



香港中文大學  
The Chinese University of Hong Kong

# 恭賀高錕教授 榮獲2009年諾貝爾物理學獎

## *Congratulations to Professor Charles K. Kao* **Nobel Laureate in Physics 2009**



今天，瑞典皇家科學院宣布將本年度諾貝爾物理學獎頒授給我們敬愛的前校長高錕教授，以表彰他對光通訊理論的劃時代貢獻。高教授獲頒諾貝爾獎確是實至名歸。這是香港中文大學、全香港、全國，以至所有華人的天大喜訊！我謹代表香港中文大學全體師生校友，向高錕教授申致最誠摯的賀忱，並衷心感謝高教授為中大帶來崇高的榮耀！

高錕教授是研究光導纖維通訊的先驅，素有「光纖之父」的令譽。他於一九六六年首度提出光導纖維在通訊上應用的基本原理，同時開發了實現光通訊所需的輔助系統，促成互聯網的出現。現代人日常運用的高速網絡通訊，正是高教授對科技的偉大貢獻！

高教授對中大貢獻卓越，與中大結緣近四十載，高教授早於一九七零年本校初設電子學系之時，已受聘為該系教授，並任系主任職。他在任四年間，銳意發展電子學課程，更成為本校首位電子學講座教授。

高錕教授於一九八七年至一九九六年出任中文大學校長，領導校務發展，取得長足進步，其間中大實施靈活的學分制，全面檢討本科課程，成立工程、教育兩學院，致力改善教學質素；創設多個研究所，促進跨學科研究；提升校園主幹網絡，連接世界各地系統；與國際學術重鎮保持密切聯繫，加強與本地工商界合作。中大今天得以成為區內以至國際上教研俱佳的學府，高教授厥功尤偉。

中大於一九八五年頒授榮譽理學博士銜予高錕教授，以表揚他在科研成就及促進高等教育的卓績。高教授卸任校長一職之後，一直擔任中大工程學榮譽講座教授至今。中大將科學館北座命名為「高錕樓」並設立「高錕基金」，以發展學術研究，促進國際聯繫及學生活動。高教授對中大感情深厚，今年更把他所有共十七項的獎牌慨贈予中文大學。

我跟所有中大人一樣，深以高教授的輝煌成就為榮。謹此再次向高教授伉儷及其家人致以衷心的祝賀！

校長 劉遵義  
二零零九年十月六日

I have great pleasure in bringing to you the happy news that Professor Charles K. Kao, our former Vice-Chancellor, has been awarded the 2009 Nobel Prize in Physics by the Royal Swedish Academy of Sciences for his 'groundbreaking achievements concerning the transmission of light in fibres for optical communication'. This is truly great news for all of us at The Chinese University of Hong Kong, in Hong Kong, in China, and indeed to all Chinese around the world. On behalf of all the faculty, students and alumni of CUHK, I would like to extend our heartfelt congratulations to Professor Kao and Mrs. Kao. We at the University are humbled by the honour that we are privileged to share.

Professor Kao is known as the 'Father of Fibre optics'. He developed the principles of fibre optics with his own insight and turned optical fibre communication into reality, eventually heralding the age of the Internet. The high-speed network communication that is now such an integral part of modern living owes much to Professor Charles Kao, the trailblazer.

Professor Kao's relationship with CUHK goes back almost 40 years. In 1970, he joined the then Department of Electronics as a professor and head of department. The next four years saw him laying the foundation for its programmes. He became the first Professor of Electronics at CUHK.

From 1987 to 1996, Professor Kao led the University through a period of steady development as Vice-Chancellor. Under his leadership, CUHK implemented a flexible credit system and revamped the undergraduate curriculum. He was instrumental in the establishment of the Faculty of Engineering and the Faculty of Education, and raised the quality of the education offered at CUHK. New research institutes were established and interdisciplinary research initiatives launched. The communication network on campus was enhanced to connect with the wider world. Links with international seats of learning as well as industry were strengthened. Professor Kao has made pivotal contributions to the international reputation in teaching and research that CUHK enjoys today.

In 1985, the Chinese University awarded the degree of Doctor of Science honoris causa to Professor Kao in recognition of his leadership of scientific research at the University and the enhancement of its international standing. Since retiring as vice-chancellor, Professor Kao has continued his association with CUHK as an Honorary Professor of Engineering. CUHK has named the north wing of the Science Centre as the Charles Kuen Kao Building and set up the Charles Kuen Kao Fund to support academic research, international links and student activities. Professor Kao cares so deeply for the University that he has generously donated to CUHK all of the 17 medals awarded to him for his scientific and technological achievements.

No words can adequately describe our admiration for Professor Kao. I am sure you all share my joy and would wish to join me in congratulating Professor and Mrs. Kao and their family.

Lawrence J. Lau  
Vice-Chancellor  
6 October 2009

## 高錕教授小傳

### A Short Biography of Prof. Charles K. Kao

1933	11月4日在上海出生 Born in Shanghai on 4 November
1957, 1965	獲倫敦大學學士學位、哲學博士學位 Awarded the degrees of BSc and PhD from the University of London
1966	發表論文·建議用玻璃纖維作為光通訊的導體·開啟光纖通訊的新時代 Published a paper which proposed using glass fibre as a conductor for optic communication, ushering in the era of optic fibre communication
1970	出任香港中文大學新成立的電子學系教授兼系主任·其後為該系首任講座教授 Joined CUHK as reader and chair of the then new Department of Electronics, later appointed as the first Professor of Electronics
1985	獲授香港中文大學榮譽理學博士銜 Conferred the degree of Doctor of Science, <i>honoris causa</i> , by CUHK
1987	出任香港中文大學校長 Became Vice-Chancellor of CUHK
1996	7月榮休·自此擔任中大工程學榮譽講座教授 同年·中國科學院紫金山天文台以「高錕星」命名小行星 Retired in July from vice-chancellorship and since then became Honorary Professor of Engineering A minor planet (3463) was named after him as 'Kaokuen' by the Purple Mountain Observatory of the Chinese Academy of Sciences
2009	10月6日獲瑞典皇家科學院頒授諾貝爾物理學獎 Awarded the Nobel Prize in Physics by the Royal Swedish Academy of Sciences

## 高錕校長任內大學主要發展 (1987–1996)

### Major Developments of the University during Professor Charles K. Kao's Term as Vice-Chancellor (1987–1996)

#### ◦ 學術 Academic

- 1991 工程學院及教育學院成立。  
Faculties of Engineering and Education established
- 新本科課程相繼成立·包括日本研究·法律·小學教育·體育·建築學·護理學·藥劑學·訊息及系統工程學等。  
New undergraduate programmes introduced, including Japanese studies, law, primary education, physical education and sports science, architecture, nursing, pharmacy, and information engineering.
- 實施靈活學分制。  
Flexible credit unit system introduced.

#### ◦ 研究 Research

- 成立多所新研究所·生物科技研究院·亞太工商研究所·香港亞太研究所·香港癌症研究所·人文學科研究所·香港教育研究所及數學研究所。  
New research institutes established: Hong Kong Institute of Biotechnology, Asia-Pacific Institute of Business, Hong Kong Institute of Asia-Pacific Studies, Hong Kong Cancer Institute, Research Institute for the Humanities, Hong Kong Institute of Educational Research, and Institute of Mathematical Sciences.

#### ◦ 行政 Administration

- 中央行政改組·成立多個新部門。  
University administration reorganized with the establishment of new offices.
- 下放權責至各學院及學系·採用「單項形式」財政撥款預算制度。  
Decentralization of authority and responsibility to the faculties and departments and the introduction of one-line budget system.

#### ◦ 校園電腦化 Campus Computerization

- 圖書館·學術及行政部門的局域網絡接駁至校園基幹網絡·由此連接世界各地系統。  
Library, academic and administrative units linked by campus backbone network, which is linked to the world.

#### ◦ 新書院成立 New College Established

- 逸夫書院 (1986年籌建·1988年正式收生·1990年3月正式揭幕)。  
Shaw College (Planning began in 1986, admitted its first batch of students in 1988, officially opened in 1990.)

### 2009年高錕教授把其十七枚獎章全數贈予中大 Professor Kao Donated All of His 17 Medals to CUHK in 2009



美國富蘭克林研究所  
史特活·柏蘭亭獎章  
Stuart Ballantine Medal,  
Franklin Institute, USA  
(1977)



瑞典艾力松基金會艾力松國際獎  
L M Ericsson International Prize, Sweden (1979)



美京美亞協會成就獎  
US-Asia Institute Achievement  
Award (1983)



美國電機及電子工程師學會  
亞歷山大·格林姆·貝爾獎章  
Alexander Graham Bell Medal,  
The Institute of Electrical and  
Electronics Engineers (1985)



英國皇家工程學院  
菲利普王子獎章  
Prince Philip Medal,  
Fellowship of Engineering,  
The Royal Academy of  
Engineering, UK (1996)



英國電機工程師學會法拉第獎章  
Faraday Medal, Institute of  
Electrical Engineers, UK (1989)



意大利帕多瓦大學電信  
工程學榮譽博士  
Doctor of Telecommunications  
Engineering, *honoris causa*,  
The University of Padova,  
Italy (1996)



美國國家工程學會  
查爾斯·史塔克·德瑞普獎  
Charles Stark Draper Prize,  
National Academy  
of Engineering,  
USA (1999)



日本創價大學  
榮譽博士  
Degree of Honorary  
Doctorate,  
Soka University,  
Japan (1991)



英國電機工程師學會  
國際演講獎章  
International Lecture  
Medal, The Institution of  
Electrical Engineers, UK  
(1998)



世界工程組織協會傑出  
工程成就金章  
Medal of Engineering  
Excellence, World  
Federation of Engineering  
Organizations (1995)



香港星島集團  
2002年傑出領袖獎  
——創意/科技組別  
Leader of the Year  
2002 – Innovation  
Technology Category,  
Sing Tao, HK (2002)



日本國際賞  
Japan Prize in the Field of Information,  
Computer and Communication  
Systems, The Science and  
Technology Foundation of Japan  
(1996)



千禧傑出工程師獎  
Millennium Outstanding Engineer  
Award, HK (2001)



大英帝國司令勳章  
CBE, HK (1993)



帕多瓦市章  
La Citta di Padova (1996)



意大利鑄幣局章  
A coin from Istituto  
Poligrafico e Zecca Dello  
Stato, Italy (mint of the  
Italian Republic)

我有三分之一的工作生命是在中文大學渡過。能伴隨這所大學成長，我很欣慰。今天的中大，已是一所高質素的國際學府。

我和內子十分欣賞校園內多姿多彩的生活，也慶幸有緣成為這個生氣洋溢，友善和諧的大家庭中的一分子。現代人時常強調效率、速度、新意念及轉變，我們卻欣賞歷久不渝的友情、交誼、珍貴的傳統，以及所有能帶來溫馨回憶的事物。”

— 高錕

(摘自中文大學校刊 特刊《惜別高錕校長伉儷》)

"In fact, one-third of my career has been dedicated to the Chinese University... I have witnessed how this university has prospered and grown into a mature and quality-assured institution with a truly international outlook. My wife and I have enjoyed the many-faceted life on campus and we are pleased to have been part of such a vivacious and friendly community. At an age when too much emphasis is placed on efficiency, speed, new ideas and changes, we appreciate time-honoured friendship, collegiality, valuable traditions, and things that will bring back fond memories.

— Charles K. Kao

(Extracted from *Bidding Farewell to Prof. and Mrs. Charles K. Kao*, Chinese University Bulletin • Special Supplement)