



理學院通訊

Newsletter



二〇〇七年四月版第十七期

ISSUE 17, APRIL 2007

## CENTRALIZED SCIENCE LABORATORIES WINS HONG KONG INSTITUTE OF ARCHITECTS AWARD

The Chinese University's new Centralized Science Laboratories Building (Centralized Labs) has won the Hong Kong Institute of Architects (HKIA) Merit Award - Community Building. The jury gave credit to its good site planning and attempt to go for experimentation in facade design by adopting the concept of the periodic table in chemistry to the coloured facade.



Centralized Science Laboratories Building

The six-storey Centralized Labs is located on a hillside on Central Campus of The Chinese University, overlooking Tai Po Road to the south and connecting to the Science Centre to the north. It has a gross floor area of some 11,000 square meters with over 70 laboratories purpose-designed for advanced research by the Science and Medical Faculties, as well as a range of other facilities.

The Centralized Labs is an innovative research building in terms of safety, energy conservation and user-friendliness. From the choice of facilities, to the lighting, air-conditioning and exhaust systems, it strives to maximize user safety and comfort while conserving energy. Its layout is also conducive to interaction among different academic specialities and scholars.

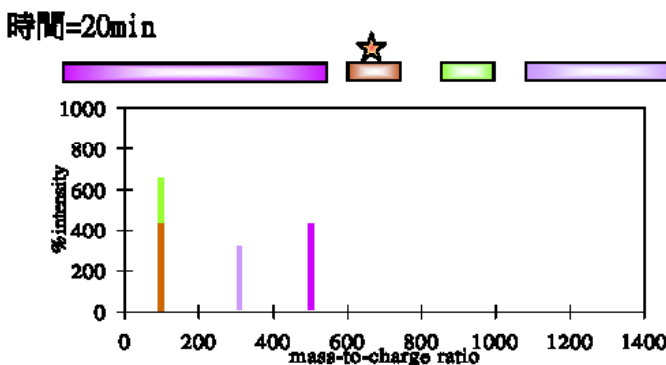
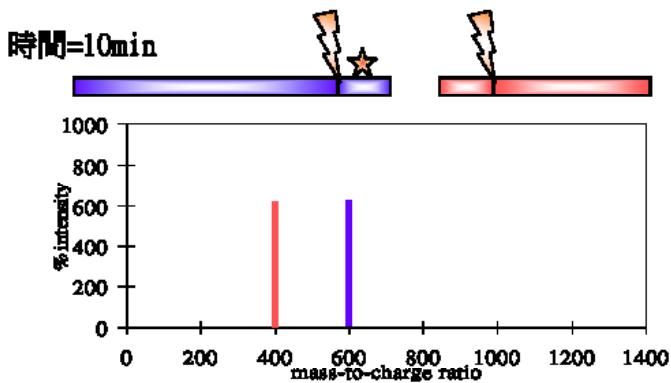
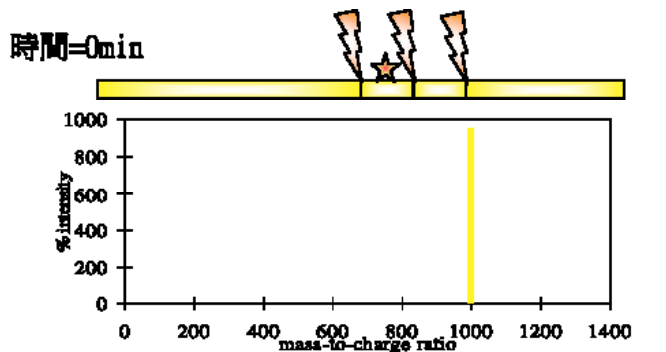
## SCIENCE STUDENTS WIN 3RD PLACE IN VICE CHANCELLOR'S CUP OF STUDENT INNOVATION

A joint team of Biology and Molecular Biotechnology Students won the 3rd place in the competition for Vice Chancellor's Cup of Student Innovation for their project "DigesTIP".

The students are Miss Wong Ngan Yuk (MBT/Year 3), Miss Lam Chor Kwan (BIO/Year 1) and Miss Wu Hoi Yan (MBT/Year 4). Professor Ngai Sai Ming is their supervisor.

A brief description of the project is as follows:

### DigesTIP- 分析PTM的新方法



★ :PTM

⚡ :可供胰蛋白酶消化的位置

\* 翻譯後修飾(PTM)影響蛋白的結構和功能，從而影響細胞的機能。

\* 現有技術並不能準確鑑定PTM類別及其位置。

\* 現有的質譜分析雖然可以準確有效地測量胰蛋白酶完全消化後多肽的質量，但PTM會引起多肽質量的轉變，這無疑阻礙了科研人員分析數據和確認蛋白身份。

\* DigesTip的設計概念正針對處理這個難題，並創新地加入時間參數到質譜分析技術上，從而跟進多肽在消化過程中的出現序。

\* 含有PTM的多肽鑑定相對地得到改善，若再加上技術優化，PTM的分析將會更有效率。

上圖：黃色多肽經過質譜分析被估計含有PTM

中圖：10分鐘後，在未完全酶解的情況下，黃色多肽被切成紅色和藍色多肽，這時可以監察含有PTM的藍色多肽

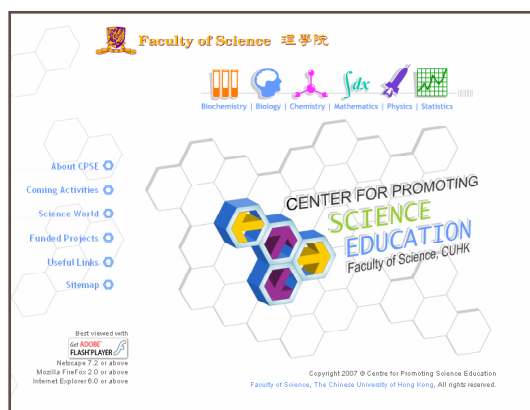
下圖：在20分鐘酶解後，藍色多肽被切成紫色和啡色較短小的多肽，這樣PTM的所在區域被逐步收窄，同時避免錯誤推斷PTM在其他相同質量的多肽上(青色多肽)





## WEBSITE OF CENTRE FOR PROMOTING SCIENCE EDUCATION

A new Centre for Promoting Science Education website is launched.



Check out the details at <http://www.cuhk.edu.hk/cpse/>

## SCIENCE SUMMER PROGRAMME 2007 科學領袖營之營得有「理」2007

Science Summer Programme 2007 will be held from 17-20 July 2007 (Tuesday to Friday). The goals of this yearly event are to bring science to life, create a passion for learning science and to allow young students to learn in a relaxed and playful environment. Participants will spend 4 days and 3 night in a quest to find solutions to mental quizzes, physical challenges, and participate in science workshops and talks, hands-on experiments, group activities etc.

### Application Details

Eligibility: 12 - 14 Years old students

Language of Instruction: Cantonese

Fees: \$3,280 (Early Bird - on or before 23 May 2007)  
\$3,480 (From 24 May 2007 to 15 June 2007)

Application Procedures:  
[http://www.cuhk.edu.hk/sci/summer\\_camp/page4.html](http://www.cuhk.edu.hk/sci/summer_camp/page4.html)

Application Deadline: 15 June 2007

Programme Website:  
[http://www.cuhk.edu.hk/sci/summer\\_camp/](http://www.cuhk.edu.hk/sci/summer_camp/)

## ELECTION OF SENIOR LECTURER/LECTURER REPRESENTATIVES ON FACULTY BOARD IN 2007/08 - 2008/09

The following staff members have been elected to serve on the Faculty Board in 2007/08 - 2008/09:

### Senior Lecturers

Professor Che Chun Tao (School of Chinese Medicine)

Professor Yu C M Jimmy (Chemistry Department)

### Lecturers

Professor Lee S T Susanna (Biochemistry Department)

Professor Ge Wei (Biology Department)

Professor Ng H L Dickon (Physics Department)

Professor Wong Yum Shing (Biology Department)

Congratulations to all!

## CALENDAR

Events Planned in the Months of May - June 2007

Department	Date, Time and Place	Events
Physics	7 - 10 May 2007 SC L2	Symposium International Symposium on the Recent Progress in Optical Spectroscopy and Its Applications Guest Speakers: Hong Chen (Tongji University, China), Yang-fang Chen (National Taiwan University, Taiwan), Kohzo Hakuta (The University of Electro-Communications, Japan), Hongbing Jiang (Peking University, China), Kuijuan Jin Institute of Physics, CAS, China), Chuanfeng Li (University of Science and Technology of China, China), Jonathan P. Marangos (Imperial College London, UK), Daniel H. C. Ong (The Chinese University of Hong Kong, China), Xiao-yun Pu (Yunnan University, China), Weilong She (Sun Yet-Sen University, China), Xuechu Shen (Fudan University, China), Yuen-Ron Shen (University of California, Berkeley, US), Baozhou Sun (Washington State University, US), Hongfei Wang (Institute of Chemistry, CAS, China), Ligang Wang (Zhejiang University, China), Xiulai Xu (Hitachi Europe Ltd., UK), Jian-fang Wang (The Chinese University of Hong Kong, China), Elsa C. Y. Yan (Yale University, US), Jian Zi (Fudan University, China), M. Suhail Zubairy (Texas A&M University, US) More details: <a href="http://www.phy.cuhk.edu.hk/sym07/index.html">http://www.phy.cuhk.edu.hk/sym07/index.html</a>
	18, 21, 23, 25 & 28 May 2007 10:30am - 12:00 noon MMW Building LT2	Seminar Collider Physics Guest Speaker: Professor Wai-Yee Keung, Department of Physics, University of Illinois at Chicago
Faculty of Science	23 June 2007	Workshop Teacher Development Workshop of "A Science Enrichment Programme for Secondary 3-4 students"

## 理學院通訊 Faculty of Science Newsletter

地址: 香港新界沙田香港中文大學科學館北座G43室

Address: G43, Science Centre North Block, CUHK, Shatin, N.T.

電話/Tel: 2609 6327 傳真/Fax: 2603 5156 電郵/Email: [sfo@cuhk.edu.hk](mailto:sfo@cuhk.edu.hk)

網址/website: <http://www.cuhk.edu.hk/sci/>