

盧偉國博士工程師 Ir Dr LO Wai-Kwok

榮譽大學院士 Honorary Fellow of HKUST

Have you ever met a pipa-playing, opera-singing and art-collecting engineer? If not, get ready to meet Ir Dr Lo Wai-Kwok, the current president of the Hong Kong Institution of Engineers. Dr Lo has music in his heart, science on his mind, art in his soul and technology at his fingertips.

But Dr Lo is more. Appointed and re-appointed since 1997, he is also one of the longest-serving District Council members in Shatin. This public-spirited renaissance man, despite his punishing work schedules, still finds time to teach as an Adjunct Professor at City University of Hong Kong and as a guest professor of the University of Electronic Science and Technology of China, Zhongshan Institute.

The Chinese has an apt saying for the likes of Dr Lo: "With the able goes the heavy workload." He has the uncanny ability of juggling multiple roles within a narrow sliver of time. His day job is Managing Director of the five-plant, 14,000-employee Surface Mount Technology (Holdings) Limited, one of the top electronics manufacturing services providers. This is a manufacturing concern with a clean and sharpened social conscience, setting itself up as a leader in green manufacturing.

Dr Lo, as president of this prestigious engineering society, is setting a good example for his fellow members to become constructively engaged in community work. He has an octopuslike reach into the affairs of the community and even the country. When not working for his company, he is running or helping to run other public service agencies. He is Vice Chairman of the Hong Kong Quality Assurance Agency, member of the Research Grants Council, member of the Building Committee of the Housing Authority, Committee Member of the China Association for Science and Technology, and member of the Political Consultative Conference Zhongshan Committee. He was President of the Hong Kong Association for the Advancement of Science and Technology, Chairman of the Hong Kong Electronics Industry Council, Vice Chairman of the Pearl River Delta Council, Vice Chairman of the Hong Kong Electronics Industries Association, and was a member representing the Information Technology sub-sector on the Election Committee for Hong Kong's first two Chief Executives. In the West, they have another saying: "If you want something done, give it to a busy person." And if you want super things done, give them to a super-busy man like Dr Lo.

Though action-oriented, Dr Lo has a deeply reflective side. He may be formally trained in the hard sciences, having garnered a bachelor's degree in mechanical engineering, master's degrees in industrial engineering and business administration, topping off with a doctorate in engineering, but he never loses sight of the big picture, especially when it comes to engineering itself.

The umbrella term "engineering" with reference to the Hong Kong Institution of Engineers now encompasses some 18 different disciplines, and its membership reflects the full range of the ever-expanding field of engineering – from the traditional big four of mechanical, industrial, civil and electrical engineering to new arrivals such as biomedical engineering.

大家曾否遇過一位精於演奏琵琶、熱愛廣東戲曲和喜愛藝術收藏的工程師呢?本人謹此介紹這位集藝術與科技於一身的工程師 — 現任香港工程師學會會長盧偉國博士。

盧博士不只具有音樂細胞、藝術天份和科學頭腦, 更熱心社會事務。他自一九九七年起擔任沙田區議員至 今,是該區服務年期最長的區議員之一。儘管盧博士公務 繁忙,仍不忘把專業知識教育下一代,抽時間出任香港城 市大學兼任教授,及電子科技大學中山學院客座教授。

古語有云:「能者多勞」,用作形容盧博士,最為 恰當。盧博士有超乎常人的能耐,能夠於片刻間,妥善 處理多項工作。盧博士現任著名的電子生產服務企業新 進科技集團有限公司的董事總經理,管理五間工廠及一 萬四千名員工。該公司一向著重企業社會責任,重視環 保,實施一連事的綠色製造措施,堅守可持續發展的理 想和目標。

盧博士雖為行動派,坐言起行,但亦有沉實內斂的 一面。他接受傳統科學訓練,先後獲頒授機械工程學 士、工業工程碩士、工商管理碩士及工學博士,始終醉 心廣闊的工程科學。

香港工程師學會現涵蓋十八個不同的工程專業,從 傳統的四大領域,包括機械工程、工業工程、土木工程 及電機工程,不斷發展至新的領域如生物醫學工程等。 工程學當中不同學科的快速增長,正反映了今天的科技 瞬息萬變,高速發展。處身於這個技術發展一日千里的 時代,令盧博士提出了一個發人深省和根本的問題: 「工程學究竟是什麼?」 This proliferation of sub-disciplines within the engineering science is itself a reflection of the rapid technological change and increasing technological sophistication of our contemporary civilization. It has led this thoughtful man to pose a thoughtful but unexpected question: "What is engineering?"

As Dr Lo sees it, engineering is about "how to use scientific concepts and resources to solve our problems and meet our needs in life." It is a discipline that used to be primarily anchored by hardware. Now, in the digital age, software is guiding, extending and amplifying its many applications. And software is fueling an ever-changing definition and differentiation of engineering, giving us emerging fields such as financial engineering.

Whatever its definition, engineering is often the machine that drove social and economic development in human civilization. Dr Lo strongly supports the work of the Task Force on Technology and Innovation, which was formed in the Institution to tackle the challenges of the digital age. He believes that as an applied science, engineering has a duty to help build a sustainable and healthy economic structure. He has an ambition to extend the social applications of engineering technology to many of society's ever-evolving and even non-engineering problems, such as avian flu prevention, energy saving, air and water quality and even the prevention of natural disasters. What's more, he advocates that these applications be based on the core values of quality, dedication and professionalism.

The historical perspective is never far from the broad sweep of his thinking. In his view "engineering emerged from the need to improve the quality of life and to make processes and production more efficient." He is one of the few engineers to probe the mystery of China's scientific stagnation after centuries of brilliant technological inventiveness. In a nutshell, he believes that when engineers are trained right as strategic designers, and not simply asked to subserve narrow bureaucratic interests which may often be hostile to change and innovation, the world will be engineered right.

He has a clear vision on Hong Kong's role in engineering China's future and the urgent need to conserve valuable resources and protect the environment as the Chinese economic juggernaut rolls forward. We can become the mainland's model when it comes to setting international standards and practices, acting as the conduit for the latest technology and talents. Dr Lo confidently predicts that "technology and design will dictate future competition in global production." These are functions that internationally trained Hong Kong engineers can perform with a flourish.

In Dr Lo, then, we not only have a vastly experienced, scientifically sophisticated professional, we also have an all-seeing social visionary who regards his fellow engineers as problem solvers, innovators and builders of a sustainable civilization. As far as a well-rounded engineer goes, it doesn't come better than Hong Kong's own Dr Lo.

Mr Pro-Chancellor, I have the honor to present to you, on behalf of The Hong Kong University of Science and Technology, Ir Dr Lo Wai-Kwok, Managing Director of Surface Mount Technology (Holdings) Limited, for the award of Honorary Fellowship.

盧博士認為,工程學是「應用科學原理和資源,去解決人類的難題及應付生活之所需。」這門學問以往一直倚靠硬件支撐。現今數碼時代,軟件的力量無遠弗屆,應用範圍不斷擴大,並為工程學注入新動力,開拓了如財務工程學等新學科。

姑勿論工程學的定義如何,它永遠是人類文明史中,推動社會及經濟發展的驅動器。為迎接數碼時代的挑戰,香港工程師學會成立了一個創新科技發展專責小組,盧博士對此大力支持。他深信工程學作為一門應用科學,能輔助經濟體系可持續及健全的發展。盧博士提倡將工程技術在社會層面的應用擴大,以解決眾多新衍生的、甚至表面與工程學無關的社會問題,例如預防禽流感、節省能源、空氣及水質控制以及預防自然災害等。盧博士進一步提倡優質服務、專業態度、奉獻精神等核心價值。

盧博士與時並進,緊貼時代脈搏。他認為「工程學的出現,基於改善生活質素,以及提升生產效率的需要。」他積極探討為何中國科技在歷史早期取得光輝成就,及後卻無以為繼,發展停滯不前。盧博士深信,只要工程師得到恰當的訓練與機會,擔當具策略發展目光的設計師,而不是服務於因循守舊,保守官僚的狹隘範疇,這個世界便可建造得更美好。

談到香港在中國未來改革所扮演的角色,以及在中國經濟發展的巨輪下,保護珍貴資源和環境的迫切需要,盧博士對此有清晰的遠見。當內地需要訂立與國際接軌的標準和法規時,香港可作為內地的橋樑,並提供最新的科技發展資訊。盧博士堅信,「科技及設計,將是全球化生產的主要競爭領域。」這些均是具國際視野及專業訓練的香港工程師之專長。

在盧博士身上,我們不單看到一位極具經驗、精通 科學的專家;亦能看到一位具敏銳社會觸覺的傑出領 袖。他視工程師為社會的解難者、創新先驅、以及持續 文明發展的建造者。在香港土生土長的盧博士,實在是 工程學界的楷模。

副監督先生,本人謹代表香港科技大學,恭請閣下 頒授榮譽大學院士予新進科技集團有限公司董事總經理 盧偉國博士工程師。