

### Biomedical Discipline Advisory Panel

One of our major activities in the 2005/2006 Session was to help form the founding membership of our Biomedical Discipline. As a new Discipline, we have successfully attracted a good number of existing HKIE members to join the Discipline, including those from relevant Government, hospital and academic sectors. These founding members have impressive track records and biomedical engineering experience gained over the years. They were indeed pioneers in our Discipline.

The formation of the Discipline is also beginning to attract many colleagues who have not joined the HKIE previously. This strategic outreaching benefits not only the Discipline but also enriches the HKIE as a whole.

The Scheme 'A' programme created so far is serving its purposes. We anticipated that more Scheme 'A' programmes would soon be generated in the private and non-government sectors. Given this situation, we anticipate that in the coming few years, there would be a considerable number of applications for joining the Discipline from alternative routes.

### Building Discipline Advisory Panel

Over the Session, membership of Building (BUD) Discipline has increased by almost 20% to nearly 300, recording the highest growth rate in the last 10 years. In addition to our own members, many applications were received from members of Civil and Structural Disciplines.

To co-ordinate work for mutual recognition with the Chinese Supervising Engineers (中國監理工程師), the Panel has set up a project management stream for members who have experience in managing building projects for clients or consultants. Several talks were also held with the Ministry of Construction and the China Association of Engineering Consultants (中國建設監理協會) on mutual recognition during this Session, and we now aim to have a framework agreement signed by the 3rd quarter of 2006.

In February 2006, the Council accepted mutual recognition between the Discipline and the Chartered Institute of Builders (CIOB) (UK). The 1st professional assessment and training programme for their members will be launched in October this year.

The above mutual recognition will surely increase our strength, and the latest acceptance of accredited Civil and Structural degrees with topping up experience as equivalent to Building Engineering degrees will certainly attract more engineers to join the Discipline and the training scheme.

The statutory dignity of MHKIE(BUD) remains intact in the latest integrated site safety supervision system promulgated under the Buildings Ordinance. We will continue to pursue with the Buildings Department and other Government departments to have our members included in any other appropriate specific tasks.

### Building Services Discipline Advisory Panel

The Building Services (BSS) Discipline Advisory Panel had a busy Session. In addition to normal duties relating to qualification and membership affairs, the Panel performed many other important tasks over the past year. On the

formation of the new Fire Discipline, the Panel sent two representatives to join the Task Group to reflect views of the BSS Discipline and to provide assistance to the new Discipline during its formation stage.

We played an active role in the Task Force on Mutual Recognition Agreement between the HKIE and National Administration Board of Engineering Registration (全國註冊工程師管理委員會). Activities included attending two work meetings in the Ministry of Construction in Beijing. We recognise that it will take considerable time and effort from both sides to bring the initiative to fruition but the Panel will continue to strive for it.

On the training front, the Panel had its representative appointed in the Working Group under the Training Committee to look into the implementation of Scheme 'A' training on the Mainland. In a formal Training Scheme leading to Associate Membership, Building Services was named one of the three Disciplines during the pilot development/assessment stage.

We also assisted in the regular accreditation of higher diploma and degree programmes of local educational institutes. The Panel continued to work in close collaboration with the Building Services (BS) Division Committee to offer views and comments on matters and consultation papers of interest to our profession, including the Review of the Role of R.P.E. (BSS) under provisions of the Buildings Ordinance and the Proposed Mandatory Building Inspection Scheme.

Finally, the Panel resolved to embark on a large-scale research project on and for our profession in collaboration with the BS Division Committee. Survey will commence in the 2006/2007 Session.

### Chemical Discipline Advisory Panel

During the Session, the Panel continued to provide advice and support to the Qualification & Membership Board and associated committees on matters relating to membership qualifications, training and education. The Panel also promoted Scheme 'A' training to local companies and graduates.

### Civil Discipline Advisory Panel

During the Session in review, the Panel continued to provide advices to the Qualification & Membership Board and associated committees on matters relating to education, training, professional and membership admission. In addition, the Panel also provided advices to the Engineer Registration Board on the registration of professional engineers.

With some 200 candidates seeking professional assessments each year, the Panel is shouldered with a profound task. As in the past, a considerable amount of time was spent during the Session to handle the administration of all the applicants who aspired to qualify as Corporate Members of the HKIE in the Civil Discipline.

On inter-institutional affairs, the Panel has been working together with the Institution of Civil Engineers (ICE) in the past three years on joint professional assessment between the two Institutions. Such joint assessment could combine all applicants of the two Institutions by simplifying procedures. In particular, it would satisfy the demand for examiners. However, there are

further issues to be resolved. The Panel is currently holding discussions with the ICE to strive towards a consensus for implementing the joint assessment in a few years.

On Associate Membership for the Discipline, applications under the pilot training scheme were very limited in the past year. With the anticipated revival of the construction industry in the not too distant future, it is hoped that potential candidates would come forth under the training scheme to become Associate Members of the HKIE.

Over the past few years, significant progress has been made by other disciplines, such as the Structural Discipline and the Geotechnical Discipline, on mutual recognition with National Administration Board of Engineering Registration (全國註冊工程師管理委員會). Spearheaded by the Environment, Transport and Works Bureau, discussions are now being held for the inclusion of the Discipline. This process is expected to take some time and it would be a few years before recognition would actually come into effect.

### **Control, Automation & Instrumentation Discipline Advisory Panel**

It is a great pleasure to report that there was again an increase of membership from the Control, Automation & Instrumentation Discipline during the Session of review. Similar to the last Session, the Panel met three times to discuss issues relating to the Discipline.

A delegation from the Institution of Measurement & Control (InstMC) (UK), led by its President and core members, visited Hong Kong, Shenzhen and Beijing in March 2006. As there is a Reciprocal Recognition Agreement between the HKIE and the InstMC, the Panel arranged a welcome gathering for the delegation at the World Trade Club (HK) on 22 March 2006. The President of the HKIE, the office bearers of the Panel and the Committee of the Control, Automation & Instrumentation Division, and the InstMC delegation shared views relating to the professional and learned society activities of both Institutions. The Chairman of the Panel also joined the delegation for the meeting with Shenzhen Instrument & Control Society in Shenzhen and the meeting with Chinese Instrument & Control Society in Beijing.

The Reciprocal Recognition Agreement with the Chinese Automation Association was in good progress. We are currently waiting for endorsement from the relevant government officials of the Mainland. Since its establishment, the Working Group has been following up this issue and several Working Group discussions were held in Guangzhou during the year to review overall progress.

Last but not least, the Panel also assisted an accreditation visit to the Chinese University Automation and Computer-Aided Engineering on 14 and 15 March 2006.

### **Electrical Discipline Advisory Panel**

The Panel continued to facilitate Reciprocal Recognition Agreement discussions with the Institution of Electrical Engineers (IEE)(UK). Subsequent to the merger of the IEE and the Institution of Incorporated Engineers (IIE) to form the Institution of Engineering and Technology (IET) on 31 March 2006, Reciprocal Recognition Agreement with the IEE ceased.

Meanwhile, negotiations for Reciprocal Recognition Agreement with the IET commenced. Clause 9 of Reciprocal Recognition Agreement, namely the provision governing applicants with substantive training and experience in a jurisdiction but applying for membership in another jurisdiction, was discussed within the HKIE among relevant representatives and between the HKIE and the IET. However, no time schedule was established.

On the note of Reciprocal Recognition of Professional Qualifications between the Ministry of Construction (MOC) and the HKIE, the Panel attended the 7th and 8th Joint Meeting held on 9 November 2005 and 31 March 2006 respectively in Beijing. An informal meeting was also held between the MOC and the HKIE on 13 March 2006 at the HKIE Headquarters. Progress for the Electrical Discipline had been slow, pending the registration of Electrical Engineers on the Mainland.

The Panel also held discussions with the Chinese Society for Electrical Engineers (CSEE). Two meetings in Shenzhen were held in August 2005 and March 2006. A draft Co-operation Agreement was prepared after the 2nd meeting. The Agreement was intended to allow the Panel to take active involvement in CSEE's plan to formalise assessment procedures for qualified Electrical Engineers on the Mainland.

The Discipline currently has 100 Fellows and around 1,140 Corporate Members.

### **Electronics Discipline Advisory Panel**

This has been a fruitful and productive year for the Electronics (ENS) Discipline Advisory Panel. The number of applications for ENS Discipline membership/assessment received during the year almost doubled. A total of 29 new members of the Discipline were admitted. More applications are in the pipeline.

Riding on the successful membership drive at the Hong Kong Science and Technology Parks Corporation last year, the Panel actively promoted membership in a focused and effective way during the Session. It also performed routine activities which include the professional assessment of applications for membership, and the assessment and re-assessment of Scheme 'A' training. Moving with the times, the Panel has taken a critical review of the Core Objectives and the Model Training Guide for Scheme 'A' training with a view to meeting the latest challenges from the electronics industry in the 21st century. The Panel continued to work closely with the Electronics (EN) Division over the year. This strategy has proved to be effective and the Panel plans to organise similar membership promotion activities targeted at large corporations.

The Panel has also put priority effort in attracting student members – who will construct the new generation of professional electronics engineers – to join the Discipline. With full support from the EN Division, the Panel gave professional career development talks to electronics engineering students from all local universities.

Regarding the Scheme 'A' training companies of the Discipline, a total of 14 companies participated in the Scheme 'A' training programme of the Discipline. 18 degree programmes relating to the Discipline were organised during the year.

### Environmental Discipline Advisory Panel

During the Session in review, the Environmental (ENV) Discipline Panel has made great inroads into the recognition of MHKIE(ENV). After rounds of meetings and lobbying, the Government issued a Technical Circular promulgating environmental management on construction sites in January 2006, under which contractors would have to employ suitably qualified site personnel including both engineers qualified with MHKIE(ENV) and Associate Members to take care of environmental issues. Major corporations and public utilities would also be approached for recognising MHKIE(ENV) as an employment condition. Another challenge during the year was to strive for the Government's recognition of MHKIE(ENV) as having equal standing as other disciplines. The Institution is currently pursuing these goals through dialogues with senior officials of the Government.

On the wider use of R.P.E. (ENV), we met with the Government to explore the feasibility of specifying R.P.E. (ENV) in environmental legislation. We will further review this issue in the coming Session. In scrutinising a proposal on the admission of non-accredited degree holders with long years of relevant experience, we stressed the importance of having a clear definition of "Engineer" while not losing the flexibility of catering for very experienced professional engineers with non-traditional formation. In this Session, we processed six applications for professional assessment with five members admitted to the Discipline. We also considered a number of mismatch cases and degree programmes accreditation and re-accreditation. To further expand our membership, we are actively seeking suitably qualified applicants to join the Discipline.

### Fire Discipline Advisory Panel

Following the establishment of the Fire Discipline in November 2005 and the endorsement by the Qualification & Membership Board (Q & M Board) of the admission requirements for Founding Members as well as the general admission requirements for members into the Discipline, the Council approved the appointment of the Fire Discipline Advisory Panel at its meeting on 19 January 2006.

The Panel spared no time in commencing its work on several fronts. Details were prepared for the Institution to publicise the establishment of the new Discipline; applications for Founding Members were processed immediately; final touches were put on a draft model training guide; and formalities for recognition of relevant academic qualifications were worked out.

On 10 April 2006, the Discipline Representative, Deputy Representative and Members of the Panel held an open forum to introduce the Discipline to the HKIE members, in particular those from the Building Services Discipline. Similar talks were given to members of the Fire Service Installation Contractors Association and members of the Institution of Fire Engineers, explaining to them the avenues for applying for the HKIE membership.

The Panel is pleased to see that over 90 Founding Member applications for the Discipline have been processed and approved by the Q & M Board. These were mostly made by members of other disciplines, and we are receiving many applications from non-HKIE applicants. Other areas of work described above have either been finalised or are near to completion. The Panel is expecting a busy year ahead.

### Gas Discipline Advisory Panel

The Gas Discipline Advisory Panel held two meetings in the Session to discuss a number of important issues. In addition, members communicated and discussed various issues through e-mails.

During the Session, the Qualification & Membership Board (Q & M Board) advised that the Reciprocal Recognition Agreement signed by the HKIE and the Institution of Gas Engineers and Managers (IGEM) in September 2004 was not ratified by the governing body of IGEM. The Panel provided inputs to the Q & M Board for expediting the two Institutions by executing a new Agreement. Furthermore, the Panel discussed the proposal from the Fire Services Department on the engagement of R.P.E. for endorsement on fuel oil tanks during Dangerous Goods licence applications and proposed that R.P.E. of the Discipline should be recognised. The Panel also discussed the Reciprocal Recognition Agreement proposal from the Energy Institute.

The Panel representatives continued to sit in the Q & M Board, Registration Committee of the Engineers Registration Board, Professional Assessment Committee, Education & Examinations Committee, Training Committee and Training Review Sub-committees to provide advice on matters relating to qualifications, membership, reciprocal recognition, professional assessment, education, training and accreditation of engineering courses.

### Geotechnical Discipline Advisory Panel

The Panel met four times in the Session, during which members exchanged views on issues of quality of membership and related matters. Members continued its representation on the Qualification & Membership Board (Q & M Board) and associated committees on membership, education, training, professional assessment and reciprocal recognition.

Further to the Q & M Board's recognition of the Master of Science Course in the field of Applied Geosciences, a programme offered by the University of Hong Kong to top up Earth Science graduates for the Geotechnical Discipline of the MHKIE, members of the Panel joined the course committee to contribute to assuring quality of learning of students studying in the master course.

The Panel examined the need and basis of reciprocal recognition with geotechnical engineers on the Mainland. The Discipline Representative took part in discussions with Mainland officials and counterparts for the setting up of a working group of Hong Kong and Mainland representatives to exchange views and to work out details for reciprocal recognition of the geotechnical qualification.

### Information Discipline Advisory Panel

The Panel held four meetings during the Session. Apart from regular functions and activities relating to the Qualification & Membership Board (Q & M Board) and the committees/sub-committees on training, education and examinations, membership, qualification and professional assessments of the Institution, the Panel had taken several initiatives during the year in membership development to enable the HKIE to become the professional home for all qualified Information engineers and Information Technology (IT) professionals in Hong Kong. These included strengthening communications with the IT

Division Committee on membership development and establishing dialogue with the Government IT Professional Association to explore possible facilitation arrangements for qualified IT Professionals of the HKSAR Government to join the HKIE.

In working with the Environmental and Materials Disciplines through the Working Group on Technology and Emerging Disciplines chaired by the President, a proposal for setting up an alternative to mature route that required non-accredited degree holders applying for professional assessment to have 8 to 12 years of professional experience was submitted to the Q & M Board. The Panel will further the work in this direction with the Education & Examinations Committee in formulating the necessary framework.

Chairman of the Panel continued its role as Convenor of the Working Group for Registration System for IT Professionals which came into operation in 2003 with representatives of 18 IT associations and societies and the Legislative Councillor (IT Functional Constituency) as members. The Working Group held four meetings during the Session. It concluded the 1st stage of work in April 2006 with a final report that has defined the domain, and roles and functions of IT Professionals, and recommended a commonly agreed framework for the registration system. Subject to endorsement of the report by majority of the participating bodies, the HKIE would continue its lead in the Working Group's next stage of work in the 2006/2007 Session.

### **Manufacturing & Industrial Discipline Advisory Panel**

In this Session, the Panel held regular meetings to discuss a number of important issues, and continued to serve the Institution by providing advice to various committees on membership, qualification, training, education, examination and other matters within the Manufacturing & Industrial Discipline.

In particular, the Panel worked directly with a special working group to look into the Civil Aviation Licensed Engineers' Block Conversion Programme. In making this issue possible, the hard work of Ir L M Li, Chairman of the working group, Ir Dr Aaron Tong, Chairman of Manufacturing & Industrial (MI) Division and other team members is gratefully appreciated.

The Panel also maintained very strong collaboration with the MI Division Committee in promoting the Discipline.

### **Marine & Naval Architecture Discipline Advisory Panel**

The Panel Members normally held two meetings during the Session to discuss various matters relating to the Marine & Naval Architecture Discipline. However, as Panel Members had business commitments and were working on the Mainland frequently, only a meeting was held in this Session.

The Panel Members continued its representation on the Education & Examinations Committee, Training Committee and Professional Assessment Committee. The Panel Chairman also represented the Discipline in the Registration Committee of the Engineers Registration Board and the Qualification & Membership Board.

### **Materials Discipline Advisory Panel**

The Panel continued its active participation in the Qualification & Membership Board and its committees. Apart from promoting Scheme 'A' training to local companies and graduates, the Panel also actively promoted interest in the Materials Discipline and strove towards the recognition of R.P.E. in the Discipline among local businesses and public sector organisations.

### **Mechanical Discipline Advisory Panel**

The Mechanical Discipline Advisory Panel continued its important work of vetting applications much in the same way as it had done in the previous Session. A new system, introduced during the previous Session to speed up application process, continued to operate most effectively. Normally the Panel would aim to hold three meetings per Session. However, due to the busy schedules of members, only two meetings were possible during this Session. The major item on the agenda this year was to brainstorm ways to enhance effectiveness of the Panel to prepare for a more diverse and proactive customer-friendly approach in the future.

None of the cases dealt with by the Panel were of sufficient interest to merit mention in this Report. This is perhaps indicative of our set of rules, regulations and processes which are effective in meeting the needs of the vast majority of applicants for HKIE membership and/or Engineers Registration Board registration.

The Panel maintained representation on the Education & Examinations Committee, Training Committee and Professional Assessment Committee. Furthermore, the Panel Chairman represented the Discipline on the Registration Committee and the Qualification & Membership Board.

The outgoing Chairman and all concerned highly appreciate the dedication, time and energy invested by the hard-working members of the Panel in the Session in review.

### **Structural Discipline Advisory Panel**

Panel members met a few times in the last Session to discuss issues relating to the Discipline and professional practice. In November last year, the Panel jointly organised a series of training and examination sessions with the National Administration Board of Engineering Registration (全國註冊工程師管理委員會) of the Ministry of Construction in Haikou, Hainandao for the mutual recognition between the HKIE members of the Structural Discipline and the First Class Registered Structural Engineers of the Peoples' Republic of China (1RSE-PRC). A total of 6 trainers and 20 examiners were appointed by the Panel to represent the HKIE to provide training and to conduct examination and interview sessions for the Mainland candidates. On completion of the three-day training and examination session, 26 HKIE members successfully obtained the 1RSE-PRC status of Mainland China. In view of the considerable cost and time involved, the Panel is now working with its Mainland counterpart to see if the mutual recognition exercise should be conducted every two years.