

Annual Report for Session 2015/2016

1. Foreword

Session 2015/2016 was a very fruitful year of the Electrical Division. Including the upcoming Division AGM scheduled for 5 May 2016, the Division Committee would have held eleven meetings in Session 2015/2016 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
23/7/2015	Seminar on New Technologies for Power Transformer Testing	Ms G Marieilla of ISA
23/9/2015	Seminar on New Technology in Building LV Distribution	Mr Sean Chiu and Mr Ian Lee of Schneider Electric
4/12/2015	Seminar on Intelligent Building Management System – A New Advancement on BMS Integration	Mr Paul Tsui of Carrier HK
11/12/2015	Two Talks on Electrical Safety and Power Quality	Ir Roy Mui of WSP PB, Ir Dr Edward Lo of PolyU
14/12/2015	Four Tutorials on Power Electronics Systems and Applications	Prof Eric Cheng of PolyU , Prof Patrick Luk of Cranfield U in UK, Prof P Arboleya of Oviedo U in Spain, Prof BP Divakar of REVA U in India
15 & 16/ 12/2015	Four Keynotes on Power Electronics Systems and Applications	Prof C Mi of San Diego State U in USA, Prof KK Lee of PolyU, Dr MH Ang Jr, NUS in Singapore, Prof CT Rim of KAIST in Korea
22/1/2016	Seminar on Electronic Traffic Enforcement Systems	Dr Nelson Yung
23/2/2016	Seminar on Engineer as Expert Witness	Ir Barry Chin
8/4/2016	Seminar on New Multi-Sensor Online Partial Discharge Testing Technologies for Switchgear & GIS	Mr D Ashliegh of Power Monitoring & Diagnostic Technology Ltd in USA
15/4/2016	Seminar on Power System Simulation	Prof SM Kouhsari of Amirkabir U of Tech. in Iran
3/5/2016	Seminar on Professional Negligence	Ir Barry Chin
27/5/2016	Title of seminar: t.b.a.	Speaker: t.b.a.

3. 33rd Annual Symposium (Chaired by Ir Siu Kwong HO)

The 33rd Annual Symposium was held on 29 October 2015 at Sheraton Hong Kong Hotel & Towers. The Symposium Organising Committee was chaired by Ir Siu Kwong HO, with Ir YK CHU as the Symposium Secretary. The Symposium theme was “Drive for Efficiency”, for which nine papers were presented. The HKIE Vice President, Ir Thomas CHAN delivered an opening address on behalf of the HKIE President. Ir Professor Victor O.K. LI of HKU and Ir Professor S.L. HO of HK PolyU 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. There were 22 attendees on average for each visit. Amongst the visits, the one to Lamma Power Station and Lamma Winds was tailor-made for secondary school students in connection with the HKIE 40th Anniversary Solar Power Model Car Design Competition with an aim to promoting electrical engineering to our younger generation. Apart from visiting facilities of technical interests in Hong Kong, the Division also organized an exchange with the Macau Institution of Engineers to reinforce our connection with other learned society, and conducted a technical visit to Companhia de Electricidade de Macau and the House of Dancing Water.

Date	Place of Visit
31/7/2015	ElectriCity of CLP Power
26/9/2016	Condition Monitoring Centre and System Control Centre of HK Electric
12/3/2016	Companhia de Electricidade de Macau and the House of Dancing Water
2/4/2016	Lamma Power Station and Lamma Winds of HK Electric
15/4/2016	Caritas Medical Centre

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

Eighteen members joined a 5-day technical visit to Shanxi (山西) from 10 to 14 October 2015. The members had a technical exchange meeting with the experts of Huaneng Taiyuan Dongshan Gas-Fired Cogeneration Plant (華能太原東山燃氣熱電廠) in Taiyuan (太原), and visited the plant after the meeting.

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

36 participants joined a technical visit to Iceland from 1 to 9 August 2015. During the trip, the delegation visited the Orkuverid Jord Geothermal Power Plant in Reykjanes, at the SW coast of Iceland. Two 50-MW turbines were driven by steam at 290-320⁰C and 19 bar from twelve 2,700m-deep wells. In Iceland, the electricity is almost 100% obtained from renewable energy, with about 75% coming from hydropower and 25% from geothermal power.

7. International Conference on Electrical Engineering (ICEE) 2015 (Led by Ir Prof. C.C. CHAN)

The International Conference on Electrical Engineering (ICEE) 2015 with the theme “Sustainable Electrical Engineering to Third Industrial Revolution” was held in the Centennial Campus of HKU in Hong Kong from 5 to 9 July 2015. It offered a very 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 around 400 full papers presented orally or by posters. Representatives from the Division met over 600 delegates from 14 regional areas.

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

Five membership drive talks were organized in 2015/16 session at IVE (Chai Wan), IVE (Tsing Yi), IVE (Haking Wong), HKU and HK PolyU. The presentation included an introduction on HKIE and its Electrical Division, careers 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 Siu Kwong HO)

The programme was sponsored by CLP Power Hong Kong Limited and had been running for 7 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 or promotion of energy efficiency to the community. It was first launched as the “Energy Innovation Project Competition” and was re-named to “Energy Innovation for Smart City Competition” this year to give more focus on smart use of energy in modern city. Over 300 students joined the Competition in 71 teams this year, with 28 teams competing in the second round. Ten teams would enter the Competition Final on 7th May 2016.

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

For the past four years, the Division had been organizing contests 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 organize the event with the main theme on solar energy. To recognize the dedicated effort of the Division in promoting electrical engineering in Hong Kong, this event was chosen as one of the celebratory events for the 40th Anniversary of the Institution. The competition 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 Ltd. In the 2015/16 session, over 130 lower form secondary school students from 35 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 2016, which attracted 286 registrations. This was the sixth year the Division run such courses and the Committee was greatly encouraged by the overwhelming response. The professional short courses of the 2015/16 session continued to be endorsed by EMSD that they

Electrical Division
電機分部

satisfied 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” on 24th May 2016.

12. Annual Dinner (Chaired by Ir C.F. CHAN)

In order to provide an opportunity for annual gathering of members, the Annual Dinner 2016 was scheduled for 5 May 2016 at Sheraton Hotel 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 Dr. K.M. Leung)
- Discipline Representative (represented by Ir P.N. Ip)
- Learned Society Board (represented by the Chairman, Ir P.K. CHAN)
- Public Relations Committee (represented by the Deputy Chairman, Ir C.F. CHAN)
- Community Service Committee (represented by the Hon Secretary, Ir Dr. Edward LO)
- Continuing Professional Development Committee (represented by Ir Dr. Bryan PONG)

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

Ir P.K. CHAN co-ordinated learned society activities and represented the Division to participate in the LSB to provide recommendations to the Council at strategic level.

15. Public Relations Committee (PRC) (Represented by Ir C.F. CHAN)

Ir C.F. CHAN, who represented the Division in the PRC, led Division members to support activities in promoting public relations of the HKIE.

16. Community Service Committee (CSC) (Represented by Ir Dr. Edward LO)

Ir Dr. Edward LO, as a member of the CSC, served as a link for the Division to provide prompt and constructive comments to consultation papers issued by the HKSAR Government and other statutory/professional bodies.

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

Ir Dr. Bryan PONG, who represented the Division in the CPD Committee, updated 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 of 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>).

Electrical Division
電機分部

19. The HKIE 40th Anniversary Sports and Family Fun Day

The Division participated in various events and won the Champion in the Tug-of-War game.

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/ mainland learned society counterparts. We would continue the tradition and 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 P.K. CHAN)
Chairman, Electrical Division Session 2015/16
30 April 2016

Electrical Division
電機分部

Electrical Division Committee Session 2015/2016

Chairman	Ir P.K. CHAN	
Immediate Past Chairman	Ir Siu Kwong HO	
Deputy Chairman	Ir C.F. CHAN	
Honorary Secretary	Ir Dr. Edward LO	
Honorary Treasurer	Ir Y.K. CHU	
Members	Ir Steve CHAN Ir Tony YEUNG Ir Stanley LEUNG Ir T.K. CHIANG Ir W.I. HO Ir Dr. Bryan PONG	Ir Mandy LEUNG Ir Andrew YAN Ir Peter TANG Ir S.S. TANG Ir C.L. WONG Ir Raymond SZE
Ex-officio Members	Ir Dr. K.M. LEUNG Ir P.N. IP Mr. Indi WONG Ms. Serene CHEUNG Ir Simon TSUI	(Council Member (Division)) (Discipline Representative) (AMC Representative) (YMC Representative) (SSC Representative)
Co-opted Members	Ir Tommy LAM Ir Alex FU	Ir Ken CHAN
In Attendance	Ir Simon CHUNG Ir Sai King HO Ir Geoffrey CHAN Ir K.M. LEUNG Ir Albert TO Ir C.L. LEUNG Ir Edward YEUNG Ir W.S. TAM Ir Y.H. CHAN Ms. June YIP Ir Tony LAU Ir Jason CHAN Mr. Smith TSAI	Past Chairman as advisor Past Chairman as advisor Ir W.K. LEE Ir Gordon WOO Ms. Candy LEUNG Ms. Venus TAM Ms. Karen WONG Ir Sherman TONG Mr. Christopher LEE