

# Reports from Divisions and Other Committees



Mr Keith S K Chung

## Associate Members Committee

The Associate Members Committee (AMC) organised 24 activities including promotional events, seminars and technical visits during the Session. All were overwhelmingly successful. The annual visit to Shandong Province in September 2004 enabled members to better understand the regulatory policies and construction practices on the Mainland.

The AMC conducted a series of visits to Government departments to promote the recognition of Associate Members (AMs). Great support was received from the directorate representatives of the Civil Engineering and Development Department, Architectural Services Department and the Water Supplies Department on this issue. These departments agreed to reflect AMC's suggestion of applying the qualification of AMHKIE as an equivalent recruitment requirement for new technical staff of the Environment, Transport and Works Bureau (ETWB).

The AMC also visited the Mass Transit Railways Corporation (MTRC) Limited in October 2004. Project Director, Ir Russell Black told AMC delegates that the MTRC unreservedly supported the promotion of the AMHKIE qualification and would consider ways in which it could be applied to new recruitment. Similarly, the Kowloon-Canton Railway Corporation (KCRC) also confirmed that it supported the recognition of the AMHKIE qualification and would use it as a benchmark for their engineering staff recruitment.

The AMC worked closely with the Institution to develop a formal training route for AMs. Under the proposed scheme, candidates with Higher Diploma accredited/recognised by the Institution or equivalent would be required to complete the two-year formal training and then be eligible to sit for the professional assessment leading to the Associate Membership. The Q & M Board had approved the proposed scheme and the pilot scheme will be implemented soon.

The success of the AMC in this Session was due to the contribution of all Committee Members.



Annual Visit to Shandong Province

## Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
29 Jun 2004	Laws of Nature and Sustainability	Gabriel C K LAM
5 Jul 2004	Technological Creativity	Jointly organised with IT Division
19 Jul 2004	Applications of Special Fire Safety Systems	Samuel K S FUNG
2 Aug 2004	中國建造師	余立佐
3 Sep 2004	Be a Challenging Engineer – Médecins Sans Frontières Mission	Alice CHOW
10 Sep 2004	Legal Aspects on Insurance for Construction and Engineering	Paulus KAM
18 Sep 2004	Proposed Revision to the Code of Practice on Working Near Electricity Supply Lines	Speakers from HKIUS
19 Oct 2004	Global Applications of Commercial Satellite for Engineers	Thomas LEE
5 Nov 2004	Auditing Approach to Social Accountability 8000 (SA 8000)	Miranda C Y KWAN C S LAM
10 Dec 2004	Moving Heavy Precast Units Using Inflatable Air Bag Rollers	Alan M L LAW
7 Jan 2005	卓越抑壓管理技術 – 超覺靜坐 · 達至優質工程生活	陳耀南 陳敬賢 伍倩婷
5 Feb 2005	Preventive Measures for Corrosion of Steel Bars	Organised by HKISC
23 Feb 2005	Total Safety Quality Management in Construction	C S LAM
11 Mar 2005	中醫養生之道	林傲梵
29 Apr 2005	Nuclear Power Plants – Are They Safe?	Vincent HO
6 May 2005	AMC AGM and Annual Dinner	—
20 May 2005	The Transformation of the Shing Mun River	TSUI Tack Sang
24 May 2005	Serving the Community with Information, Communication and Technology	Elizabeth QUAT
17 Jun 2005	Fire Evacuation – How Well Are You Prepared?	Michael LEUNG

## Technical Visits

Date	Title
26 Jun 2004	Group Sense Factory in Dongguan
24 Jul 2004	Hong Kong Science Park
21 Aug 2004	East Rail Extensions – Lok Ma Chau Spur Line Project – LDB 201 Sheung Shui Launching Shaft and Kwu Tung Station
11 Sep 2004	Tai Po Gas Production Plant
22-26 Sep 2004	Annual Visit to Shandong Province
20 Nov 2004	Indoor Air Quality Information Centre at Hong Kong Productivity Council
15 Jan 2005	Mainland Visit on Moving Heavy Precast Concrete by Air Bag Rollers
23 Apr 2005	Black Point Power Station at Lung Kwu Tan
30 Apr 2005	Drug InfoCentre



Ir Ng Hon-keung

### Authorised Person/Registered Structural Engineer Committee

The Committee has continued to contribute at both Government and community levels.

Members of the Committee served on the Authorised Persons and Registered Structural Engineers Committee of the Buildings Department, the Building Sub-committees of Land and Building Advisory Committee, the Authorised Persons Registration Committee and its Panel, the Structural Engineers Registration Committee, the Contractors Registration Committee (CRC) Panel and CRC under Buildings Ordinance, the Buildings Ordinance Appeal Tribunal Panel, the Building Safety Loan Scheme Vetting Committee and Authorised Person Liaison Committee of the Fire Services Department. The Committee also provided views and comments on the technical and administrative proposals prepared by the Buildings Department, including the draft Codes of Practice for Structural Use of Steel (Limit State Approach) and the new issues of and amendments to the Practice Notes for Authorised Persons and Registered Structural Engineers.

During the Session, senior officers of the Buildings Department were invited to attend the Committee meetings to share with Members the experience of the Buildings Department on technical codes and standards.

The Committee also submitted views and concerns on the system of Private Certification of Building Submissions under the Buildings Ordinance proposed by the Provisional Construction Industry Co-ordination Board.



Ir Alfred W H Sit

### Biomedical Division

Over the last few decades, there has been a tremendous growth in the application of technology in the healthcare and medical industries. The fast growing expenditure and engineering investment in the biomedical engineering field reflects the increasing demand for healthcare technology, particularly in the context of the global challenges of dealing with an aging population.

Biomedical Engineering, which combines engineering expertise with medical needs for the enhancement of healthcare, is now one of the fastest growing industries and emerging engineering professions in Hong Kong. The Biomedical Division's mission is to promote the advancement of biomedical engineering and the professional status of biomedical engineers. The Division organised a variety of activities throughout the year including CPD seminars, technical visits and conferences which enabled members to share their experiences and ideas and receive updates on the latest advances in the biomedical engineering field.

The Division Committee met six times during the 2004/2005 Session to plan activities and events to raise the profile and membership of the Division. The Division also actively coordinated with local universities on formulating more biomedical engineering related courses.

The Biomedical Discipline was successfully formed and the Scheme 'A' training programme for the Discipline was established. Efforts were made to recruit the



Technical Visit to  
the Prince of  
Wales Hospital

founding members and to give assistance to companies providing Scheme 'A' training. The Division also launched the Professional Services Development Assistance Scheme (PSDAS) project for Biomedical Engineering. Under the project, a CPD guideline on Biomedical Engineering was developed and nine CPD seminars and a Conference on Biomedical Engineering – BME 2004 were organised.

The Division also provided support to local tertiary institutions applying for the accreditation of their relevant undergraduate programmes. With applications from graduates and the Division's membership drive, it is anticipated that the membership will grow gradually.

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
31 Jul 2004	Radiological Equipment in Hospital – Application, Safety & Maintenance	K Y CHEUNG
10 Sep 2004	Legal Aspects on Insurance for Construction and Engineering	–
23-25 Sep 2004	BME2004 – Biomedical Engineering Conference Integrating Science and Technology in the Healthcare Industry	Joel J NOBEL Benjamin TSUI Peter FUNG Paper presenters from various universities and organisations
24 Sep 2004	Best Student Papers Competition	Daniel H K CHOW
19 Oct 2004	Engineering in Community Medicine	YU Meng Sun
21 Oct 2004	Seminar on Micro-fabrication Technology to Support the Development of the Miniaturisation of Medical Devices and Rehabilitation Engineering; and Application of Diffusion Bonding and 3D-Keltool Technologies in Medical Device Components Manufacturing	Derek LOUIE Kenneth YUEN  –
8 Nov 2004	Electromyography (EMG) Measurements for Rehabilitation Applications	Peter KONRAD
12 Nov 2004	International Regulatory Overview on Medical Device Approval	Theobald CHAN
3 Dec 2004	Advanced Technologies on Medical Modelling, Three Dimensional Image Processing and Rapid Prototyping for Medical Applications	Thomas YONG Chuck FUNG Rachel WONG
10 Dec 2004	The Medical Device Administrative Control System of Hong Kong	Mark W K LAU
23 Feb 2005	Gathering with Biomedical Students from the PolyU	Alfred W H SIT Albert K F POON
21 Mar 2005	Dinner Gathering with Biomedical Students from the HKU	Alfred W H SIT Albert K F POON
23 Mar 2005	The Latest Development of Navigation Systems for Neurosurgery	Jude CHOW
9 Apr 2005	Technical Meeting with Manufacturer of Medical Devices in Dongguan	John MOK Peter MOK K M CHOW

# Reports from Divisions and Other Committees

## Technical Visits

Date	Title
31 Jul 2004	The Prince of Wales Hospital
25 Sep 2004	Hong Kong Science Park (during BME2004)
9 Apr 2005	Factory on Manufacturing of Medical Devices in Dongguan



Ir Ben S S Lui

## Building Division

The Division, working with nine professional institutions and organisations, has focused on enhancing a quality culture within the building industry by jointly organising the Quality Building Award (QBA) 2004. Awards which aim to promote quality buildings across the industry were announced. The Grand Awards were presented to Jolly Place and One Peking for residential and non-residential categories respectively. The next QBA event will be held in 2006 with the Division as one of the organisers.

The Building Division's Fourth Annual Seminar titled "Quality Building – A Culture or A Myth" was held in March 2005. Mr Michael MY Suen, Secretary for Housing, Planning and Lands, gave the Keynote Address. A total of 250 members and guests participated in the Seminar.

The Second Joint Conference on "Heritage Conservation", held in October 2004, was jointly organised by the Building and Structural Divisions, the Hong Kong Institute of Architects (HKIA) and the Hong Kong Institute of Surveyors (HKIS). Dr Patrick C P Ho, Secretary for Home Affairs, and Mr C H Yue, Director of Architectural Services, gave positive signals in their speeches on how the Government would work on Heritage Conservation in Hong Kong.

On Mainland activities, the Division organised a visit to Beijing in March 2005. A team of 22 participants visited the design institutes and the Olympic site in Beijing. Meetings with the professors from Tsinghua University and officials of the Ministry of Construction (MOC) were also held to share experiences of the two cities. The team was impressed by the rapid growth of infrastructure and building works in Beijing. Another visit to Macau has been arranged for June 2005.

The Division held its Annual General Meeting (AGM) and the Annual Dinner on 29 April 2005 at the Kowloon Shangri-La Hotel.



Beijing Delegation  
at the Great Wall

## Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
10 Jul 2004	Quality Building Award 2004 Presentation Conference	Jointly organised with ST and BS Divisions, HKIA, HKICM, HKIH, HKIS, HKQAA, REDA and HKCA
27 Aug 2004	Quality Building Award 2004 – Award Presentation Ceremony	Jointly organised with ST and BS Divisions, HKIA, HKICM, HKIH, HKIS, HKQAA, REDA and HKCA
31 Aug 2004	Development Finance for Building & Infrastructure Projects	Patrick LAM Francis TONG Gary TAM  Jointly organised with HKIPM
13 Sep 2004	The Design and Construction of the Retractable Roof at the Shatin Racecourse	Philip CHEN Paul TSANG
11 Oct 2004	Mediation as Alternative Dispute Resolution in Construction Disputes	Peter HO Chris WONG
23 Oct 2004	Heritage Conservation – Opportunities & Challenges	Jointly organised with ST Division, HKIA and HKIS
11 Nov 2004	Role of Large-scale Field Testing in the Selection of Ground Improvement Techniques and Serviceability and Strength of Normal and High Strength Concrete Beams, Columns, Slabs and Walls	A S BALASUBRAMANIAM LOO Yew Chaye Chris WONG
16 Nov 2004	Numerical Modelling of Pollutant Dispersion in Harbours and Advances in Water Quality Monitoring within Ports and Harbours	TAO Longbin Charles LEMCKERT Chris WONG
20 Dec 2004	Update of the World's First Platform Screen Door Retrofit Project	Dono K W TONG Andy TONG
18 Jan 2005	Qualification for Registered Constructor	Linda FAN
24 Jan 2005	Young or Ready – Route to Corporate Membership for Building Discipline	Linda FAN C M TAM Carmen CHAN
31 Jan 2005	Employability of Construction Professionals in the PRC	Francis WONG Charles LEUNG
4 Mar 2005	Fellowship Dinner with Scheme 'A' Companies Supervisors	K F YAU Ben YIU
18 Mar 2005	Annual Seminar on Quality Building, a Culture or a Myth?	–
29 Apr 2005	Annual General Meeting and Annual Dinner	–

## Technical Visits

Date	Title
24 Jul 2004	Retractable Steel Roof at Shatin Racecourse Parade Ring
28 Aug 2004	Lamma Power Station Extension
18 Sep 2004	Shatin Racecourse Parade Ring Redevelopment Project
15 Jan 2005	Union Square Megatower
24-28 Mar 2005	Beijing Delegation
23 Apr 2005	Hong Kong Science Park





Ir Gilbert K C Law

### Building Services Division

During the Session, the Division organised many CDP activities including the China Symposium held in Shenyang in July 2004 and the Hong Kong Symposium held in Nov 2004. Several of the 13 technical visits held during the Session involved Guangdong's cities. The Division also organised CPD short courses on Fire Engineering services, Plumbing and Drainage, Testing & Commissioning of the Heating and Ventilating Air Conditioning (HVAC) and Financial Management.

Division members were involved in various task forces, committees, and working groups – some at the invitation of Government departments, others at the invitation of individual projects. Work in this area ranged from the West Kowloon Cultural District Project and the Buildings Department's Plumbing & Drainage Regulation Review to the Fire Safety Advisory Group and Ventilation Liaison of the Fire Services Department. Other working groups looked at the Code of Practice on Grid Connection of the Electrical and Mechanical Services Department; the Change of Cable Colour; the Building Services Code Review, and the Code of Practice on General Specification for Lift & Escalator Installation and Cooling Tower.



Technical Talk on "The Troubleshooter in Property Management"

On professional issues, the Division joined with the representatives from the Executive and the ERB in a presentation to the Buildings Department on the "Wider Use of Registered Professional Engineer (Building Services) under Buildings Ordinance". With the assistance of Ir Dr the Hon Raymond C T Ho, Legislative Councillor representing the Engineering Functional Constituency, the Division met the Director of Buildings Department in November 2004 to discuss the proposed scope of works. A further request was made to the Director of Buildings Department in April 2005 asking that a working group be formed to study this issue immediately. The Division will continue to pursue this issue.

The Division remains involved in the nurturing and training of young building services (BS) engineers. In addition to the four scholarships awarded to outstanding students of universities or IVEs, the Student Liaison Sub-committee of the Division also arranged a student presentation competition to help BS engineering students to improve their presentation and social skills. The Division, with other learned societies and academic institutes, is studying the potential of producing a video to improve the profile of BS engineers.

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
25 Jun 2004	Benefits of Heat Pipes in Warm & Humid Climate	Richard MESKIMMON Jointly organised with ASHRAE and CIBSE
29 & 30 Jun 2004	Mainland – Hong Kong Joint Symposium on Healthy Buildings in Urban Environment	Jointly organised with ASHRAE and CIBSE
7 Aug 2004	Advanced Method of Load Estimation in Design of Plumbing & Drainage System	Jointly organised with IPHE
20 Aug 2004	Use of LED Exit Sign as a Fire Service Installation – Potential in Energy Saving & Constraints	W H CHENG C L WONG Jointly organised with ASHRAE and CIBSE
26 Aug 2004	Short Course on Prescriptive Codes Versus Performance Based Design, Progress on BD Code of Practice for Performance Based Fire Safety Design	M C LUO W K CHOW Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
2 Sep 2004	Short Course on Computer Modelling – Compartment Fires, Evacuation	M C LUO W K CHOW Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
7 Sep 2004	Short Course on P&D System Review (1)	POON Shek Chuen Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
8 Sep 2004	Energy Conservation & Cost Saving Strategies in Chilled Water Plant	LIM Beng Teck Jointly organised with ASHRAE and CIBSE
9 Sep 2004	Short Course on Fire Safety System Design	Richard YUEN Kenneth LI L ZHAO Jointly organised with IFE, ASHRAE, BOSMES, PolyU and CityU
14 Sep 2004	Short Course on P&D System Review (2)	William CHEUNG Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
16 Sep 2004	Short Course on Wet System	Daniel H W CHAN Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
21 Sep 2004	Short Course on Pumps and Piping Systems	William CHEUNG Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
23 Sep 2004	Short Course on Fire Detection & Alarm System, Emergency Power Supply, Emergency Lighting and Exit Sign	N K FONG L T WONG Jointly organised with HKIE, IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
30 Sep 2004	Short Course on Gas Flooding System	Peter LAM Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU

# Reports from Divisions and Other Committees

Date	Title	Speaker(s)/Remarks
5 Oct 2004	Short Course on Legislation (1) Plumbing Systems	KU Chi Chung KWOK Chiu Man  Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
7 Oct 2004	Short Course on Fire Legislations – Fire Services Ordinance, Cap 95, Dangerous Goods Ordinance, Cap 295	Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
11-13 Oct 2004	Intelligent Innovations for a Sustainable Quality of Life	Jointly organised with IEE
11-14 Oct 2004	IEE International Conference on Building Electrical Technology (BETNET 2004) – Intelligent Innovations for a Sustainable Quality of Life	–
12 Oct 2004	Short Course on Legislation (2) Drainage Systems	Y Y KWOK  Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
14 Oct 2004	Short Course on Fire Legislations – Fire Safety (Commercial Premises) Ordinance, Cap 502, Fire Safety (Buildings) Ordinance, Cap 572	Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
19 Oct 2004	Short Course on Sewage & Effluent Treatment and Mics Systems	Raymond H M CHAN  Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
21 Oct 2004	Short Course on Smoke Extraction System, Pressurisation System and VAC Control	M C HUI Fiona TSUI  Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
26 Oct 2004	Short Course on Operation & Maintenance of P&D Systems	Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
28 Oct 2004	Short Course on Buildings Department's Code of Practice - Provision of Means of Escape in Case of Fire, Provision of Means of Access for Firefighting & Rescue Purpose, Fire Resisting Construction	Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
2 Nov 2004	Short Course on Testing and Commissioning	Jointly organised with BOSMES, HKPSWTA, IOP and CIBSE
4 Nov 2004	Short Course on the Structure of Fire Protection Commands of FSD and Delineation of Responsibilities among Various Divisions, Statutory Submission Procedures, Requirements on Access for Fire Appliances & Street Fire Hydrant	Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
11 Nov 2004	Short Course on Fire Action Plan	Peter KWOK Philip PIH  Jointly organised with IFE, CIBSE, ASHRAE, BOSMES, PolyU and CityU
16 Nov 2004	Joint Symposium on Servicing Dense Built Environments	Jointly organised with CIBSE, ASHRAE and PolyU
4, 6, 9, 11, 13, 16, 18, 20, 23, 27 & 30 Nov 2004	Short Course on Testing & Commissioning of Heating, Ventilation and Air-conditioning Systems	Jointly organised with BOSMES, IVE (MH), REEM and HKBC&C
27 Nov 2004	Sustainable Buildings – Quality Building Award (QBA) 2004 Wining Buildings	Jointly organised with YMC, CIBSE and HKIA

Date	Title	Speaker(s)/Remarks
11 Dec 2004	Distinguished Lecture on Ventilation & Health	Jan SUNDELL  Jointly organised with ASHRAE and HKU
4, 6, 11 & 13 Jan 2005	Financial Management for Building Operation and Maintenance Professionals	Jointly organised with BOSMES and PolyU
18 Jan 2005	International Conference on Intelligent Systems, Structures & Facilities	Organised by Asian Institute of Intelligent Buildings, supported by BS Division, BOSMES, CIBSE, IEE, HKIFM and HKIUS
20-21 Jan 2005	Contemporary Solution for Lift Safety	Jointly organised with IFE, ASI and FSD
4 Mar 2005	The Challenges to BS Design in Police Station	S K HO  Jointly organise with ASHRAE and CIBSE
	The Application of Integrated Security System in Modern Buildings	CHAN Tak Ka FUNG Tat Yin
7 Mar 2005	Application of Ice Storage Plant for Air Conditioning Purpose	Ricky Y C CHAN M Y YIP  Jointly organised with CIBSE, ASHRAE and PolyU
14 Mar 2005	Natural Ventilation	CHEN Qingyan  Jointly organised with CIBSE, HKU, ASHRAE and CityU
16 Apr 2005	Assessment of Day-lighting Performance of Buildings	T M CHUNG  Jointly organised with CIBSE, CIE (Hong Kong), BSE, PolyU and ASHRAE
10 May 2005	Life Cycle Energy Analysis of Building Construction	Francis YICK Welman LEUNG  Jointly organised with EMSD and OAP
3 Jun 2005	Thermal Energy Storage – Stainless Steel Ball Plus Ice	Richard CHAN  Jointly organised with CIBSE and ASHRAE
8-11 Jun 2005	Guangzhou International Lighting Exhibition & Electrical Building Technology China 2005	–

## Technical Visits

Date	Title
31 Jul 2004	Hong Kong Wetland Park – Geothermal Heat Pump Air Conditioning System Installation
11 Sep 2004	Guangzhou Otis Elevator Factory
2, 9, 16 & 23 Oct 2004	Fire Services Communication Centre (Third Generation Mobilising System TGMS)
30 Oct 2004	Fire Services Training School (Demonstration on Compartment Fire Behaviour Training)
	Shenzhen Huawei Technologies
	Hong Kong Science Park – Designing for Tomorrow
20 Nov 2004	The Challenges to Building Services Design in Wanchai Police Headquarters
4 Dec 2004	URA K2 Development – The Langham Place
5 Mar 2005	Asia Airfreight Terminal (AAT) at Hong Kong International Airport
28 May 2005	Schneider Busway (Guangzhou) Ltd



Ir Yu Sai-yen

### Civil Division

International conferences and official trips to the Mainland continued to successfully attract the support of members. The International Conference on “Coastal Infrastructure Development – Challenges in the 21st Century”, the Conference on “Public-Private-Partnerships: Opportunities and Challenges” and the International Seminar on “Project Management” attracted a total of over 800 overseas and local delegates. With regard to the Young members, Sustainable Journey 2004 to Shanghai and the 2004 Mainland Civil and Construction Technology Winter Camp for Youth of Hong Kong in Hangzhou were also held with great success.

Regular programmes, including more than 40 technical meetings and seminars, attracted record-breaking attendances. Two new series focusing on Information Technology and Mainland Contact were launched at the beginning of 2005 to cover the wide range of advanced technological applications in civil engineering and to give members the opportunity to communicate interactively with Hong Kong engineers working on the Mainland.

The Division jointly organised two open forums with other Divisions on “Harbour Area Treatment Scheme (HATS) Stage 2” and “Hung Hom Peninsular”. Views from the HATS forum were brought to the attention of senior government officials and were followed up during a round table discussion involving the HKIE and senior Government officials led by Ir Dr the Hon Sarah Liao, Secretary for Environment, Transport and Works.

Two new annual awards have been established. The Best Reporter Award is set up to honour the reporter who contributes the best report on technical meetings or other activities published in the journal of the Institution. The Most Contributing Organisation Award is made to the organisation which contributes the most while hosting technical visits or giving presentations to technical meetings of the Division.

The 2004 Civil Engineering Papers of the Year Award again received strong support with 11 papers submitted.



Chairman of Civil Division presenting the Most Contributing Organisation Award to the Director of Civil Engineering and Development at the Division Annual Dinner

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
13 Jul 2004	Site Safety Management in Public Works Projects	WONG Chiu Yau
29 Jul 2004	Presentation of CEYPA Short-listed Papers	–
5 Aug 2004	The Significance of Underground Utility Survey from the Management Point of View	Damien C C KU Jointly organised with CIWEM and HKIUS
10 Aug 2004	Rehabilitation of Water Mains in Hong Kong	WONG Kwok Hung
2 Sep 2004	People's Republic of China Professional Constructor System and Qualification Examination	L C YU William T F CHAN
7 Sep 2004	The London Underground Public Private Partnership (PPP)	Arthur MCLNNIS Jointly organised with ASCE
16 Sep 2004	Deep Bay Link	Joseph T K LEE
4 Oct 2004	International Brunel Lecture 2004 – Water for the World – Why It Is So Difficult?	John K BANYARD Jointly organised with ICE
7 Oct 2004	Geothermal Heat Pump (GHP) Air-conditioning System in Hong Kong Wetland Park	Andrew Hall LEWIS Andy SUEN Joe LAM Jointly organised with EV Division and CIWEM
9 Oct 2004	Open Forum on Harbour Area Treatment Scheme (HATS) Stage 2	Albert KOENIG K C LAM Albert LAI W W CHUI Jointly organised with PR Committee and CIWEM
12 Oct 2004	Risk Management – Safety Culture and Its Role in Accident Reduction	Sukhy BARHEY Dorothy CHAN Jointly organised with YMC
20 Oct 2004	Early Contractor Involvement (ECI) – an UK Highway Project Experience	Brett DOUGHTY
23 Oct 2004	Sustainable Development in Logistics and Transport Development in Hong Kong	Vera TANG C K MAK Jointly organised with YMC
28 Oct 2004	Design and Construction of the Reinforced Fill Structures in Hong Kong	Chris SHI Paco TSANG Richard AUSTIN
4 Nov 2004	Prolongation Claims under Hong Kong General Conditions of Contract – A Contract Administrator's Perspective	Bevis MAK
9 Nov 2004	Bioremediation Works in Shing Mun River	T S TSUI
17 Nov 2004	Young or Ready – Professional Assessment Series – Civil Discipline	David LAU Victor K Y LO Jointly organised with YMC
20 Nov 2004	「中國建造師制度與建設項目管理」研討會	–
22-24 Nov 2004	International Conference on Coastal Infrastructure Development – Challenges in the 21st Century	Jointly organised with ETWB (Works)
25 Nov 2004	PPP-Hong Kong's Practice and Way Forward with Highlights on Road Maintenance	MO Sau

# Reports from Divisions and Other Committees

Date	Title	Speaker(s)/Remarks
29 Nov – 1 Dec 2004	國際工程管理研討會	Jointly organised with the Chinese Academy of Engineering and the Hong Kong Academy of Engineering Sciences
2 Dec 2004	Condition Assessment of Asphalt Carriageway Network by Ground Penetrating Radar	Steven TSANG Wallace LAI  Jointly organised with HKIUS and UTI
7 Dec 2004	Design and Construction of the East Rail Extension Tsim Sha Tsui Station	Timothy SUEN Colin WADE David SMITH
8 Dec 2004	Open Forum on Hunghum Peninsular	K P YIM H F CHAN  Jointly organised with EV, BD and BS Divisions and PR Committee
10 Dec 2004	Moving Heavy Pre-cast Units Using Inflatable Air Bag Rollers	Alan M L LAW  Jointly organised with AMC and YMC
16 Dec 2004	Silent Piling Technology and Its Applications in Hong Kong	GOH Teik Lim Ivan LEUNG
25-31 Dec 2004	2004 Mainland Civil and Construction Technology Winter Camp for Youth of Hong Kong	Delegates of the Winter Camp
6 Jan 2005	Giant Tree Transplantation at Penny's Bay	Kelvin LAU David LAU
11 Jan 2005	Hong Kong Wetland Park	Vinci LI
25 Jan 2005	Design and Build Form of Contract – Drainage Services Department's Experience	K W MAK Samson LAM Ian MACKENZIE
1 Feb 2005	IT Series (1): GIS Applications in Civil Engineering – Hong Kong Experience	Thomas LEE
19 Feb 2005	Pipe Rehabilitation by Lining Methods	H C CHENUG Zico KWOK  Jointly organised with CHKSTT, HKIUS, IC-HKPU and UTI
22 Feb 2005	Conference on Public Private Partnerships – Opportunities and Challenges	Jointly organised with CICIP of HKU
24 Feb 2005	Design and Construction on West Rail Pat Heung Maintenance Depot	Edmund KWONG
26 Feb 2005	Mainland Contact (1): Shekou Port and Shenzhen Metro Line 4	–
3 Mar 2005	Application of Fibre-reinforced Polymers in Civil Engineering – Hong Kong Experience	JIN Song Wang S H GIAM
8 Mar 2005	IT Series (2): RFID Applications in Civil Engineering – MTRC's Experience	Ian J SHELLEY Corey HO
22 Mar 2005	Bridge Management System and Condition Assessment for All Bulgarian Road Bridges; and Case Study of Acoustic Monitoring and Residual Stress Measurement in a Post-tensioning Bridge in Belgium	Gilles HOVANESSIAN Mouna AOURI
7 Apr 2005	IT Series (3): GPS Applications in Civil Engineering – Hong Kong Experience	Thomas LEE
12 Apr 2005	Winter Camp Presentation	Delegates of the Winter Camp 2004
15 Apr 2005	Utility Survey as Your Second Profession	S M FOO C C KU  Jointly organised with CA Division, HKPU-IC and HKIUS

Date	Title	Speaker(s)/Remarks
16 Apr 2005	物流工程科技應用分享會	Ian SHELLEY David CHEUNG Jeffrey WONG  Jointly organised with AES, HKU-SPACE, CITL-HK and HKLA
22 Apr 2005	Railway Project Opportunity for Kowloon-Canton Railway Corporation (KCRC) in the Next Five Years	K K LEE
23 Apr 2005	Mainland Contact (2): The Hong Kong – Shenzhen Western Corridor (HK-SWC) Steel Deck Fabrication Yard in Dongguan	–
28 Apr 2005	Design and Build of Tung Chung Cable Car	Markus SIGRIST
5 May 2005	IT Series (4): Collaboration Information Portal for Resident Site Office	C K NG
20 May 2005	The Transformation of Shing Mun River	T S TSUI  Jointly organised with AMC and YMC
	Would Ground Penetrating Radar (GPR) Help in Underground Utility Survey?	Steven TSANG Neil KEEN  Jointly organised with CA Division, HKIUS and UTI
7 Jun 2005	IT Series (5): System Development and Implementation of Public Works Programme Information System	LEUNG Wing Lim
9 Jun 2005	Utility Management in Hong Kong	Thomas H C WONG  Jointly organised with GE Division and HKIUS

## Technical Visits

Date	Title
26 Jun 2004	Extension of Sha Tin Sewage Treatment Works
10 Jul 2004	Ngong Ping Sewage Treatment Plant, Trunk Sewers and Effluent Export Pipeline
21 & 28 Aug, 25 Sep & 20 Nov 2004	Route 8 – Sha Tin Heights Tunnel and Approach
4 Sep & 6 Nov 2004	Road T3 and Associated Roadworks
11 & 18 Sep 2004	Deep Bay Link – Southern Section
9 & 16 Oct 2004	Shenzhen West Corridor – Pre-cast Segment Construction: Casting Yard in Nam Sha
30 Oct 2004	KCRC – Lok Ma Chau Spurline: Viaduct Section
13 Nov 2004	Yantian Port Development
27 Nov 2004	KCRC – Lok Ma Chau Spurline: TBM Works
11 Dec 2004 & 8 Jan 2005	New International Exhibition Centre at Hong Kong International Airport
18 Dec 2004	Route 8 – Ngong Sheung Chau Viaduct
22 & 29 Jan 2005	Deep Bay Link (Northern Section)
7 & 28 May 2005	Route 8 – Lai Chi Kok Viaduct
21 May 2005	Hong Kong Wetland Park at Tin Shui Wai
4 & 25 Jun 2005	Route 8 – Eagle's Nest Tunnel and Associated Works
18 Jun 2005	Tung Chung Cable Car Project





Ir Angus H W Cheung

### Control, Automation & Instrumentation Division

The Control, Automation and Instrumentation (CA) Division Committee organised about 20 learned society activities including technical visits, seminars, technical forum and symposiums during the Session.

It made good progress in establishing closer working relationships with other institutions. In November 2004, the Division co-organised with the China Association of Automation (CAA) on a Technical Forum held in Guangzhou. Apart from attending the Forum, the Division also invited the delegation of CAA senior members to visit the Institution and some of the major Control, Automation and Instrumentation installations at the Hong Kong International Airport.

Internationally, the Division was represented at the "16th IFAC World Congress" organised by the International Federation of Automatic Control (IFAC), held in Prague in July 2005 and is in the final stage of concluding a co-operation agreement with the Asian Institute of Intelligent Building (AIIB). HKIE members will be informed when this agreement is signed.

The success of the Division is the result of the work and support of Committee members and helpers, and in particular, the Division's office bearers.



Visit to Airport Mail Centre at Chek Lap Kok Airport with the Delegation of the China Association of Automation

### Electrical Division

The Electrical Division Committee held 11 meetings to discuss and plan activities for members during the Session.

The International Conference on Electrical Engineering (ICEE) 2004 was held in Sapporo, Japan in July 2004. A number of the Division's representatives attended the Conference. The technology competition for secondary schools on "Wise Use of Energy - Today and Tomorrow" was successfully held. The prize presentation ceremony was held in August 2004 following an exhibition of the schools' project works at the Hong Kong Science Museum in July 2004. The winning team was awarded a study tour to Singapore.

The 22nd Annual Symposium was held on 19 October 2004 with the theme "Competitive Advantages of Hong Kong - An Electrical Engineering Perspective". A total of nine papers were presented in the Symposium and over 200 delegates exchanged views and experiences.

In this Session, 13 technical talks and nine technical visits were arranged. Other events organised included visit to the Three Gorges Project on the Mainland in October 2004. This included a trip to the top of the Three Gorges Dam where members had an eye-opening view on the great project. The Overseas Technical



Ir Ip Pak-nin

Technical Meetings/Seminars		
Date	Title	Speaker(s)/Remarks
16 Jul 2004	The Significance of Underground Utility Survey from the Management Point of View	Daniel C C KU
24 Nov 2004	Annual Forum of Chinese Automation Association at Guangzhou	Co-organised by CA Division
7 Dec 2004	Building Commissioning: Benefits and Costs (PSDAS project)	WONG Wai Tung Victor CHEUNG
11 Jan 2005	Design Principles & Maintenance Management of Curtain Walls	Edward TAM Su YAM
18 Jan 2005	International Conference on Intelligent Systems, Structures and Facilities 2005	Co-organised by CA Division
22 Jan 2005	Collaborative Aviation Training Solutions for the Pan Pearl River Delta	Co-organised by CA Division
18 Feb 2005	2005 Quality & Management Series II - 5 S	Louis LOCK R MAK
24 Feb 2005	Energy Management in Modern Buildings	-
15 Apr 2005	Utility Survey As Your Second Profession	S M FOO C C KU
27 Apr 2005	CAI Symposium 2005	-
20 May 2005	Would Ground Penetrating Radar (GPR) Help in Underground Utility Survey?	Steven TSANG Neil KEEN
26 May 2005	RFID Technologies	Bernard CHIANG

### Technical Visits

Date	Title
23 Oct 2004	IFC Two
24 Nov 2004	Super Terminal One and Airport Mail Centre (for CAA Delegation)
12 Mar 2005	KCRC West Rail Control Centre
15 Jan 2005	West New Territories (WENT) Landfill
7 May 2005	Government Flying Services



Delegation at the Three Gorges



## Reports from Divisions and Other Committees

Visit Team toured Europe in July 2004. The itinerary included visits to world-class manufacturing/testing plants such as Koncar Power Transformer (KPT) Ltd in Croatia, Iskraemeco Energy Measurement & Management Ltd in Slovenia, Schindler in Austria and Toyo Electronics Raychem in Germany.

A membership drive and career talks were delivered to students at Hong Kong's tertiary institutions including the University of Hong Kong, the Hong Kong Polytechnic University and the Hong Kong Institute of Vocational Education and the Division's homepage was completely revamped during the year. The new website [www.hkie-electrical.com](http://www.hkie-electrical.com) enables us to manage content directly for timely dissemination of divisional news and information to members.

With the unfailing support of members, the Division will continue to expand and excel in its services to meet the needs and aspirations of all members.

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
16 Aug 2004	Power Quality	Vincent TO H F KWAN
11-13 Oct 2004	Conference on Building Electrical Technology	Supported by EL Division
29 Oct 2004	Power System Protection	P K CHAN
9-12 Nov 2004	International Conference on Power Electronics Systems and Applications	Supported by EL Division
16 Dec 2004	Knowledge Management in Practice	T W BUI
13 Jan 2005	VCB Magnetic Transient	Edward LO Cat WONG
21 Jan 2005	HV Variable Speed Pump Control at Stonecutter Island	Norman K K SIU Dominic K H HO
14 Mar 2005	Contract Management	Lily HEO
15 Apr 2005	HV Distribution in Buildings	Eric CHUI
27 Apr 2005	Lightning Protection for Building Structures and Equipment	Joe LAU
5 May 2005	Application of RFID Technology in Hong Kong Airport	Y F WONG
24 May 2005	Renewable Energy – Grid-connection and Technologies	-
13 & 14 Jun 2005	Conference on Alternative Energy	Supported by EL Division

### Technical Visits

Date	Title
26 Jun 2004	CLP Power's Training School
30 Oct 2004	Tai Po Water Treatment Works
13 Nov 2004	One Peking Road
11 Dec 2004	Hong Kong International Airport Control Centre
5 Feb 2005	MTR – Disneyland Resort Line
19 Mar 2005	The System Control Centre of the Hongkong Electric Co Ltd
24 Apr 2005	Power Quality Centre of CLP Power
28 May 2005	Stonecutter Treatment Plant
25 Jun 2005	Tung Chung Cable Car

### Electronics Division

The Electronics (EN) Division organised or co-organised over 20 different events during the Session. The objective was to provide diverse CPD programmes and activities for members. The PSDAS project on Integrated Circuit (IC), which was jointly organised with the IT Division, started off with a five-day IC Technology Exchange with counterparts in Shanghai and Beijing in August 2004, followed by the IC Hong Kong Symposium and a four-day IC Workshop in Hong Kong held in the fourth quarter of 2004.



Ir Frank F Chan

Given the fact that the electronics industry has become the largest merchandise export earner, and accounted for 45% of Hong Kong's total exports in 2004, the Division has set out a very clear objective to encourage more communication and sharing among members in different electronics industry sectors, and to forge a much closer collaboration with the trade associations. To meet the objective, the Division has maintained close relationships and organised networking functions with the Hong Kong Electronic Industries Association, the Hong Kong Critical Components Manufacturers Association and universities. The Annual Dinner 2005 was a great success, attracting the presence and support of various industrial sectors and academia.

While the Division focused on bringing members and partners of the electronics industry closer together, it did not lose sight of the need to attract new blood to ensure sustainable development of the Division. As a result, the Division has liaised with universities to recruit more Student Members and worked closely with the Biomedical and IT Divisions and the HKIE Secretariat to spearhead a membership drive among tenants at the Hong Kong Science and Technology Park.

To improve the continuity of the Division's culture and development, Past Chairmen have been invited to be advisors to the Division Committee. With their presence and the support of fellow members, the Division will grow from strength to strength.



Electronics Division Annual Dinner

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
31 Aug – 4 Sep 2004	IC Technology Exchange Programme to Shanghai and Beijing (PSDAS project)	Jointly organised with IT Division
15 Oct 2004	Linking the Virtual Logistics Supply Chains	Anna LIN
19-20 Oct 2004	JEDEX Shenzhen 2004	Organised by the JEDEC Solid State Technology Association and supported by EN Division
5 Nov 2004	IC Hong Kong 2004 Symposium	–
10 Nov 2004	Intelligence at Society Competition 2004	Organised by HKBU and supported by EN Division
	Bluetooth	Lawrence YEUNG
26 Nov 2004	Recent Development of the IT Industry in the PRC and an Unique Role for Hong Kong	Jointly organised with IT Division and the Hong Kong Computer Society
12, 19, 26 Nov & 3 Dec 2004	IC Hong Kong 2004 Workshop	Jointly organised with IT Division
3 Dec 2004	Middleware in Game Development	Milo YIP
12 Jan 2005	Third Generation Mobile	ON Ching Yu
19 Jan 2005	Workshop on China Compulsory Certification Mark (PSDAS project)	Jointly organised with HKPC
22 Feb 2005	Augmented Reality and Mixed Reality	Clifford CHOY
11 Mar 2005	中醫養生之道	Jointly organised with IT Division and AMC
15 Mar 2005	The Future of Digital TV Broadcasting and Home Entertainment	Organised by VTC and supported by EN Division
18 Mar 2005	Annual Dinner	–
11 May 2005	The Role of the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI) in the Hong Kong Electronics Industries	Robert YANG

### Technical Visits

Date	Title
30 Oct 2004	Mega-iAdvantage
22 Jan 2005	Tseung Kwan O TVB City
26 Feb 2005	CLP Power Digital Trunked Radio (TETRA) System

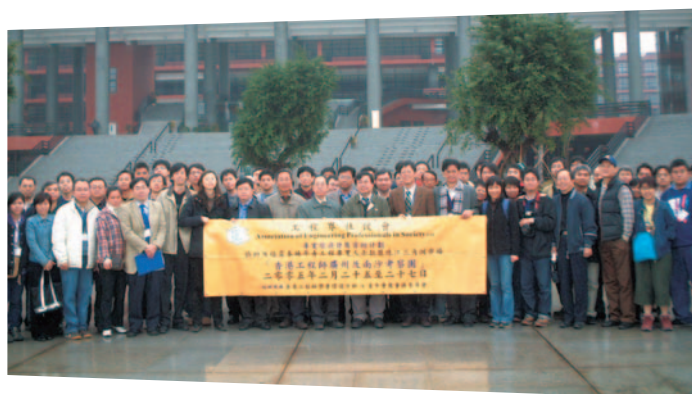


Ir Patrick W M Ng

### Environmental Division

The Environmental Division introduced new initiatives to restructure its Committee during the Session. Three working groups on “Mainland Liaison”, “Sustainable Construction” and “Green Issues” were formed. These working groups encouraged more exchanges with the Mainland, particularly within the Pearl River Delta (PRD) in Guangdong and Macau with the momentum from the 9 + 2 Pan PRD Forum. The Division also focused on promoting sustainable or green construction practice and technology in the construction industry. Professional views and engineers’ ideas on green issues, including current issues such as the Harbour Area Treatment Scheme and waste charging, were conveyed to the Government and the public through forum and consultations.

Technical meetings and visits were managed under the Programme & Publicity Sub-committee of the Division and the Divisional web page was much enhanced. The Environmental Paper Award jointly with Hong Kong Construction Association was launched to promote good projects with environmental considerations or inputs, either during design or construction phases. Promotion on the Book Prize to young engineers was made, and attracted a number of high-standard articles.



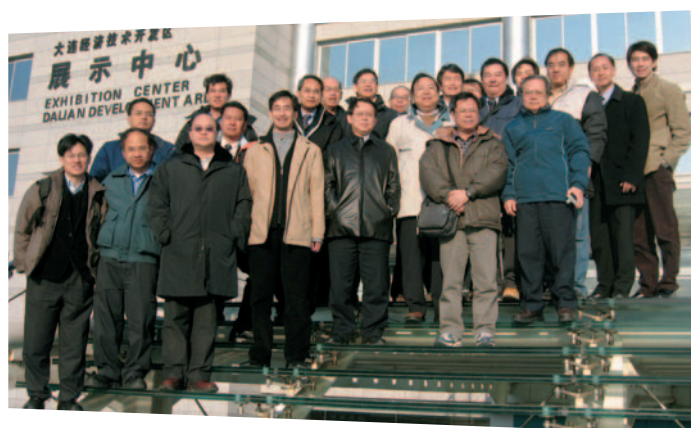
Delegation to Guangzhou

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
7 Jul 2004	ECO-product Concept and Produce Recycling in Relation to Environmental Disposal	Wilie WONG Jointly organised with HKWMA
22 Jul 2004	Environmental Business Opportunity in Mainland China upon Launching of Pan-PRD Regional Collaboration	Cathy JIAN Jointly organised with HKWMA
17 Aug 2004	Sai Tso Wan Recreation Ground – The First Permanent Landfill Afteruse Facility	Lawrence CHEUNG Jointly organised with HKWMA
14-21 Aug 2004	Soil Remediation Technologies	Irene M C LO
7 Oct 2004	Geothermal Heat Pump Air-conditioning System in Hong Kong Wetland Park	Jointly organised with CIWEM
9 Oct 2004	HATS Stage 2 Consultation Forum	Benny WONG, W W TSUI, Albert LAI, Iris TAM, Davis WU Jointly organised with PRC, CSC, GE and CV Divisions and CIWEM
15 Oct 2004	Workshop on Dioxin Source Measurements	Jointly organised with AWMA and PolyU
10-11 Nov 2004	Workshop on Emission Source Characterisation	Jointly organised with AWMA
4 Dec 2004	Sustainable Development	The Chater House Project Team, Civic Exchange, HK Land & Gammon
14 Dec 2004	CEPAS	Raymond YAU, Vincent CHEUNG, Edward CHAN Jointly organised with PolyU
11 Jan 2005	Hong Kong Wetland Park	Vinci LI Jointly organised with CV Division and CIWEM
17 Jan 2005	Urban Renewal as a Forum of Sustainable Development	Stephen LAM Daniel HO

# Reports from Divisions and Other Committees

Date	Title	Speaker(s)/Remarks
18 Jan 2005	5 S Management	Louis LOCK, R MAK  Jointly organised with SSC, EE of HKU and IVE
21 Feb 2005	Green Laying of Railway Tracks at KCRC East Rail	Peter KWAN
15 Mar 2005	Annual Reception	Gordon WU
13 Apr 2005	Talk after AGM, Biodiversity in Hong Kong	P M SO
14 Apr 2005	Ways to Improve Indoor Air Quality (IAQ) and IAQ Certification Scheme in Hong Kong	Raymond FONG  Jointly organised with CIWEM



Technical Visit to Dalian

## Technical Visits/Other Activities

Date	Title
21 Aug 2004	Siu Tso Wan Recreation Ground
13 Nov 2004	Night Safari at Kadorie Farm and Botanic Garden
22 Dec 2004	Visit to Liaison Office of the Central People's Government in HKSAR
15 Jan 2005	West New Territories (WENT) Landfill
25-27 Feb 2005	Delegation to Guangzhou
12 Mar 2005	Delegation to Macau Institution of Engineers



## Gas & Energy Division

The Gas and Energy (EG) Division continued to maintain close collaboration with related learned societies in Hong Kong during the Session. Relationships with the Institution of Gas Engineers and Managers (IGEM) (Far East District Section), the Energy Institute (Hong Kong Branch), the Hong Kong Association of Energy Engineers (HKAEE), and the Building Services Operation and Maintenance Executive Society (BSOMES) continued to strengthen.

The Division, together with the IGEM (Far East District Section), organised a technical visit to Dalian to study the development of the Mainland's gas industry. Another 12 technical visits, seminars and meetings were organised for members. These events provided opportunities for Continuing Professional Development (CPD) for members and brought together fellow members and affiliates in the gas and energy industry.

Through the HKIE, the Division continued to share professional knowledge by providing feedback to different government consultation papers such as the Code of Practice on Working Near Electricity Supply Lines under the Electricity Supply Lines (Protection) Regulation.

The Committee recognised a divergence between the Committees of the EG Division and the Nuclear Division as to the path and format of amalgamation. The Committee considered that dissolution of the EG Division as a prerequisite to facilitate the formation of the proposed amalgamation would not be beneficial to the continuation of the gas and energy learned society activities and the Division's established links with external learned and professional organisations.

The Council, having considered the opinions of the Divisions on this issue, adopted an administrative arrangement proposed by the Learned Society Board. This covers the composition and temporary additional membership of the Division Committee should the Nuclear and the EG Divisions be amalgamated. A three-year transitional period would be granted for this special administrative arrangement. This amalgamation arrangement including the number of additional seats of ordinary members during the transitional period will be further discussed with the Nuclear Division in the coming Session.

All Committee Members worked hard to ensure the Division enjoyed another successful Session.

## Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
6 Sep 2004	Exploding Manholes – A Public Safety Issues	John TONEN  Jointly organised with IGEM
23-25 Sep 2004	Energy Auditing	Jointly organised with the Energy Institute, HKAEE, BSOMES, HKPC and HKU
30 Sep 2004	Guidelines on Energy Audits	Joe CHAN Iris LAU
19 Nov 2004	Application of Trigeneration System in a Commercial Building in Beijing	Colin CHUNG
27 Jan 2005	Gas Market in China	Joseph LAI
27 Apr 2005	Latest Development of Polyethylene Piping System in the Gas Industry	Gustaff SUYS  Jointly organised with IGEM
9 May 2005	Counting the Cost of Energy – An Innovative Approach to Sustainable Development	Otto POON

## Technical Visits

Date	Title
24 Jul 2004	Hong Kong Science Park
28 Aug 2004	Pumpable Ice-slurry Air-conditioning System at Lei Yue Mun Park and Holiday Village
13 Nov 2004	Turbojet Shipyard Facilities
17-20 Mar 2005	Dalian Delegation
23 Apr 2005	CLP – Black Point Power Station
18 Jun 2005	Shell Tsing Yi Terminal





Ir Mak Shu-hei

### Geotechnical Division

The Geotechnical Division's Annual Seminar on "Safe and Green Slopes" was held in May 2005 and attracted an audience of more than 400 people and 34 high quality technical papers. Ir Raymond Chan, Head of Geotechnical Engineering Office (GEO) of Civil Engineering and Development Department, and Dr Robbin Sotir from Robbin & Sotir & Associates Inc delivered stimulating keynote lectures on the holistic Hong Kong approach to Safe and Green Slopes and the Integrated Natural Approach to Soil Bioengineering respectively.

Highlights from the Division's technical meetings included a talk by Dr Brian Simpson on Computer Modelling, presentations on the Three Gorges Project and the Third Lumb Lecture by Prof C F Lee. Other presentations covered the Recent Developments in Natural Terrain Studies by Ir H N Wong, the talk by Prof Harry Poulos on Pile Behaviour, and the talk by Ir Dr Jack Pappin and Ir Dr Matthew Free on the Design for Tsunami Hazards.

In view of the extensive developments in Macau, the Macau-Hong Kong Geotechnical Lecture Series were organised. The first talk was held in November 2004 on Fundamental Issues in Geotechnical Engineering. This was followed by the presentation on Underground Structures in December 2004. Lectures in 2005 focused on Reclamations, Foundations and Slope Issues.

The 11th Annual Dinner took place in March 2005 with the Director of Buildings, Mr Marco Wu, JP, as the Guest of Honour. He briefed the audience of around 250 people on the legislation of Registered Geotechnical Engineers (RGE). With the full implementation of the RGE system on 31 December 2005, qualified Geotechnical Engineers will be fully responsible for private geotechnical building works.

The winner of this year's Fugro Prize was Mr Eric Wong of GEO, with a paper entitled "Centrifuge Modelling on Large-diameter Bored Piles with Toe Defects". Book prizes and student prizes were also awarded.



Technical Visit to Route 8, Shatin Heights Tunnel

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
30 Jun 2004	Masonry Block Reinforced Soil Retaining Walls – A New Technology	R J BATHURST
7 Sep 2004	Pile Behaviour – Consequences of Geological and Construction Imperfections	Harry POULOS
15 Sep 2004	Registration of Geotechnical Engineers under the Buildings Ordinance	S H MAK
6 Oct 2004	The 3rd Lumb Lecture – Geotechnical Challenges in Hydropower Development in China	C F LEE
26 Oct 2004	Water Leak Detection for Buried Water – Carrying Services Affecting Slopes	K WONG
9 Nov 2004	De-briefing on the 5th Asian Young Geotechnical Engineers Conference/ Real-Time Observational Compensation Grouting	Winnie HUNG Ansie WONG Yann AMICEL
20 Nov 2004	CPD Course on Engineer Inspection for Slope Maintenance	–
24 Nov 2004	Road Tunnel Construction in Ma On Shan	Chris W F LAU Sam H Y HO
14 Dec 2004	Numerical Analysis and the Real World – It Looks Pretty, But Is It Right?	David HO
13 Jan 2005	Seismic Design of Stonecutters Bridge	Jack PAPPIN
25 Jan 2005	Designing for Tsunami Hazards	Jack PAPPIN Matthew FREE
1 Mar 2005	Landslides and Slope Engineering in Hong Kong	Ken HO
4 Mar 2005	Soft Ground Tunnelling Using Multi-circular Shield	J T HUANG CHENG Zhong Hang
1 Apr 2005	Long Term Effect of Geotechnical Process	–
4 May 2005	Annual Seminar – Safe and Green Slopes	Raymond CHAN Robbin SOTIR
6 May 2005	Application of GIS in Geotechnical Engineering	Mark WALLACE

### Technical Visits

Date	Title
14 Aug 2004	CLP Pipe-jacking Cable Duct Crossings at Canton Road
27 Nov 2004	Route 8, Shatin Heights Tunnel
26 Feb 2005	Formation and Associated Infrastructure Works for Development at Choi Wan Road and Jordan Valley



Ir Lee Wan-lik

## Information Technology Division

The IT Division continued to play an active role in promoting IT to engineers and within the community. Around 20 seminars and visits on topics ranging from smart ID cards, 3G-telecommunication technology to semiconductor technology were organised. The Division also participated in the PSDAS to promote IC design activities in Hong Kong.

Strengthening ties between the Division and other IT organisations was a highlight of the year. Following

the Memorandum of Understanding signed with the Hong Kong Computer Society, the Division jointly organised a key election forum for the candidates of the IT functional constituency last year. Together with the Hong Kong Computer Society, the Division represented the majority of eligible voters and, as a result, the event attracted a capacity attendance. With strong and capable support from the HKIE Secretariat, very vigorous and exciting discussions were conducted under a professionally chaired and managed forum.

The Division launched its first community service project "IT Bridges: Connecting the Hearing Impaired Students to the World". It not only provided refurbished PCs and broadband connections to deserving students, but also bridged the world of young engineers, young police officers and the hearing impaired students through a Care Programme.

After more than ten years of existence, the Division has reviewed its vision and concluded that advocating professionalism should be the Division's primary goal. It offers a core of highly qualified members in the Discipline that has gone through a rigorous vetting process, and being part of the HKIE accords it a professional standing.

With this foundation, the IT Division is in a strong position to promote sustainable excellence in the IT industry. Along that line, the HKIE continues to chair a task force on Professional Qualification for IT Practitioners, which has representation from 14 IT organisations and societies. In the future, much more work is needed to promote excellence in the application of engineering principles on large IT projects.



Technical Visit to Macao University of Science and Technology

## Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
5 Jul 2004	Technology Creativity	Stephen LAI
16 Aug 2004	Model Driven Software Development Approach	Curtis TSANG
20-23 Aug 2004	Hong Kong Computer and Communication Festival 2004	-
24 Aug 2004	Open Forum for Candidates of Information Technology Functional Constituency (ITFC)	-
3 Sep 2004	Be a Challenging Engineer - Médécins Sans Frontières Mission	Alice CHOW Albert KO
24-25 Sep 2004	IT Symposium	Winnie TANG Dik LEE
1 Oct 2004	Information Dissemination Seminar on IC Design	Spencer TAO
19 Oct 2004	Global Applications of Commercial Satellites for Engineers	Thomas LEE
5 Nov 2004	Auditing Approach to Social Accountability 8000 (SA8000)	Miranda C Y KWAN
	IC Hong Kong 2004 Symposium (PSDAS project)	Spencer TAO
25 Nov 2004	Surface Coating - Its Research and Industrial Applications at Advanced Coatings Applied Research Laboratory	YIU Wing Mai Lawrence LI
26 Nov 2004	Recent Development of the IT Industry in Mainland China and an Unique Role for Hong Kong	C K WONG
25 Feb 2005	3G Technology and Trend	Patricia YEE
3 Mar 2005	Securing Your Company's Infrastructure - Best Practices for IT	(ISC) <sup>2</sup> Asia
11 Mar 2005	中醫養生之道	林敬堯
14-17 Apr 2005	International Integrated Circuit Technology (ICT) Expo	-
11 May 2005	IT Division AGM	-
	Seminar - How does IT matter?	Wing WONG
24 May 2005	Serving the Community with ICT	Elizabeth QUAT
7 Jun 2005	Annual Dinner	John C TSANG

## Technical Visits

Date	Title
26 Jun 2004	Group Sense Factory at Dongguan
17 Jul 2004	Smart ID Card Center
31 Aug - 3 Sep 2004	IC Technology Exchange Programme to Beijing & Shanghai (PSDAS project)
20 Nov 2004	Indoor Air Quality Information Center
30 April 2005	Macau IT Facilities



Ir Kenneth K W Leung

### Manufacturing & Industrial Division

The Division organised a number of activities to enable members to enhance their professional capabilities, including the Young Engineers Programme 2005 (YEP!2005) and the programme on “Building the Capability of Manufacturing/Industrial Engineers in response to the CEPA Initiative”.

YEP!2005 was organised to enable undergraduates of the Manufacturing & Industrial Discipline to understand the industrial environment of Hong Kong and the Pearl River Delta Area. This was the fourth year since the programme began in the 2001/2002 Session, which included technical talks, industry visits in Hong Kong, Shenzhen and Dongguang, as well as presentations of findings by students. 30 students from five universities and IVE were selected from different grades to participate in the programme. The Closing Ceremony, which marked the end of the programme, was held on 9 April 2005.



Group photo of YEP!2005

The programme on “Building the Capability of Manufacturing/Industrial Engineers in response to CEPA Initiative”, which ran from 22 February 2005 to 25 June 2005, was funded by the Government as a PSDAS project. It included a series of one-day seminars on particular manufacturing industries, namely Garment and Clothing, Auto Parts, Watches and Clocks, Jewelry, Food, and Intellectual Property Engineering and on Creative Problem Solving. Besides, two-day seminars on CEPA and the China Market and a Study Mission in Product Research and Development (PRD) were held. The programme also covered topics like Innovative Product Development, IT Tools for Enhancing Productivity, and Lean Services.

The Division also supported other PSDAS project on the Development of Radio Frequency Identification (RFID), the Competition on Design of Creative Assistive Devices for the Elderly, and the Student Competition on Design and Make.

Sincere thanks go to the Committee Members for their support and assistance in the Division's activities.

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
15 Jan 2005	YEP!2005 Orientation Programme	–
21 Jan 2005	Medical Application for Rapid Prototyping	Martin WONG James CHOW Keith GOH L K CHEUNG Ian GIBSON Thomas YOUNG
29 Jan, 19 Feb & 19 Mar 2005	Seminar for YEP!2005	–
22-23 Feb 2005	Two-day Seminar on CEPA (PSDAS project)	–
11 & 18 Mar, 8, 15 & 22 Apr 2005	Seminars on Specific Industry – Garment & Clothing, Auto Parts, Watches & Clocks, Jewelry & Food (PSDAS project)	–
12 Mar – 8 Jun 2005	Six Sigma Black Belt Training Programme	Jointly organised with HKSQ
7, 14, 21, 28 May & 4 Jun 2005	Training Workshops – IP Engineering, Creative Problem Solving, Innovative Product Development, IT Tools for Enhancing Productivity, Lean Service (PSDAS project)	–
11 May – 14 Aug 2005	Six Sigma Black Belt Training Programme	Jointly organised with HKSQ
4 Jun 2005	Training Workshop on Lean Service (PSDAS project)	–
6-10 Jun 2005	CEPA Smart Eco-Design Programme for Manufacturing and Industrial Engineers – Enhancement of Knowledge of Design Professional on Eco-Design of Electronic or Engineering Products (PSDAS project)	Jointly organised with HKU and HKPC
17-18 Jun 2005	Two-day Seminar on China Market (PSDAS project)	–

### Technical Visits

Date	Title
5 Feb & 5 Mar 2005	YEP!2005 Visit – Towngas and Excelsior Hotel
25-26 Mar 2005	YEP!2005 China Visit – Yantian International Container Terminal and SAE



# Reports from Divisions and Other Committees



Ir Fung Wing-kun

## Materials Division

The Materials (MT) Division had been active in promoting the science of materials through the seminars and site visits. Although the Division is small, its learned society activities are still impressive and attract members of other divisions.

The Division has been very successful in getting financial help from the PSDAS. As a result, activities were run with minimum registration fees from the participants, and this proved to be especially

attractive to young members who are keen on continuing professional development.

While construction materials remain the Division's core business, it has put more effort into promoting material science in other fields. For example, a seminar was held on "Surface Coating – Its Research and Industrial Applications" in collaboration with the Innovation and Technology Commission in November 2004. Another seminar on "Diffusion Bonding Technology" was jointly held with the Hong Kong Productivity Council on 14 January 2005.

Besides promoting material science, the Division has worked closely with the industry in developing guidelines for good practice in diagnostic testing for existing concrete structures. A Diagnostic Testing Group comprising experts in the industry has been established. The techniques include infra-red thermography, radar waves detection of buried substance in concrete and an echo sounder for mapping out the profile of large diameter bored piles with bell-out. Significant progress has been made and two draft practice notes are already available.

By cooperating with other divisions and sister organisations, the Division expects to widen its scope of activities with a view to reaching out to more fellow engineers.



Seminar on Fastening Technology

## Technical Meetings/Seminars/Other Activities

Date	Title	Speaker(s)/Remarks
12 Jul 2004	Nano Seminar	–
17 & 24 Jul 2004	Watch Workshop in Shenzhen	–
30 Aug 2004	Powder Injection Moulding	–
3 Sep 2004	Health Monitoring of Concrete Materials & Structures	Supported by MT Division
30 Sep 2004	Understanding How and Why Components Fail I – General Introduction to Fractography and Basic Techniques in Failure Investigation	–
6 Oct 2004	Fastening Academy	–
7 Oct 2004	Understanding How and Why Components Fail II – Metallic Material for Construction Application	–
14 Oct 2004	Understanding How and Why Components Fail III – Failure of Lifting Devices	–
18 Oct 2004	An introduction to Petrography	–
21 Oct 2004	Understanding How and Why Components Fail IV – Glass and Other Hardware	–
29-30 Oct & 1-2 Nov 2004	Welding for Structural Engineering	–
1 Nov 2004	Reinforcement Corrosion in Concrete: Corrosion Mechanisms, Protection Systems and Galvanising	–
4 Nov 2004	Understanding How and Why Components Fail VI – Introduction to Heat Exchanger Failure	–
4-6 Nov 2004	Corrosion Problems in Heat Exchanger	–
6 Nov 2005	Spray Forming and Other Research Achievements	–
18 Nov 2004	Understanding How and Why Components Fail V – Plumbing Systems Failure	–
17 Mar 2005	Use of Recycled Aggregates in Structural Concrete	Jointly organised with ST Division
30 Mar 2005	E&M Equipment Failures – The Value or Benefits of Rapid, Local and Independent Investigations	Jointly organised with MC Division and AP Department of CityU
11 Apr 2005	Advanced Metal Injection Moulding (MIM) Technology and Its Applications in Asia 2005	–
17 Apr 2005	Straw Competition	Supported by MT Division
5 May 2005	Plasma Surface Modification of Biomaterials and Implants	–
20 May 2005	ACI China Chapter Symposium: Advances in Concrete Materials and Structures	Supported by MT Division
26-28 May 2005	Materials Science and Technology in Engineering Conference (MaSTEC) 2005	–
27 May 2005	MT Division AGM	–
9 Jun 2005	Materials Characterisation Techniques for Engineers	–



Ir Alex K M To

### Mechanical, Marine, Naval Architecture and Chemical Division

The Division organised a record of 52 activities across diversified areas and covering the spectrum of mechanical, marine, naval architecture and chemical engineering.

A highlight of the numerous technical visits to local industrial plants and facilities across the border on the Mainland was the China Tour in October 2004.

While visiting a couple of large mechanical workshops in the Sichuan Province, delegates were amazed to see one of the world's largest turning machines, a lathe spanning almost one hundred meters in length. The trip also provided members with an opportunity to meet Chinese counterparts and to exchange views on engineering developments.

The Division also organised social functions, such as Wine Tasting and Dragon Boat Racing during the Session. Technical seminars and symposiums arranged for members included one on the Application of Engineering Technology in Health and Hygiene Control, which was jointly organised with the health care professionals, attracted almost 250 participants. It was an event not only linking mechanical engineers of the HKIE with those from the Institution of Mechanical Engineers (IMechE) and American Society of Mechanical Engineers (ASME), but also the engineering profession with the health care profession across the boundary.

One of our roles is to prepare young people for the engineering profession. As a result, the Division organised around 50 activities, including five Promotion Talks at universities and two speeches on the topic of "Engineers in Society" in two IVE. The largest single turn out was close to 300 students.

The success of the Division in the 2004/2005 Session was attributed to the hard work of the Committee Members and the support of its members.



Division Committee Members participating in the Dragon Boat Race

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
15 Jul 2004	Prizes for the Best Final Year Project for the Academic Session 2004/2005	Jointly organised with ASME-HK Sector and IMechE-HK Branch
20 & 23 Aug 2004	Promotion Talk to HKU Freshmen	-
27 Sep 2004	Promotion Talk to HKU Undergraduates	-
6 Nov 2004	Ice-class Tankers (Topic One) and Long Term Anti-corrosion System Using Nano-technology (Topic Two)	-
8 Nov 2004	Financial Management for Young Engineers - How to Be a Millionaire (Series 1)	-
16 Nov 2004	Wine Tasting (Australian Wine) cum Social Gathering	-
18 Nov 2004	The Ninth Seminar on River Trade Vessels and Navigation	-
1 Dec 2004	The Ventricular Assist and Replacement Device	Jointly organised with PolyU
3 Dec 2004	The Development of Phoenix - Seven Total Artificial Heart	Jointly organised with PolyU
15 Jan 2005	Career Seminar	-
4 Feb 2005	Promotion Talk to PolyU Undergraduates	-
15 Feb 2005	Promotion Talk to HKUST Undergraduates	-
25 Feb 2005	Spring Dinner cum Prize Presentation for the Best Final Year Project Award	-
7 Mar 2005	Commercialisation of Innovation - How to Turn Invention into Patent	-
16 Mar 2005	Engineers in Society	Jointly organised with IVE (Tsing Yi)
19 Mar 2005	Engineers in Society	Jointly organised with IVE (Tuen Mun)
23 Mar 2005	The Latest Development of Navigation Systems for Neurosurgery	Jointly organised with BM Division
30 Mar 2005	Automated External Defibrillator (AED) - A Safety Equipment to Save Your Life	-
30 Mar 2005	E&M Equipment Failures - the Value or Benefits of Rapid, Local and Independent Investigations	Jointly organised with MT Division and Department of Applied Physics (AP) of CityU
1 Apr 2005	Renewable Energy and Sustainability	Jointly organised with ASME
2 Apr 2005	Renewable Energy and Sustainability Development in Transport, Building and Power Sectors	Jointly organised with ASME, and Department of Building and Construction of CityU
12 Apr 2005	Wine Tasting (French Wine) cum Social Gathering	-
28 Apr 2005	MC Division AGM and Dinner	-
7 May 2005	Financial Seminar on the Selection of Mandatory Provident Fund and Investment Management	-
21 May 2005	Registration Requirements of Surveyors for the Inspection of Amusement Ride	-
27 May 2005	One Day Symposium on Application of Engineering Technology in Health and Hygiene Control	Jointly organised with ASME and IMechE

# Reports from Divisions and Other Committees

## Technical Visits

Date	Title
17 Jul 2004	Galvanisation Plant at Tai Po Industrial Estate Super Terminal One, Chek Lap Kok (CLK)
31 Jul 2004	Vessel Traffic Centre of Marine Department at Shun Tak Centre
7 Aug 2004	Full Mission Ship Simulator
28 Aug 2004 & 12 Mar 2005	Cathy Pacific Flight Simulator at Chek Lap Kok
9 Oct 2004	Ngau Tam Mei Water Treatment Works
27-31 Oct 2004	China Delegation: Chengdu and Jiuzhaigou
27 Nov 2004	Sham Tseng Sewage Treatment Works
14 Dec 2004	Dayawan Petrochemicals Industrial Park
18 Dec 2004	Kowloon Motor Bus Depot
8 Jan 2005	KCR West Rail Depot
15 Jan 2005	Tai Po Towngas Plant
23 Apr 2005	Air-conditioning Manufacturing Plant – Efatar Engineering Company at Guangdong
21 May 2005	Lamp and Electronic Ballast Manufacturing Plant “OSRAM” at Guangdong
28 May 2005	Pilot Desalination Plant at Tuen Mun Salt Water Pumping Station



Ir Dr Herman Y W Tsui

## Nuclear Division

The 2004/2005 Session had been an eventful and important year for the Nuclear (NE) Division. Three technical visits were held during the Session and eight seminars have been organised with distinguished speakers from Hong Kong, the Mainland and overseas. In particular, members attended two conferences held in December 2004 at the Institute of Nuclear Energy Research (INER) in Taiwan and paid a technical visit to the nuclear power plants in Northern and Southern Taiwan. The visit has fostered technical exchanges with the nuclear institutions in Taiwan and promoted an understanding of the development of nuclear power across the strait.

Over the past two years, the NE Division Committee has made every effort to pursue a merger with the Gas & Energy (EG) Division. However, our proposal did not receive sufficient support from the EG Division Committee after intensive discussion. We consider that it is important to uphold the interest of our members and with our identity being recognised after the merger. We also reckon that the merger, if successful, would provide the synergy to strengthen the Institution's representation as a platform of engineers and experts serving in the industries related to nuclear, gas and energy. The NE Division will keep members informed of future developments and views and comments on this issue from members are welcome. The NE Division will not have a Council Member (Division) effective for the 2005/2006 Session pursuant to the decision made by the Council in 2000. Nonetheless, the NE Division remains committed to continuing its service to members in organising a wide range of activities and establishing links with counterparts on the Mainland and overseas to promote the understanding of nuclear technology.

## Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
23 Sep 2004	Advanced Nuclear Fuel Management for Ling Ao Nuclear Power Station	XIAO Min
4 Dec 2004	The Challenge that Faces China's Nuclear Power Industry	Allen HO Jointly organised with PolyU
12 Jan 2005	Current Status of World Nuclear Power Industry	PO Li Chi
28 Jan 2005	The Radiation Risk and Its Controls in Molecular Biology Research Laboratories in a University	S T YIP
28 Apr 2005	Equipment Qualification of Components Important to Safety in Nuclear Power Plants	Henry LEUNG
29 Apr 2005	Nuclear Power Plants – Are They Safe?	Vincent HO Jointly organised with YMC, AMC, and Hong Kong Association of Risk Management and Safety (HKARMS)
9 May 2005	The Nuclear Power Rush in China – Who Is Going to Win the Yangjiang/ Sanmen Bid?	Allen HO
20 May 2005	Nuclear Reactors, Past, Present and Future	Philip A BEELEY

## Technical Visits

Date	Title
27 Nov 2004	Guangdong Daya Bay Nuclear Power Station
20-24 Dec 2004	Nuclear Power Stations in Northern & Southern Taiwan (Technical exchange with The Institute of Nuclear Energy Research (INER) & Nuclear Energy Society of Taiwan)
26 Feb 2005	Solar Electric and Wind Power Facilities at Society for the Aids and Rehabilitation of Drug Abusers (SARDA) at Shek Kwu Chau



Group photo taken at the Main Control Room of NPP-2 at Wan Li Township during Taiwan visit





Ir Roger M K Ng

### Safety Specialist Committee

The Safety Specialist Committee, formerly the Safety Specialist Group, continued to promote the safety awareness of engineers and to uphold the safety standard in engineering practices. The activities focused on the engineering system safety and occupational safety.

The Committee also jointly organised events with other divisions, committees and organisations including the Institution of Occupational Safety & Health, the Institution of Utilities Surveyors, the Association of Engineering Professionals in Society, the Hong Kong Polytechnic University, the City University of Hong Kong and the Institute of Electrical & Electronics Engineers (IEEE).

During the Session, the Committee organised a visit to Guangzhou Administration Bureau of Work Safety and a number of other activities to introduce the Mainland Certified Safety Engineer and Guangdong Registered Safety Officer system to members.

Safety organisations including the Labour Department, Occupational Safety & Health Council, Hong Kong Occupational Safety & Health Association, Construction Industry Training Authority and Institution of Occupational Safety & Health were invited to discuss current safety issues with members. The role of engineers in the safety field and the possible scenario of Safety Discipline were also discussed.



Technical visit to Guangzhou Administration Bureau of Work Safety

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
19 Jul 2004	Applications of Special Fire Safety Systems	Jointly organised with AMC
10 Sep 2004	Legal Aspects on Insurance for Construction & Engineering	Jointly organised with BM Division & AMC
18 Sep 2004	Open Forum for Proposed Revision to the Code of Practice on Working near Electricity Supply Lines of Electricity Supply Lines (Protection) Regulations	Jointly organised with Industrial Centre of PolyU, HKIUS, CITA & UtilityINFO Institute
25 Sep 2004	System Safety - Applications and Challenges	TSO Sing Hin Vincent HO Simon CHAN Sukhy BARHEY Ivan LAI  Jointly organised with IOSH
20 Nov 2004	China Constructor & Project Management System	Jointly organised with AES
18 Feb 2005	5 S Management	Jointly organised with EV & CA Divisions, Department of Electrical Engineering of PolyU, IVE (Haking Wong) and IVE (Morrison Hill)
23 Feb 2005	Total Safety Quality Management in Construction	Jointly organised with AMC
23 Apr 2005	Training & Practice of Safety Engineer on the Mainland	Jointly organised with AES and PolyU & SRDC
14 May 2005	Smart Card Security & Computer Forensics	Jointly organised with IEEE & CityU
17 Jun 2005	Fire Evacuation - How Well Are You Prepared?	Jointly organised with YMC & AMC

### Technical Visits/Other Activities

Date	Title
26 Jun 2004	Hong Kong Electric Lamma Power Plant
24 Jul 2004	MTRC Penny's Bay Line
11 Sep 2004	Tai Po Gas Production Plant
22 Oct 2004	Delegation to Guangzhou Administration Bureau of Work Safety
13 Nov 2004	CRC Tsing Yi Oil Terminal
11 Dec 2004	Hong Kong Airport Authority
14 Jan 2005	Guangzhou York Engineering Factory
15 Jan 2005	West New Territories (WENT) Landfill
9 Apr 2005	Langham Place
22 Apr 2005	Safety & Engineering Professionals Cocktail Reception

# Reports from Divisions and Other Committees



Ir Joseph Y W Mak

## Structural Division

The Division collaborated with industry and academia to organise a total of 16 technical seminars during the year.

It also launched two major initiatives in the area of professional career development. The first initiative involved a reciprocal recognition examination for structural engineers on the Mainland and in Hong Kong. Out of 120 Hong Kong candidates, 90 passed the examination. The second initiative was a proposal to the PSDAS on the training of Hong Kong young structural engineers on the Mainland. Funding has been successfully received to support the training of 240 young engineers.

The Annual Structural Special Award for Hong Kong projects has been held for many years. This year, the Division launched a Special Award for China projects undertaken by Hong Kong engineers, acknowledging their excellent achievement and contribution in exporting technological experience to the Mainland. In parallel, another more ambitious award, the China Award, was co-organised by the HKIE Structural Division and representatives of the Institution of Structural Engineers in Beijing, Shanghai and Shenzhen to cover the entire China region.

The Division and IStructE (HK), together with four UK engineering institutions, jointly organised a fund-raising concert called the Caring Engineers Concert to raise funds to subsidise the training of university students and graduates during the current difficult employment climate being experienced by the construction industry.

The Division has also initiated four working groups to prepare handbooks on the newly issued codes of practice on wind, concrete, foundation and pre-cast concrete. The aim is to provide working examples in the application of the codes for the benefit of graduates and young engineers. The first edition of the handbook, which focused on wind, was published in June 2005.

The Annual Dinner was held in November 2004 with Mr C M Leung, Permanent Secretary for Housing, as the Guest of Honour. In April 2005, a visit to Taipei's 101 Tower and the National Center for Research on Earthquake Engineering was organised to enable an exchange of experience and information with the Taiwan Civil and Structural Association.

Special thanks go to senior members and Division Committee Members for the Division's successes during the Session.



Group photo at the Annual Dinner

## Technical Meetings/Seminars

Date	Title	Speakers
10 Jul 2004	Quality Building Award 2004 Presentation Conference	The eight finalists of Quality Building Award
14 Sep 2004	Full-field Strain Measurement and Analysis of Reinforced Concrete Beams by Digital Speckle Correlation Method	Michael HUNG Ray SU
22 Sep 2004	Corrosion Control Techniques for Deteriorated Reinforced Concrete Structures	Harry LIT Jointly organised with YMC
27 Sep 2004	Beijing Projects	XUE Yifu Goman HO Ronan DELANEY
21 Oct 2004	Design and Construction of 129 Repulse Bay Road	Gordon NG
23 Oct 2004	Conference on Heritage Conservation – Opportunities and Challenges	Jointly organised with BD Division, HKIA and HKIS
1 Nov 2004	Construction Standards & Eurocodes, The UK/EU Approach and Its Effect on Civil and Structural Design Practice in Hong Kong	Jointly organised with BSI
18 Nov 2004	Two International Finance Centre – a Tale of a Tall Tower	Craig GIBBONS
19 Nov 2004	Annual Dinner	–
14 Dec 2004	One Peking Road	William LEUNG K F TAM
20 Jan 2005	Footbridge to Lantau Link Visitors Centre	Stephen CHAN
26 Feb 2005	Examination Technique for the IStructE Chartered Membership (Part 3) Examination	Fred NG Helen KWAN K S LAW James LAU C K LAU Henry LIU Johnny WONG Jointly organised with YMC
17 Mar 2005	The Use of Recycled Aggregates in Structural Concrete	W K FUNG Jointly organised with MT Division
21 Apr 2005	Resolving Construction Disputes by Mediation	Ivan CHEUNG Nicholas SEYMOUR Eddie LAM Jointly organised with HKMC
27 Apr 2005	IStructE - the International Institution	Mike FORDYCE
19 May 2005	Design and Construction of Hong Kong-Shenzhen Western Corridor	Joseph LEE S Y CHAN
7 Jun 2005	Annual Seminar on Advances in Structural Codification in Buildings – A New Era of Design and Construction for Hong Kong	–
18 Jun 2005	Excavation and Lateral Support Works	Jointly organised with GE Division and HKGES

## Technical Visits/Other Activities

Date	Title
29 Jan & 5 Feb 2005	Cyberport Development
15-17 Apr 2005	Annual Visit to Taipei, Taiwan



Miss Winnie W Y Ngan

### Young Members Committee

The 2004/2005 Session marks the 20th anniversary of the Young Members Committee (YMC). The anniversary theme "Encouraging Diversified Development" was put forward to encourage wider development of Registered Young Members (RYMs).

In the fast moving 21st century, broader skills are needed in addition to technical knowledge. In this Session, the YMC organised many activities to help RYMs develop a wider scope of knowledge, including communication skills, leadership skills and business management skills, which are crucial to our professional development. The YMC also provided a platform to raise RYMs' awareness of community service and to improve their connections with students and young engineers in Hong Kong and around the world.

Although the technical seminars and visits continued to be the focal point of our activities calendar, the YMC launched some new initiatives including publishing a Special Feature in *Hong Kong Engineer* in September 2004, participating in the World Engineers' Convention 2004 and the Young Engineers of the ASEAN Federation of Engineering Organisations (YEAFO-11), hosting the Business Game Competition, and arranging a Thai Boxing Training Course.

It has always been the YMC's main objective to provide excellent services and professional development opportunities to young members. With the joint efforts of enthusiastic Committee Members and helpers, the YMC has not only achieved its mission, but also successfully turned itself into one of the most active committees in the Institution.

However, the above achievements could not be attained without the support from other divisions and committees, institutions, societies and associations. The YMC sincerely thanks everyone who has been involved, in particular the members of the HKIE for their continuous support. The YMC promises to continue its excellence in the future.



Delegation at the World Engineers' Convention 2004, Shanghai

### Technical Meetings/Seminars

Date	Title	Speaker(s)/Remarks
26 Jun 2004	Enhancing the Competitiveness of Hong Kong's Young Professionals on the Gas Market in the PRC (PSDAS project)	Organised by IGEM, supported by YMC and CityU
28 Jun 2004	Cultural Heritage - Hong Kong's Precious Attribute	Louis NG
29 Jun 2004	Laws of Nature and Sustainability	Gabriel LAM
24 Jul 2004	Current Practice and Future Trend of Contract Management, Construction Law and Alternative Dispute Resolution - Second Course	Danny CHOI Louise POPPLEWELL John MOLLOY Ian De WITT Teresa CHENG
28 Jul 2004	Sustainable Journey Series: Recycling of Waste Rubber Tyres as a High Performance, Lightweight, Geo-material (Rubbersoil) for Slope Stabilisation	LEE Kin Man
3 Sep 2004	Be a Challenging Engineer: Médecins Sans Frontières Mission	Alice CHOW Albert KO
6 Sep 2004	Sustainable Journey Series: Management of Construction and Demolition Materials from the Perspective of Sustainable Development	Henry CHAN
9 Sep 2004	Sustainable Journey Series: Development of a Recovery Park in Hong Kong	Edmond YUEN
22 Sep 2004	Corrosion Control Techniques for Deteriorated Reinforced Concrete Structures	Harry LIT  Jointly organised with ST Division
8 Oct 2004	改車初體驗	狄港生
12 Oct 2004	Risk Management - Safety Culture and Its Role in Accident Reduction	Sukhy BARHEY Dorothy CHAN
14 Oct 2004	Sustainable Journey Series: Sustainable Development - Green Elements	Martin TAM
21 Oct 2004	Career Development - From Engineer to Managing Director	T L NG
23 Oct 2004	Sustainable Journey Series: Sustainable Development in Logistics and Transport Infrastructure in Hong Kong	C K MAK Vincent WONG
12 Nov 2004	Body Management Series: Traditional Chinese Medication	CHOW Yiu Kwan
17 Nov 2004	Young or Ready - Route to Corporate Membership for Civil Discipline	David T W LAU Victor K Y LO  Jointly organised with CV Division
23 Nov 2004	Overcoming Fear of Public Speaking: Act Like a Pro	Flora WAI
27 Nov 2004	Sustainable Buildings - Quality Building Award (QBA) 2004 Winning Buildings	Jointly organised with BS Division, CIBSE and HKIA
9 Dec 2004	Practicing Mediation - Demonstrating Dispute Resolution Technique via Role Play	Michelle CHAN Jan LAU Paco TSANG  Jointly organised with HKMC
10 Dec 2004	Moving Heavy Pre-cast Units Using Inflatable Air Bag Rollers	Alan LAW  Jointly organised with CV Division and AMC
11 Dec 2004	Young or Ready - Interviewing Skills for Professional Assessment	Martin CHEUNG Tim IP Theresa WU
4 Jan 2005	Project Management - the Key to Career Growth	Kevin CHUI



# Reports from Divisions and Other Committees

Date	Title	Speaker(s)/Remarks
5 Jan 2005	Beneficial Factors Contributed by CEPA Towards Engineers in Product Design & Development Industry	LAM Kin Tak
10 Jan 2005	2004 Communication Workshop Series Two: Technical Presentation for Non-technical Audiences	Donald YEE
19 Jan 2005	Application of Dispute Resolution Method – Arbitration & Mediation	Speakers from the CI Arb & HKMC
24 Jan 2005	Young or Ready – Route to Corporate Membership for Building Discipline	Linda FAN C M LAM  Jointly organised with BD Division
16 Feb 2005	Infrastructure Development of Hong Kong International Airport	Kevin POOLE
26 Feb 2005	Enhancing Your Competitiveness Series I: 「有禮走天下」 – 內地商務禮儀工作坊	楊向餘
	Examination Techniques for the IStructE Chartered Membership (Part Three) Examination	Jointly organised with ST Division
10 Mar 2005	2004 Communication Workshop Series Three – Think and Speak on Your Feet: Speaking Under Pressure	Talis WONG
12 Mar 2005	Enhancing Your Competitiveness Series II: 「盡善盡美」 – 投訴及公共關係處理技巧工作坊	李鉅標
19 Mar 2005	Project Finance & Project Claims	Speakers from the Lighthouse Club  Jointly organised with Lighthouse Club
9 Apr 2005	Enhancing Your Competitiveness Series III: 「溝通零距離」 – 面試、人際關係及談判技巧工作坊	鄭偉文
20 Apr 2005	2004 Communication Workshop Series Four: Communication Skills: Negotiation to Win Win-Win	Paco TSANG
29 Apr 2005	Nuclear Power Plants – Are They Safe?	Vincent HO  Jointly organised with AMC, NE Division and HKARMS
20 May 2005	Transformation of the Shing Mun River	TSUI Tack Sang  Jointly organised with AMC
24 May 2005	20th YMC AGM	–
	20th Anniversary Annual Seminar on Urban Renewal in Hong Kong	WONG Ying Kay
	Serving the Community with Information, Communication and Technology	Jointly organised with IT Division and AMC
10 Jun 2005	20th Anniversary Annual Dinner	YANG Ti Liang
17 Jun 2005	Fire Evacuation – How Well Are You Prepared?	Jointly organised with AMC and SSC
23 Jun 2005	夏日星空漫遊	劉啟業

## Technical Visits/Other Activities

Date	Title
26 Jun 2004	Group Sense Factory in Dongguan
11 Sep 2004	Tai Po Gas Production Plant
23 Oct 2004	BBQ Gathering
30 Oct 2004	Mega-iAdvantage
31 Oct – 7 Nov 2004	Sustainable Journey (Mainland Delegation 2005)
5 Nov 2004 – 21 Jan 2005	Thai Boxing Course
27 Nov 2004	Stonecutters Island Sewage Treatment Works
28 Nov 2004	Fund Raising Walk
5 Dec 2004	Ronald McDonald House Open Day Carnival
10 Dec 2004	YMC X'mas Party
18 Dec 2004	Kowloon Motor Bus Lai Chi Kok Depot
8 Jan 2005	Hong Kong Aircraft Engineering Company Limited
16 Jan 2005	騎馬樂
22 Jan 2005	Tseung Kwan O TVB City
22 Jan & 5 Feb 2005	Pastry & Cake Baking Class
23 Jan 2005	War Game
29 Jan 2005	Cyberport Development
25-27 Feb 2005	專業服務發展資助計劃：「協助及培育本地年青工程專業人士拓展珠江三角洲市場」 – 香港工程師泛珠三角持續發展考察
12 Mar 2005	Hong Kong Observatory
2 Apr 2005	Fun Day for the Hong Kong Youth Design and Technology Contest
2 & 8 Apr 2005	Business Game
9 Apr 2005	電車派對
24 Apr 2005	Team Building Training Day Camp
30 Apr & 28 May 2005	美味春天 – 蛋糕及麵包製作班
5 May 2005	Hip-hop 舞蹈班

**Membership Number of Divisions/Committees** (as at 23 June 2005)

Division/Committee	Membership No
Associate Members Committee (AMC)	1,975
Biomedical Division (BM)	335
Building Division (BD)	2,183
Building Services Division (BS)	4,674
Civil Division (CV)	7,970
Control, Automation & Instrumentation Division (CA)	1,532
Electrical Division (EL)	3,249
Electronics Division (EN)	1,583
Environmental Division (EV)	4,434
Gas & Energy Division (EG)	988
Geotechnical Division (GE)	4,165
Information Technology Division (IT)	3,081
Manufacturing & Industrial Division (MI)	969
Materials Division (MT)	643
Mechanical, Marine, Naval Architecture & Chemical Division (MC)	2,902
Nuclear Division (NE)	231
Safety Specialist Committee (SSC)	2,517
Structural Division (ST)	5,322
Young Members Committee (YMC)	4,018

**Membership Number of Divisions/Committees**