN)

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

19. The 40th Anniversary of HKIE Electrical Division (Chaired by Ir CF CHAN)

Ir CF CHAN led the Organizing Committee of celebrating the 40th Anniversary of the Electrical Division.

20. Concluding Remarks

The Committee of the Electrical Division has been organising activities to promote and advance the profession of electrical engineering. Technical talks, visits, short courses, seminars, conferences and reach-out programmes as reported above were only some of the works of the Committee. The Committee not only served over 3,000 members of the Electrical Division, but also formulated and implemented plans to introduce the profession to the younger generation, and arranged visits to and exchanges with overseas and Mainland learned society counterparts. We would continue the missions of the Division to nurture the youth and provide a platform for the development of HKIE members.

21. I would like to thank all Committee Members for their devotion to the Division. Only with their unfailing support and active participation, I was able to lead the Division to another successful session. Immersed in a culture of dedication and continuous improvement, the Division is prepared to meet the needs and aspiration of all members in the coming sessions.

(Ir CF CHAN)
Chairman, Electrical Division Session 2016/17
5 May 2017

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Electrical Division Committee Session 2016/2017

Chairman	Ir CF CHAN	
Immediate Past Chairman	Ir PK CHAN	
Deputy Chairman	Ir Dr Edward LO	
Honorary Secretary	Ir TK CHIANG	
Honorary Treasurer	Ir YK CHU	
Members	Ir Steve CHAN Ir Alex FU Ir WI HO Ir Tommy LAM Ir Mandy LEUNG Ir Stanley LEUNG	Ir Dr Bryan PONG Ir Andrew YAN Ir Peter TANG Ir Tony YEUNG Ir CL WONG Ir Raymond SZE
Ex-officio Members	Ir SK HO Ir Gary KO Mr Indi WONG Ms June YIP Ir Simon TSUI	(Council Member (Division)) (Discipline Representative) (AMC Representative) (YMC Representative) (SSC Representative)
Co-opted Members	Ir YH CHAN Ms Candy LEUNG	Ir Dr Ken CHAN
In Attendance	Ir Simon CHUNG Ir Sai King HO Ir Geoffrey CHAN Ir KM LEUNG Ir Albert TO Ir CL LEUNG Ir Walter AU Mr Jason CHAN Ir Kit CHAN Mr Ryan CHAN Ir Tony LAU Ir Ian LEE Ir Dr Tony LEE Ir Gordon WOO Ir SS TAM Ir Sherman TONG Mr Smith TSAI Ms Karen WONG	Past Chairman as advisor Past Chairman as advisor Past Chairman as advisor Past Chairman as advisor Past Chairman as advisor Past Chairman as advisor Ir WK LEE Ir Joseph LEUNG Ir Vincent LEUNG Ir Y H LEUNG Ir Henry NGAI Ir Dr Philip PONG Ms Venus TAM Ir WS TAM Ir WH YAN Ir Edward YEUNG Ir Stephen YIP