

Graduate Studies & Research Newsletter

Published by City University of Hong Kong

研訊

Available at:
www.cityu.edu.hk/ro/newsletter/issue.html/

Volume 34
June 2008

FEATURES



P.2

Virtual Reality Technology Exhibited



P.8

Technology Transfer at CityU



P.12

Tips on Writing Research Papers

IN THIS ISSUE

- Research 1
- Technology Transfer 6
- Graduate Studies 11

Prestigious Engineer Takes Up Presidency of CityU

Prof Way Kuo, an internationally renowned engineer and academician, joined CityU as President on 14 May 2008.

Prior to joining CityU, Prof Kuo was University Distinguished Professor and Dean of Engineering at the University of Tennessee (UT), Knoxville, in the USA. He was concurrently Professor of Industrial and Information Engineering and Electrical and Computer Engineering at UT.

Prof Kuo's principal research interests are in modelling, evaluating, and estimating reliability of modern systems, with emphasis on optimal system design; both basic research and practical applications are addressed. Recent professional interests include investigating reliability design for microelectronics and nano products and studying reliability and maintainability for systems that consist of a significant software portion. Other research contributions include survivability and reliability optimisation of command, control, communication,

and information networks.

He is recognised as one of the principal scholars responsible for developing cost-effective methodologies for reducing infant mortality in the fast-evolving microelectronics industry. His contributions to industry include advancing the development of the fundamentals of reliability design as well as introducing new industrial applications of parametric and nonparametric analysis.



▲ Prof Way Kuo

Prof Kuo was born in Taipei and received his BSc degree in Nuclear Engineering from the National Tsinghua University in Taiwan in 1972. He received a PhD degree in Industrial Engineering in 1980 from Kansas State University, USA.

Before his career in academia, Prof Kuo worked for Bell

(continued on next page)

Newsletter Advisory Board

Prof David Tong, *Deputy President* • Prof Roderick Wong, *Vice President (Research) / Dean of Graduate Studies* • Prof Y V Hui, *Associate Dean, Chow Yei Ching School of Graduate Studies* • Prof K K Wei, *Dean of Faculty of Business* • Dr Robert Neather, *Department of Chinese, Translation and Linguistics* • Dr Bruce Richardson, *Department of Biology and Chemistry* • Dr John Ho, *School of Law* • Mr Tang Kin Ching, *representative from CityU Postgraduate Association*

Editorial Board

Mrs Linda Cheng, *Research Grants Office* • Ms Vicki Geall, *Research Grants Office* • Ms Millie Mark, *Chow Yei Ching School of Graduate Studies* • Mr H Y Wong, *Technology Transfer Office*



The Editorial Board welcomes articles, photos and ideas. Please send your contributions to Ms Millie Mark, c/o Chow Yei Ching School of Graduate Studies (Fax: 2788-7097; E-mail: sg@cityu.edu.hk).



Laboratories. From 1993 to 2000, he was Head and Professor of the Department of Industrial (and Biomedical) Engineering at Texas A&M University (TAMU). He held the Royce E Wisenbaker Chair of Engineering in Innovation and was Executive Associate Dean of Look College of Engineering, TAMU, from 2000 to 2003.

Prof Kuo is renowned for his work in designing reliability for nano-electronics and for developing methods to reduce infant mortality. He is also well-known for promoting both the academic curriculum of relevance to societal needs and problem-driven research. He is Honorary Professor of the National Chiao Tung University in Taiwan, Operations Research Chair Professor of the Tsinghua University, Honorary Professor of the Beijing Aerospace and Aeronautics University, Shanghai Jiao Tong University, Xian Jiao Tong University,

and Central South University, and holder of the Kuo-Liang Optical-electrics Corporation Chair of the National Tsing-Hua University.

Prof Kuo is an elected member of several prestigious institutions including the US National Academy of Engineering and Academia Sinica of Taiwan. He is an Academician of the International Academy for Quality and a fellow of the Institute of Electrical and Electronics Engineers (IEEE). At the end of 2007, Prof Kuo was elected a Foreign Member of the Chinese Academy of Engineering (CAE). The election recognised Prof Kuo's "contribution to the field of reliability design for microelectronics products and system," said President Xu Kuangdi of CAE. CAE membership is the highest academic title in engineering science and technology in China. ■

CityU's Smart Ambience Therapy Exhibited at Hong Kong Science Museum

Smart Ambience Therapy (SAT), developed by the Centre for Innovation Applications of Internet and Multimedia Technologies (AIMtech) of CityU and its collaborating partners from the Hong Kong Association of Art Therapists, has become an exhibit at the Hong Kong Science Museum.

SAT is a pioneering application of interactive media and virtual reality technology in art therapy, particularly in psychotherapy for children who have been physically or emotionally abused. The system captures and translates body motions and gestures into visual forms and movements. By wearing a pair of stereoscopic glasses, children can see three-dimensional virtual objects and feel immersed in the environment. They can also manipulate and interact with the virtual objects.

Dr Louis Ng Chi-wa, Assistant Director (Heritage and Museums) of the Leisure and Cultural Services Department, welcomed guests at the opening of the exhibit on 22 February 2008. Other officiating guests were Mr Michael Wong Hing-lan, Chief Curator, Hong Kong Science Museum; Prof Richard Ho Yan-ki, CityU's then Acting President; and Prof Horace Ip Ho-shing, Chair Professor of the Department of Computer Science.

"CityU is devoted to contributing the outcomes of applied research to society, and SAT is an excellent example," Prof Ho said.

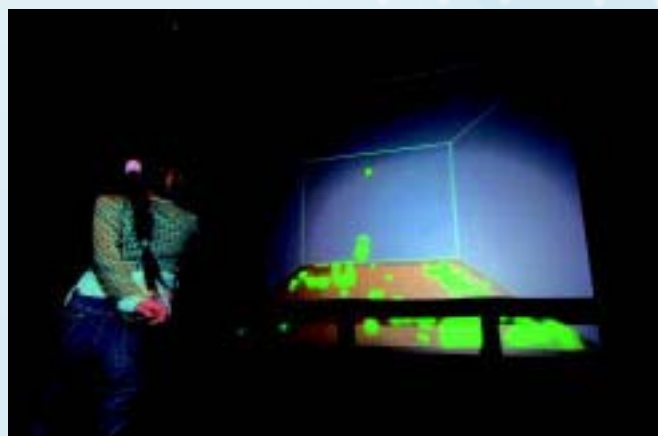
Developed by a research team led by Prof Ip, in collaboration with Ms Julia Byrne and Ms Ivy Fung from the Hong Kong

Association of Art Therapists, SAT provides a new medium that helps clients address negative feelings and low self-esteem resulting from abuse, and creates a unique process of accessing one's internal world through kinesthetic movement.

Since SAT was launched in 2006, Prof Ip has worked with NGOs, such as Against Child Abuse, SKH St Christopher's Home, and the Hong Kong Family Welfare Society, to implement the application.

SAT has also been recognised internationally. In 2007, it was awarded a gold medal at the 35th International Exhibition of Inventions, New Techniques and Products in Geneva. ■

Adapted from an article by *CityU NewsCentre*



▲ The art therapy interactive game "Magic Bouncing Balls"



Research Excellence Awards Ceremony

The first CityU Research Excellence Awards (REA) were presented to two distinguished scholars at a ceremony at the University on 17 March 2008. The Grand Award was conferred on Prof Zhang Longxi, Chair Professor in the Department of Chinese, Translation and Linguistics, and the Award of Excellence on Prof Paul Chu Kim-ho, Chair Professor in the Department of Physics and Materials Science.

Prof Zhang was excited about winning the award. "CityU has many good researchers, and REA is a wonderful way to recognise their work and encourage them to aim high and make great contributions to international scholarship," he said.

Prof Chu said he was very happy to receive the honour, and hoped the University would continue to provide support for researchers.

Officiating guests at the award ceremony included Prof Richard Ho Yan-ki, then Acting President, Prof David Tong Shuk-yin, Deputy President, and Prof Roderick Wong Sue-cheun, Vice-President (Research). Prof Ho thanked all the University's researchers for their contributions that help CityU fulfil its mission. "We are committed to creating an environment

conducive to high quality research at an internationally competitive level," Prof Ho said.

Prof Zhang Longxi is a world renowned scholar in humanities and cross-cultural studies. His main research interest is in promoting cross-cultural understanding between China and the West, from the perspective of East-West comparative studies.

His publications have received high acclaim in the international arena. Prof Paul Chu is a leading scientist in plasma science and materials engineering. His work has led to a much better fundamental understanding of how energetic plasma ions impact on and interact with surfaces. A myriad of innovative plasma technologies and applications having industrial impact have also been developed.

REA, to be held every two years, encompasses academic and applied research projects, along with contract research projects, consultancies, or other applied work. The selection process for the next round will begin in 2009.

For more details on the winners and the awards, please refer to Volume 33 of the *Graduate Studies and Research Newsletter* (available online at www.cityu.edu.hk/ro/newsletter/33eng.pdf). ■



▲ (from left) Prof Roderick Wong, Prof Richard Ho, Prof Paul Chu, Prof Zhang Longxi, and Prof David Tong

Asia Pacific Law Review Becomes First Asia-based Law Journal in Renowned Index

The *Asia Pacific Law Review*, a journal of the School of Law (SLW) at CityU, has become the first Asia-based law journal to be included in the Social Science Citation Index (SSCI), the world-renowned database of Thomson Scientific. The recognition reinforces the international reputation of the School, as well as CityU.

Thomson Scientific wrote: "Asia Pacific Law Review is a well-produced law journal covering the Asia Pacific region.... [It] is an excellent resource for Asia Pacific legal studies." SSCI adopts stringent criteria. It evaluates a journal's editorial content, takes into account the international spread of contributors, and conducts a citation analysis.

The *Asia Pacific Law Review* joins the SSCI's league of leading law journals that includes the *Harvard Law Review*, *Yale Law Journal*, *Stanford Journal of International Law*, *UCLA Law Review* and *American Journal of Comparative Law*. It is also indexed/abstracted in several other sources, such as the Index to Legal Periodicals and Books.

The SLW journal commenced publication in 1992 and has published articles by leading scholars from all parts of the world. It has also attracted articles by eminent judges and world-renowned practitioners. ■

Adapted from an article by CityU NewsCentre



Business Professors Receive International and National Honours

Prof (Chair) Leung Kwok, Head of the Department of Management, and Prof Zhou Nan, Head of the Department of Marketing at CityU, have received international and national awards respectively for their academic achievements. Prof Leung has been elected as Fellow of the Academy of International Business (AIB) for his contribution to international business studies, while Prof Zhou Nan was awarded a Cheung Kong Chair Professorship under the Cheung Kong Scholars Programme 2007.

Fellow of leading international business association

Prof Leung is the first scholar from the Greater China region to be elected as an AIB fellow. There are around 80 AIB fellows worldwide, with just 3 in Asia. AIB was established in 1959 and now has more than 3,000 members in 71 countries. It is the leading association of international business scholars and specialists. Fellowship status is limited to a maximum of 5 scholars per year.



▲ Prof Leung Kwok

Prof Leung joined the academy as a member in 2002, and was invited to be the Deputy Editor-in-Chief of the academy's *Journal of International Business Studies*. He also helped the academy organise the 2006 Frontiers Conference in San Diego.

Given his relatively short tenure as a member, Prof Leung was particularly delighted that his research was being recognised by such an elite organisation. He said that working in the academy has helped his research on multinational operations. "Hong Kong is one of the centres of international

business activity. It is also the bridge between the Mainland and overseas markets. Any research or studies on international business and multinational operations are especially important to Hong Kong and the Mainland."

Prof Leung will take up an advisory role in the academy and is now a member of the Consulting Editors Board of the journal.

Professorship utilises scholar's marketing expertise

Prof Zhou Nan will visit Wuhan University to contribute his expertise to the field of enterprise management. The Cheung Kong Scholars Programme was established by the Ministry of Education and Li Ka Shing Foundation in 1998 to further improve China's educational standards and competitiveness through the training of the country's best and brightest young minds.



▲ Prof Zhou Nan

Prof Zhou said he was honoured to receive the professorship. He would like to make use of his 20 years of marketing research and teaching experience to act as a bridge between Hong Kong and mainland academics. He also wishes to nurture young marketing scholars in the Mainland and enhance the standard of scholarship. In the past few years, Prof Zhou has organised exchange tours to mainland institutions and participated in a number of mainland marketing conferences with other marketing professors and students. ■

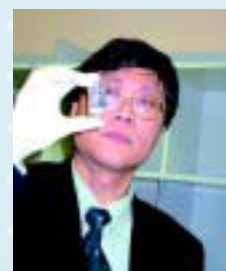
Adapted from an article by CityU NewsCentre

Appointment to International Group of Marine Environment Experts

In March 2008, Prof Rudolf Wu—Chair Professor of the Department of Biology and Chemistry (BCH) and Director of the Centre for Marine Environmental Research and Innovative Technology (MERIT)—was appointed as a member of the Joint Group of Experts on the Scientific Aspects of Marine Environment Protection (GESAMP).

Prof Wu joined CityU in 1993 as the founding head of BCH. Specialising in marine pollution, marine ecology, and ecotoxicology, Prof Wu has managed a variety of large-scale research programmes and many multimillion dollar consultancy projects. MERIT is one of the eight Areas of Excellence in Hong Kong selected by the University Grants Committee. It focuses on the development of innovative technologies for the early detection, assessment, prediction, and control of the effects of human activities on the marine environment.

GESAMP was established in 1967 by a number of United Nations Agencies and is the global authority that provides scientific advice on all aspects of the prevention, reduction, and control of the degradation of the marine environment to sustain life support systems, resources, and amenities. Over the past three decades, GESAMP has produced a large number of reports and studies relating to marine pollution problems, which have had a significant impact on marine environmental studies and policies worldwide. It currently comprises 10 experts from around the world, with Prof Wu the only member from Asia. ■



▲ Prof Rudolf Wu



External Grants

Funding Body	Project Title	PI (Dept)	Amount
Hong Kong Applied Science and Technology Research Institute (ASTRI)	Ultra Low Complexity Speech Coding (ULCSC)	Dr C F Chan (EE)	HK\$150,000
Innovation and Technology Fund (ITF) (Guangdong–Hong Kong Technology Cooperation Funding Scheme)	Cross Platform Cyber/Wireless Security System in Enterprise: Design and Implementations	Dr Weijia Jia (CS)	HK\$9,556,000*
	Research and Development of Business Intelligence Technologies for Enterprise Security Management Systems	Dr Jian Ma (IS)	HK\$5,900,000*
ITF (Teaching Company Scheme)	Reliability Study of Vacuum Dielectric Capacitors for Microwave Circuit Applications	Dr Hei Wong (EE)	HK\$310,000*
Private funding	Methodologies and Applications in the Interface of Internet Users and Market Models	Prof Xiaotie Deng (CS)	HK\$290,000
Private funding	OLED Degradation Mechanisms	Prof S T Lee (AP)	US\$98,450

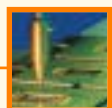
* inclusive of industrial sponsorship

Upcoming Deadlines/Activities

Date/Deadline	Activity	Responsible Party
August 2008	Hong Kong Electric Clean Energy Fund	RO
18 August–13 September 2008	Application period for the Research Tuition Scholarship and Outstanding Academic Performance Award, 3rd Round 2008	SGS
22 August 2008	Chiang Ching-kuo Foundation for International Scholarly Exchange (CCKF) Conference and Seminar Grants, Publication Subsidies	RO
27 August 2008	Smuts Visiting Fellowship in Commonwealth Studies	RO
1–30 September 2008	Application period for the Conference Grant and Research Activities Fund, 3rd Round 2008	SGS
19 September 2008	Chiang Ching-kuo Foundation for International Scholarly Exchange (CCKF) Institutional Enhancement Grants, Senior Scholar Grants	RO
29 September 2008	Pneumoconiosis Compensation Fund Board (PCFB) Research Fund	RO
30 September 2008	Japan World Exposition Commemorative Fund (JEC Fund)	RO

Please note that a number of funding schemes [including the Environment and Conservation Fund (ECF)/Woo Wheelock Green Fund (WWGF), the Ford Foundation Grants and Programme-related Investments to Organisations, Humboldt Research Fellowships, and the Occupational Safety and Health Research Grant] welcome applications year round. Please contact the Research Grants Office for details or visit www.cityu.edu.hk/ro.

Various Innovation and Technology Fund (ITF) schemes also invite year-round applications. Further information can be found at www.cityu.edu.hk/tto or please contact the Technology Transfer Office.



Patents in Hong Kong

Applying for a patent is an important way of protecting the intellectual property arising from research. A patent is a set of rights that excludes anyone other than the patent owner from exploiting the patented invention (such as making, using, or selling it) for a certain period of time.

Patents need to be applied for in different countries or regions. Inventors seeking protection for their novel ideas and technologies in Hong Kong can apply for local patents, which offer up to 20 years of protection.

There are two types of patents in Hong Kong: standard and short-term. Standard patents are renewable annually for a maximum of 20 years. Short-term patents last for four years once granted, and can be renewed for another four-year term.

Standard patents

However, the main difference between the two types of patents in Hong Kong lies not in their terms of efficacy, but rather in their differing prior registration requirements. Inventors who wish to apply for standard patents must have their inventions patented by any one of “the three designated offices” before they can lodge an application with Hong Kong’s Intellectual Property Department (IPD). The three designated offices are as follows:

- The State Intellectual Property Office of China (SIPO)
- The European Patent Office (EPO)
- The United Kingdom Intellectual Property Office (UK-IPO)

Inventions with valid patents awarded by mainland China, the European countries, or the UK can, through standard patents, have their IP protection extended to Hong Kong with relative ease.

Short-term patents

While applying for a short-term patent does not require any prior registration, it does call for proof of novelty. The inventor must be able to produce a “search report” that vouches for the invention’s novelty, and that shows the invention has not previously been described in a printed publication or patent and is not in public use anywhere in the world.

An inventor who needs a search report should contact the International Searching Authority (ISA) of any one of the three designated offices mentioned above. Upon the inventor’s request, the ISA will conduct a global search on existing technologies and writings that may undermine the inventor’s claim of originality. A favourable search report is a requisite for application. ■

—Eliza Chan, *Technology Transfer Office*

The table below highlights the characteristics of both patents.

	Standard	Short-term
Period of efficacy	Up to 20 years (renewable annually)	Up to eight years (renewable for another four-year term after the first four years)
Requirement	Applicant must hold a patent granted by one of the following three patent offices: <ul style="list-style-type: none">• The State Intellectual Property Office of China• The European Patent Office• The United Kingdom Patent Office	Applicant must secure a search report from the ISA to prove there are no existing technologies or writings that may refute the novelty of the invention
Procedure	Applicant files a <i>request to record</i> within six months after the patent application in the designated patent office is published ↓ A filing date will be assigned to the application ↓ IPD examines request ↓ Upon fulfilment of application requirements, the IPD will publish applicant’s <i>request to record</i> in the Hong Kong Intellectual Property Journal ↓	Applicant orders a search report from the ISA ↓ Applicant files application for short-term patent ↓ IPD examines request and will issue a filing date if requirements are fulfilled ↓ IPD examines application ↓ Application fulfils requirements ↓



<p>Applicant files a <i>request for registration and grant</i> within six months after the publication of the <i>request to record</i> in Hong Kong or the grant of patent by the designated patent office</p> <p>↓</p> <p>IPD assigns a filing date to applicant's <i>request for registration and grant</i></p> <p>↓</p> <p>IPD examines request</p> <p>↓</p> <p>If examination is passed, IPD will register the designated patent and grant a standard patent</p>	<p>IPD grants short-term patent. Details of patent will be published in the Hong Kong Intellectual Property Journal</p>
--	---

For more information, you can log on to the Intellectual Property Department's website at www.ipd.gov.hk or visit CityU's Technology Transfer Office website at www.cityu.edu.hk/tto/. Please refer to Volume 31 of the *Graduate Studies and Research Newsletter* for "An Introduction to Patents" (available online at www.cityu.edu.hk/ro/newsletter/31eng.pdf).

Strategies in Patent Application and Preparation

To provide insight into the sometimes daunting process of filing a patent for innovations arising from research, CityU's Technology Transfer Office (TTO) organised a workshop by Mr Kenneth Yip, former Senior Manager of the Intellectual Property Department of the Hong Kong Applied Science and Technology Research Institute.

In the session Mr Yip considered the why, when, where, what, and how of patenting, along with identifying who can help with the process.

To illustrate **why** patenting is important, Mr Yip looked at the impact of patented inventions from history, such as Edison's light bulb and Kodak's camera. "These inventors built great empires and generated a huge amount of wealth from their patented inventions," he said. He also gave a few examples of more recent patents such as predictive texting and tactile feedback computer interfaces.

Finding the prime time **when** to file a patent is necessary to avoid the pitfalls of early and late application. Too early may mean the scope of implementation and usage possibilities may not be fully explored, Mr Yip said. But applications must be filed prior to publishing research or disclosing your research to a potential licensee without a non-disclosure order.

Inventors need to consider the location of customers (to prevent competitors from selling products there) and manufacturers (to prevent competitors manufacturing there) when deciding **where** to file a patent. Mr Yip said you need a patent in each jurisdiction, but having patents in multiple countries becomes extremely expensive.

The expense of filing patents also affects **what** to patent, and decisions on what to patent should fit into a well thought out business strategy. "You can take a minefield approach with patents spread over a broad area, or a fortress approach with a strong profile in one area," Mr Yip explained. You need to understand the lifecycle of your invention and also the ease of detecting infringement. Patents can be about protection or licensing, Mr Yip said, and university-generated intellectual

property is generally about licensing. There is also the consideration of whether to patent a process (more difficult to prove infringement) or a product or system (easier to identify infringement).

Mr Yip highlighted three key aspects for **how** to patent an innovation, namely displaying effectively the novelty, inventive steps, and industrial application. The invention must be addressed from all angles—such as the materials, process, product, system, and usage—as well as its current and future impact.

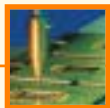
You can turn to various people for help with the patent application process. The first port of call is your university's technology transfer staff, who can explain the process and ease communication with patent attorneys. But it is still down to you to provide good materials and information.

Mr Yip then provided an example of a granted patent, comprising the title, abstract, description, drawings, and claims. He also explained approaches to searching for patents, both as an essential stage in identifying prior work when filing your own application, and as an important database for research. ■

—Vicki Geall



▲ Mr Kenneth Yip



Participating in Technology Transfer at CityU

To offer CityU researchers further insight into the issues and processes relating to technology transfer, a seminar was held at the University on 25 January 2008. A presentation by Mr H Y Wong, Director of CityU's Technology Transfer Office (TTO), was followed by a question and answer session.

Technology Transfer: What and Why?

Mr Wong kicked off the seminar by outlining technology transfer as "a formal transfer of rights to another party to use and commercialise new discoveries and innovations resulting from scientific research." He explained that this applies to both patentable inventions and non-patentable intellectual properties such as software, know-how, and processes. It represents the last phase of a series of four steps in intellectual property (IP):



"Worldwide, governments have invested a lot of money in scientific research," Mr Wong said. "Now, gradually, governments and the public are expecting some of the research results to benefit society in the near future. Also, academics want to take pride from seeing their research results being used in some kind of application or product. This is a change in the culture that is happening in the academic world."

In Hong Kong, the Universities Grants Committee (UGC) promotes and supports knowledge transfer among local higher education institutions. Such activities generate income for universities; however, the key significance of technology transfer lies in the benefits it brings to society.

Licensing

The common modes of technology transfer are contract research, consultancy, incubation of start-ups, and licensing.

"Licensing is the most commonly used technology transfer

mode," Mr Wong said, "because it allows academics to focus on what they do best." "There is no need for them to learn about business, and the effort required is quite minimal. Little risk is involved as the IP is normally licensed on an 'as is' or 'no warranty' basis."

To illustrate technology licensing by universities, Mr Wong cited the example of the USA, where the practice is already fairly well established and growing. For instance, in 2006 Stanford University executed 109 licences, with the University of Michigan and Georgia Tech executing 97 and 25 respectively.

The concepts of IP rights and technology licensing are relatively new to academics in Hong Kong, and future development faces various challenges, Mr Wong explained. The local market for technology licensing is relatively small and in its early stages, and a technology gap exists between research output at universities and marketable products.

CityU has in place a number of measures to help build the foundations for expanding licensing activities including compiling a technology database, a patent database, and an applied research brochure; networking with overseas universities to learn from successful current practice and with international

licensing organisations; working collaboratively with relevant local bodies, such as the Hong Kong Applied Science and Technology Research Institute (ASTRI); and marketing the University's technologies through exhibitions and launching a series of technology transfer forums.

Issues raised in the discussion that followed Mr Wong's talk included assessing the licensing value of patents, deciding on income sharing arrangements, and bridging the gap between researchers and business people.

For information or advice on licensing, or technology transfer in general, please contact TTO. ■

—Vicki Geall



▲ Mr H Y Wong



"It is not about the promise of future revenues that might be generated from this activity...It is not about the money. Technology transfer must serve our core mission, sharing ideas and innovations in the service of society's wellbeing."

Dr Mary Sue Coleman
President, University of Michigan



Licensing Process at CityU



Step 1: Description of your invention

- Contact the Technology Transfer Office (TTO) and explain your invention
- TTO's technical writer will prepare an easy-to-understand description of your invention
- The description will be added to TTO's "Technology for Licensing" database



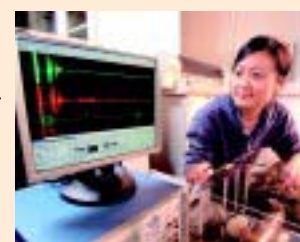
Step 2: Review and evaluation

- Technology transfer personnel will work with you to review and evaluate the possible applications of and potential markets for your technology
- TTO staff will also assess the potential market value of your technology



Step 3: Protection of intellectual property

- Together with TTO you will consider whether you need to file a patent (or patents) to protect the technology, whether your invention is eligible for patent application, and if so, in which country or countries the patent(s) should be filed
- Inventors are advised to withhold publication of their research as prior disclosure may jeopardise patent application



Step 4: Marketing

- Based on the review and evaluation, TTO staff will work out a marketing strategy
- As the most knowledgeable person about your invention, you will be encouraged to suggest companies that could possibly use your technology



Step 5: Business negotiation

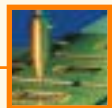
- TTO will handle all the business negotiation, and will update and consult with you periodically
- Before the deal is finalised, you will be consulted on the terms



Step 6: Income sharing

After the cost of patent application and commercialisation has been recovered, the net income will normally be shared as follows:

	CityU	Inventor	Inventor's unit
Patented technology	35%	30%	35%
Non-patented technologies and patented technologies where the patent cost is not CityU funded	25%	50%	25%



Life Sciences Technology Transfer Forum

A number of CityU inventions and a case study of the University's commercialisation success were presented at the Hong Kong Science and Technology Parks' technology investment forum for life sciences on 28 April 2008. The event, entitled BioX@SciencePark, was attended by venture capitalists, biotechnology companies, and representatives from other local universities and research institutes.

BioX, which comes from "Bio-community's eXchange", aims to foster collaboration between industry and academia. Universities and start-up companies had the opportunity to meet with potential investors for licensing and commercialising their intellectual property, and the forum provided the opportunity to network with senior executives and technology experts in the life sciences industry.

Co-organised with five research universities in Hong Kong, BioX featured 15 projects from universities and start-up companies in Hong Kong and the Pearl River Delta. In addition, guest speakers from Venturepharm Laboratories and NewSummit Biopharma shared their market insights from an investor's perspective.

CityU scientists—Dr Kelvin Yeung (AP), Dr Cheng Shuk

Han (BCH), and Dr Lawrence Tsang (BCH)—shared their innovative findings. Dr Yeung presented his work on smart metallic materials for spinal implants, while Dr Cheng focussed on the use of zebrafish for drug screening and toxicity testing. Dr Lawrence Tsang was one of just two speakers invited to provide case studies of successful examples of commercialisation, and he shared CityU's experience in the application of DNA analysis technology.

The presentations were followed by business meetings between researchers and investors/companies. ■



▲ (from left) Dr Lawrence Tsang (BCH, CityU), Dr Eric Chan (TTO, CityU), Mr Ken K N Hui (Vice President, Marketing and Admission, HKSTP), Mr E Anthony Tan (CEO, HKSTP), and Dr Bill Guo (Chairman, Venturepharm Laboratories Ltd)

Patent Drafting Training Course

Dr Eric Chan, CityU's Technology Transfer Officer, attended a prestigious patent drafting and preparation workshop in Bangkok, held from 31 March to 4 April 2008 and organised by the Fédération Internationale des Conseils en Propriété Industrielle (FICPI). FICPI is a non-profit-making organisation for intellectual property professionals. The FICPI South East Asian Drafting (SEAD) Training Course is an annual event whose attendance is usually limited to around 30 to ensure learning quality. A follow-up session of the workshop will take place in September 2008.

"What makes the workshop unique is its emphasis on hands-on experience. We were expected not only to be able to read and write a patent document, but also to become alert to the legal and commercial implications of linguistic expressions whose nuances in meanings we always take for granted.

"For example, a seemingly straightforward sentence that reads 'a method for producing a car' may be subject to debate: one may contend that the method is limited to producing a car, while others may say the method is also applicable to producing a boat.

"Equally tricky is the use of numerals. Very often, numerals and bullet points are used interchangeably, serving as markers of items. In patent writing, however, numerals that follow the word 'comprising' are strictly markers of sequence that characterise a specific process or procedure. This means that another patent document outlining similar items but arranged in a different sequence would not constitute an infringement.

"International exposure was another feature of the SEAD workshop with which I was impressed. Participants from Thailand, Malaysia, Singapore, Hong Kong, and Spain worked in small groups to accomplish their patent drafting tasks within a very tight schedule. A teaching team with tutors hailing from North America, Australia, and Europe also added to the cultural diversity that made the workshop an ideal platform for building ties and promoting understanding of how patent laws are executed globally."

For more information or advice on patent drafting, please contact Dr Chan on bhechan@cityu.edu.hk. ■



CityU Helps High-flying Business Professionals to Soar

CityU's Doctor of Business Administration (DBA), launched in 2006, is aimed at senior executives with many years of business and management experience who are seeking a high level of theory and research with direct practical experience.

"Given the demands of an increasingly knowledge-based economy, the need for sophisticated business leaders well acquainted with advanced ideas and methods in the field is growing rapidly," said Prof Matthew Lee, Programme Director. "Our DBA programme is designed to produce such a new generation of business scholar-practitioners who will be able to lead their organisations to the next threshold of excellence in this increasingly competitive global economy."

Mr Brian Li and Mr Stephen Tang both joined the programme with the first cohort of students in 2006. Mr Li is currently Managing Director of GP Industries Limited, part of the Gold Peak Group, which he joined in 1981. He has undertaken professional development throughout his career, most recently completing a Master of Science in Global Business from The Chinese University of Hong Kong in 2003.

Mr Tang—Vice President, Information Risk Management, Corporate Technology/Risk and Business Services, JPMorgan Chase—has also pursued further development and continued education throughout his professional life, including an MBA at CityU and master's degrees in financial economics at the University of Hong Kong and e-business at CityU.

Interactive learning

A key strength of the programme is the way it taps into the vast experience of the group. Fellow students are seen not simply as co-learners but rather as "learning partners". Each student is assigned an academic as their personal mentor. The close relations and feedback between each student, the professors, and the learning partners enables a collaborative and iterative learning experience.

"It represents an approach to research study that involves 'spiralling interaction'," Mr Tang explained, "where we have initial ideas that are discussed and refined through the many opportunities to interact and challenge each others' ideas."

"Through the programme we have formed a network of academics and colleagues providing strong support," Mr Li said. "It is an opportunity for a group like us to come together regularly and discuss things openly. We experience a lively and fun exchange of ideas that gives us great insight."

Practical relevance

The DBA aims to combine doctorate level research with a relevance to the work lives of professionals. While a traditional PhD programme emphasises making a theoretical contribution to an area of knowledge, this programme focuses on advancing professional practices through rigorous cutting-edge applied research.

"The DBA bridges the worlds of academics and practitioners," Mr Li said. "We can apply established principles and theories to analyse and better understand our experiences. The business environment is changing rapidly and the underlying principles are very important to any business leader."

"Most members of our cohort are already in top management positions," Mr Tang said, "but the academic rigour and practical relevance of the DBA further equip us with the skills and knowledge to realise

and understand available alternatives to solving practical problems."

International standing

"One reason I chose CityU for my DBA study was because the programme leaders and mentors are all very professional, outstanding researchers, who have a strong sense of the practical environment," Mr Tang said. "The Faculty has a great group of professors with an active interest in the business world," Mr Li said.

The Faculty has gained recognition from international bodies, and is currently the only business school in the greater China region to be triple accredited by AACSB International (the Association to Advance Collegiate Schools of Business), EQUIS (the European Quality Improvement System), and AMBA (the Association of MBAs).

Both Mr Li and Mr Tang also praised the access to information afforded to CityU students through traditional print and also high-tech electronic media. The University's central location is a further plus point for busy part-time students. ■

—Vicki Geall



▲ Mr Brian Li



▲ Mr Stephen Tang



Postgraduate Forum 2008: Writing a Good Research Paper

A full-house audience of over 100 research students attended a Postgraduate Forum on 29 February 2008 to gain insight and pick up tips on how to write a good research paper, an essential skill for all researchers in disseminating their ideas and findings.

A panel comprising accomplished researchers, a language teacher, and a recent research degree graduate shared experiences and outlined strategies for achieving good papers and increasing the chance of publication.

In his opening remarks, Prof Roderick Wong Sue-cheun, Vice-President (Research) and Dean of Graduate Studies, highlighted the importance of making a good impression with research writing from the outset, as even the briefest initial run-through by a reviewer can pick up weak content and poor language. He also recollected personal experiences of the redrafting process, including forty years ago as a student rewriting his PhD thesis seven times and learning much from the extensive input of the reviewer of his first journal paper. "My advice is to learn from others," Prof Wong said, "and today we have a panel of experts to share their experience with you."

Disseminating findings and research ethics

The first speaker, and Panel Chair, was Prof Paul Chu, Chair Professor of Materials Engineering in the Department of Physics and Materials Science. "Both conference presentations and journal papers are important," Prof Chu said. "Conference papers enable face-to-face interaction and feedback, and good quality journal papers are highly regarded by the academic community." For both, the purpose is putting forward new ideas and findings, and generating such new ideas can be helped by wide reading in your field, learning from advisers and peers, and attending conferences.

Prof Chu looked at the typical structure of papers and offered guidelines for successfully undertaking each section. For example, the title needs to be simple, informative, and attractive, the abstract self-contained and comprehensive yet concise, and the conclusion must summarise your ideas, objectives, contributions, and future directions whilst avoiding

simply repeating earlier sections.

"Busy people such as professors and managers may often only have time to read the title, and if this is interesting then the abstract and conclusion, so it is important to get them right to attract attention," Prof Chu said.

Research typically builds on a body of work by previous researchers and can involve collaboration, the use of others' data, or citation of their work. This background needs to be reflected in research papers, Prof Chu said, to avoid plagiarising other people's work. He also advised that even if your ideas or work conflict with or negate previous work, you should still show respect to other researchers through citing and comparing rather than just criticising. Respect and careful consideration should also be given to the comments of editors and reviewers who



▲ Prof Roderick Wong welcomed participants to the Forum

critique your papers.

Using sources

Dr Robert Neather, Assistant Professor in the Department of Chinese, Translation and Linguistics, continued with the theme of your research building on a body of existing work by focussing on the use of sources in papers.

As the Executive Editor for English articles for the journal *Translation Quarterly*, Dr Neather has identified some effective ways to use sources and help avoid rejections. "You need to provide adequate literature review, give sufficient sources to back up individual points made, and cite and introduce sources carefully and correctly," Dr Neather said.

In reviewing existing literature, you need a strong enough coverage to show familiarity with previous writing on the questions, Dr Neather explained, and the sources should be as up-to-date and authoritative as possible. "Define your position in relation to previous research," he said, "and make clear what is new about your approach or findings in relation to earlier work and how you build on it." When quoting sources, it is important to weave this into your discursive interpretation and not just provide a string of multiple quotes, he added.



Dr Neather used extracts from papers to illustrate some pitfalls in citing sources and gave tips on how to avoid them. These included quoting without explicitly marking or citing the quote and quoting with slightly changed wording. He also looked at the difficult problem of how to quote a source which itself quotes another source. All of the sources that you cite and quote must be included in a clear and consistent bibliography, forming an important part of the paper, Dr Neather explained.

What makes a good paper?

“A good paper is a combination of good content and good writing skills,” said third speaker Ms Christy Chan, a Senior Tutor of the English Language Centre (ELC). She is experienced in helping research students to enhance their writing skills. “Often the writer’s ideas do not come across clearly, with the paper lacking structure and a flowing argument,” Ms Chan explained.

To improve writing skills, research students can take advantage of the expertise and resources of the ELC, including workshops specifically designed for postgraduates and Individual Thesis Writing Consultation (please see www.cityu.edu.hk/sgs/ for further information).

Ms Chan offered some pointers for how to improve your writing. “First, it is important to know what reviewers want from you, such as whether the main point or result is clear and significant and whether the paper is technically sound, is clearly written and accessible to other researchers, and references appropriate relevant work.”

Having an effective plan and doing multi-level outlines of the paper can aid writing, and the paper does not need to be written chronologically, Ms Chan said. Revision, although often tedious, is an essential stage, and can be enhanced by involving others such as your supervisor, your peers, and a professional proof-reader. If you are a non-native speaker of English, you can avoid language problems by ensuring effective organisation and flow, using other good papers as examples, being aware of common mistakes and eliminating them, and asking native speakers to read your work.

Ms Chan demonstrated how all of these tactics can be brought together to create templates for research papers, defining

the purpose and style of each section.

A PhD graduate’s personal experience

The final presentation was given by a recent Information Systems PhD graduate of CityU, Dr Christy Cheung, who is currently an Assistant Professor at Hong Kong Baptist University. Dr Cheung said that a good research record is important for your academic career, and CityU offers an excellent research environment in which to nurture this. “The ultimate goal is to become a good researcher,” she said.

Dr Cheung looked at four stages related to writing papers. Preparation involves gaining a strong research foundation, getting involved in different research projects, and being exposed to others’ ideas through seminars, conferences, and critical reading.

“Starting to write is the most difficult but also the most important step,” Dr Cheung said. She suggested starting with conference papers, learning writing styles from good journals, and making sure you truly understand every sentence that you write.

She then looked at building your research profile by writing papers related to your dissertation and also your collaborative work, targeting top journals and high profile conferences, aiming to become an expert in your particular research area, attending

international conferences, and undertaking research visits. The next stage of being an independent researcher can involve learning from and collaborating with others, starting your own research projects, and managing your projects and papers through a database, Dr Cheung said.

Being persistent and positive is essential to deal with reviews and rejections and the long cycle of publishing your work. “Writing a paper is a long,

tough, and sometimes lonely process,” Dr Cheung said. “You must love your research work, enjoy the writing process, and be prepared to work on your own much of the time.”

The forum wrapped up with a Q&A session during which a number of students sought advice on particular issues relating to writing and publishing research papers. ■

—Vicki Geall



▲ A full-house audience listened to the speakers’ presentations and participated in the discussion that followed



2nd PhD Student Workshop in Suzhou

The 2nd PhD Student Workshop (Suzhou), organised by the Chow Yei Ching School of Graduate Studies, was held successfully at the University of Science and Technology of China (USTC)—CityU Joint Advanced Centre in Suzhou from 25 to 26 March 2008.

This annual workshop provides a forum for Hong Kong and mainland students of project teams under the Mainland Collaboration Schemes to meet and discuss their research findings and the latest advancements in their own discipline. The workshop also aims to advance participants' understanding of important issues and frontier research in their own research area. About 240 people took part in the 2008 event.

This year is special for CityU's mainland partner, USTC, as it marks the University's 50th Anniversary, and students and supervisors of USTC were therefore also invited to participate in the workshop along with students and supervisors from Hong Kong, Suzhou, and Shenzhen.

In conjunction with the workshop, an award presentation ceremony for the Peter Ho Conference Scholarships was held. This award recognises and rewards the outstanding academic performance of students. The nine awardees will receive sponsorship to participate in an academic conference to help widen their exposure and strengthen their research writing and presentation skills.

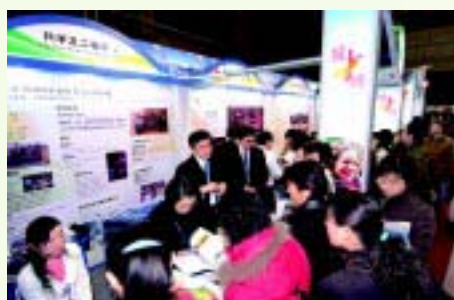
In the opening address, Prof Roderick Wong, Vice-President (Research) and Dean of Graduate Studies at CityU, welcomed students, hoping they would find the workshop stimulating and enjoyable, and thanked Mr Peter Ho for taking time to present the certificates in Suzhou to the Scholarship awardees.

As in last year's workshop, the focus was on eight key areas: applied mathematics, business and management, control and mechatronics, fire safety and nanomechanics, web services, environmental science, information engineering, and physics and materials science. ■



▲ Mr Peter Ho Ka-nam (left), CityU alumnus and Managing Director of Techworld Industries Limited, presents a certificate to an awardee of the "Peter Ho Conference Scholarships"

China International Education Exhibition Tour 2008



CityU's Chow Yei Ching School of Graduate Studies (SGS) participated in the China International Education Exhibition Tour (CIEET) 2008 in Beijing, Shanghai, Xian, Changsha, and Guangzhou from 1 to 16 March 2008.

The booths were very well received by visitors in all five cities. SGS took this opportunity to publicise CityU's postgraduate, research degree, and professional programmes to target groups in the Chinese mainland, offering an important communication channel between mainland applicants, their parents, and overseas education providers. ■

Social Gathering for International Postgraduates and Academics

On 1 April 2008 the Chow Yei Ching School of Graduate Studies organised, for the first time, a social gathering for international postgraduate students and academic staff. The event took place at the University's City Top Restaurant.

The gathering was held to encourage discussion and interaction amongst staff and students of different cultures, and to highlight the diverse backgrounds of the CityU community. Joining the event were about 80 students and staff from 20 different countries around the world including New Zealand, Canada, Mexico, Nigeria, Norway, Turkey, Kenya, India, and Malaysia. Students found it a great opportunity to meet and interact with other international students and professors in this relaxed, social setting. ■





SGS Promotes Exchange and Internationalisation of Graduate Studies

A delegation from the Chow Yei Ching School of Graduate Studies (SGS) of CityU led by Prof Roderick Wong Sue-cheun, Vice-President (Research) and Dean of Graduate Studies, recently completed a visit to Hungary and Romania. The trip had two key objectives: exploring opportunities for CityU to recruit research students from Eastern Europe, and promoting international collaboration in graduate education between Eastern European universities and CityU.

During the five-day trip from 5 to 9 May 2008, the SGS delegation visited five major universities in Hungary and Romania. These were the Eötvös Loránd University in Hungary, and the University of Bucharest, the “OVIDIUS” University of Constanța, the Academy of Economic Studies Bucharest, and the University of Politehnica of Bucharest in Romania.

“City University of Hong Kong has continuously dedicated itself to enhancing the international mix of our research students,” Prof Wong said. “The visit to Eastern Europe to establish cooperation in graduate education has demonstrated our commitment to attracting high-calibre international students and providing them with quality learning opportunities.”

During the visits, representatives from the Hungarian and

Romanian universities shared their experience and exchanged ideas on the internationalisation of graduate education. The delegation explored opportunities for student exchange and academic collaboration with these universities. In addition, CityU’s Department of Biology and Chemistry (BCH) and Liu Bie Ju Centre for Mathematical Sciences (LBJ) also identified opportunities to strengthen future cooperation with Eastern European institutions during the trip.



▲ Prof Roderick Wong (left) presents a souvenir to Prof György Michaletzky, Dean, Faculty of Science, Eötvös Loránd University

In his presentation on CityU to the institutions, Prof Wong said the University is committed to internationalisation and attracting more international students. He said CityU employs faculty members from all over the world, and many of them, including himself, have experience teaching and researching in overseas universities. He also emphasised that the language of instruction in CityU is English. Although CityU already has a multinational student body from over 25 countries, there is still plenty of scope for further efforts to enhance the international mix of research students in the future.

Accompanying Prof Wong in the delegation were Prof Hui Yee Van, Associate Dean of SGS, Dr Kwong Hoi Lun, Acting Head of BCH, Prof Lau Tai Chu of BCH, Dr Liliana Gratie of LBJ, and Miss Millie Mark, School Secretary of SGS. ■

China Mobile President Addresses EMBA Students

Dr Wang Jianzhou, President of China Mobile Communications Corporation and Executive Director, Chairman, and CEO of China Mobile Limited, shared his valuable experience with students and teachers during his address on “Branding and Soft Power” at the CEO Forum organised by the Faculty of Business (FB) EMBA programme at CityU on 7 May 2008.

Dr Wang was also appointed as an adjunct professor of FB. Prof Richard Ho Yan-ki, then Acting President of CityU, and Prof Wei Kwok-kee, Dean of FB, presented the appointment certificate to Dr Wang. Prof Wei said FB focuses on combining theory and practice, and the appointment was another example of the ways in which students could benefit from the expertise of the business elite.

Students attending the forum were excited to learn more about the corporate culture, management philosophy, and internet influence of China Mobile. Dr Wang said a successful corporation should balance the benefits of consumers and shareholders.

CityU’s EMBA programme has organised the CEO Forum since 1997, providing a platform for students to meet prominent CEOs and benefit from their leadership and managerial skills. ■



▲ Prof Richard Ho (left) presents the appointment certificate to Dr Wang Jianzhou

Adapted from an article by CityU NewsCentre



Two New Scholarships for Research Students

Chow Yei Ching School of Graduate Studies Entrance Scholarships

These scholarships aim to encourage outstanding international students to undertake PhD studies at CityU with a view to promoting academic exchange and enhancing the international mix of the University's student population. Newly admitted international students will be considered for the scholarships on the recommendation of their Department and Faculty or School. The scholarships will cover students' tuition and on-campus hostel accommodation fees in their first year of PhD studies. Around 20 awards will be given each year, subject to the availability of funding.

Chow Yei Ching School of Graduate Studies Scholarships

These meritorious awards, granted on a strictly competitive basis, recognise and reward students with outstanding academic performance. The scholarships are one-off cash awards of HK\$60,000. Students with good study progress and excellent publications will be considered for the scholarships on the recommendations of their Department and Faculty or School. Ten students have been awarded scholarships for the 2007/08 academic year as follows:

Chan Kit Wing, Frankie (EE)	Duan Renjun (MA)	Sen Banani (EE)	Yeung Wai Yin (BCH)
Chen Jianxin (EE)	Lui Wing Kin (EE)	Sun Yonghong (IS)	
Chong Yat Ming (AP)	Panday, Pranab Kumar (SA)	Wu Zhengwei (AP)	

CUPA Executive Committee 2008–2009

The following students have been elected to serve as executive committee members of the CityU Postgraduate Association (CUPA) for a period of one year from 1 April 2008:

Position	Name	Profile	Department / School
President	CHOI Yuet Ming, Chris	Local / Taught Programme	Economics and Finance
Vice President	TARIQ, Mahmood	Non-Local / Taught Programme	Building and Construction
Treasurer	CHAN Chiu H, Edmond	Local / Taught Programme	Accountancy
General Secretary I	YANG, Evelyn Y	Non-Local / Taught Programme	Law
General Secretary II	SIN Wai Yin, Ricky	Local / Taught Programme	Chinese, Translation and Linguistics
Internal Programme Leader	XIN Ying, Anita	Non-Local / Taught Programme	Law
External Programme Leader	NGAN, Peter	Local / Taught Programme	Electronic Engineering
Sports and Recreation Leader	SIT Wai Hung	Local / Research Programme	Biology and Chemistry
Career Development Leader	LO Ka Wing, Luke	Local / Taught Programme	Law
Publication Leader	TANG Kin Ching	Non-Local / Taught Programme	Computer Science