



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

Annual Report for Session 2004/2005

1. Foreword

2004/2005 has been a very eventful year for the Electrical Division. The Division Committee has held ten meetings to discuss and plan activities (both local and overseas) for members. There will be one more meeting in June, making a total of eleven 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 events will be held in May and June. More than 40 attendees on average were recorded for each of the talks or seminars. A technical talk was also organised after the Division AGM on 4 May 2005.

	Date	Event
1	16 Aug 2004	Technical Talk - Power Quality
2	11-13 Oct 2004	Conference on Building Electrical Technology, (EL Div. & BS Div. as supporters, organised with IEE-HK)
3	29 Oct 2004	Technical Talk - Power System Protection
4	10 & 11 Nov 2004	Conference on Power Electronics (EL Div as supporter, organised by HKPolyU-EE Dept., IEEE)
5	16 Dec 2004	Technical Talk - Knowledge Management in Practice
6	13 Jan 2005	Technical Talk - VCB Magnetic Transient (Winning paper in ICEE2004)
7	21 Jan 2005	Technical Talk - HV Variable Speed Pump Control at Stonecutter Island
8	14 Mar 2005	Technical Talk - Contract Management
9	15 Apr 2005	Technical Talk - HV Distribution in Buildings
10	27 Apr 2005	Technical Talk - Lightning Protection for Building Structures and Equipment
11	24 May 2005	Technical Talk - Renewable Energy – Grid-connection and Technologies (co-organised with EMSD)
12	13 & 14 June 2005	Conference on Alternative Energy (EL Div as supporter, organised by HKPolyU-EE Dept.)



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

3. Twenty-Second Annual Symposium

The Twenty-Second Annual Symposium was held on 19 October 2004 at the Sheraton Hotel. The Symposium Organizing Committee was chaired by Ir Joseph Leung, and Ir Y K Chu acted as Symposium Secretary.

The theme of the Symposium was “Competitive Advantages of Hong Kong – An Electrical Engineering Perspective”. There were a total of nine papers presented at the Symposium, discussing factors and issues contributing to the competitive advantages of Hong Kong, taking an electrical engineering perspective. The Symposium attracted over 200 delegates.

4. Twenty-Third Annual Symposium

Planning work is in hand for the Twenty-Third Annual Symposium which will be held on 20 October 2005 at the Sheraton Hotel. The theme of this year’s Symposium is “The New Frontiers of Electrical Engineering”. Renowned speakers will present new developments and ideas in electrical engineering as well as interesting projects in and outside Hong Kong.

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

Ir Ng organized seven technical visits to places of technical interest to members. Two more visits to the Stonecutter Sewage Treatment Plant and Tung Chung Cable Car will be arranged in May and June, making a total of nine 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.

	Date	Place of Visit
1	26 June 2004	CLP Power Training School
2	30 Oct 2004	Tai Po Water Treatment Works
3	13 Nov 2004	1 Peking Road
4	11 Dec 2004	Airport Control Centre
5	5 Feb 2005	MTR – Disneyland Resort Line
6	19 Mar 2005	HEC System Control Centre
7	24 Apr 2005	CLP Power’s Power Quality Centre
8	28 May 2005	Stonecutter Treatment Plant
9	25 June 2005	Tung Chung Cable Car



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

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

Ir Yuen organized a technical visit to the Three Gorges Project from 22 to 28 October 2004. During the visit, members had the chance to see the Three Gorges Power Station and its generation equipment. And with the special arrangement by the Three Gorges Corporation, we were able to view from the top of the dam to appreciate the greatness of the Three Gorges Project. Members were also given a briefing by the site engineer about the construction of the two hydropower generating stations totalling 18,200 MW in capacity and the transmission system comprising 500kV AC and DC lines to Central and Eastern China. Altogether 23 members participated in the visit including distinguished senior members of HKIE like Ir Otto Poon and Ir P.K. Kwok.

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

Ir Yeung organized a 14-day technical visit to Europe. The visit took place from 16 to 30 July 2004. Countries visited included Croatia, Slovenia, Austria and Germany. The tour included visits to Koncar Power Transformers (KPT) Ltd. in Croatia, manufacturer of large capacity high voltage transformer; Iskraemeco Energy Measurement & Management Ltd. in Slovenia, manufacturer of electricity tariff meters; Schindler in Austria, the world No. 1 manufacturer of escalators; and Raychem cable accessories manufacturing plant of Tyco Electronics Group in Germany. In addition, the itinerary of the overseas technical visit in 2005 has been finalised and will include visits to Turkey and Greece from 4 June to 17 June. 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) 2004 was held in Sapporo from 4 July to 8 July. 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 James Kwan, the President of HKIE and Ir Prof C C Chan, Past President of HKIE. More than 20 papers were submitted from Hong Kong. The ICEE 2005 will take place from 10 July to 14 July in Kunming. Ir T H Tai and Ir Prof C C Chan were nominated to attend on behalf of Electrical Division. In addition, the Administration Board and the Executive have agreed to support the hosting of ICEE 2007 in Hong Kong.



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

9. Technology Competition for Secondary Schools (chaired by Ir Joseph Leung)

The Technology Competition which was jointly organized by the HKIE-Electrical Division, Education and Manpower Bureau (EMB), EMSD, CLP Power Hong Kong Ltd., The Hong Kong Polytechnic University (HKPolyU), Hong Kong Science Museum and sponsored by CLP Power Hong Kong Limited, came to a perfect close with the prize presentation ceremony on 11 August 2004. The competition began with 71 schools teams. 28 entries were qualified and the school teams have submitted project models, project description and evaluation on the impact of energy and environmental issues. Their works were displayed at the Hong Kong Science Museum and attracted over 1000 visitors. The winning team was awarded with cash coupon for book purchase and a study tour to Singapore in August 2004. The competition aims at promoting students' interest in exploring the innovative use of energy through project competition and active learning environment. Mentors from HKPolyU (Undergraduates) and MHKIE (Electrical Division) supervised the project progress and provided guidance to school project teams through to completion. Thanks to Ir Joseph Leung, Ir Dr Edward Lo, Ir Frank Ng, Ir Y K Chu, Ir C L Wong, Ir Gary Ko, Mr Indi Wong and others who have contributed great effort in liaison and co-ordination with the school teams.

10. The Membership Drive Subcommittee (chaired by Ir K M Yung)

Ir Yung organized three talks to over 150 electrical engineering students of the tertiary educational institutes: HKU, HKPolyU, IVE in March and April 2005. The composition of the Subcommittee includes representatives from power utilities, consultants, contractors and government. Its aim is to attract young engineering students to join HKIE as student, graduate or associate members after their graduation and promote electrical engineering as a career to students. An information leaflet about Electrical Division and career opportunities of electrical engineers in Hong Kong was prepared for the membership drive talk and similar activities in future.

11. External Relationship (PR Committee) (represented by Ir T H Tai)

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 2004. Two papers of topical interest in electrical engineering were presented in the seminar by Electrical Division (Ir Simon Chung and Ir Eric Chui).



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

12. Community Services Committee (represented by Ir Prof K P Wong)

On community services front, Ir Geoffrey Chan, Ir Eric Chui, Ir Joseph Leung and Ir K M Yung were nominated to join the HKIE expert pool to comment on construction projects on need basis by the District Council. 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.

For this session and up to present moment, the following nomination for external committee was made and accepted:

- Industry Training Advisory Committee for the Electrical and Mechanical Services Industry of EMB (Ir Joseph Leung)

Ir Eric Chui and Ir Joe Lau continued to represent Electrical Division in the working group on Review of Cable Colour Code in Hong Kong and Technical Guidelines on Grid Connection of Small Scale Renewable Power Systems. Ir Gary Ko also represented Electrical Division in the Working Group on COP on Working Near Electricity Supply Lines.

13. Continuous Professional Development Committee (represented by Ir K M Yung)

The Electrical Division, represented by Ir K M Yung, has made significant contribution to the preparation of the report on mandatory CPD requirements for corporate members which has been endorsed by LSB. Our division supported the CPD requirements. HKIE has scheduled that mandatory CPD requirements will be implemented on 1 January 2006 with a grace period of two years.

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 S K Ho (EOM), Ir Dr F C Chan (EOM), and Ir T P Uy (Division)]
- Discipline Representative (Ir W H Wong)
- Learned Society Board (represented by the Chairman, Ir P N Ip)
- Public Relations Committee (represented by the Deputy Chairman, Ir T H Tai)
- Community Service Committee (represented by the Hon Secretary, Ir Prof K P Wong)
- Continuing Professional Development Committee (represented by Committee Member, Ir K M Yung)
- Editor (Electrical) of the Publications Committee (Ir Prof K P Wong)
- Training Committee (represented by the Deputy Chairman, Ir T H Tai)
- Chairman of Journal Editorial Committee (Ir Dr F C Chan)



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

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. Several discussions have been held to gather facts and material.

16. New Divisional Homepage

Thanks to the efforts of Ir Dr F C Chan and Ir C L Wong, we have implemented the new website for Electrical Division. The new website at www.hkie-electrical.com was designed with latest website technology which facilitates us to update the homepage contents for timely dissemination of divisional news and information to our members.

17. My Sincere Gratitude

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 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 our members.

(P N Ip)
Chairman, Electrical Division 2004/05 Session
May 2005



香港工程師學會

THE HONG KONG INSTITUTION OF ENGINEERS

香港銅鑼灣記利佐治街1號金百利9字樓
9/F Island Beverley, No 1 Great George St, Causeway Bay, Hong Kong
電話 Tel +852 2895 4446 傳真 Fax +852 2577 7791
hkie-sec@hkie.org.hk www.hkie.org.hk

電機工程部
ELECTRICAL DIVISION

Electrical Division Committee 2004/2005

Chairman	Ir P N Ip	
Immediate Past Chairman	Ir Joseph Leung	
Deputy Chairman	Ir T H Tai	
Hon Secretary	Ir Prof K P Wong	
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 C S Ho Ir Geoffrey L Chan	Ir Frank Ng Ir Dr Edward W C Lo Ir W K Lee Ir K M Yung Ir Gary Ko Ir Henry Lam
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 Leung (YMC Representative)	
Co-opted Members	Ir Joe Lau Ir Simon F W Chung	
In Attendance	Ir P M Cheng (Assistant Secretary) Ir Edward Y H Yeung Ir David Yuen	