

蘇東來教授 Professor Charles G. Sodini

榮譽大學院士 Honorary Fellow of HKUST

Whether the intricate detail of mixed-signal integrated circuits and systems or the huge canvas of how science and technology can be harnessed for social and economic change, Professor Charles G. Sodini has been an active and effective global force for good, including a ground-breaking initiative with HKUST that seeks to drive forward innovation in Hong Kong.

The LeBel Professor of Electrical Engineering at Massachusetts Institute of Technology (MIT) has spent 40 years exploring microelectronics, with contributions ranging from the earliest days of the semiconductor industry to tomorrow's brave new world of implantable healthcare devices. The field's awesome potential and how it should be utilized continue to enthuse the far-sighted American, one of the still rare academic-technologists equally at home in the classroom, lab, boardroom, and government briefing room.

He was first inspired as an undergraduate at Purdue University by late great engineering educator Professor Gerry Neudeck. Prof Sodini has gone on to take this legacy forward, energizing generations of electrical engineering students since joining MIT in 1983 and as an Adjunct Professor in the Electronic and Computer Engineering Department at HKUST.

The bigger social picture has also long been a part of Professor Sodini's worldview. At Purdue, he earned a BA in Sociology as well as a BSc in Electrical Engineering. He then joined Hewlett Packard Laboratories, gaining his master's degree and PhD at the University of California, Berkeley, in 1981 and 1982 respectively, while at the same time continuing to work for HP Labs. Since that time, Prof Sodini has effectively combined these perspectives as a consultant to many technology companies. He has also proved an able entrepreneur himself. In 1999, he co-founded SMaL Camera Technologies to develop cutting-edge digital imaging solutions for products such as mobile phones and automotive vision systems.

In 2011, his research expertise and all-round industry experience saw the respected IEEE Fellow become founder and co-director of MIT's Medical Electronic Device Realization Center. The combined academic, medical and

無論是處理混合訊號集成電路與系統的複雜細節,或致力通過科技改變社會和經濟發展,蘇東來教授從來不遺餘力,他更與科大攜手開創嶄新計劃,加強香港的創新力量,從而推動全球科技發展。

蘇東來教授現為美國麻省理工學院LeBel電機工程教授,過去四十年致力研究微電子,從早年的半導體行業至未來的新型植入式醫療儀器等,貢獻良多。蘇東來教授卓有遠見,專心致志鑽研微電子的發展潛力及其應用。他亦是少數縱橫學界與科技界的專家,不論在教學、實驗研究、處理董事會議及政府公務等,他均能應付裕如。

他於普渡大學修讀本科生課程,師承已故工程教育家Gerry Neudeck教授,深受啟蒙。蘇東來教授薪火相傳,自1983年加入麻省理工,及後出任科大電子及計算機工程學系兼任教授,啟迪後進。

蘇東來教授擁有廣闊的世界觀,關心社會。他在 普渡大學取得文學士學位(主修社會學)及理學士學 位(主修電機工程)。他其後加入惠普實驗室工作, 繼續進修,並分別於1981年及1982年在加州大學柏克 萊分校取得碩士及博士學位。蘇東來教授將知識貫通 融會,為多家科技公司擔任顧問。他也是出色的企業 家,於1999年合夥創辦 SMaL Camera Technologies, 為流動電話及汽車視像系統開發嶄新的數碼影像解決 方案。

蘇東來教授為電機及電子工程師學會(IEEE)院士。 他於2011年充分運用其研究專業及業內的豐富經驗, 在麻省理工創辦醫療電子器材中心,並擔任聯席總 監。中心結合學術、醫學及科技等領域,就多項先進 的醫療器材進行研究,包括新一代穿戴式裝置,既可 辨識身分,更能感測個人狀態。 technology industry endeavor is now advancing state-of-the-art medical devices, including next-generation wearables that will extend the role of clothes from indicating who we are to how we are.

Links with Hong Kong and HKUST stretch across decades. In the 1990s, Professor Sodini's knowledge and interest in globalization were ably employed during a sabbatical at our campus and as part of a large MIT team that explored how Hong Kong should position itself for the future. The team's year-long study carried out on behalf of the Hong Kong government and business sector led to the book, *Made by Hong Kong*, published in 1997. Now, as Hong Kong seeks to advance further as an innovation hub, Professor Sodini together with Professor Mitchell Tseng, from HKUST's Department of Industrial Engineering and Logistics Management, have opened the way for another part of the city's knowledge transfer ecosystem to be put into place.

Through the HKUST-MIT Research Alliance Consortium, launched in 2014, Hong Kong has gained a pioneering research and development catalyst focused on pre-competitive activities. This significant collaborative venture involves government, local and international higher education, and multinational companies. It aims to spur development in the city by driving forward industry-relevant research with local, regional and global impact. It strives to deepen opportunities not only for engineering graduates of HKUST but for all of Hong Kong's engineering schools as well as other young talents and the wider community.

Equally significant, the Consortium is powering a mindset shift, drawing the attention of international companies involved in R&D to the world-class innovative capabilities now available in Hong Kong. The initial emphasis is on intelligent living technology, including smart green buildings and information and communication technologies, to hasten healthier urban lifestyles.

HKUST and Hong Kong have been fortunate to have a colleague and friend such as Prof Sodini. He has shared his expertise, energy, and understanding of the crucial social role of innovation with us all. He has elevated the possibilities that we can all now aspire to achieve. This is why we honor Prof Charles G. Sodini, LeBel Professor of Electrical Engineering, today.

蘇東來教授與香港及科大早有淵源。九十年代, 適逢他在科大作短期教學休假,以其對全球化的專業 知識和經驗,與麻省理工學者一同探討香港在未來發 展的定位,為香港政府及商界進行為期一年的研究, 並於1997年出版《Made by Hong Kong》一書,分享 其研究心得。今天,要進一步鞏固香港作為創新之都 的地位,使其更上一層樓,蘇東來教授與科大工業工 程及物流管理學系的曾明哲教授合作,為香港的知識 轉移生態系統開拓新里程。

經兩位教授積極推動,香港科技大學一麻省理工學院研究聯盟在2014年成立,成為促進香港創新前沿研發的催化劑。政府、本地及國際高等教育機構與跨國公司參與這個重要的合作計劃,推動對本地、區內及全球具影響的相關產業研究,帶動香港的創新發展。計劃不單致力為科大的工程系畢業生開創機會,並惠及工程學院、世界各地的年青優才以至整個社會。

這個聯盟亦帶動創新思維,令跨國企業的研發部門對香港的世界級創新能力有更深了解。智能生活科技為計劃的首個重點,包括智能綠色建築與資訊及通訊科技,締造更健康的城市生活模式。

香港科技大學以至香港社會深慶能與蘇東來教授 共事,他深明創新對社會發展局負關鍵的角色,並且 樂意貢獻他的專業知識,積極推動公眾更加明白創新 的重要。蘇東來教授開創不同機會,為科大實現目標 向前邁進。今天在此表揚LeBel電機工程教授蘇東來教 授的貢獻。