



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

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電機工程部  
ELECTRICAL DIVISION

## Annual Report for Session 2005/2006

### 1. Foreword

2005/2006 has been a very active year for the Electrical Division. The Division Committee has held nine meetings to discuss and plan activities (both local and overseas) for Members. There will be one more meeting in June, making a total of ten Division meetings for the session.

### 2. The Technical Programme and Publications Sub-committee (chaired by Ir Dr. Edward Lo)

Ir Dr Lo organized ten technical talks/seminars. Two more talks will be held in May and July. More than 40 attendees on average were recorded for each of the talks or seminars. A technical talk would also organise after the Division AGM on 9 May 2006.

Item	Date	Event
1	28 Sept 2005	Technical Talk on “New Edition of Guide to Connection of Supply (GCS)”
2	2-6 Oct 2005	IEEE Industry Applications Society 40th Annual Meeting (hosted by IEEE-IAS, supported by EL Division)
3	6 - 7 Oct 2005	Conf. on Renewable Energy (by HKIE HQ with heavy involvement of EL Division)
4	21 Nov 2005	Technical Talk on “Lightning – Effects on our daily life”
5	23 Nov 2005	Symposium on “Life Style Lighting for Modern Cities” (host by CIE (HK), supported by EL Division)
6	9 Dec 2005	Technical Talk on “Power Quality and Its Solutions”
7	14 Dec 2005	Technical Talk on “Hydrogen Fuel Cell Power Supply” (co-organized with PolyU EE & IEEE-HK PES JC)
8	21 Dec 2005	Technical Talk on “Design of Lightning Protection Systems – Conventional & Early Streamer Emission Types”
9	12 Jan 2006	One Day Symposium on “Energy Saving & Power Conversion Technologies” (hosted by PolyU-EE, supported by EL Division)
10	19 Jan 2006	Technical Talk on “New developments in standardization of Household Appliances”
11	30 Mar 2006	Technical Talk on “New Cable Colour Code and Associated Revision of COP” (co-organised together with BS Div., IEE-HK-PES & CIBSE (HK))
12	19 Apr 2006	Technical Talk on “Surge Protection Devices for Circuits”, by ESET LTD.
13	15 May 2006	Technical Talk on “Power Quality – Voltage Sag/Dip”
14	10 July 2006 (Tentative)	Technical Talk "A Framework for managing Enterprise Risks"



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### 3. Twenty-Third Annual Symposium

The Twenty-Third Annual Symposium was held on 20<sup>th</sup> October 2005 at the Sheraton Hotel. The Symposium Organizing Committee was chaired by Ir P N Ip, and Ir Y K Chu acted as the Symposium Secretary.

The theme of the Symposium was “The New Frontiers of Electrical Engineering”. There were a total of nine papers presented at the Symposium, discussing new developments and new ideas in electrical engineering as well as interesting projects within Hong Kong and worldwide. The Symposium attracted over 280 delegates. The Symposium was definitely honoured with Ir Dr. Greg CY Wong, JP, President of HKIE, Prof C F Lee, Pro-Vice-chancellor of University of Hong Kong, and Mr. Joseph Y W Pang, Executive Director & Deputy Chief Executive of The Bank of East Asia, Limited for the Opening Address, the Closing Address, and the Keynote Speech respectively and our participants were benefited a lot from their speeches and from other papers of the Symposium.

### 4. Twenty-Fourth Annual Symposium

Planning work is in hand for the Twenty-Fourth Annual Symposium, which will be held on 17 October 2006 at the Sheraton Hotel. The theme of this year’s Symposium is “Engineering Excellence through Continuous Improvement”. Renowned speakers will present excellence engineering projects and development within Hong Kong through continuous improvement as well as discuss the associated factors and issues for continuous improvement.

### 5. The Local Technical Visit Committee (chaired by Ir Frank Ng)

Ir Ng organized eight technical visits to places of technical interest to members. Two more visits to the HEC Wind Turbine and Disneyland will be arranged in May/June, making a total of ten local technical visits for the session. These technical visits were very well received by members and during every visit, there were enlightening discussions between visiting members and the hosting organisations. On average, twenty members were enrolled for each visit.

	<b>Date</b>	<b>Place of Visit</b>
1	25 June 2005	Tung Chung Cable Car
2	29 Oct 2005	HEC Power Quality Centre and Standards Laboratory
3	19 Nov 2005	EMSD New Headquarters in Kowloon Bay
4	17 Dec 2005	International Exhibition Centre, HK International Airport
5	7 Jan 2006	Tung Chung Cable Car –MTRC
6	4 Mar 2006	HUD Floating Dock
7	25 Mar 2006	SuperTerminal 1 – HACTL



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8	22 Apr 2006	Route 3 (CPS) Company Ltd.
9	20 May 2006	HEC Wind Turbine
10	24 June 2006	Disneyland

6. The Mainland Visit Sub-committee (chaired by Ir David Yuen)

Ir Yuen organized a visit to Nanjing from 24 Sept to 30 Sept 2005. Electrical Division on behalf of HKIE joined the gatherings in honour of the retirement of Ex-President and Ex-Chairman, Prof. C.C. Chan, his commencement of new era and his devotion to teaching and research over the past 45 years. The visit included meetings with the representatives of the local associations in electrical and science field in Nanjing and to keep abreast of the latest development of the electrical industry at Jiangsu province.

In addition, the 20 people delegation team of Electrical Division led by the chairman Ir TAI Tak-him, and accompanied by our vice President, Ir Peter Wong, visited Huizhou on 13-14 Jan 2006. The Waste Energy Power Generation Plant is an environmentally friendly power generation plant made use of the energy extracted from burning rubbish and waste to produce electrical power, which is exporting to the grid. This was the first of such plant being installed in South China. The installation was completed and commissioned in February 2006. It was of interest to see the plant before it was totally encased and sealed up. The delegation team then visited the Huizhou Power Supply Bureau, which belonged to Gungdong grid co. of China southern Grid. The visit to the control room illustrated how electricity from various sources: Gungdong fossil fuel power generating plants, hydro from the Western provinces and 3 Gorges as well as Nuclear Power from Daya Bay were fed to the grid and distributed. It was also interested to note the price difference for different categories of electricity supplied.

7. The Overseas Technical Visit Sub-committee (chaired by Ir Edward Yeung)

Ir Yeung organized a 14-day technical visit to Turkey and Greece. The visit took place from 4 June to 17 June 2005. The tour included visits to Areva Transformer and Siemens Power T&D at Turkey, Landis & Gyr and Philips at Greece. In addition, the itinerary of the overseas technical visit in 2006 has been finalised and will include visits to Russia, Finland and Sweden from 15 July to 29 July 2006. It will be a 14-day tour to update our members with latest development in electrical and building services products and equipment in these countries.

8. ICEE Conference

The International Conference on Electrical Engineering (ICEE) 2005 was held in Kunming from 10 July to 14 July 2005. The aim of the ICEE is to provide a forum for the exchange of knowledge, experience and ideas among electrical engineers worldwide. Representatives who attended the conference from Electrical Division were led by Ir Dr. W



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K Lo, Vice President of HKIE together with Ir Prof C C Chan, Ir Dr. F C Chan, Ir T H Tai and Ir Dr Edward Lo. More than 20 papers were submitted from Hong Kong. The ICEE 2006 will take place from 9 July to 13 July at Korea. In addition, the Administration Board and the Executive have agreed to support the hosting of ICEE 2007 in Hong Kong.

9. Technology Competition for Secondary Schools (chaired by Ir Dr. Edward Lo)

Education and Manpower Bureau (EMB) would launch a technology award scheme first time this year. The aim would be to raise the image and concept of technology education. The awards would include those for school, curriculum design, technology education leader and quality student learning. The technology award scheme would roll out in April 2006 with awards' presentation by Oct 2006. The HKIE - Electrical Division was pleased to be one of the supporting organizations. In the meantime, it would be a good chance to launch the technology competition following this award in Oct 2006. The Proposed Technology Competition was being planned.

10. The Membership Drive Subcommittee (chaired by Ir Simon Chung)

Ir Chung organised a membership drive presentation at HK Poly U in March 2006. The target audience was students of the universities and practising engineers in the industry. The composition of the Subcommittee includes representatives from power utilities, consultants, contractors and government. Career development was highlighted in the presentation. Mr. Indi W F Wong (AMC) and Ms Mandy MY Leung (YMC) had promoted this new style presentation to the members from AMC and YMC.

11. External Relationship (PR Committee) (represented by Ir Prof K P Wong)

Members of the Electrical Division continued to support the PR activities organized by the PR Committee. Electrical Division also took part in the technical seminar and exhibition of The Asian Elenex in June 2005. Two papers of topical interest in electrical engineering were presented in the seminar by Electrical Division. The Electrical Division would continuously support The Asian Elenex in June 2006 and one paper on cable colour code would be presented by Ir Dr. K M Leung in the seminar.

12. Community Services Committee (represented by Ir K M Yung)

The Division continued to provide prompt and constructive comments to consultation papers issued by the SAR Government and other statutory/professional bodies, and nominating Members to serve on external Boards and Committees.

Due to great impact to the Society, a workgroup was formed for a consultation paper on "Future Development of the Electricity Market Review Stage 1 Public Consultation" while



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Ir Joseph Leung was nominated to be the co-ordinator. Several discussions have been held to gather views and comments to response the Government.

A forum on the ELDB's Stage II Consultation on Future Development of the Electricity Market in Hong Kong was organised by HKIE in March 2006. A long discussion among Electrical Division was held and Ir Prof K P Wong consolidated all the views and made a submission to the Institution. The views and comments had been uploaded to divisional website for information.

Up the present moment, the Committee Members / Members are serving the following external committees:

Committee Members / Members	External Committee
Ir K K Fung	Disciplinary Tribunal Panel (Electricity) under the Electricity Ordinance (Cap 406) - EMSD
Ir Eric C H Chui Ir Gary C W Ko Ir W K Lee	Appeal Board Panel (Electricity) under the Electricity Ordinance (Cap 406) - EMSD
Ir Simon F W Chung	Qualification Framework Working Subgroup related to Electrical Engineering Works - EMB
Ir Geoffrey L Chan	Qualification Framework Working Subgroup related to Lifts & Escalators Engineering Works - EMB
Ir Edward Y H Yeung	Qualification Framework Working Subgroup related to Lifts & Escalators Engineering Works - EMB
Ir Joseph C M Leung	Electrical Safety Advisory Committee - EMSD
Ir Joe W N Lau Ir David C M Yuen	Working Group on Grid Connection of Small-scale Renewable Energy - EMSD
Ir C S Ho	Kowloon City District Quality Building Competition 2005-06 - Kolwoon City District Council
Ir Geoffrey L Chan Ir Joseph C M Leung	Appeal Board Panel on Lifts and Escalators (Safety) Ordinance, Cap 327, Registered Professional Engineers within the discipline of electrical or electronic engineering – EMSD
Ir T H Tai	VTC Committee on Technology Training: Subcommittee on Engineering Graduate



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Training Scheme
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13. Continuous Professional Development Committee (represented by Ir Eric C H Chui)

Our division continuously supported the CPD requirements. HKIE has scheduled that mandatory CPD requirements will be enforced in 2008 with a two-year trial period starting from this year.

14. HKIE Boards and Committees

The Division also participated actively in the work of the Institution with Division Committee Members serving in the following Board and Committees:

- Council Members [Ir Dr. F C Chan (EOM), Ir Gary Ko (EOM) and Ir T P Uy (Division)]
- Discipline Representation (Ir W H Wong)
- Learned Society Board (represented by the Chairman, Ir T H Tai)
- Public Relations Committee (represented by the Deputy Chairman, Ir Prof K P Wong)
- Community Service Committee (represented by the Hon Secretary, Ir K M Yung)
- Continuing Professional Development Committee (represented by Committee Member, Ir Eric C H Chui)

15. History Book on Electrical Engineering in Hong Kong (chaired by Ir T H Tai)

The committee has decided to compile a history book on Electrical Engineering in Hong Kong for the past 50 years. A task force was formed under the chairmanship of Ir T H Tai to pursue this great project. The progress is satisfactory that around 20 story articles are prepared for final vetting. Tentatively, the booklet will be published in Oct 2006.

16. Publication and Communication with Members

Communication to the members has to be enhanced to improve the sense of belongings. Division's homepage was regularly updated and enriched with information. Ir Dr. F C Chan had arranged Symposium Proceedings be all scanned into electronic format and uploaded to the Division's homepage. Also, the participants were suggested to submit articles on the observations of the technical visits and technical talks. Accepted articles would be posted on Electrical Division Web and/or Hong Kong Engineers Magazine. Recognition to the participants was suggested and endorsed by the Committee.

17. Finally, I would like to take the opportunity to express my gratitude for the effort and contribution made by the Committee Members to the work of the Division during the



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session and to thank all the Members, Co-opted Members, Ex-official Members (including Mr Indi Wong – AMC, Ms Mandy Leung – YMC), and Members In-Attendance for their unfailing support and active participation. I look forward to their continued support in the coming year. With the support of the Institution and the participation of Members, I am confident that the Division will continue to grow and expand its activities and leadership to meet the needs and aspiration of the Members.

(T H Tai)  
Chairman, Electrical Division 2005/06 Session  
May 2006



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### Electrical Division Committee 2005/2006

Chairman	Ir T H Tai	
Immediate Past Chairman	Ir P N Ip	
Deputy Chairman	Ir Prof K P Wong	
Hon Secretary	Ir K M Yung	
Hon Treasurer	Ir S K Ho	
Members	Ir Dr. F C Chan Ir Y K Chu Ir Eric C H Chui Ir C L Wong Ir Gary C W Ko Ir Henry H C Lam	Ir Frank K L Ng Ir Dr. Edward W C Lo Ir W K Lee Ir C S Ho Ir Geoffrey L Chan Ir Simon F W Chung
Ex-officio Members	Ir T P Uy (Council Member/Division) Ir W H Wong (Discipline Representative) Mr. Indi W F Wong (AMC representative) Ms. Mandy M Y Leung (YMC Representative)	
Co-opted Members	Ir Dr. Joe W N Lau Ir Dr. K M Leung	
In Attendance	Ir P M Cheng (Assistant Secretary) Ir Edward Y H Yeung Ir David C M Yuen Ir P.K. Chan Ir Gordon M S Woo	