



# Sustainable Campus

可持續校園

二零一二年夏・秋 Summer・Autumn 2012



## 羅桂祥綜合生物醫學大樓 榮獲

## LKS Building, Awarded 環保建築白金評級 BEAM Platinum Rating, Now in Operation

**憑**藉出色的環保設計，最近正式開幕的羅桂祥綜合生物醫學大樓獲香港環保建築協會評為白金級別。該協會為非牟利機構，建立自發性的評估工具，為建築物的環保水平進行獨立評估。

### 綠色節能

大樓經精心設計，加添多項環保措施，以達至節能減碳，其中包括：

- 採用南北座向，減少夕照。
- 設有中庭，引進天然光線，融和氣氛。
- 實驗室採用大窗戶設計，以便採納自然光。
- 大樓南北外牆上裝上遮陽篷，有效減低陽光照射產生的熱力。
- 大樓空調由設於第三十九區的中央冷卻系統供應，該系統同時應付區內其他建築物的空調需求，節能兼具成本效益。
- 其他環保設施尚有外牆的垂直綠化植物、自動感應照明系統和可變速空調系統，以及可調節新鮮空氣的二氧化碳感應器。

### 科研基地

大樓坐落校園北部研究樞紐的三十九區，眺望吐露港。為配合校園發展計劃的建議，大學將以集群式分

區發展概念組織各學科的教研活動，而三十九區被選為主要科研基地，除了有設施尖端的科研大樓，還將有研究生宿舍。

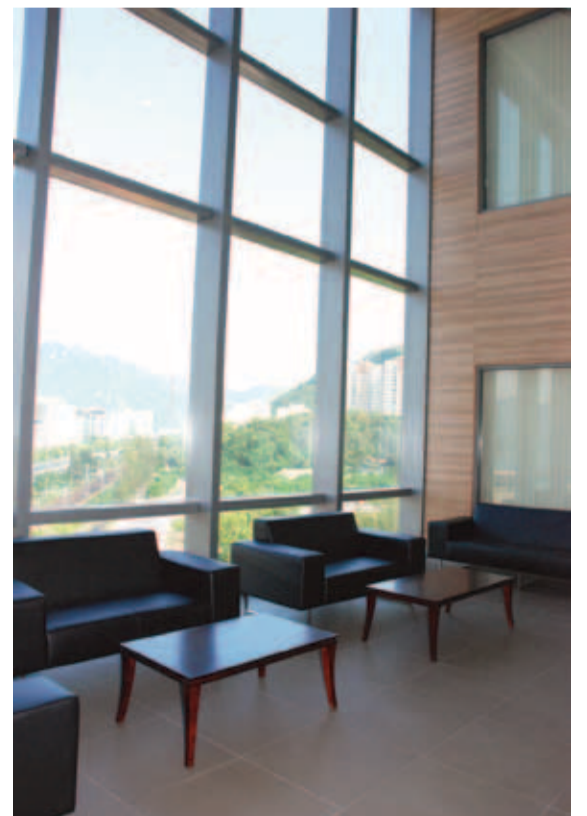
大樓樓高九層，實用面積為9,860平方米，開放式的設計，配備了先進的生物醫學儀器，有助從事跨學科研究。樓內設有示範式實驗室、研討室、思研廳、主題實驗室、會議室、休閒區及辦公室。

生物醫學學院為大樓的主要用戶，設有四所中心實驗室，分別為大分子及基因表達中心實驗室、流式細胞儀與細胞培植中心實驗室、組織學中心實驗室和顯微及影像中心實驗室。另外亦設有實驗動物存養設施，為研究人員提供較長時間的動物存養以供實驗之用。藥劑學院處於八樓全層。

### 安全為先

大樓備有專門的實驗室控制系統，為教學和科研活動提供安全的環境。大樓內不同區域均設有獨立式氣壓控制系統，將實驗室維持於負壓環境，避免實驗室氣體排放到其他公共地方。實驗室同時設有完善的緊急應變系統，一旦啟動，通風系統會自動補充足夠的新鮮空氣，並發出警報，提醒師生及研究人員切勿進入實驗室。

實驗室內配備超過80多部生物安全櫃與排風櫃，以進行各種實驗。大樓天台更備有排煙櫃專用排風扇，把氣體安全排放。



(續下頁)

The Lo Kwee-Seong Integrated Biomedical Sciences Building, now in full operation, has received the Platinum Standard rating from the Hong Kong Building Environmental Assessment Method Society (BEAM), a non-profit organization that runs a voluntary green building labelling scheme.

### Green Features

The LKS Building was carefully designed to incorporate many green features that would reduce energy consumption and lower carbon emission. They include:

- The main facades face north and south; this minimizes exposure to the setting sun.
- A central atrium provides additional light and relief to the interior.
- Research labs have large windows commanding open views and allowing natural light to enter.
- To minimize heat, sunshades are installed on the north and south elevations of the building.
- To achieve cost-efficiency and environmental friendliness, air-conditioning is supplied by a centralized cooling system in Area 39 to LKS building as well as other buildings.

- Other green features include vertical greening, motion sensors for lighting, variable air-flow in the air-conditioning system, carbon dioxide sensors for the regulation of fresh air inflow.

### The University's New Research Hub

The building faces the Tolo Harbour and is situated at Area 39 within the Northside Research Campus. In line with the Campus Master Plan, which prescribes clustered and zoned development for disciplinary teaching and research activities, Area 39 is being developed into a research hub with sophisticated facilities and postgraduate hostels.

The nine-storey, state-of-the-art building adopts an open-plan layout to enhance interdisciplinary research. It is equipped with advanced biomedical equipment. Occupying its 9,860 m<sup>2</sup> net operation floor area are facilities including a demonstration laboratory, seminar rooms, research commons, theme-based laboratories, meeting rooms, breakout areas and administrative offices.

The main occupant of the LKS Building is the School of Biomedical Sciences of the Faculty of Medicine, which runs four core laboratories here: the Macromolecular and Microarray Core Laboratory; the Flow Cytometry and Cell Culture

Core Laboratory; the Histology Core Laboratory; and the Microscopy and Imaging Core Laboratory in addition to the Animal Holding Care, a centralized and high standard animal care and housing facility.

The School of Pharmacy occupies the eighth floor.

### Safety Comes First

The building has a dedicated laboratory control system to provide an energy-efficient and safe environment for teaching and research activities. The different zones of the building have independent pressure control systems to keep the laboratories at a negative pressure to prevent any airborne hazards from spreading to public areas. A dedicated emergency ventilation control system is also installed in each of the laboratories. Once activated, the system will run in full fresh air mode and an alarm will sound to warn people against entering the laboratories affected.

Laboratories are equipped with over 80 bio-safety cabinets and fume cupboards for research purposes. Special fume exhaust fans are provided on the roof for the safe discharge of chemical fumes and other safety purposes. ✨



## 未來五年的 可持續發展目標和「綠識辦」

中大一直致力推行可持續發展的環保方案，長遠的環保目標，是要達到《校園發展計劃》之設定，即在2025年前把人均能源消耗減少25%，人均溫室氣體排放量減少20%（以2005年的校園數據為基數）。為協助大學評估其進度和在一些其他重要的環保範疇持續進步，大學亦訂定未來五年的可持續發展目標。這些中期目標詳情如下：

- 人均能源消耗減少8%
- 人均溫室氣體排放量減少10%
- 人均都市固體廢物量減少12%
- 人均用水量減少15%
- 用紙量減少50%，特別是會議用紙
- 2014年前大學全體部門須加入「綠識辦」計劃
- 每個大學部門至少委派一名同事為能源監察員，負責支援節能計劃的執行
- 協助各部門盡快於2015年或以前進行碳審計
- 大學飯堂續約或招標時，必須加入廚餘管理的條款
- 大學部門公務車輛報廢更換時，必須選購更環保的型號

### 學界先鋒

為履行以上目標，大學力求以身作則，作為綠色機構的示範。為此，最近啟動了「綠色辦公室計劃」（綠識辦）。此項創學界先河的全校層面環保辦公室計劃，旨在透過推動行為改變，在校園建立長遠、可持續的環保文化。沈祖堯校長帶領簽署〈綠色辦約章〉時表示：「大學過往在環保政策及硬件上做了很多工夫，投放了很多資源，也得到很多公開獎項，成績備受肯定。大學最近訂定了未來五年的可持續發展目標，現在正是時候在大學成員的個人行為和校園文化方面多做一些工作。『綠識辦』參考了外國大學的最佳範例，再根據本地的情況，帶頭為香港大專院校及中小學引入綠色辦公室的概念。我期望中大人身體力行，為環保多做一些。」

協理副校長馮通教授指出，自九十年代初起，中大已把保護環境視為發展與管理工作的重點事項。「大學現希望透過綠識辦計劃，鼓勵教職員及學生齊齊參與，一起改變個人的行為及校園的文化，再把環保的行為及信息帶到家庭及社區，這亦是大學應有的教育使命和社會責任。」

有關大學綠色政策詳情，請瀏覽：[www.cuhk.edu.hk/cps/policies.html](http://www.cuhk.edu.hk/cps/policies.html)。

### 網上支援

綠識辦開設了「綠識辦資源頁」（[www.cuhk.edu.hk/cps/go!/resources.html](http://www.cuhk.edu.hk/cps/go!/resources.html)），提供豐富實用的資訊，歡迎大學同仁和社會各界人士查閱，實踐綠色生活。



## Five-year, Medium-term Sustainability Targets and 'GO!'

Ever committed to sustainable practices, the University's ultimate aim in terms of environmental protection is to attain the targets set out in the Campus Master Plan: to cut energy consumption by at least 25% (per capita), and greenhouse gas emissions by 20% by 2025 (from the campus base figures of 2005). To help assess performance and ensure continual progress in other important areas of sustainability, the University has drawn up specific sustainability targets for the next five years. These medium-term targets are:

- To reduce energy consumption (per capita) by a further 8%
- To reduce greenhouse gas emissions (per capita) by a further 10%
- To reduce waste to landfill (per capita) by 12%
- To reduce water usage (per capita) by 15%
- To reduce the use of paper by 50% with particular reference to committee papers
- To make participation in the Green Office Programme (GO!) compulsory for all University offices by 2014
- To assign at least one staff in every office to serve as an Energy Warden to support the implementation of energy saving plans
- To assist all offices to conduct self-evaluation of carbon emission as soon as practicable and no

later than 2015

- To make food waste management compulsory in the tenders and contracts for all the canteen caterers on campus when the existing contracts expire
- To replace all official cars/vans/scooters with environmentally-friendly vehicles when they reach the end of their life span

### A Pioneer in Academia

To fulfil the commitments above, the University strives to set an example as a green organization. Recently it launched the Green Office Programme (GO!). The first of its kind in academia, the university-wide green office programme hopes to bring about behavioural changes among staff and students and nurture a green culture on campus. Vice-Chancellor Prof. Joseph Sung said at the signing of the 'GO! Charter', 'The University has devoted much effort and resources in developing green policies and green infrastructure, and the results have been fruitful and well recognized by various public awards. We have set a five-year target of sustainable development and we think it's time to put more effort into bringing about behavioural changes and green culture on campus. Drawing reference from the best practices of overseas universities and taking into account the

local situation, "GO!" aims at playing an exemplary role in promoting a green office concept among tertiary institutions, secondary schools and primary schools in Hong Kong. I also hope campus members will join hands to protect the environment.'

Prof. Fung Tung, Associate Pro-Vice-Chancellor, said, 'Since the 1990s, CUHK has regarded environmental protection as a key element in university development and management. Through the "GO!" Programme, the University aims to encourage staff and students to make changes in personal behaviour and campus culture, and to spread the message to their families and the community, fulfilling the education mission and social responsibility of the University.'

### Resource

For the University's green policies, please visit [www.cuhk.edu.hk/cps/policies.html](http://www.cuhk.edu.hk/cps/policies.html).

Members of the University and the public are welcome to check out the 'GO!' website ([www.cuhk.edu.hk/cps/go/resources.html](http://www.cuhk.edu.hk/cps/go/resources.html)) for tips on how to become greener. ✨

## 中大生協助清理海面塑膠粒 CUHK Students Help Clean up Plastic Pellets

7月，颱風韋森特吹襲香港，一百五十公噸聚丙烯塑膠粒由貨櫃船上吹到海中，不少漂流至各海灘。綠色組織和政府隨即發起清理行動，市民紛紛響應。中大學生亦當仁不讓，組隊協助。

中大學生會組隊前往長洲沙灘清理膠粒，而另一學生環保組織綠色天地則先後到愉景灣和南丫島參與清理工作。綠色天地幹事李雅婷（護理學二年級）說：「我們事先先與愉景灣區內的環保組織 DB Green 聯絡，得他們提供篩子、垃圾袋和盆子等工具。我們一行二十人，從早上10時工作至晚上6時。」至於南丫島之行，由於不是假日，參加人數較少。不過，綠色天地將繼續每隔一至兩星期安排一次清理膠粒活動。



When typhoon Vicente hit Hong Kong earlier in July, 150 tons of non-toxic polypropylene pellets spilled into the sea, and many washed up onto the beaches. Green groups and government departments organized clean-up campaigns and citizens pitched in. CUHK students also organized several trips to beaches to help remove the pellets.

The Chinese University Student Union has made a trip to Cheung Chau beach, while campus environmental group Green World has run two trips so far. The first was to Discovery Bay. One of the board members of Green World, Vivian Lee (Year 2, Nursing), said, 'Our group contacted DB Green, an eco group on Discovery Bay, who said they would provide us with the tools: sieves, rubbish bags and basins. The 20 of us were there from 10am to 6pm.' The second trip—to Lamma Island—had fewer members as it was a weekday. But Green World has plans to organize cleanup trips once every one to two weeks. ✨

## 博群社區市集(2012年10月4及5日) I-CARE Community Market Fair (4 & 5 October 2012)

一連兩天的博群社區市集將於文化廣場舉行，集結十二間社會企業介紹其產品和服務，並有多個攤位售賣各種環保企業、有機農戶、合作社的自家產品，以及公平貿易貨品。開幕禮將於10月4日下午1時30分舉行，由沈祖堯校長主持，緊接其後是一個題為「於公營部門推廣責任採購」的研討會。

A two-day I-CARE Community Market Fair will be held at Cultural Square on Central Campus. About 12 community businesses and social enterprises will showcase and demonstrate their latest products and services. There will be booths run by operators of different nature, including environmental and agricultural, cooperatives and fair trade, and social inclusion. Prof. Joseph Sung, Vice-Chancellor, will officiate at the opening ceremony to be held at 1.30 pm on 4 October. This will be followed by a seminar (2.30-4.30pm) on the responsible procurement of public organizations.

For more on the I-CARE Programme, see [www.cuhk.edu.hk/icare](http://www.cuhk.edu.hk/icare). ✨

## 中大樹鳥流動應用程式 New CUHK Trees and Birds Apps

中大樹木計劃及環保教育團體「開創綠家園」首次推出「中大樹」及「中大鳥」流動應用程式，供iPhone及iPad用家免費下載，以認識校園內的近五十種雀鳥及逾一百六十種樹木，更可聆聽悅耳的鳥聲。



The CU Tree Project and the Grateful Green Group have launched the first-ever 'Trees of CUHK' and 'Birds of CUHK' Apps for iPhone and iPad users. These two user-friendly, free-of-charge applications allow for easy identification of some 50 species of birds and over 160 species of trees found on the CUHK campus. After downloading them, users can also listen to the calls and songs of the birds. ✨

## 停止食用魚翅政策 Formalization of 'No Shark's Fin' Policy

大學推行《環保採購政策》已有一段日子，最近該政策正式加入停止食用魚翅條款，禁止所有由中大舉辦或支付費用的活動食用魚翅。大學或書院所經營的會所、飯堂及餐廳均不會供應魚翅菜式。

The University has been adopting a green approach towards purchasing, and it recently formalized its 'No Shark's Fin' practice, making it a part of its green purchasing policy. According to the policy, the consumption of shark's fin will be formally banned from all official functions that are either arranged by or paid for by CUHK. And of course shark's fin dishes will no longer be served in the clubhouse, canteens and restaurants operated by the University and its Colleges. ✨

