

[Courtesy Translation]

**Guangdong/Hong Kong Intellectual Property
Cooperation Item**

**Report on Guangdong/Hong Kong Exchange Programme on
Intellectual Property Management in Tertiary Institutions
and Science and Technology Institutes**

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Guangdong/Hong Kong Intellectual Property Cooperation Item

Guangdong/Hong Kong Exchange Programme on Intellectual Property Management in Tertiary Institutions and Science and Technology Institutes

Background

The Guangdong/Hong Kong Expert Group on the Protection of Intellectual Property Rights (the Expert Group) was set up in 2003. Members of the Expert Group include representatives from government departments responsible for the protection of intellectual property rights (IPR) in the two places, with the Guangdong delegation led by the Director of the Intellectual Property Office of Guangdong Province (GDIPO) and the Hong Kong delegation led by the Director of Intellectual Property of the Hong Kong Special Administrative Region (HKSAR) Government. The scope of cooperation of the Expert Group includes promotion and education, training, enforcement and information dissemination. Since the commencement of Guangdong/Hong Kong cooperation on IPR protection in 2003, a number of cooperation items have been completed successfully or are ongoing, and a close partnership has been successfully forged between the intellectual property (IP) authorities in the two places.

2. Under the cooperation framework of the Expert Group, exchange programmes in different forms and on different topics have been organised for IP professionals jointly by the two sides every year since 2004. Last year, GDIPO and the Intellectual Property Department (IPD) of the HKSAR Government invited representatives from various departments/organisations, including the Hong Kong Customs and Excise Department, the Hong Kong Economic and Trade Office in Guangdong and the Hong Kong Trade Development Council, the Guangdong Provincial Administration for Industry and Commerce, the Copyright Bureau of Guangdong Province, the Department of Foreign Trade and Economic Cooperation, the Guangdong Provincial Public Security Bureau and the China Foreign Trade Centre, to participate in an exchange programme on IPR protection for the convention and exhibition industry. They visited the convention and exhibition venues in the two places and explored in depth monitoring and enforcement issues. The exchange programme significantly enhanced both sides' understanding of IPR protection for the convention and exhibition industry.

3. At the Sixth Meeting of the Expert Group held in Guangzhou in July 2007, the two sides agreed to continue to organise the exchange programme for IP professionals in 2007/08,

focusing on IP management in tertiary institutions and science and technology (S&T) institutes. It was hoped that through the exchange programme, IP professionals of both places could gain a deeper understanding of IPR protection and management in such institutions, such as IPR licensing and the commercialisation of S&T research results, with a view to raising the standard of intellectual capital management in both places.

Detailed arrangement of the Exchange Programme

4. The 2007/08 Guangdong/Hong Kong Exchange Programme on IP Management in Tertiary Institutions and S&T Institutes comprised two parts: (i) exchange visit to Guangzhou by the Hong Kong delegation on 18 and 19 December 2007; and (ii) exchange visit to Hong Kong by the Guangdong delegation on 29 and 30 January 2008. The lists of delegates are at Annexes 1 and 2.

I. Hong Kong Delegation's Exchange Visit to Guangzhou

5. The Hong Kong delegation, led by Mr Peter CHEUNG, Deputy Director of Intellectual Property, comprised 19 members from IPD, the Innovation and Technology Commission and the Office of the Government Chief Information Officer, the University of Hong Kong, the Chinese University of Hong Kong, the City University of Hong Kong, the Hong Kong University of Science and Technology, the Hong Kong Polytechnic University and the Hong Kong Cyberport Management Company Limited.

6. The Hong Kong delegation visited the universities, S&T institutes and enterprises below to conduct in-depth exchanges on the work of the units and institutions in respect of scientific research and technology transfer, and on IPR protection and management.

Jinan University

(Website: <http://www.jnu.edu.cn/>)

Date: 18 December 2007

Time: 9:30 am

Receiving Staff:

Vice President	Prof JIA Yimin
Dean & Professor, School of Law	Prof FU Qilin
Assistant to Head of Social Science Department	Ms HAI Zhen
Deputy Head, Science and Technology Research Department	Ms ZHANG Sujuan
Associate Professor, School of Law	Ms WANG Aihua
Intellectual Property School	Dr YANG Yuanbin
Director, Office of Intellectual Property School	Mr ZHOU Yuyu
Director's Assistant, Office for International and Hong Kong, Macao and Taiwan Affairs	Mr LI Lijia

i. Training of Professionals

Jinan University (JNU) is China's first national university for overseas Chinese students. The predecessor of JNU, the Jinan School, was established by the Qing government in 1906 whereas JNU was established in Guangzhou in 1958. Set up on 11 September 2004, the Intellectual Property School of JNU is the first IP school in Guangdong Province that integrates teaching with research and the first of its kind in

South China. The prime objective of the Intellectual Property School is to train up more IP professionals to address the shortage problem. As IP is a professional field straddling the disciplines of law and management, the School devises its training plans and teaching objectives to meet the needs of the two professional streams. The first batch of law degrees in IP is expected to be awarded in 2008.

ii. Overview of IP Management

2. JNU manages its IP matters mainly through its Science and Technology Research Department. Upon receipt of a patent application from a teacher, JNU will first evaluate the quality of the potential patent. Evaluation is conducted mainly by the representatives of the patent applicant, research management officer and patent agent. They will separately conduct quality assessment based on their expertise. For patent applications concerning inventions of high quality with good industrialisation potential, JNU will provide further fee remission to various extents on top of the provincial level of application fee remission. Upon grant of the patent, the inventor will receive a fixed monetary reward depending on the type of invention. In addition, upon exploitation of the patent, a certain portion of the after-tax profit will be awarded to the inventor. This serves to motivate researchers to invent and enhance their awareness of IPR protection.

3. With the patent granted, the ultimate aim is to transform the research results into marketable products. This may bring considerable reward to the inventor and enable the public to share the fruits of research. JNU recognises that, apart from in-house development, commercialisation of IP can be achieved by collaborating with different enterprises to effect technology transfer. This approach has the advantages of attracting more capital from society to develop more platforms for research and development (R&D) and pilot tests, and ensuring the alignment of research results with market needs, thereby increasing the possibility of commercialisation of the research results.

4. Despite the rapid development of IP work and the increasing number of patent applications of JNU, some problems remain to be solved. As it takes quite some time to commercialise granted patents, some of the research resources of the university are used to maintain these patents. As such, the teaching staff are required to share part of the risk. In addition, given the limited resources of the university, it is necessary to consider ways to allocate resources effectively to increase cost-effectiveness.

5. On industrialisation, JNU has set up a technology and industry group to develop the market of biomedicine and conduct research on artificial kidneys and lungs.

This is a successful example of commercialisation and industrialisation of research results.

iii. IP Management Strategy and Direction

6. JNU has a well-defined IP management strategy, with IPR protection procedures and a comprehensive package of measures for IP management in place and implemented by different functional departments. JNU gives strong support and incentives for IP ownership and technological innovation and, throughout the process from establishment of a patent claim to acquisition, attaches great importance to patent supervision and management. Encouraging R&D by its staff will remain a priority of JNU in the future.

7. JNU is interested in collaborating with any of the universities in Hong Kong by, for example, jointly offering programmes on areas such as IP laws or technology. It also hopes to cooperate with IPD, which may consider commissioning JNU to conduct research or provide training on IP, Putonghua or other areas.

iv. Tour of Campus and JNU History Museum

8. The JNU History Museum comprises two floors. The first floor mainly displays precious photos of JNU, as well as donations and contributions of alumni to JNU. The second floor is divided into six sections, namely, “Initial stage of JNU in Nanjing”, “Expansion and relocation of JNU”, “Re-establishment of JNU in Guangzhou”, “Re-opening and development of JNU”, “JNU during the implementation of the national ‘211’ Project”, and “The superlative university for overseas Chinese with graduates all over the world”. The museum houses a comprehensive collection of pictures and documents about JNU, recounting the centennial history of the university.

South China University of Technology

(Website: <http://www.scut.edu.cn/>)

Date: 18 December 2007

Time: 2:00 pm

Receiving staff:

Vice President	Mr LI Lin
Director, Scientific Research Division	Mr LI Benxiang
Vice Chairman	Mr ZHANG Zhengang
Director, Patent Office	Ms HE Yanling

i. Demonstration of the Polymer Dynamic Rheo-Station

The Hong Kong delegation was given a demonstration of the Polymer Dynamic Rheo-Station (the Rheo-Station) developed by the South China University of Technology (SCUT). The Rheo-Station introduces vibration force field in the processing steps of extrusion, mixing, injection and blow moulding to realise characterisation of broad-sense rheology of polymer and its composites. The Rheo-Station is able to perform more functions but its price is only 2/3 of that of imported ones. The on-line visualisation of the polymer processing process is a patented technology with proprietary IPR for many years. The realisation of the globally original innovative rheometering function enables the product to take the dominant position technically from the outset (Source: <http://www2.scut.edu.cn/polymer/zhuixin20070608.htm>).

ii. Visit to the State Key Laboratory of Pulp and Paper Engineering

2. Briefed by the laboratory staff, the Hong Kong delegation noted that the laboratory mainly conducts research on the characteristics of different materials for making paper, including non-wood materials, fast growing timber and reclaimed fibres, bleaching technologies and pulping and paper making equipment. The laboratory team

seeks to reduce industrial pollution caused by paper making, and develop multi-purpose and high quality paper products through different research projects.

iii. IP Creation and Management

3. Formerly known as the South China Institute of Technology, SCUT was established in 1952 and changed to the present name officially in January 1988. SCUT is a key university directly under the Ministry of Education. Seeking to commercialise its research results, SCUT is among the first batch of pilot enterprises and institutions participating in the trial scheme on the use of patents.

4. SCUT attaches great importance to IPR protection and management. As early as the mid-1980s, a patent office was established to handle patent application, patent maintenance, file management and technology implementation management matters. In 2000, SCUT set up an Intellectual Property Office to be responsible for the formulation of IP strategies, and the formulation and amendment of relevant rules and regulations.

5. To put in place a robust IP system, SCUT has implemented various award and management measures, including the Measures on IP Management of SCUT, the Measures on Awarding Teaching, Research and Academic Achievements of SCUT and the Measures on Management of Research Results of SCUT. To boost technological invention among the research staff of the university, SCUT grants fixed monetary rewards to the inventors of different types of granted patents. When a particular patented technology is developed into a core project, the inventor will be entitled to promotion. Appraisals of the inventors will also fully reflect their achievements in obtaining the patents.

6. The major challenges faced by SCUT are the high costs of maintaining a large number of patents and the need to decide on which patents were to be abandoned. Since it is also necessary for the university to secure international patent protection, huge costs are involved. Besides that, brain drain is one of the problems faced by SCUT.

iv. IP Management Strategy and Direction

7. SCUT publicises and promotes its patented technologies through different channels and in different ways. Meanwhile, it strengthens the combination of industry, education and research, and collaborates with enterprises to develop platforms for commercialisation of research results with a view to facilitating the transformation of patented technologies into products. In addition, various measures are taken to

facilitate the implementation of patented technologies, including stressing the further development of patented research results and perfecting the ancillary facility to speed up the engineering and industrialisation process, and doing well in the transfer and licensing of patent rights to widen the application of patented technologies.

8. Recently, key areas of IP work of SCUT include preparing for the introduction of nationwide IP exemplary units; strengthening liaison with Mainland and overseas tertiary institutions to take forward the formulation and implementation of IP strategies; and further enhancing the wider implementation and application of patented technologies as well as IP creation and protection.

Guangzhou Institute of Chemistry, Chinese Academy of Sciences

(Website: <http://www.gic.ac.cn/>)

Date: 18 December 2007

Time: 4:00 pm

Receiving staff:

Chairman, Guangzhou Chemistry Co Ltd, Mr HA Chengyong
Chinese Academy of Sciences

Chief of Division of Science and Mr HU Meilong
Technology

i IP Management

Founded in October 1958, the Guangzhou Institute of Chemistry (GIC) is the only comprehensive chemical research institute focusing on applied research and high-tech innovation under the Chinese Academy of Sciences in South China. GIC's major fields of research include the higher value application of natural resources, carbon dioxide chemistry, chemical construction materials, medicine fine chemical industry, chemical grouting materials and environmental-friendly materials.

2. The objectives of the IP work of GIC are to realise the vision of the nation to build an innovative society, to provide services for scientific research and various aspects of daily work such as production, to form and develop areas of excellence with proprietary IPR, to nurture composite talents and enhance its core competitiveness through research, production and other aspects of its daily work.

3. GIC has made significant progress in its IP work owing to the overall conducive environment for development. The Reports of the 16th and 17th National Congresses of the Communist Party of China highlight the importance of IPR protection and the implementation of IP strategies. In accordance with the Outline of the Strategies on IPR of Guangdong Province, the Guangdong Provincial Government spares no efforts in taking forward its IP work. The guidance of the leaders at all levels and the tireless efforts of the staff are also instrumental.

ii. Patent Industrialisation

4. Similar to other S&T institutes, GIC seeks to industrialise its granted patents. To achieve this end, GIC adopts the approach of strengthening the consolidation, external transfer and internal exploitation of patented technologies concurrently. Its strategies are as follows:

- i. Consolidation of patented technologies – consolidate and enhance various technologies to form a structured technology system and a technical route in order to maximise the combined benefits of the technologies.
- ii. External transfer of patented technologies – realise industrialisation of patented technologies that require substantial capital investment and involve complicated techniques in collaboration with enterprises by way of transfer or licensing.
- iii. Internal exploitation of patented technologies – realise industrialisation of patented technologies that do not require substantial capital investment and involve less complicated techniques through in-house production.

5. GIC cited a number of successful cases of industrialisation of patented technologies, including an external transfer project on the production of degradable polyfoam using carbon dioxide and an internal exploitation project on the development of an anaerobic adhesive for sealing and locking mechanical articles.

iii. IP Policies and Direction

6. GIC has developed a series of IPR protection policies, which include implementing the Provisional Measures on Protecting IPR of GIC and the Patent Work Schedule of GIC; progressively reinforcing its areas of excellence; avoiding the single-minded pursuit of patent volume; and focusing on the enhancement of the quality and methods of IPR protection. GIC places great emphasis on IP education, especially for research students. By allowing research students to participate in and learn about IPR protection, a foundation is laid for the nurturing of composite talents. GIC actively encourages its research staff to apply for patents through the provision of financial support. Its stringent assessment mechanism helps raising the patent grant rate.

7. GIC also aims to foster the development of IP industry through active participation in IP-related community activities.

Sun Yat-sen University

(Website: <http://www.sysu.edu.cn/>)

Date: 19 December 2007

Time: 9:30 am

Receiving staff:

Vice President	Dr LI Mengfeng
Deputy Director, Science and Technology Office	Dr LUAN Tiangang
Supervisor, Technology Transfer Office	Mr ZHUO Yizhou
Deputy Director, Office of International Cooperation	Ms Jenny HAO
Supervisor, Division of Industry-Education Partnership, Science and Technology Office	Ms HUANG Mali
Supervisor, Intellectual Property Division, Science and Technology Office	Mr WANG Xiaosong
Professor, School of Life Science	Prof SU Weiwei
School of Information Science and Technology	Dr ZHOU Fan

i. Establishment of IP Organisation and System

Sun Yat-sen University (SYSU) attaches great importance to the establishment of an IP organisation and an IP system, which are essential for the performance of IP work. In early 2004, the Intellectual Property Division was set up on the basis of the Patent Office under the Science and Technology Office to undertake all the IP-related work of the university. The Intellectual Property Division handles official business jointly with the Division of Industry-Education Partnership, an arrangement which further strengthens IP exploitation and industrialisation. SYSU also set up the Technology Transfer Office in November 2005, with the main functions of

coordinating and pooling high and innovative technology resources of the university, undertaking technology transfer in collaboration with the government and enterprises, and continuously enhancing the quantity and quality of IP through sound IP management and technological cooperation and exchange with other countries. SYSU also places great emphasis on the nurturing of IP professionals. In November 2005, the School of Intellectual Property was formally set up to further expand the pool of IP professionals.

2. While continuously enhancing the institutional setup for IP management, SYSU gives much importance to the establishment of an IP system. It has introduced a number of IP-related regulations, such as the Regulation on the Commercialisation of Research Results of SYSU and the Provisional Measures on the Administration of Technology Contracts of SYSU. In 2006, SYSU formulated the Measures on Patent Management of SYSU and set up a patent fund to encourage invention and innovation by its staff and students at the policy level.

ii. Patent Application and Commercialisation of Innovative Medicines

3. The Guangzhou Quality Research and Development Centre of Traditional Chinese Medicine (the Centre) under SYSU is mainly responsible for researching into the quality of Chinese herbal medicines and developing innovative medicines. The development of innovative medicines requires substantial and long-term investment. It is profitable, but also risky. In this connection, the Centre forms joint ventures with major pharmaceutical firms to explore the global market and maximise the benefits. A new R&D direction is natural and biotechnology products. The Centre makes continuous efforts in the R&D of new Chinese herbal medicines and seeks to facilitate the commercialisation of patents by different means, including approaching enterprises for cooperation after filing a patent application, identifying the applications of a technology before choosing it as the subject of a project, and deciding on the subject jointly with enterprises.

4. SYSU briefed the Hong Kong delegation on a number of innovative medicines under research and some successful cases of commercialisation. For example, the Centre has developed a medicine for dissolving phlegm and relieving cough and its production method. The Centre has successfully transferred the patented technology for industrialisation by the Guangdong Global Pharmaceutical Company Limited. The medicine is in Phase II clinical trial.

5. Patent protection is of paramount importance to the R&D and industrialisation of new medicines. The challenges currently faced by SYSU are the very high costs of application for international patents, a relatively small pool of

intermediary services and average quality of services provided by patent agencies. Moreover, insufficient communication in the patent application process often renders it more difficult to have the patent granted.

6. The goal of SYSU in the coming years is to get its patented medicines into the international market. SYSU and the government patent authority act as a bridge between the Centre and enterprises or international organisations, guaranteeing a better chance of patent industrialisation. Furthermore, given that “patent is a powerful weapon in international competition”, the Centre endeavours to cooperate with enterprises to create a win-win situation.

iii. Digital Home Standardisation and Report on Patent Works

7. “Digital home” refers to “the use of digital technology to connect conventional household electrical appliances, personal computers and various digital devices through a network to achieve information interchange. Currently, there are two major modes of digital home, one using the computer, and the other using the television, as the central device for building a home information sharing network. Digital home in Guangdong Province is digital television-based, using the cable television network as the major channel” (Source: <http://www.gzkj.gov.cn/kjxx/newsDetail.jsp?infoId=59387>).

8. In 2007, the People’s Government of Guangdong Province incorporated digital home in its 11th Five-Year Plan of Special Programme on Self-Proprietary Innovation of Industrial Technology¹. It is expected that, with the standardisation of digital home, enterprises would apply for some 3,000 to 5,000 patents for invention. SYSU has not only been actively applying for patents for invention, but also collaborating with the relevant organisations to establish a pool of digital home patents. The university first assigns the patents to the allied enterprises for zero consideration, and then the allied enterprises manage and license the use of the patents in the pool centrally. The benefits so derived will be allocated to all parties concerned. This mode of cooperation with enterprises enables SYSU to industrialise its research technologies effectively. Apart from participating in the development of standards for digital home, SYSU has registered eight projects on local standards with the Quality and Technology Supervision Department of Guangdong Province. These will help enrich and improve the scheme of digital home standards.

¹ Guangdong Province’s 11th Five-Year Plan of Special Programme on Self-Proprietary Innovation of Industrial Technology (http://www.gd.gov.cn/govpub/jhgh/zdxx/200701/t20070130_12991.htm).

9. SYSU plans to further improve and enrich the management of the patent pool and to give impetus to the allied enterprises' for apply for more patents for invention in 2008. Riding on the Digital Home Standardisation Technical Committee of Guangdong Province and the related work, the university intends to apply for the establishment of a "Working Group on Standards for Interactive Applications for Digital Home and Digital Television" to further promote the development of standards. The standards will be continuously fine-tuned through the pilot scheme conducted in Nanhai and Panyu, involving 850,000 user households.

Chen Li Ji Traditional Chinese Medicine Museum

(Website: <http://www.gzclj.com.cn/index.asp>)

Date: 19 December 2007

Time: 2:00 pm

Situated at the Guangzhou Dadaonan and costing millions of *yuan* to build, the Chen Li Ji Traditional Chinese Medicine Museum fully displays the special status of Chen Li Ji Pharmaceutical Factory in the history of the Chinese pharmaceutical industry. Apart from pictures and real objects showing the history of Chen Li Ji Pharmaceutical Factory and methods of pharmaceutical manufacturing, the Museum makes use of multi-media and composite images to show the development of the Chinese pharmaceutical industry, providing an opportunity for the public to gain a better understanding of the unique history and culture of “Nanyao” (medicine of South China).

2. The different sections of the Museum depict the traditional pharmaceutical manufacturing process. The wax ball packaging technique, in particular, fully demonstrates the unique technology adopted in pharmaceutical manufacturing in the old days. Chen Li Ji Pharmaceutical Factory invented the method of mixing bee wax and wood wax to make a ball-shaped container. With the ball split into two halves, the pills are placed inside and the ball is sealed with propolis, thereby preventing degradation under the humid climate of South China and prolonging the storage period. This simple method, which exemplifies folk wisdom, has since been widely adopted in many places. It has contributed to the production of “Nanyao” and brought about a revolutionary change in the Chinese pharmaceutical industry.

Zhujiang Brewery

Date: 19 December 2007

Time: 2:50 pm

Established in 1985, Zhujiang Brewery Group Co Ltd is the first modern beer enterprise in the Mainland to introduce advanced technologies and equipment from overseas. It is also the first beer production base that achieves no-waste production in the Mainland.

2. The Hong Kong delegation was given a tour of the whole production line, including the computerised control room, saccharification and gelatinisation plant, wort filtration plant, state-level technical centre, sample store room, aseptic workroom, laboratory and packaging plant. Through the tour, the delegation gained a better idea of the stringent hygienic control in beer production and the company's continuous efforts in enhancing its production efficiency and product quality through technological innovation and re-engineering.

II. Guangdong Delegation's Exchange Visit to Hong Kong

The 19-member Guangdong delegation led by Mr ZHU Wanchang, Deputy Director General of GDIPO, came to Hong Kong on 29 January 2008 to visit a number of universities and S&T institutes in the second part of the Guangdong/Hong Kong Exchange Programme on Intellectual Property Management in Tertiary Institutions and Science and Technology Institutes. The Guangdong delegation comprised representatives from government departments, universities and S&T institutes, including GDIPO, SYSU, SCUT, JNU, South China Agricultural University, Southern Medical University, Guangdong Ocean University, Guangzhou Institute of Energy Conversion of the Chinese Academy of Sciences, Guangdong Institute of Microbiology, Guangzhou Research Institute of Non-ferrous Metals, South China Sea Institute of Oceanology of the Chinese Academy of Sciences, China Electronics Technology Group Corporation and the First People's Hospital of Foshan.

2. The Guangdong delegation visited the universities and S&T institutes mentioned below to conduct in-depth exchanges on grant of patents and modes of technology transfer, and on ways to protect and apply IPR for sharing of resources and development of more high and innovative technologies.

The Chinese University of Hong Kong

(Website: <http://www.cuhk.edu.hk/v6/en/>)

Date: 29 January 2008

Time: 9:30 am

Receiving staff:

Pro-Vice-Chancellor

Prof PC CHING

Director, Technology Licensing Office

Prof Alice NGAN

Director, Institute of Space and Earth
Information Science

Prof Hui LIN

Technology Licensing Co-ordinator

Mr Billy LY LAM

i. Briefing on Technology Licensing

The Chinese University of Hong Kong (CUHK) was founded in 1963. Its Technology Licensing Office (TLO) is primarily responsible for IP management and the transfer of the research results of the university's teaching and research staff for industrial and commercial purposes by means of agreements, patent licensing, spin-off companies or joint ventures under central coordination and systematic regulation.

2. TLO mainly adopts two approaches in handling patent applications. One approach is to assess the commercial potential of an invention with companies and experts in the relevant sectors. If the invention is found to be commercially viable, TLO will arrange for appropriate patent protection through university or external funding. The other approach is a non-commercial approach, under which the decision to apply for a patent is made on the basis of whether it will manifest CUHK's R&D achievements. For this approach, the decision to apply for a patent rests with the Patent Committee of CUHK, which mainly takes into account the scientific merits and whether the reputation of the university will be enhanced as a result.

ii) Successful Cases of Technology Transfer

3. CUHK cited several successful cases of technology transfer. One of them is the detection of Ribonucleic Acid (RNA) of unborn foetuses from the plasma of pregnant women invented by Prof Dennis LO Yuk-ming of the Department of Chemical Pathology. This method enables the early detection of foetal abnormalities and diseases, such as eclampsia of pregnancy and premature birth, from the plasma of pregnant women. Medical practitioners can thus avoid as far as practicable the use of more risky and invasive test methods, such as amniocentesis. CUHK has authorised a US biotechnological company to further develop this technology.

4. The rapid development of technology transfer activities has enabled CUHK to make use of the revenues from technology transfer to support and promote more research activities, thereby creating a virtuous circle.

iii. Visit to Institute of Space and Earth Information Science

5. Established in 2005, the Institute of Space and Earth Information Science (ISEIS) mainly engages in conducting researches on remote sensing of cloud and rain prone areas and promoting research works on virtual geographic environments. In view of the abnormal global weather caused by an increase in natural disasters worldwide, aggravated environmental pollution and excessive urban development, ISEIS makes use of the Satellite Remote Sensing Ground Receiving Station to capture, record and process satellite-sourced remote sensing data for analysis so as to monitor the environmental changes in Hong Kong and South China and provide accurate warning of potential natural disasters, including landslides, floods, typhoons, earthquakes and subsidence, thereby reducing casualties and economic loss.

6. The Receiving Station has also driven the development of various emerging industrial activities in relation to processing of remote sensing data, software development and other value-added services in Hong Kong, and promoted technology collaboration between Hong Kong and the Mainland, accelerating the development of the remote sensing industry in the Greater Pearl River Delta region.

Hong Kong Cyberport Management Company Limited

(Website: http://www.cyberport.hk/cyberport/en/home/home_flash.html)

Date: 29 January 2008

Time: 11:45 am

Receiving staff:

Business Development Manager (iResource Centre) Mr Terence LEUNG

i. Hong Kong Wireless Development Centre

The Hong Kong Wireless Development Centre (HKWDC) has been devised by the Hong Kong Wireless Technology Industry Association with funding support from the Innovation and Technology Fund (ITF) administered by the Innovation and Technology Commission (ITC) of the HKSAR Government. HKWDC seeks to promote the development and usage of wireless application technology in Hong Kong. It provides end-to-end infrastructural support for mobile and wireless applications in Hong Kong, from information, consultancy, development, deployment to product dissemination. HKWDC also provides a multi-operator and multi-vendor platform with connectivity to various wireless networks so as to enable enterprises interested in developing wireless technology to develop and test their products at lower costs and with shorter development time.²

ii. iResource Centre

2. Also funded by the ITF of ITC, the iResource Centre is established to provide specialised and public information for the industry, especially small and medium enterprises. In addition to books, magazines and publications, the iResource Centre also provides a popular online business knowledge base and multimedia materials and tools, such as background music and sound copyright clearance service. The public can conduct high-speed searches among more than 10,000 music and sound clips for commercial or learning purposes and legally upload or download materials using Digital Rights Management technologies, which offer effective IPR protection.

² Hong Kong Wireless Development Centre: <http://www.hkwdc.org/aboutkwdc.html>.

iii. Visitor Centre

3. The Visitor Centre elaborates Cyberport's vision and background through a number of high-tech presentation tools, including a 360-degree display screen, which gives visitors an impression of being placed in another dimension.

iv. Digital Media Centre

4. The Digital Media Centre (DMC) offers a range of support services in the areas of imaging, filming and video recording, sound production and computer-generated virtual sets. By hiring DMC's venues and equipment, multimedia developers or schools can gain access to digital equipment, multimedia software or hardware facilities to produce digital films at lower costs with the technical support of professionals. One of the virtual set systems of DMC enables performers appearing before a blue screen to see themselves in another setting or in a surreal environment in real time on a television screen. Hirers may change the virtual setting at any time as necessary.

The University of Hong Kong

(Website: <http://www.hku.hk/index.html>)

Date: 29 January 2008

Time: 3:00 pm

Receiving staff:

Pro-Vice-Chancellor

Prof Paul KH TAM

Director, Technology Transfer Office

Prof Paul YS CHEUNG

Deputy Managing Director, Technology
Transfer Office

Mr Hailson YU

Technology Transfer Officer, Technology
Transfer Office

Mr Matchy JM MA

Administrative Assistant, Technology Transfer
Office

Ms Daisy WONG

Senior Business Manager (Biotechnology
Development)

Mr James CHAN

Senior Legal Counsel, Versitech Ltd of HKU

Ms Eliza KUNG

Legal Officer

Mr James CHAN

i. Overview of R&D and Technology Transfer

Founded in 1911, the University of Hong Kong (HKU) was ranked 18th in the world in 2007. With the establishment of the Technology Transfer Office (TTO) in September 2006, the patent application procedures in the university have been simplified to encourage more faculty members to apply for patents. TTO has developed and promoted an industrial partnership scheme to enable the university to make use of more funds for research and encourage technology transfer and applied research in appropriate

areas. TTO also collaborates with various Mainland and overseas institutions which have brought HKU's S&T research to new heights.

ii. Impact of China's 11th Five-Year Plan on the Development of Innovation and Science and Technology of Hong Kong

2. HKU is of the view that China's 11th Five-Year Plan (the Plan) has a far-reaching impact on the development of S&T research in Hong Kong. In the Plan, China recognises the importance of S&T development to the overall development of the society, and encourages autonomous innovation. It is committed to enhancing its innovation capacity by adopting various major approaches, which include promoting key technological innovation in areas like energy, resources and environment; boosting the core competitiveness of key industries; strengthening the integration of technologies; raising the service ability of S&T; reinforcing the capability to safeguard national security; making advanced deployment in fundamental and leading-edge technological research; and enhancing the capacity for sustained S&T innovation. China has also implemented financial policies at the central level to actively enhance the capacity for autonomous innovation of enterprises and cultivate and strengthen the market subject with a view to raising the income and status of S&T research talents in the Mainland.

iii. Difficulties and Development Strategy for S&T in Hong Kong

3. S&T development in Hong Kong is beset with difficulties. Hong Kong has all along been committed to a free economy, in which investors are generally driven by commercial interests. S&T investment is inadequate due to the high costs involved and the long period for return. Moreover, its importance is not duly recognised by the community. It is therefore difficult to achieve substantial development in high and innovative technologies in Hong Kong. In addition, some Hong Kong students studying abroad choose to stay overseas because they believe that the high-tech industries there offer more development opportunities. The lack of S&T research talents and weak capability for innovation further hold back the development of high and innovative technologies in Hong Kong.

4. According to HKU's data, the ratios of S&T investment to GDP and science degree holders to total population in both the Mainland and Hong Kong are much lower than those of other countries, reflecting the lack of S&T investment and talents in Hong Kong. The S&T development strategy of Hong Kong should start with a substantial increase in S&T investment, greater efforts in the nurturing of talents and more incentives for the development of innovative technologies.

iv. Successful Cases of Technology Transfer

5. The number of successful patent applications of HKU has increased substantially since 2000 and the number of technology transfer agreements has more than doubled from 2004/05 to 2006/07, fully reflecting HKU's rapid development in S&T research.

6. HKU cited several successful cases of commercialisation of technologies. One of them is a joint project with the Massachusetts Institute of Technology, which resulted in the development of a self-assembling peptide that can be used for nerve regeneration. When the protein comes into contact with an ionic liquid (such as blood), a comb-like structure will be formed immediately, which is useful in the regeneration of nerves.

The Hong Kong University of Science and Technology

(Website: <http://www.ust.hk/eng/>)

Date: 30 January 2008

Time: 9:45 am

Receiving staff:

Acting Vice-President for Research and
Development

Prof Tony EASTHAM

Director, Technology Transfer Center

Dr Claudia J XU

Senior Scientific Officer, Materials
Characterisation and Preparation Facility

Dr WENG Lu-tao

Manager, Intellectual Property Administration,
Technology Transfer Center

Ms Alice SK YUEN

Executive Officer, Technology Transfer Center

Mr Edmond HF YAU

Executive Officer, Technology Transfer Center

Ms Sofia NM LEUNG

Business Development Manager,
HKUST R and D Corporation (Guangzhou)
Limited

Mr Don DIAO

i. Units Responsible for IP Management

Founded in October 1991, the Hong Kong University of Science and Technology (HKUST) has the mission of advancing learning and knowledge through teaching and research. HKUST attaches great importance to IP management and S&T research. It has established the Technology Transfer Center (TTC) and the HKUST R and D Corporation Limited (RDC) to take charge of its IP management and technology transfer.

2. TTC's mission is to transfer technology and research information to industry and to solicit industrial funding for joint R&D projects. It is responsible for HKUST's IPR protection work (such as operational matters relating to patents, IP management and maintenance, IP seminars, patent infringement actions and IP consultation services), fund raising for research, business networking and technology licensing.

3. RDC is a company wholly-owned by HKUST promoting the commercialisation of the research results, services and IP of HKUST. Its main duties are to handle the licensing arrangement of IPR owned by HKUST, incubate the start-up of technology-based work, invest in spin-offs resulting from successful incubation, and enter into R&D service contracts with organisations. In addition, RDC strives to foster the transfer of HKUST's research results to local, regional and overseas industrial, government and commercial organisations.

4. HKUST's Office of Contract and Grant Administration is responsible for keeping faculty members aware of funding opportunities, assisting with the preparation of project proposals, ascertaining the sources of research funding, administering grants and contracts, assisting with the preparation of publications and project reports, and maintaining a research information database.

5. The Entrepreneurship Center was established in 1999 to encourage and permit the direct participation of faculty members in the commercialisation of new technologies. The service scope covers the provision of work space, internet access and central office services, advisory services, introduction to venture capitalists, discount for participation in trade shows, and use of university facilities and resources. The services are open to faculty members, staff or students (past or present) of HKUST, who can benefit from marketing their research results in the name of HKUST.

ii. Overseas and Mainland Initiatives

6. Apart from setting up various units and companies to engage in R&D activities, HKUST also forms partnership and networks with overseas entities with a view to gaining overseas experience and training talents.

7. Similarly, HKUST attaches great importance to the Mainland market. It has set up various entities and research institutes in the Mainland to promote S&T development in the Mainland and Hong Kong. HKUST's cooperation partners in the Mainland include Peking University, Tsinghua University, Fudan University and SYSU.

iii. Visit to Materials Characterisation and Preparation Facility

8. The delegation visited the Materials Characterisation and Preparation Facility (MCPF) to see the sophisticated equipment there for materials characterisation and examination. A presentation on transmission electron microscopy was given by the MCPF representative. In addition to providing different equipment for laboratory purposes, MCPF also offers training courses and workshops to the teaching staff and students of HKUST.

The City University of Hong Kong

(Website: <http://www.cityu.edu.hk/cityu/index.html>)

Date: 30 January 2008

Time: 1:30 pm

Receiving staff:

Director, Technology Transfer Office	Mr HY WONG
Finance and Administration Manager, CityU Enterprises Limited	Mr Michael MAN
Associate Professor, Department of Electronic Engineering	Dr LM CHENG
Laboratory Director, Wireless Communications Research Centre	Dr XUE Quan
Executive Officer, Technology Transfer Office	Ms Stella CHU

i. Overview of Technology Transfer

The technology transfer structure of the City University of Hong Kong (CityU) comprises three companies, namely, CityU Enterprises Limited (CityUE), CityU Professional Services Limited and CityU Research Limited (CityUR). The Technology Transfer Office (TTO) of CityU is mainly responsible for the creation, protection, marketing and transfer of IP. The major modes of technology transfer include setting up companies with industrial and sectoral partners, providing consultancy services by CityU professors, and patent licensing. On the mode of operation of patent licensing, CityU authorises CityUR to use its IP and CityUR in turn licenses the use of the IP to the business sector. Since CityUR is a limited company wholly-owned by CityU, effective risk control is achieved.

ii. Obstacles to Patent Licensing and Strategies Adopted

2. Patent licensing is still in its infancy in Hong Kong. As research results have to be further refined before they can be developed into marketable products, a great deal of time and money is required and investors may not be willing to take the risk. Moreover, local enterprises are mostly small and medium in size. They may not have the necessary skills and capital to apply the technologies developed by local universities. Given the high costs of patent application, patent protection can only be applied for in one or two overseas countries. All these are obstacles to the development of patent licensing in Hong Kong.

3. CityU's strategies to overcome these obstacles include publishing more IP and patent licensing data on its website, making reference to local or overseas universities' practices of patent licensing, participating in the activities and programmes of overseas technology transfer organisations and establishing international networks, promoting its research results through participation in Mainland and overseas exhibitions, introducing its technologies in various fields and their applications by organising technology transfer forums, collaborating with S&T institutes, and commissioning local and foreign patent licensing agents to promote its technologies. TTO cited two successful cases of patent licensing, one of which being a wireless charging platform for multiple electronic devices.

iii. CityUE

4. The mission of CityUE is to enhance the competitiveness of Hong Kong's business sector through the development and provision of innovative applied S&T products and patented technologies. It strives to encourage and support CityU staff to commercialise their S&T results. It also provides integrated services such as exploring business opportunities, provision of initial funding, corporate finance management and training for CityU and its subsidiaries. The business scope of CityUE covers biotechnology, environmental science, mobile communication equipment and Internet information management.

5. Looking forward, CityUE will actively explore development opportunities in the Mainland by building partnerships with Mainland enterprises and educational institutions. Furthermore, CityUE hopes to enhance the profile of the companies under the group and the recognition of their products by strengthening communication with the mass media and the business sector, and to expand the scope of business to new areas by strengthening R&D, production and marketing capabilities.

iv. Smart Card Design Centre

6. The Smart Card Design Centre has been established with ITC funding to offer technical support to Hong Kong industry. Under the support of the SME Development Fund of the Trade and Industry Department, the Centre has developed a double-interface smart card operating system and testing facilities. It has also successfully applied for funding under the Hong Kong/Guangdong Technology Cooperation Funding Scheme of ITC to carry out a project on the development of a radio frequency identification reader in collaboration with the Wireless Communications Research Centre of the Department of Electronic Engineering. The Centre has also successfully taken forward several applied research projects, including the widely-known e-Channels for automated passenger clearance.

v. Visit to Wireless Communications Research Centre

7. Representatives of the Wireless Communications Research Centre briefed the delegation on the dual-use GPRS telephone network for the Mainland. Another invention is a device to prevent losing track of tour participants. Through an automatic tracking system, a tour guide can instantly identify the whereabouts of a tour participant wearing a micro-sensor by inserting a USB drive into his personal digital assistant. Finally, students of the Centre demonstrated an automation system for borrowing, returning and classifying books.

The Hong Kong Polytechnic University

(Website: http://www1.polyu.edu.hk/main/main_e.php)

Date: 30 January 2008

Time: 3:30 pm

Receiving staff:

Vice President	Dr LUI Sun-wing
Director, Partnership Development	Mr Andrew YOUNG
Business Development Manager, Partnership Development Office	Mr Edmond LAM

i. Overview of S&T Research and Technology Transfer

The Hong Kong Polytechnic University (PolyU) established the Institute for Enterprise in 1999, which comprises the Partnership Development Office (PDO), PolyU Technology and Consultancy Company Limited, and the Management and Executive Development Centre. IP and technology transfer management are mainly taken up by PDO. Under PDO, there are three units with different responsibilities, namely, patent and funding applications, marketing, and collaborative development and technology transfer. The main objective of PDO is to commercialise research results and provide one-stop service.

2. The modes of commercialisation and technology transfer adopted by PDO include setting up wholly-owned or joint venture companies, patent licensing and encouraging collaborative S&T research by PolyU and the industry. Collaborative research will benefit both the university and the industry. To the university, it can increase the rate of successful transition from the laboratory to the market, make complementary use of one another's advantages over resources as well as create communication channels and establish effective mode of collaboration with the industry. To the industry, enterprises can gain access to the latest science and technology, make use of PolyU's resources, expand their product range, and upgrade their product quality and competitiveness.

ii. Difficulties in Patent Application and Technology Transfer and Strategies Adopted

3. In view of the considerable costs involved in patent application and maintenance, PolyU employs in-house IP lawyers to enhance the efficiency of patent application and reduce application costs. PolyU also encourages its faculty members to reserve funding for patent application in their research project grants. A common mistake made by universities is that their prime consideration is the publication of research papers and they will thus disclose their inventions in the academic forums before applying for patents. Some inventions are even shown in exhibitions before the relevant patent applications are filed. Universities and inventors should pay special attention to this problem and prevent disclosure before applying for patents.

4. The key to effective IP management and successful technology transfer is to keep abreast of relevant information. The university must know its own strengths, the needs of enterprises, the characteristics of the local economy, and global trends and changes.

iii. Visit to House of Innovation

5. The delegation visited the House of Innovation and watched a short film on its history and development. The House of Innovation mainly displays inventions with comparatively high applicability. During the visit, the House's representatives introduced a self-cleaning textile fabric using nanotechnology. When the fabric is stained with sweat or other organic substances, its nano-coating will decompose the stains, reducing the time and frequency for laundering. Other research products introduced include the Intelligent Home System and the Palmprint Identification System.

Challenges Facing Tertiary Institutions and Science and Technology Institutes in Guangdong and Hong Kong in Technology Transfer and Strategies Adopted

After the four-day exchange programme, it was not difficult for the delegations to recognise that universities and S&T institutes in Guangdong and Hong Kong face a lot of challenges in technology transfer. While the challenges are largely similar, the approaches adopted by individual universities or S&T institutes to face up to and tackle the challenges differ. Some of them prefer addressing the problems internally while others choose to seek external assistance. This section provides a summary and analysis of the challenges facing them and the strategies adopted to resolve the problems.

Challenges in Technology Transfer

i) Shortage of Funds

2. The greatest challenge facing universities and S&T institutes in Guangdong and Hong Kong is shortage of funds for S&T R&D. The development of a high and innovative technology requires substantial funds in the order of several million dollars. The development cycle is long and the successful commercialisation of the research results is not guaranteed. Even if a product arising from S&T research is put on the market, it may not generate a reasonable return. Given limited resources and shortage of funds, a university may become so risk averse that it gives up some promising but costly research projects. Although a university may cooperate with enterprises to jointly develop its research results, it is difficult for a relatively small enterprise to provide sufficient financial and technical inputs necessary for joint technological development with a university.

ii) Nurturing of S&T Research Talents

3. To establish a robust and effective technology transfer system, the nurturing of S&T research talents is important. However, the demand for such talents in the two places still outstrips supply. The major reasons are that researchers are not well paid enough and they are not as highly esteemed as other professionals. Moreover, the long payback period of S&T research and innovation compared with other trades is not attractive to the younger generation. In addition, the commercialisation of research results and the successful marketing of the resultant products require people who are conversant with technological innovation, understand the market needs and have basic knowledge of contract and IP management. Such composite talents who are both creative and business-minded are scarce. For this reason, the success rate of patent transfer in the two places is relatively low.

Expediting the training of S&T research and technology transfer talents is the prime task for the universities and S&T institutes in Guangdong and Hong Kong.

iii) Application for Overseas Patents

4. As IPR protection is territorial, universities and S&T institutes have to apply to the patent offices of different countries, regions or places for patents before they can enjoy patent protection there. However, universities and S&T institutes cannot but file their patent applications on a selective basis because of the complicated patent application procedures, long processing time and high costs (including application fees, registration fees, maintenance payments, charges of patent agents, etc.). Moreover, the specification of a patent is a professional document comprising technical and legal elements. Whether it is properly written will have an impact on the patent protection. The scope of protection for a patented invention may also be affected by insufficient communication between the inventor and the patent agent. If a patent is not granted, the technology in question cannot be successfully transferred. In addition, some university professors give priority to the publication of research papers. Sometimes an invention is mistakenly disclosed in the academic circle before a patent application is filed, thereby depriving the university of its right to apply for a patent.

Possible Strategies

i) Establishing a Good IP Management System

5. Universities and S&T institutes should develop a sound and highly transparent strategy on IP and technology transfer to give S&T researchers and administrators a clear understanding of the relevant responsibilities, requirements, interests and procedures, which is essential for the smooth transfer of technology. Universities and S&T institutes may avoid a technology being disclosed by its teaching and research staff before a patent application is filed by devising a set of management and implementation measures acceptable to both parties. In so doing, various IPR issues arising from academic deliverables can also be clarified, including the allocation of income generated by a patent or technology approved for use. With clear guidelines, all parties concerned may then coordinate their efforts smoothly. The universities and S&T institutes in both places have this very much in mind, and some universities have formulated management and implementation measures and prepared policy documents for reference by their teaching and research staff to enhance the effectiveness of IPR protection and management.

ii) Establishing an Incentive Mechanism to Encourage Creativity

6. To encourage S&T researchers to unleash their creativity and actively apply for patents, all universities and S&T institutes adopt an affirmative approach which gives incentives and rewards to the inventors, although the details differ. Some universities and S&T institutes offer one-off and/or fixed rewards to the inventing staff while some universities prefer allocating to the inventing staff part of the profits earned over the validity period of the patent rights after the successful transformation or commercialisation of the patents concerned. Some universities include granted patents and original applied research in the performance appraisals of S&T researchers in order to boost their creativity and motivation for invention.

iii) Market-oriented Cooperation

7. In order to raise more funds for S&T research, universities and S&T institutes effect technology transfer in different modes, such as reselling or licensing the use of patented technologies, forming spin-off companies, setting up joint ventures or cooperating with the public sector. The biggest advantage of reselling or licensing the use of a patented technology is the considerable income received by the university and that it is no longer required to be involved in the management of the technology. However, finding a suitable company for the continued development of a technology is rather difficult. Therefore, universities and S&T institutes in Guangdong and Hong Kong usually form their own companies and further develop the research results through these companies they hold or through joint ventures with private enterprises. The major advantages of entering into a joint venture are that the mode of operation of private enterprises stays closer to market needs, and that private enterprises are more knowledgeable about market positioning and pricing, channels of market access and marketing approaches. Given these advantages, a joint venture can help ensure that the research results are more a means to meet the demand of users than merely an end in itself in pursuit of high technology.

iv) Joint Development of a S&T Research Platform by Universities or Government Agencies of Both Places

8. Apart from forming joint ventures with private enterprises, universities and S&T institutes of both places can jointly develop a platform for cooperation through different forms of exchanges and contacts. Institutes of the two places may combine their efforts in the development of similar research results in order to enhance cost-effectiveness, avoid duplication of efforts, complement each others' strengths and minimise vicious competition. It is proposed that they should take the opportunity of the exchange programme to compile a directory of universities and S&T institutes of both places, which will facilitate

communication and further exchanges between S&T researchers and the managing departments concerned of the two places.

v) Strengthening Contacts with the Mass Media and the Business Sector

9. In addition to promoting S&T research results to enterprises through their respective technology transfer offices and companies, universities and S&T institutes can publicise their achievements in high and innovative technology through the media. They may upload the authorised technological outcomes to their websites or patent databases for wider promotion; gain publicity through the media, including television, radio, newspapers and magazines, with a view to enhancing their image and the recognition of their products; enter S&T research competitions to win more international prizes and awards so as to enhance their reputation; showcase their research results in local and overseas exhibitions to make their achievements more widely known to international organisations, and directly introduce their technologies and related applications in different fields during technology transfer forums; and commission local and overseas patent agents to promote their technologies to enterprises. Highlighting the achievements of the universities/institutes through different channels can not only enhance public awareness and recognition of technological innovation, but also increase the chances of successful commercialisation of their technologies.

vi) Making Good Use of Government Resources to Develop New and Innovative Technologies

10. The HKSAR Government and the Guangdong Provincial Government have set up different expert groups and funding schemes to support the high and innovative technology industries in the two places. For example, the two governments established the Hong Kong/Guangdong Expert Group on Cooperation in Innovation and Technology and launched the Hong Kong/Guangdong Technology Cooperation Funding Scheme in 2003. To open up new sources of funds, universities and institutions in the two places may seek funding from the relevant government departments as appropriate for their S&T research projects. For example, the Wireless Communications Research Center of the CityU has successfully obtained funding under the Hong Kong/Guangdong Technology Cooperation Funding Scheme of ITC of the HKSAR Government for a radio frequency identification reader project. In addition, they may also make good use of the technological platform facilities provided by the governments. For instance, technological infrastructures funded by the HKSAR Government, such as the Science and Technology Parks, the Applied Science and Technology Research Institute and the Cyberport, are open for rental to universities and S&T institutes in Hong Kong. By making good use of these resources, universities and S&T institutes in the two places can share their resources and achieve higher cost-effectiveness.

vii) Training of More IP Talents

11. In order to improve internal IP management, it is important for universities and S&T institutes to train more IP professionals. Apart from enhancing in-house IP training and encouraging the staff members concerned to pursue further training, universities and S&T institutes may also recruit employees who have majored in IP or are qualified patent agents to assist in internal IP management and perform patent application work. This can not only reduce the reliance on the services of patent agencies, but also avoid unsuccessful applications owing to mistakes on the part of patent agencies or insufficient communication between the agencies and the inventors. This may also help bring down the costs of patent application and raise the standard of vetting. JNU and SCUT of the Mainland have set up schools of IP to train more IP talents, who are expected to contribute to the effective IPR protection and management in the universities and in the whole region.

viii) Making Good Use of the Resources of IP Intermediaries

12. Currently, the tertiary institutions and S&T institutes of the two places, particularly those in the Mainland, are faced with challenges, including high application costs and insufficient funding, in applying for patents for their S&T research results in the US, Japan and Europe. Mainland universities and S&T institutes may collaborate with Hong Kong IP intermediaries on a trial basis, starting from application for overseas patents, to come up with a mode of cooperation involving the sharing of investment costs, risks and profits.

Conclusion

13. Every year, GDIPO and IPD of the HKSAR Government jointly organise exchange activities in different forms and on different topics to provide a platform for the establishment of effective communication channels between different IP bodies and stakeholders with a view to promoting mutual understanding and exchanges.

14. This exchange programme has enhanced mutual understanding between universities and S&T institutes of the two places, and deepened their knowledge of the possible strategies for IPR protection and resolving problems relating to technology transfer. Through experience sharing, they can draw useful reference and valuable lessons when they face similar challenges in the future.

15. By making use of the communication channels established in this exchange programme, universities and S&T institutes of the two places can explore opportunities for future cooperation, identify common S&T research areas and share the available resources in order to achieve the highest possible cost-effectiveness under the prevailing stringent condition by using the minimum amount of resources to develop more high and innovative technologies.

16. The two places may consider joining their efforts in developing new technologies, identifying new development pathways and exploring new areas of cooperation. By forming an alliance, the two places can expand their networks in Hong Kong, in the Mainland and over the world, which will create more opportunities for obtaining funding from, and cooperating with, private enterprises, and for gaining financial support and sharing resources from the governments of the two places.

17. Both Guangdong and Hong Kong hope that this exchange programme can provide a forum for experience sharing between the universities and S&T institutes. It is also hoped that the universities and S&T institutes will make use of this platform to explore more opportunities for cooperation in developing more high and innovative technologies and new and popular commercial products, thereby promoting the economic prosperity of the two places and laying a solid foundation for the development of the two places as centres of high and innovative technology.

Intellectual Property Office of Guangdong Province
Intellectual Property Department of the HKSAR Government
July 2008

Annex 1

Guangdong/Hong Kong Exchange Programme on Intellectual Property Management in Tertiary Institutions and Science and Technology Institutes

List of Hong Kong Delegates:

Leader:

Mr Peter CHEUNG Kam-fai, Deputy Director of Intellectual Property

Members:

Organiser:

Name of Organiser	Name of Member	Post
Intellectual Property Department of the HKSAR Government	Ms FUNG Shuk-hing, Pancy	Assistant Director of Intellectual Property (Advisory)
	Ms WONG Siu-ling, Jenny	Head (Marketing Division)
	Miss WAN Shuk-man, Brenda	Senior Manager (Regional Relations)
	Ms LI Yuk-wah, Veness	Manager (Regional Relations)

Universities and Science and Technology Institutes:

Name of Organisation	Name of Member	Post
The University of Hong Kong (Technology Transfer Office)	Mr Matchy JM MA	Technology Transfer Officer
	Ms Daisy WONG	Administrative Assistant
The Chinese University of Hong Kong (Technology Licensing Office)	Prof Alice NGAN	Director
	Mr Billy LY LAM	Co-ordinator
The City University of Hong Kong (Technology Transfer Office)	Mr HY WONG	Director
	Ms WANG Xinyu	Executive Manager, Shenzhen Research Institute
The Hong Kong University of Science and Technology (Technology Transfer Center)	Dr Claudia J XU	Director
	Dr Rocky LAW	Associate Director
	Ms Alice SK YUEN	Manager, Intellectual Property Administration
The Hong Kong Polytechnic University (Partnership Development Office)	Mr Edmond LAM	Business Development Manager, Partnership Development Office
Hong Kong Cyberport Management Company Limited	Mr David CHUNG	Senior Manager (Information Technology Operations)

(List in order of the number of strokes in names of organisations in Chinese)

Departments of the HKSAR Government:

Name of Department	Name of Member	Post
Innovation and Technology Commission	Mr YEUNG Ba-sang	Senior Manager, Innovation and Technology Fund
Office of the Government Chief Information Officer	Mr Dantes KH TANG	Systems Manager, Infrastructure and Security Division
	Mr Sidney KC NG	Programme Manager, Technology Resources Management

(List in order of the number of strokes in names of organisations in Chinese)

Annex 2

Guangdong/Hong Kong Exchange Programme on Intellectual Property Management in Tertiary Institutions and Science and Technology Institutes

List of Guangdong Delegates:

Leader:

Mr ZHU Wanchang, Deputy Director General of Intellectual Property Office
of Guangdong Province

Members:

Name of Organisation	Name of Member	Post
Intellectual Property Office of Guangdong Province	Mr WANG Hu	Deputy Division Director
Intellectual Property Office of Guangdong Province	ZHANG Jing	Senior Staff Member
Sun Yat-sen University	Prof SU Weiwei	Professor, School of Life Science
Sun Yat-sen University	Mr WANG Xiaosong	Supervisor, Intellectual Property Division, Science and Technology Office
South China University of Technology	Ms HE Yanling	Director, Patent Office
Jinan University	Ms ZHANG Sujuan	Deputy Head, Science and Technology Research Department
Jinan University	LI Jing	Principal Staff Member, Science and Technology Research Department

Name of Organisation	Name of Member	Post
South China Agricultural University	QUAN Feng	Deputy Chief, Office of Science and Technology
Southern Medical University	ZHANG Hong	Chief, Office of Science and Technology
Southern Medical University	ZHAO Zhen	Office of Science and Technology
Guangdong Ocean University	YANG Ping	Chief, Science and Technology Division
Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences	SU Qiucheng	Vice-Director, Research and Development Division
Guangdong Institute of Microbiology	SUN Guoping	Deputy Chief
Guangdong Institute of Microbiology	GUO Xirong	Chief, Science and Technology Section
Guangzhou Research Institute of Non-ferrous Metals	WANG Li	Senior Engineer, Science and Research Department
South China Sea Institute of Oceanology, Chinese Academy of Sciences	LI Lixuan	Representative, Research Planning Office
China Electronics Technology Group Corporation	YIN Yulin	Senior Engineer, No 7 Research Institute
First People's Hospital of Foshan	WU Xiaolian	Deputy Chief, Science and Education Section