Issue1 2006



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Support

HKUST Reaches Matching Grant Ceiling 配對補助金達標

The University has achieved further success in its fundraising activities, reaching the ceiling of HK\$455 million in the Government's Second Matching Grant Scheme, which ended on 28 February.

In the seven months to February, HKUST raised a total of \$698 million, including matching funds from the Government. Taking into account unmatchable donations, the amount raised reached nearly \$1.2 billion.

President Paul Chu said he was delighted by the result, with donors coming from all sections of the community and comprising long-standing supporters, new friends and alumni. "This shows the University's achievements in teaching and research are becoming increasingly recognized by the wider community. I am confident that the future for the University is bright," he said.

The money will be used for university development and scholarships/mainland internships. New donors included Mr Lee Wan Keung, Chairman, Lee & Man Paper Manufacturing Ltd, Mr Chan Sui Kau through the Chan Family Charitable Trust and the Lo Ka Chung Charitable Foundation Ltd.

Meanwhile, long-time benefactors continued their generous support. Council and founding Court member Dr Helmut Sohmen gave \$15 million for chair professorships while the Joseph Lau Luen Hung Charitable Trust donated another \$20 million for the scholarship program it has established.

President whu also thanked all members of HKUST for their determined efforts and support which he said had been crucial in advancing the University's fund-raising endeavors. 科大在2月28日結束的第二輪配對補助金計劃 中,籌得逾4.55億港元捐款,超過計劃的上 限,再創籌款佳績。

連同政府提供的補助金,科大從去年8月到今 年2月的7個月內,共籌得逾6.98億元。如果把 未符合配對條件的捐款計算在內,科大共籌得 12億元。

朱經武校長滿意籌款的結果。捐款人來自社會 各界,包括大學的長期支持者、新朋友和年輕 的校友。他說: "籌款成績證明科大的教研成 就,已獲得更多社會人士的認同。我對科大的 前景充滿信心。"

籌得的款項將用作大學發展,以及為學生提供 獎學金和內地實習的機會。支持這次籌款活動 的新捐款人包括:理文造紙有限公司主席李運 強先生、陳瑞球先生通過陳氏家族慈善基金作 出捐贈、及盧家驄慈善基金有限公司。

大學的長期支持者繼續慷慨捐贈:校董兼創校 顧問委員蘇海文博士捐出1,500萬元,支持大學 設立講座教授;劉鑾雄慈善基金再度捐贈2,000 萬元,支持基金在科大設立的獎學金計劃。

朱校長又感謝大學全體成員對科大的熱心和支 持,在推動大學的籌款工作方面,起了很大的 作用。

Dal國際聲譽 Recognition Mech Dept on Top of the World 機械工程研究產量冠全球



The Department of Mechanical Engineering has become the latest of HKUST's ranking success stories, gaining the No.1 position globally for its research output.

Rankings were based on a recent survey of 265 universities worldwide carried out by Yuan Ze University in Taiwan. The survey looked at the average number of Science Citation Index (SCI) papers published from 2000 to 2002, with the results placing HKUST ahead of other world-class institutions, including Princeton and Stanford, and universities in Hong Kong.

During the period specified by the survey, HKUST's Department of Mechanical Engineering produced an average of 3.29 papers per faculty member per year.

"This recognition is testament to our vision of becoming one of the leading mechanical engineering departments in the world," said Tong-Xi Yu, Chair Professor and Head of the Department of Mechanical Engineering.

The Department's faculty conducted research in a wide range of pioneering areas, including electronic packaging, micro-systems, nanotechnology, and advanced materials, and each member always strives for innovation and research excellence, Prof Yu said.

Other HKUST engineering departments have also attained top rankings based on SCI publications in their respective disciplines, according to Yuan Ze University. Research output from the Department of Industrial Engineering and Logistics Management is ranked No.4 and the Department of Chemical Engineering No.14 in the world.

Last year, HKUST overall was placed among the world's top 50 universities by the *Times Higher Education Supplement*, while the University's Executive MBA program, run jointly with Kellogg School of Management in the US, rose to No.2 globally in rankings carried out by the *Financial Times*.

Institutions **No of Publications** 論文數量 院校 The Hong Kong University of Science and Technology, Hong Kong 3 29 香港科技大學(香港) 2 Princeton University. US 普林斯頓大學 (美國) 3.10 3 Korea Advanced Institute of Science and Technology, South Korea 3.02 南韓高等科學技術院(南韓) 4 Stanford University, US 史丹福大學 (美國) 2.96 5 Johns Hopkins University, US 約翰霍普金斯大學 (美國) 2.46 6 University of Sydney, Australia 悉尼大學 (澳洲) 2.36 7 University of Toronto, Canada 多倫多大學 (加拿大) 2.25 8 Pohan University of Science and Technology, South Korea 2 23 浦項科技大學(南韓) 9 University of Hong Kong, Hong Kong 香港大學 (香港) 2 22 10 University of California, San Diego, US 加州聖地牙哥大學 (美國) 2.15 30 Hong Kong Polytechnic University, Hong Kong 香港理工大學(香港) 1 62

科大機械工程學系的研究產量,榮登全球之冠,令科大在全球排名榜的成 績更上一層樓。

根據台灣元智大學對全球265所大學進行的一項調查,以2000至2002年在 全球科學引用文獻索引 (Science Citation Index)的論文產量來計算,科大 機械工程學系的教授每年平均發表論文3.29篇,位居全球第一。排在全球 首10名的大學,不乏世界知名學府,如美國普林斯頓大學和史丹福大學, 香港一共有三所大學榜上有名。

科大機械工程學系主任及講座教授余同希說:"排名是對我們決心發展成全 球領先的機械工程學系之一的一種肯定。機械工程學系的教授不斷追求創 新,在微電子封裝、微系統、納米技術和先進材料等多個領域,表現卓著。"

根據元智大學的調查,科大工學院其他學系的研究產量亦躋身世界前列: 工業工程及物流管理學系位居全球第四,化學工程學系則為第14位。

科大在2005年《泰晤士報高等教育特刊》的最佳學府調查中,名列首50 位,而科大工商管理學院與美國西北大學Kellogg管理學院合辦的行政人員 工商管理碩士課程,在《金融時報》的排名更躍升至全球第二位。

Alumni Add to Achievements 校友成就斐然

Faculty members in the Department of Mechanical Engineering can be proud not only of their research achievements but of the flying start their teaching provides for students.

For Mohamed Lebbai (MSc in Industrial Engineering & Engineering Management 1997; PhD in Mechanical Engineering 2002), doctoral research in the Department led to more than 10 international publications and two US patents. His studies, focused on "Improvement of Interfacial Adhesion in Plastic Packages—Dimples, Metallic Coatings and Black Oxide", also stirred industrial interest, sparking enquiries from semiconductor assembly houses after the research was published.

"The support of Dr Jang Kyo Kim, my thesis supervisor, was invaluable," said Lebbai, now a senior manager at Philips Electronics Hong Kong Ltd, "and the network I developed with Department the of Mechanical Engineering and other departments at HKUST has meant I can better match academic and industry needs and expectations. My PhD also helped me gain my latest job."



Elaine Wong (BEng in Mechanical Engineering 2002; MSc in Materials Science and Engineering 2004) has found her HKUST degrees to offer many career openings even in difficult economic times. She first went to work for famous US global semiconductor assembly and test services provider AIT. When its Hong Kong branch closed down during SARS, she was immediately contacted by another company.

"My undergraduate final-year project focused on electronic packaging and was very good preparation for my work," said Elaine, who is currently a project leader at the Hong Kong Applied Science and Technology Research Institute (ASTRI). "All my jobs have been totally related to my studies," she said.

Established links between HKUST professors and industry through past collaborations can also assist graduates' job search, Elaine said. The Department's graduates have a versatile set of skills and can take up positions in fields ranging from building services to computing. "Nor is Mechanical Engineering only for men. I would recommend it for women too," she said. 研究成就以外,機械工程學系的教授也為他們的學生而 感到驕傲,因為,經他們教導的畢業生,在事業上卓然 有成。

Mohamed Lebbai (1997工業工程及工程管理學理學碩 士;2002機械工程學哲學博士)在科大修讀機械工程學 博士課程,研究如何改進塑料封裝的界面膠合。他發表 了逾10篇學術論文,又獲得兩項美國專利權。研究成果 發表後,吸引了工業界的注意,不少半導體組裝公司更 向他查詢。

> 他説:"論文指導老師金章敎博 士的支持是非常寶貴的,加上我 與機械工程學系及其他科大學系 建立的聯繫,讓我可以在學術界 與工業界的需要及期望之間,作 出平衡。我的博士學位也為我找 來這一份工作。"Lebbai現時在 飛利浦電子香港有限公司出任高 級經理。

> 即使在經濟困境,黃燕卿(2002 機械工程學士;2004材料科學及 工程學理學碩士)在科大獲取的 學位,仍能為她帶來不同的就業 機會。她畢業後先在美國著名的 國際半導體組裝及測試服務公司 AIT工作,沙士期間,香港分公 司停止營運,但她迅即為另一家 公司羅致。

> 她說: "我在本科課程的最後一 年,專攻電子封裝,為日後的工 作做好準備。不管做甚麼工作, 我都可以將課堂上所學的完完全 全的用得上。"她現時在香港應 用科技研究院出任項目統籌。

> 她說:"科大教授與工業界通過 合作建立的緊密聯繫,有助畢業 生求職擇業。機械工程學系的畢 業生擁有多元技能,可擔任不同

工作,在屋宇設備及電腦計算等領域作出貢獻。機械工 程學也不是男生的專利,女生同樣可以勝任有餘。"

StrategiC策略藍圖 Roadmaps





Since President Prof Paul Chu first unveiled the University's inspiring Strategic Plan in mid-2005, the HKUST community has been actively engaged in pushing its many initiatives ahead.

One of the core elements of the plan, which provides a comprehensive blueprint for the University's advancement up to 2020, is the identification of five high-impact areas in which HKUST will seek to lead the way world-wide. Advances in these pioneering fields—biological sciences and biotechnology, nanoscience and nanotechnology, electronics, wireless and information technology, environment and sustainable development, and management education and research—will help to reshape how people live, impacting on the economy, our health, and the natural world, locally, regionally and globally.

HKUST has already established an international reputation for groundbreaking research in these fields and is continuing to move forward both through new discoveries and by working with outside institutions and industries to apply that knowledge through the introduction of innovative products and services.

Such research and development often calls for a multidisciplinary approach, with HKUST particularly well equipped to forge ahead in fresh directions through the special combination of expertise available in its four Schools: Science, Engineering, Business and Management, and Humanities and Social Science.

"The years ahead will see tremendous change in the way the world works," President Chu said. "The research and development that HKUST conducts in these cutting-edge fields will help build a global presence for the University and attract the eyes of the world to Hong Kong."

Here is how some of these high-impact areas will redefine the future and HKUST's exciting role in their evolution:

自從校長朱經武敎授於2005年中公佈大學的《策略發展計劃》後,科 大人已經積極行動起來,推動各項計劃的實現。

策略發展計劃是指導大學邁向2020年的全面規劃。計劃的其中一項核 心內容是精選出五個重點研究領域,即生物科學及生物技術、納米科 技、電子學、無線通訊及資訊科技、環境及可持續發展、工商管理教育 及研究,並力爭在這些領域中取得世界領先地位。這五個開創性領域將 幫助人類重整生活方式,並對本港、鄰近地區和全球的經濟、保健以及 大自然產生影響。

科大已經以突破性的成果在這些領域中建立了國際聲譽,並再接再厲, 不斷取得新的發現,還與外地機構和工業界合作,把有關知識轉化成為 新產品和服務。

這類研究和開發通常需要跨學科合作。科大的理學院、工學院、工商管 理學院及人文社會科學學院各具專長,大學善加發揮,結合各類特長, 推動新的發展方向。

朱校長説:"未來數年,世界將會有很大的改變,科大在這些尖端領域 從事的研究和開發,將有助大學建立國際地位,亦使香港的科研為世界 矚目。"

以下介紹其中四個重點科研領域對未來的影響,以及科大所扮演的令人 振奮的角色:





Biological Sciences and Biotechnology 生物科學及生物技術

From HKUST's earliest days, biological sciences and biotechnology have been regarded as key areas. Over the years, HKUST has established special expertise in molecular neuroscience, cell signaling, cancer biology and traditional Chinese medicine (TCM)-based drug discovery and development.

What is the significance of these fields?

The life sciences currently affect more than 30% of global economic turnover by way of healthcare, food and energy, agriculture and forestry and are set to grow further.

What contribution has HKUST made?

The University's interdisciplinary Biotechnology Research Institute (BRI) was initiated in 1990, giving HKUST a head start in the then-emerging field. BRI has since spearheaded biotechnology developments in Hong Kong. HKUST was the first institution in Hong Kong to possess an integrated drug discovery capability. BRI has also utilized TCM in novel drug screening strategies.

How will HKUST continue to develop these areas?

Through encouraging multidisciplinary research and by enabling the University to excel in applied research, such as drug discovery, drug delivery, pharmaceutical production, medical diagnostics and imaging, and biomedical devices. This will help to stimulate a flourishing biotechnology sector in Hong Kong and boost the region's knowledge-based economy. HKUST is now engaged in identifying new drug candidates for a variety of diseases and conditions, including neuropathologies, cancer, and aging.

What education programs are envisaged?

Developments will build on current undergraduate and postgraduate program strengths in the biosciences and include a multidisciplinary program with specializations (for example, biotechnology, bioengineering, biosensors) and an elite, research-oriented bioscience program to sustain the biotechnology industry. 科大從創校初期,便重點發展生物科學及生物技術。這些年間,已在分子 神經科學、細胞訊號傳遞、癌症生物學,以及在傳統中藥基礎上的藥物發 現及開發等多個領域,奠定了專業地位。

影響重大

目前全球經濟產值中,有超過30%是與生命科學有關,涉及的行業包括保健、食品、能源以及農林業,而且正不斷擴展。

科大的貢獻

大學於1990年設立跨學科的生物技術研究所,率先在這個當時才剛露頭角 的領域中建立優勢,在香港生物科技的發展中擔當先鋒。科大為本港第一 所具備綜合藥物開發能力的院校。生物技術研究所亦利用新型的藥物篩選 技術進行中藥研究。

發展規劃

大學將鼓勵跨學科研究並促進藥物開發、藥物傳遞、藥劑生產、醫療診斷 和造影,以及生物醫學器件等應用研究,以協助香港的生物科技工業蓬勃 發展,推動本地區發展知識型經濟。目前,科大正針對神經病理、癌症和 老年病等一些疾病和生理狀況開發新一代藥物。

教學展望

為了向生物技術工業的持續發展培養人才,大學將以目前生物科學本科及 研究生課程的優勢為基礎,加入跨學科的專業方向,例如生物技術、生物 工程和生物傳感器等;還增加一個研究為主的生物學精英課程。

Bio breakthroughs

- ★Setting up of TA Therapeutics Ltd, a joint venture between the University and NASDAQ-listed biotech company Geron Corporation to research and develop drugs to help counter age-related and neurodegenerative diseases
- ★Discovery of the fifth gene linked to schizophrenia, creating the prospect of new treatments for millions of sufferers worldwide
- ★Development of gene-chip based technology for efficient, accurate and costeffective testing of the authenticity of TCMs

突破性進展

- ★大學與納斯達克上市生物醫藥公司Geron Corporation合資成立TA Therapeutics Ltd, 共同進行抗老年病新藥的研究和開發
- ★發現與精神分裂症有關的第五個基因 · 可望為全球數以百萬計的患者帶來新的治療方 法
- ★開發基因晶片技術,低成本、準確而有效地測試中藥的真偽

StrategiC策略藍圖 Roadmaps

Nanoscience and Nanotechnology 納米科技



HKUST has made outstanding discoveries in nano research, including the synthesis of the world's first 4Å single-walled carbon nanotubes. Such achievements have moved the boundaries of research forward in this potentially revolutionary area.

How has HKUST achieved such success?

Long before it was fashionable in Asia, HKUST had been making nanoscience a priority. In 1995, HKUST established an Advanced Materials Research Institute (AMRI) and, as nanoscience emerged as a strong focus within this field, AMRI was restructured into the Institute of Nano Science and Technology. The University also set up the HK\$100 million Institute of NanoMaterials and NanoTechnology (INMT) to provide mid-stream R&D and technology transfers, with funding from the Innovation and Technology Fund (ITF) and industry matching. This year sees INMT move under Nano and Advanced Materials Incorporated (NAMI), an independent corporation led by HKUST. NAMI will engage in market-driven, industry-led research and provide a nano-center for Hong Kong and the region.

How will nanotechnology influence the future?

The potential for nanotechnologies reaches into many different areas of life, including more advanced computers, higher performance engines and electronic displays. Nanoparticles could also be utilized in drug delivery to specific parts of the body and keeping the environment clean.

What does HKUST plan to do?

Emphasis will continue to be placed on the creation of nanostructures with new morphologies and the development of tools for research. More effort will also be spent on the discovery of functional nanomaterials and nanostructures, which promise commercialization of nanotechnology. HKUST's leading role in NAMI will help Hong Kong initiate new nanotech products and boost economic growth.

What areas will be investigated?

In basic research, studies will continue into such ground-breaking areas as the size of carbon nanotubes and the critical temperature (Tc) for superconductivity in carbon based materials, while planned applications include the design and fabrication of a nano-particle-based system for pathogen detection and the development of a nano tool-kit for biomedical research, among many others.

What will this mean for students?

HKUST is intent on nurturing world-class nanoscience research programs and rigorous and interdisciplinary education for both postgraduates and undergraduates. A new MPhil and PhD in nanoscience and technology are being launched this year, and there are plans for an undergraduate degree program in nanoscience and nanotechnology. 科大已在納米科研領域取得傑出成就,包括成功研製全 球首個直徑僅4Å的單壁納米碳管,這些成果為這個將帶 來重大變革的領域拓展了新的研究範疇。

成功之道

遠在納米科學在亞洲大行其道以前,科大已將其選為優 先發展領域。大學在1995年成立高新材料研究所,隨著 納米科學備受重視,研究所整合為納米科技研究所,並 獲創新及科技基金和工業界資助一億港元,成立納米材 料技術研發所,從事中游研究發展及技術轉移。今年, 研發所劃歸科大承辦的納米科技及先進材料有限公司。 這間獨立公司將會進行具市場前景、切合業界需要的開 發研究,並設立納米研究中心,為香港及鄰近地區提供 服務。

對未來的影響

納米科技的發展潛力涉及人類生活多個範疇,例如更先進 的電腦、高效能的引擎和電子顯示器,納米粒子可以把藥 物輸送到身體特定部位,以及保持環境清潔等。

發展大計

大學將會繼續重點研究具有嶄新形態的納米結構,以及 新的研究器材,並會致力開發具市場前景的功能性納米 材料和納米結構。科大在納米科技及先進材料有限公司 中的領導角色將協助香港開創新的納米技術產品,推動 經濟增長。

將要探索的領域

大學將繼續進行包括設計和製造檢測病原體的納米粒子 系統,以及開發供生物醫學研究用的納米工具等多項應 用研究,並在納米碳管的尺寸及碳基材料的超導臨界溫 度等基礎研究中最前沿的領域上發展。

學生受惠

科大擬形成世界水平的納米科學研究課題,以及為本科生 及研究生提供嚴格的、跨學科的教育。今年已推出納米科 技哲學碩士及博士課程,本科課程亦在籌劃中。

Nano Achievements

- ★Fabrication of the world's smallest, single-walled carbon nanotubes, measuring 0.4 nanometers
- ★Development of a new generation of electrorheological (ER) fluids, with a high yield stress of 200 kPa
- ★Demonstrated the world's first bioactive nanostructures based on antibiotics for treating infectious diseases

成就斐然

★成功研製全球最細的單壁納米碳管,直徑只有0.4納米 ★開發新一代電流變液體,其剪切強度高達200 kPa ★展示世界首個以治療感染的抗生素為基礎的生物活化納米結構

Electronics, Wireless and Information Technology 電子學、無線通訊及資訊科技



Electronics is the engine that drives wireless communication and information technology. HKUST researchers have already gained world-wide prominence in all three of these areas and form the largest research community in HKUST.

What does the future hold?

Ubiquitous communications and computing is considered the next wave of wireless information technology. This development will take over from personal computers as the premier technology driver for the next 20 years and beyond, changing people's lifestyles and having a profound economic impact.

What will this involve?

In the future, computers will be able to adapt to the people they serve and allow people to monitor and interact with their environments. The embedded nature of communications and computers will mean people can benefit without any knowledge or awareness of them. Everyday items such as cars, toys and clothes will carry communication and computational power. Developments will also enable 4A (any time, anywhere, any device, any data) services for proactive and user-aware computing.

How will HKUST advance such technologies?

Key research areas pinpointed for future initiatives will be the development of revolutionary wireless technologies to support cognitive ubiquitous communications; high-speed networks for Hong Kong as a major information hub; wireless and mobile computing for information mobility; multimedia information systems; and user-friendly interfaces for multilingual usage.

How will this benefit the community?

HKUST will seek to promote innovative, IT-based approaches in Hong Kong schools; advanced digital entertainment technologies; and to facilitate logistics and supply chain management between Hong Kong, the Mainland and the world, among other applications. 電子學是帶動無線通訊和資訊科技發展的火車頭,科大的研究人員已在這三個 領域佔據全球領先地位,並形成校內最大的研究團隊。

發展趨勢

在下一波無線資訊科技浪潮中,通訊和電腦計算將會無所不在。這個新發展趨勢將會取代個人電腦,成為推動未來20年或更長時期發展的重要科技,不但 改變人類的生活模式,也對經濟發展有重大影響。

涵蓋範圍

將來,電腦將能夠更加適應用戶的需要,可以用來監控周圍的環境以及與外界 互動。通訊和電腦的嵌入式特性意味著用戶可以在對新科技一無所知的情況下 受惠,諸如汽車、玩具和衣服等日常用品,都將具備通訊和電腦計算的功能。 科技的發展更可以為用戶提供4A服務,即在時間、地點、器件和數據變化時 提供符合需求的電腦計算服務。

推動新技術發展

針對未來需求的重點研究項目,科大將開發革命性的無線技術,以支援具認知 能力的大範圍通訊;發展高速網絡使香港成為主要資訊樞紐;發展無線及流動 計算以支援資訊的靈活性;發展多媒體資訊系統以及適用於多語應用的簡單易 用的介面。

社群受惠

科大將在香港的中、小學校推廣創新,以資訊科技為基礎的互動教學方法;發 展先進的數位娛樂技術,提供支援香港、內地和全球物流及供應鏈管理的科技 等等。

Electronic Milestones

- ★Development of a fast motion estimation algorithm recognized as part of MPEG-4, the international standard for multimedia applications
- ★Some 22 wireless and related US patents have been awarded or are in process since 1994
- ★Development of the first wireless video streaming testbed for the China Audio Video coding Standard (AVS) for Hong Kong 2.5G and 3G wireless networks

重大成果

- ★開發快速動作估算法,被納入國際多媒體應用標準MPEG-4
- ★從1994年至今,已有22項與無線通訊相關的技術取得或正在審批美國專利
- ★為香港2.5G和3G無線網絡,開發首個採用中國數字音視頻編解碼技術標準的無線視像傳輸系統

Strategic 策略藍圖 Roadmaps

Environment and Sustainable Development 環境及可持續發展



With the deterioration of Hong Kong's air and water quality in recent years, environmental issues are taking on a fresh urgency. HKUST faculty members have already built a strong reputation in many areas of environmental studies, including marine environmental science, meso-scale atmospheric science (including air pollution), waste management and environmental engineering.

How does the University currently contribute?

Research into local conditions often carries significant national and international implications as the need for informed action grows globally. Core research activities span a wide spectrum of environmental concerns involving air, water technology, solids/land, coastal marine, energy, and economy and society. The University also offers a number of highly successful undergraduate and postgraduate programs focusing on different aspects of environmental studies.

What are HKUST's future goals?

Most environmental problems have regional implications. Goals therefore encompass interdisciplinary environmental research and large-scale projects with mainland research partners to meet the needs of Hong Kong and the Pearl River Delta region. They see the extension of environmental education for students, and training for the public and private sectors. Outreach to stimulate community debate, provide consultancy to professional and government bodies, and to assist in the formulation of policies is also envisaged.

How will this take place?

In 2005 the University approved the establishment of an Institute for the Environment. This will enable HKUST faculty to collaborate with outside environmental research groups to form the first cohesive, interdisciplinary "think tank" in Hong Kong, linking scientific research and technological development with socio-economic and policy impact. 隨著近年香港的空氣和水質每況愈下,環境問題變得更為迫切。科大教 授已在包括海洋環境科學、中尺度大氣科學(包括空氣污染)和廢物處 理及環境工程在內的多個環境研究範疇建立卓越聲譽。

科大的貢獻

由於全球各地對環保行動的關注日益增長,針對本地情況所作的研究往 往對國家和世界各地都有重要意義。大學的核心研究項目涉及空氣、水 處理技術、固體物料/土壤、海岸海洋、能源、經濟與社會等廣泛的環境 課題。此外,科大就不同的環境研究方向,開設了多個本科及研究生課 程,都非常成功。

長遠目標

大部分環境問題都有區域意義,因此,科大的目標是因應香港和珠江三 角洲地區的需要,與內地研究伙伴合作,進行大型的跨學科環境研究項 目。此外,科大的學者亦重視向學生推廣環境教育,並為公、私營機構 提供培訓,推動社會廣泛討論環境議題,為政府和專業團體提供顧問服 務,以及協助制訂有關政策。

運作方式

大學於2005年正式成立環境研究所,讓科大教研人員與校外的環境研究 小組合作,籌組香港首個凝聚力強的跨學科"智庫",把科研、技術開發 與社會經濟及政策的影響連結起來。

Leading the Way

- ★State-of-the-art Coastal Marine Laboratory opened in 2002, providing a unique facility in Hong Kong and the region for advanced research on the regional marine environment and educational programs
- ★Joint studies with mainland partners on pollution in the Pearl River Estuary and air quality monitoring
- ★Development of products and materials from recycling, including glassphelt for road surfacing and coal-ash based building materials

領先的研究

- ★於2002年啟用的設備先進的海岸海洋實驗室,為香港和鄰近地區進行高端海洋環境 研究及教學提供了優良設施
- ★與內地伙伴合作進行珠江河口污染及空氣質量監測研究
- ★開發循環再造的產品和材料,比如用廢棄玻璃製造鋪設路面的玻璃瀝青混凝土,以 及煤灰製造建築材料等

Research and 研究與開發 Development

Anti-Malarial Drug Research Hits Cover of Top Chemistry Journal 抗瘧疾藥物研究 榮登權威期刊封面

Pioneering HKUST research to create a new and highly cost-effective antimalarial drug has been selected as the cover story for the world's most influential academic journal in the chemistry field.

The research, led by Prof Richard Haynes, Department of Chemistry, focuses on the development of artemisone and was featured as the lead article in the latest issue of *Angewandte Chemie*, published on 20 March.

In his paper, Prof Haynes details the research carried out and how artemisone

compares in terms of effectiveness and neurotoxicity with other artemisinin-type anti-malarial drugs commonly used today. The paper was commended for its excellence by the journal's editorial board.

The HKUST work was published together with the results of the preclinical studies carried out by the Bayer Pharma team within Bayer HealthCare AG in Germany, and groups in Australia, England and the US. The neurotoxicity evaluation was carried out by Bayer's Dr Gabriele Schmuck whose work was of crucial importance in allowing selection of artemisone as the drug candidate, Prof Haynes said.

He explained: "We studied the molecular structure of artemisinins and the ways that cause neurotoxicity. Then, we chemically modified their structures and synthesized artemisone which does not exhibit neurotoxicity."

The high effectiveness of artemisone means that patients only require relatively low doses. In clinical trials, there have

been no side effects at all. However, like all current artemisinins, once it is in regular use, it is likely to be used in conjunction with other drugs so as to suppress drug resistance.

Another important factor was the HKUST research team's development of innovative chemical synthetic processes to bring down production costs for artemisone, Prof Haynes added. As malaria is commonly found in developing countries, one of the critical challenges for new anti-malarial drugs is to ensure production costs are significantly lower than for existing medications.

"The selection of our research as the cover story of *Angewandte Chemie* indicates our international competitiveness in drug development," Prof Haynes said. The team is currently seeking funds to support the second phase of clinical trials so that artemisone can become a regular anti-malarial drug as soon as possible, he said. 科大成功研製出高療效、低成本的抗瘧疾新藥,這項創新的 研究獲全球化學領域的權威學術期刊選為封面專題。

3月20日出版的《應用化學》,以化學系韓利強教授領導的青 蒿碸研究為專題。

韓利強教授在論文中詳述開發青蒿碼的過程,比較青蒿碼與 現時普遍使用的青蒿素類抗瘧疾藥物的療效和神經毒性。該 刊的編輯委員會稱許韓利強教授的研究卓越。

> 論文也闡述德國拜耳醫療公司Bayer Pharma小組進行的前期臨床測試的結果, 以及澳洲、英國和美國多個研究小組的工 作。韓利強教授表示,拜耳的Gabriele Schmuck博士負責神經毒性測試,將青蒿碸 選作臨床測試的瘧疾新藥,其研究極為重 要。

> 韓利強教授説:"我們研究青蒿素的分子結 構,了解引致神經毒性的途徑,然後以化 學方法合成沒有神經毒性的青蒿碸。"

> 由於青蒿碸療效非常高,病人需要接受的劑 量相對減少。臨床測試顯示,青蒿碼完全沒 有副作用。當青蒿碼成為治療瘧疾的標準藥 物時,醫療人員會像現時的青蒿素類藥物 一樣,混合其他藥物一起使用,以降低產 生抗藥性的風險。

韓利強教授指出,研究小組開發了嶄新的化學合成方法,可 以降低青蒿碸的生產成本。由於瘧疾在發展中國家肆虐,開 發新藥的生產成本必須大大降低,不能高於現時的藥物。

韓利強教授說:"我們的研究獲選成為《應用化學》封面,彰 顯科大藥物開發研究的國際競爭優勢。"研究小組正申請撥 款,以開展第二期臨床測試,讓青蒿碸早日成為治療瘧疾的 標準藥物。



President'S校長的話

Message



Ready for Leadership Role in Global Arena 在世界舞台居領先地位

People in Hong Kong are always happy to see members of the community succeed internationally. Young prize-winners in international competitions, companies that triumph overseas, and world recognition for local artists are all favorite subjects of the Hong Kong media. Nor do we forget those who emigrate to other countries and make their mark. Their stories are also ours and treated as such.

Indeed, as one of the most successful trading ports in history, the world has always been a close companion in Hong Kong's journey down the decades. To meet the global challenges of today, our city must continue to build its international outlook and focus firmly on the big picture worldwide.

Here at HKUST, we compete at the highest international levels. From the University's founding, we have recruited our faculty from the best in the world. HKUST academics' discoveries are published by the most prestigious international journals and set the pace globally, as shown by the recent No.1 world ranking for the Department of Mechanical Engineering's research output. Our faculty members also help to advance our collective lives by pushing forward applications of new knowledge, as illustrated in the development of the antimalaria drug artemisone by Prof Richard Haynes and his team. Through our pioneering faculty, HKUST students learn the latest knowledge and are able to pursue high-flying careers in academia and business.

HKUST is poised to scale even greater heights. Our vision for the next 15 years is for the University to become a global academic leader in several areas of high impact, including nanotechnology, the environment and sustainable development, and biotechnology. Our planned Institute for Advanced Study will focus global attention on the academic excellence of Hong Kong and Asia; and the HKUST campus, set to expand rapidly to facilitate all these developments, will be a meeting point for the brightest minds and most talented young people from around the world.

This is an exciting time for HKUST and Hong Kong as we position ourselves for the future—at the forefront of the global arena, where we belong.

香港人為香港在國際領域取得的成就而驕傲:年輕 人在國際競賽獲獎,企業揚威海外,藝術家在世界 舞台廣獲認同等消息,均廣為香港傳媒報道。即使 是移居外地的香港人,他們的成就,我們也與有榮 焉!

香港向為一個最成功的國際貿易港,與世界密不可 分。為應付全球挑戰,香港必須繼續擴展其國際視 野,紮根於全球的大方向,大發展。

在科大,我們一直在國際最高水平競爭。從創校伊 始,我們從全球招攬最優秀的教授。科大的教授在 著名期刊上發表重大研究成果,最近,機械工程學 系的研究產量便高踞全球榜首;教授的研究也促進 了知識的應用,改進人類生活,如韓利強教授及其 研究小組開發抗瘧疾新藥。科大教授開風氣之先, 在他們的指導下,學生吸收最新的知識,畢業後在 學術及工商界開拓成功的事業。

科大銳意更上一層樓,未來15年,在納米科技、 環境及可持續發展、及生物技術等五個重點領域, 發展成全球學術領袖。創建中的科大高等研究所將 令世人對香港及亞洲卓越的成就刮目相看。科大校 園也將迅速發展,成為全球學者及聰明睿智的年輕 人匯聚之殿堂。

這是鼓舞人心的時刻,展望未來,科大及香港在世 界舞台上將發揮更大的影響力。

Reflections of a Retiring VP 卜誼隆榮休談科大

After nearly 11 years of dedicated service to the University, Vice-President for Administration and Business, Mr Paul Bolton, retires in April. Here he shares some of his reflections on HKUST's past, present and future:

Looking for a professional challenge outside his native UK, Paul Bolton was on the verge of accepting a similar post on a different continent when he made his first ever visit to HKUST. "It was the sheer vitality of the place that most impressed me, and still does," he said.

Having completed the early task of helping firmly establish the University's reputation, subsequent years saw new challenges present themselves. In particular, Paul worked hard to ensure that the successive funding cuts faced by Hong Kong's universities did not impact HKUST's development in teaching and research.

Talking about his retirement plans, it is clear that he sees exciting times ahead, not just for himself tending the family farm in Yorkshire with his wife and visiting his children and grandchildren, but also for the University.

"In the coming years the emphasis will be upon opportunities rather than challenges," he said. "Take the upcoming transition to four-year degrees. Curricula, teaching methodologies and the entire undergraduate experience will be enhanced. It will also bring additional recurrent and capital resources that will pave the way for more investment in staffing and new buildings."

For his enthusiastic support over the years, the HKUST Staff Association has inaugurated an annual soccer tournament, named the Bolton Cup, in honor of this lifelong Leeds United fan.

The first tournament was held in March and Paul was touched that the teams came from many different constituencies of the University, including faculty, staff, researchers, overseas students, scholars and alumni.

With the end of an era approaching, Paul Bolton simply says: "I have discovered that HKUST is a very difficult place to leave."

Equally, the University will find it hard to say goodbye.

在科大工作了近11年的行政及總務副校長卜誼隆先生於4月退 休。在離開科大前夕,他分享了對大學過去、現在和將來的一 些看法。

當年,卜誼隆離開英國祖家,尋找事業的新挑戰,差點兒就選 擇到另一個地方任職。但他首次到訪科大後,便作出決定: "科大是一個充滿活力的地方,令我留下深刻的印象。這感覺 到今天還是絲毫不變。"

卜誼隆早年協助科大建立聲譽,接著下來便要面對多項新挑 戰。在大學削減經費下,他努力確保科大的教研發展不受影 響。

談到退休大計,他將迎接未來充實的生活,與太太料理在英國 約克郡的家庭農莊、探望子女和孫兒。

他認為,科大的前景同樣令人振奮:"在未來數年,必須要抓 緊機遇。在'三三四'的學制改革中,大學可以提升課程素質、 教學方法和本科生的學習經驗,也將有更多資源投放在聘請教 學人員和擴建校園方面。"

卜誼隆是英格蘭球隊列斯聯的忠實擁躉。科大教職員協會為了 感謝他多年來對大學的支持,特別舉辦一個以他命名的周年足 球比賽——卜誼隆杯。首屆賽事於3月舉行,大學不同界別的 成員,包括教職員、研究員、海外學生、學者及校友等,組成 了參賽隊伍,叫卜誼隆深受感動。

臨別在即,他説:"我發現科大是一個令人不捨的地方!"

同樣,科大亦不捨跟卜誼隆道別。

Graduate畢業生成就

Graduates' Careers Off to Successful Start 專業生踏出

The Class of 2005 has entered the outside world at a heady pace, with more than 99% having found jobs, pursued further studies, or started their own businesses by December 2005, according to the latest HKUST graduate employment survey. Graduates were also offered more job opportunities and higher salaries.

根據科大最新的畢業生就業調查,2005年的畢 業生之中,超過99%於去年底前已經找到工 作、創業或繼續升學。畢業生獲聘機 會更多,工資也更高。



Adam So, BBA in Global Business 2005 蘇俊豐(2005環球商業管理學士)

Analyst, Investment Banking Division, Merrill Lynch 美林集團企業融資部分析員

Among those in the fast lane to career success is Adam So, who has become an analyst at Merrill Lynch. Adam's introduction to the top global investment banking firm came after HKUST put him forward for one of the company's competitive summer intern positions. Not only did he secure an internship, he was offered a job immediately after completing it—a year ahead of his graduation.

Adam, an Early Admissions Scheme entrant, thinks the elite Global Business program prepared him well for the challenging environment in which he now works. Along with the business knowledge acquired at HKUST, he gained experience of studying in the US through his exchange visit to top school Wharton. He also developed his communication skills, essential in his job as an analyst. "On the Global Business program, we had to do many presentations. I participated in a business case competition and was captain of the English Debating Society for two years. These factors have helped a lot."

Adam So (far right) 蘇俊豐 (右一) 蘇俊豐是科大最優秀的畢業生之一。他透過大學提供的暑 期實習計劃,過關斬將成功進入國際投資銀行美林集團工 作,完成實習後更獲聘書,一年後畢業即任職分析員。

他是科大錄取的首屆資優生。他說,在科大修讀的環球商 業管理精英課程,有助裝備自己面對現時充滿挑戰的工作 環境。除了在課堂學到的商業知識,他亦到美國著名的華 頓商學院交流,加強作為分析員必備的溝通技巧。

他說: "環球商業管理課程要求學生作很多匯報。我曾參 與商業個案比賽,亦是英語辯論學會連續兩年的主辯。這 些裝備使我獲益良多。"

Becky Tam, BSc in Biochemistry 2005 譚馨蕾(2005生物化學學士)

Auditor, PricewaterhouseCoopers PricewaterhouseCoopers核數師

The variety of learning experiences at HKUST has also been important for Becky Tam, another Early Admissions Scheme student. After changing her original career plan from research to the corporate world, she found her all-round knowledge and skills enabled her to move smoothly from the scientific arena into the financial world.

"The logical and analytical skills I developed as a science student, my work as an executive committee member in the School of Science and the self-enhancement scholarship I received to travel to Italy made me more competitive," said Becky, now an auditor at PricewaterhouseCoopers. "My finalyear research project and my participation in the Dance Society also taught me to be efficient and to work in a team. I trained myself to work under stress and extended my time management skills, all requirements needed to work in a Big4 firm."



同樣是科大首屆資優生的譚馨蕾也認為,科大的多元化學習體 驗非常重要。她改變初衷由學術研究轉到國際企業工作,發展 一帆風順,皆因她具備全面的知識和技巧,帶領她由科學領域 走進財經世界。

她說: "研習科學培養的邏輯和分析技巧,出任理學院學會幹 事和獲取獎學金到意大利交流的經驗,俱能提升我的競爭 力。"

"畢業前做的研究計劃,參與舞蹈學會的活動,提高了我的工 作效率及團隊精神。現在我還要鍛鍊在壓力下工作的能力,善 用時間,這些都是在四大會計公司工作必備的條件。"



Lee Cheung-fai (right, second) with Humphrey Leung (right, third), Solomon Systech President & Managing Director, and design engineering colleagues 李長輝(右二)、晶門總裁及董事總經理梁廣偉(右三)及晶片

テレー(ロー) mllmuttle=mmmt==来度伴(ロー)及m) 設計同僚



Lee Cheung-fai, BEng 1999; MPhil 2001 李長輝(1999電子工程學士; 2001哲學碩士)

Senior Design Engineer, Solomon Systech 晶門科技高級晶片設計工程師

Meanwhile, earlier HKUST graduates have firmly established the contribution they make to the development of the Hong Kong economy. For Lee Cheung-fai, his postgraduate studies on power management IC in the Department of Electrical and Electronic Engineering led directly to product team projects at leading IC design company Solomon Systech Ltd.

Currently a senior design engineer, Cheung-fai helps to turn hi-tech advances into commercial applications for the company for use in mobile phones, various kinds of handheld applications and LCD televisions.

The University's role in developing IC design talent—in addition to its research degrees, HKUST was the first in Hong Kong and the Mainland to offer an MSc degree in IC Design Engineering—is highly important to both the city and the region, according to Cheung-fai.

There is double-digit annual increase in IC-related industries in China, most of the largest foundries are located in Asia, and investment costs for fabless IC companies are lower in this region, he pointed out. "Thus, if Hong Kong can provide such engineers or expertise, more IC companies will consider locating here."

科大多年來培育的畢業生對香港經濟發展的貢獻毋庸置疑,像李長輝便是一個好例子。他 在科大電機及電子工程學系修畢功率管理集成電路的研究生課程後,加入集成電路設計行 內的龍頭公司——晶門科技公司。

他現時是高級設計工程師,主力將高新科技轉化為不同的集成電路商品,包括手機、各種 手提式應用及液晶體電視。

李長輝說,科大是香港和內地第一所開辦集成電路設計工程碩士課程的大學,在香港以至區 內培育這門科技的專才,扮演重要的角色。

他指出,國內與集成電路有關的工業每年都有雙位數字的增長,大多數鑄造廠都設於亞 洲,這裡的半導體工廠投資成本亦相對較低。

"若香港能培訓相關的工程師或專家,更多集成電路公司將考慮紮根香港。"

Awards and 獎項與榮譽

Chemistry Professor Elected CAS Academician 吳雲東獲選中科院院士



Computational organic chemistry expert Professor Yun-Dong Wu, Department of Chemistry, has been elected an Academician of the prestigious Chinese Academy of Sciences.

Prof Wu's research is focused on three main areas: asymmetric catalysis; secondary and tertiary structures of peptides, and proteins and protein-protein interaction; and drug design based on natural and non-natural amino acids. He has successfully solved the mecha-

nism of the Sharpless epoxidation reaction, among other landmark advances.

Prof Wu's research group has recently developed a program to systematically study factors influencing peptide/protein aggregations, the cause of many diseases including Alzheimer's, Bovine Spongiform Encephalopathy (Mad Cow) and Type II diabetes. The group is also actively involved in research that can assist drug development to treat HIV-1/AIDS and HCV infections.

化學系的理論與計算有機化學專家吳雲東敎授獲中國科學院選為院士。

吳敎授的研究領域主要為以下三個方面:有機化學反應機理及不對稱催化;多肽及蛋白質的二級和三級結構;基於多肽的藥物設計。他其中一項卓越的研究貢獻為成功解決Sharpless環氧化反應的機理。

吳教授的研究小組近年對多肽或蛋白質的集聚展開系統的研究。老年癡呆症、瘋牛症及二型糖尿病等多種疾 病都是由多肽或蛋白質的集聚造成的。另外,小組也積極研究有助抵抗愛滋病病毒及丙型肝炎病毒的藥物。



AI Researcher Gains Croucher Fellowship 林方真獲選裘槎優秀科研者

Dr Fangzhen Lin, Associate Professor of Computer Science, has received a Croucher Senior Research Fellowship in recognition of his outstanding contributions to artificial intelligence research.

Dr Lin's work has advanced the theory and practice of knowledge representation and reasoning. Among his achievements is the development of a methodology for Computer-Aided Theorem Discovery, which he is using to find theorems to help analyze and predict the behavior of computer programs. He hopes such research will lead to the introduction of new technologies that can assist the design of reliable software, one of the key problems in computer science.

Dr Lin has also made important contributions to Answer Set Programming.

The Croucher Senior Research Fellowships were established in 1997 to recognize the research achievements of local scientists.

計算機科學系副教授林方真博士獲頒"裘槎優秀科研者獎",以表揚他在人工智能領域的卓 越研究成就。

林博士的研究推進了知識表達與推論的理論與應用。他的重要成就之一,是提出了一套計算機輔助的定理發現方法,並以此來發現有關計算機程序的定理,分析及預測程序的行為。他期望研究有助設計更可靠的計算機軟件,解決計算機科學的一個核心問題。林博士在答集程序設計方面亦作出重要貢獻。

裘槎優秀科研者獎於1997年設立,以表揚本地科研人員的研究成就。

IC Designs Presented at 'Chip Olympics' 芯片奧運會展示嶄新晶片設計技術

On 7 February, two postgraduate students from the Department of Electrical & Electronic Engineering presented their innovative IC design technologies at the International Solid-State Circuits Conference, also known as the "Chip Olympics", in San Francisco.

MPhil student Ng Wing Lun (left), participating in the prestigious annual conference for the second time, discussed his design for a quadrature signal generator, a key component of new-generation high-frequency communications equipment. Meanwhile, PhD candidate Man Tsz Yin put forward technology that could significantly enhance the efficiency of power converters used in battery-powered electronic products. His innovation extends the effective operational time before recharging is required.

電機及電子工程學系兩位研究生於2月7日,在三藩市舉行的國際固態電路研討會(又稱為"芯片奧運會")上,發表最新的研究成果。碩士生吳詠 倫(左)開發的正交訊號產生器設計技術,是新一代高頻通訊設備的關鍵 元件之一。這是他連續第二年獲邀在芯片奧運會上發表新技術。博士生 文子賢開發供電池推動的電子產品使用的功率轉換器設計技術,大幅提 升轉換器的能源效益,延長電池每次充電的使用時間。

Achievement Award for HKUST President 朱校長獲頒傑出成就獎

President Chu has received an Outstanding Achievement Award from the Professional Validation Council of Hong Kong Industries in recognition of his contributions to scientific research in high-temperature superconductivity. The award was presented on 23 March.

校長朱經武教授於3月23日獲香港工業專業評審 局頒發傑出成就獎,表揚他在科研方面,特別 是高溫超導研究的貢獻。



Aerosol Award 陳澤強獲年輕科學家獎

Dr Chak Keung Chan (left), Associate Professor of Chemical Engineering, has received the Asian Young Aerosol Scientist Award for his outstanding contributions to the study of thermodynamics and hygroscopic properties of atmospheric aerosols. The award was presented by the Asian Aerosol Research Assembly at the 4th Asian Aerosol Conference held in Mumbai, India, in December.

化學工程學系副教授陳澤強博士(左)榮獲亞洲氣溶膠研究議會頒發亞洲青年氣溶膠科學家獎,表揚他研究熱電 學和大氣氣溶膠的吸濕特性的突出貢獻。獎項於去年12 月中在印度孟買舉行的第四屆亞洲氣溶膠會議中頒發。



Reaching 拓展聯繫

Distinguished Lecture Series Launches 15th Anniversary Celebrations 科大15周年 傑出學者講座



HKUST's 15th anniversary celebrations got off to a memorable start on 17 February with a lecture on future co-operation between Shenzhen and Hong Kong by Shenzhen Deputy Mayor Mr Liu Yingli. The talk was the first in HKUST's 15th Anniversary Distinguished Lecture Series, organized along with other special events to mark the University's anniversary.

Mr Liu's lecture, entitled "Shenzhen-Hong Kong Innovation Zone: Idea and Prospects", explored opportunities for greater integration and a fresh competitive edge for the two cities through sharing of resources, more convenient access and increased educational ties, particularly at the university level.

In response, President Paul Chu said that a major objective of HKUST's Strategic Plan for the next 15 years was to extend its Mainland reach and the University looked forward to developing wider and deeper collaboration with Shenzhen.

More Distinguished Lectures took place in March with two thought-provoking talks jointly presented by HKUST and the Man Hong Kong International Literary Festival.

On 8 March, award-winning author Armand Marie Leroi, Reader in Evolutionary Developmental Biology at Imperial College London, discussed "Mutants: On the Form, Varieties and Errors of the Human Body" while on 11 March, Tom Standage, Technology Editor of *The Economist*, looked at the new ways developing countries may utilize information technology in "The Real Digital Divide".

Topics examining the future before us will also be discussed in the 15th Anniversary Leading Scholars Lecture Series, comprising talks by eminent HKUST faculty members. The series (see table) takes place in April and May and will be launched with a lecture by President Chu on 22 April.

Building on Excellence

科大15周年慶祝活動於2月17日正式展開,由深圳市常務副市長劉應力以港 深未來合作為題發表演講。講座為科大15周年傑出講座系列的第一場,亦為 科大15周年的活動揭開序幕。

劉應力的講題為"深港創新圈的構思與展望",探討兩地如何通過資源共享、 教育同構(特別是大學層面)及交流便利,加強融合,創造互補優勢的機遇。

科大校長朱經武教授表示,科大未來15年策略發展計劃的一個目標是擴展在 內地的影響力,大學亦期望與深圳建立更廣泛和深入的協作關係。

科大又與The Man Hong Kong International Literary Festival於3月舉辦兩場講 座。英國倫敦帝國學院的獲獎學者Armand Marie Leroi於3月8日主講 "突變 體:人體的型態、變化和誤差";《經濟學人》科技編輯Tom Standage於3月 11日以 "真正的數碼鴻溝"為題,剖析發展中國家利用資訊科技的情況。

校長朱經武教授和三位教授將於4至5月在"15載科研創未來"傑出學者講座 上,就多項未來發展課題演講。

15th Anniversary Leading Scholars Lecture Series "15載科研創未來"傑出學者講座

22 April	
Speaker	Prof Paul Chu, President
講者	科大校長朱經武敎授
Topic	"Superconductivity and Discipline Convergence"
講題	"從超導研究看學科匯聚"
29 April	
Speaker	Dr Oscar Au, Associate Professor, Department of Electrical & Electronic
	Engineering; Director, Multimedia Technology Research Center
講者	科大電機及電子工程學系副教授及多媒體技術研究中心主任區子廉博士
Topic	"Multimedia On the Go—Next Generation Multimedia Technology"
講題	"新一代隨身多媒體科技"
13 May	
Speaker	Dr Kwok Kwong Fung, Senior Lecturer, Department of Physics
	Di revoletti on rigitori e controli e contro
講者	科大物理學系高級講師馮國光博士
講者 Topic	科大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals"
講者 Topic 講題	科大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals" "大自然的納米技術:小動物的閃亮色彩"
講者 Topic 講題 27 May	科大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals" "大自然的納米技術:小動物的閃亮色彩"
講者 Topic 講題 27 May Speaker	A大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals" "大自然的納米技術:小動物的閃亮色彩" Dr Robert Ko, Associate Professor, Department of Biochemistry
講者 Topic 講題 27 May Speaker 講者	科大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals" "大自然的納米技術:小動物的閃亮色彩" Dr Robert Ko, Associate Professor, Department of Biochemistry 科大生物化學系副教授高錦明博士
講者 Topic 講題 27 May Speaker 講者 Topic	A大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals" "大自然的納米技術:小動物的閃亮色彩" Dr Robert Ko, Associate Professor, Department of Biochemistry 科大生物化學系副教授高錦明博士 "Traditional Chinese Medicine"
講者 Topic 講題 <u>27 May</u> Speaker 講者 Topic 講題	A大物理學系高級講師馮國光博士 "Nature's Nanotechnology—Iridescent Colors in Small Animals" "大自然的納米技術:小動物的閃亮色彩" Dr Robert Ko, Associate Professor, Department of Biochemistry 科大生物化學系副教授高錦明博士 "Traditional Chinese Medicine" "補益中草藥的研究:從經驗至實驗"

All lectures will be held at the Hong Kong Science Museum and given in Cantonese 所有講座以廣東話於香港科學館舉行

N校園內外 Action

Nansha Forum Launched **南沙科技論壇揭幕**

The high-level Nansha Science and Technology Forum, scheduled to span two years, got underway on 24 February at the Nansha IT Park in Guangzhou. The Forum will explore science and technology issues of key importance to the social and economic development of China. Speakers at the launch included Dr Ya-Qin Zhang, Corporate Vice-President of Microsoft Corporation, and Prof Song-De Ma, Vice-Minister of Science and Technology. Over 500 people attended the Forum.

南沙科技論壇於2月24日在廣州南沙資訊科技園揭幕。國家 科學技術部副部長馬頌德教授及微軟公司全球副總裁張亞 勤博士等享譽國際的講者,與出席論壇的500多位人士分享 他們對未來數位化生活的觀點。南沙科技論壇為期兩年, 就影響中國當前經濟發展的多個關鍵技術課題,進行深層 次的探討。



Exhibition Widens Horizons 地球村展覽

To create a global atmosphere on campus, exchange students from Canada, the US, Norway, and Austria introduced their home countries to HKUST students at an exhibition organized by AIESEC. The display took place from 27 February to 3 March.

來自美國、加拿大、挪威及奧地利的科大交換生在展覽中,向 科大學生介紹各地的特色和風土人情。展覽由AIESEC主辦,於 2月27日至3月3日舉行,旨在營造更國際化的校園。





Students Meet Shenzhou-6 Astronauts 神六代表團與大學生會面

The Shenzhou-6 manned space flight delegation and astronauts Fei Junlong and Nie Haisheng shared their experiences and introduced the development of China's Manned Space Flight Program in an academic forum held on 28 November 2005. Over 1,000 students and faculty members attended the forum, which was jointly organized by HKUST, the Chinese University of Hong Kong, and the Hong Kong Institute of Education.

神舟六號兩位太空人費俊龍和聶海勝,以及中國航天飛行代表團成員,在去 年11月28日出席"神舟六號航天講座——與航天員及科學家見面"學術座談 會,分享他們接受訓練和在太空生活的經驗,及介紹國家載人航天工程的現 況。這次活動由科大、中大和香港教育學院合辦,來自三間學府超過1,000 位學生和教職員參加。

Global Ethic 劉述先主持傑出學人講座

Prof Shu-Hsien Liu, Y K Pao Distinguished Professor at HKUST, gave a lecture entitled "Global Ethic" in March. He is also offering a postgraduate course on contemporary Neo-Confucianism this semester. An advocate of contemporary Neo-Confucianism, Prof Liu is a former Distinguished Research Fellow at the Institute of Chinese Literature and Philosophy, Academia Sinica.

科大包玉剛傑出教授劉述先於3月在科大主 持一個以世界倫理為主題的傑出學人講座, 並開設一個當代新儒家研究生課程。劉述先 教授是當代新儒學代表,退休前為中央研究 院中國文哲研究所特聘研究員。



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