

They contribute to the physical infrastructure with their minds and their hearts



(Right) A paper chair, class project by a firstyear architectural student, 2001

(Left) Field trip of HKU students, 2001



(Top) Modern transport of Hong Kong (Right) White dolphins become a rare species in the Hong Kong water





Towards Sustainability

Visitors to Hong Kong are often amazed by the ever-changing landscape of our city. They marvel at the speed of change as well as the diversity



Tai Tam Reservoir water was flooding over a spillway, 1978.

and variety that accompany some of the changes. To many, the impressive skyline remains the Hong Kong identity and is an immense source of pride as well as a living testimony to the success and creativity of its citizens. The mind-boggling skyscrapers and other architectural wonders that make up the Hong Kong postcard are the achievements of local talents combined with international participation. In this, the University's graduates have played an essential part.

However, those who have been in Hong Kong for some time will notice that apart from the landscape, there is also the smooth traffic, the interconnectivity between buildings, and the quality of the public housing estates which is constantly being improved upon.

The beauty and quality of the change are attributable to the industry and intelligence of the Hong Kong people, among them notably the University's graduates. They have demonstrated the use of state-of-the-art technology with the courage of innovation. The critical choices they have made reflect a combination of an open-mind to Western ideas and deep roots in Chinese culture.

The contribution of the University's graduates to the physical infrastructure of Hong Kong is both comprehensive and impressive. Many are specialist professionals: engineers, architects, urban planners, surveyors, conservationists and environmentalists. Some are decision-makers and policy-advisors, whilst others hold responsible positions in the business sector. They contribute to Hong Kong's development not only with their minds but also with their hearts, out of a yearning for a better society, a yearning that may be attributable to the humanity that permeated the University during their formative years.

The University's graduates are also among the known advocates for social and environmental issues. There is now a paradigm shift from an emphasis on efficiency and cost-effectiveness to environmental and sustainability considerations. Many of the University's graduates, in various roles, have pioneered such a shift.

Housing

Hong Kong has led the modern trend in providing public housing in a metropolitan city. The huge influx of immigrants from the mainland in the early 1950s brought with it an acute shortage of housing. But it was the disastrous



Shek Kip Mei fire, 1953

in 1955 to create a systemic public housing programme for Hong Kong. Since the 1950s, the design of public housing has undergone several phases of development,

Shek Kip Mei squatter fire on Christmas Day 1953 which left 65,000 homeless, that put public housing firmly on the government's agenda. The Housing Authority was subsequently set up

each time with advances in balancing the difficult goal of a comfortable home for people but at an affordable cost. Donald Liao Poon-huai 廖本懷 (BArch 1955) designed the Wah Fu Estate whilst working as the Chief Architect of the Housing Authority in 1965. Completed in 1971, Wah Fu Estate in Aberdeen was built as a

community with self-contained facilities. It became the model for subsequent largescale estate designs and "new town" planning.

In the early 1970s, the dramatic expansion of public housing was one of

Governor MacLehose's major policies to combat housing shortages. New estates and new towns were built at great speed. The Housing Authority was reorganised in 1973 and a new Housing Department was established to provide low-cost housing estates for citizens with lower incomes. Liao played a key role in the expansion as the



Influx of Chinese immigrants in the mid-1950s caused heavy demand on public housing



Large-scale public housing estate development started in the 1970s (the Lion Rock in the backdrop).

Director of Housing and continued to play a significant role in formulating Hong Kong's public housing policy thereafter.

A Lifelong Career in Public Housing: Donald Liao Poon-huai

Donald Liao Poon-huai has had a great impact on Hong Kong's public housing design and public housing policies.

He served as the Commissioner for Housing in 1968, Director of Housing (1973-1980), Secretary for Housing and Chairman of the Housing Authority (1980-1985). He participated in the formulation of the Ten-Year Housing Programme in 1972 when Governor Murray MacLehose instigated the policy which resulted in the provision of public housing on a massive scale.

Liao advocated the Home Ownership Scheme, which allows those who live in rented public housing to buy their own flats. He also influenced town planning in Hong Kong during the twelve years (1968-1980) he served as a member of the Town Planning Board.

In 1985, Liao was appointed Secretary for District Administration and became an Official Member of the Executive Council. He was a member of the British team in the Sino-British Joint Liaison Group from 1987 to 1989.



Donald Liao Poon-huai (right)

In 1976, the government started the Home Ownership Scheme (居者有其屋) which provides housing for purchase by middle-income families. Wong King-keung 黄景強 (BSc(Eng) 1968, MSc 1970) was involved in the building of Shun Chi Court in Kwun Tong, one of the first six projects under the scheme.

Engineering Entrepreneur: Wong King-keung

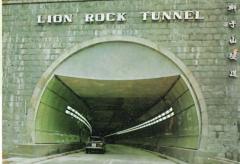
After obtaining his PhD at Queen's University, Canada, Wong King-keung returned to Hong Kong and worked as a consultant providing geotechnical assessment for several major projects, including the Mass Transit Railway, the second Lion Rock Tunnel and the Junk Bay site formation. He moved on to property development in 1976 when he became Executive Director of Goodyear Estates and Hing Kee Construction.

In 1982, Wong founded Newmark Company and developed it into the largest exporter of overhead projectors in China. He continues to use his specialist knowledge and is a member of the Town Planning Board, the Hong Kong Airport Authority and Chairman of the Hong Kong Institute for Infrastructure Development.

Apart from being an engineer and an entrepreneur, Wong is also an enthusiastic poet. He is a member of the Hong Kong Arts Development Council and the Vice-Chairman of the Hong Kong Institute for Promotion of Chinese Culture. He was appointed a member of the Chinese People's Political Consultative Committee in 1998.

Concurrent with the public housing boom, there were also major developments in the private housing sector. Mei Foo Sun Chuen (1967) and Taikooshing (1970s) were the first large private housing estates that comprised self-contained comprehensive facilities. They marked the change of a housing concept from mere accommodation to the creation of a community, re-introducing the human element into urban developments that replaced traditional villages. Such a concept is now widespread not only in Hong Kong, but also in Chinese communities in the region.





Above: Wong King-keung (right) on site at Chek Lap Kok Airport Below: Lion Rock Tunnel built in 1967



The Route 3 expressway

Both estates were designed by Wong Tung & Partners, one of the largest local architectural firms. Edward Ho Sing-tin 何承天 (BArch 1963) is a partner in the company and participated in the Mei Foo Sun Chuen project. He also designed Chi Fu Fa Yuen and played an instrumental role in the Discovery Bay development on Lantau Island.

Another graduate of note is Freddie Pang Yuk-ling 彭玉陵 (BArch 1956), Director of Housing (1985-1990) and Chairman of the Housing Authority (1985-1986), who revamped public housing design from Basic Slab Blocks to the Trident Blocks, and later the Harmony Blocks. These enhanced structural designs improved on the elements of human community in public housing.

Other HKU graduates who have taken an active role in housing policies include Timpson Chung Shui-ming 鍾瑞明 (BSc 1976, CertEd 1977), Chairman of Hong Kong Housing Society (established in 1948 as an independent non-subsidised organisation involved in housing development), and Rosanna Wong Yick-ming 王葛鳴 (BSocSc 1975), who was chairman of the Housing Authority until her resignation in 2000.

Transport

Hong Kong is renowned for its comprehensive public transport system, but it has also become one of Asia's main transportation hubs due to its highly developed air and sea transport infrastructure. HKU graduates have taken up key positions in Hong Kong's flagship airline, selected shipping companies, and local public transportation companies.

Ports and Airports

The development of first-class port facilities has been a priority for Hong Kong. By the end of 2000, eight container terminals had been completed and Container Terminal No. 9 is currently under construction. Scott Wilson (Hong Kong) was involved in the design and building of the earliest container terminals at the Kwai Chung Container Port.

Its Managing Director, Martin Kwong Hoi-chau 鄭海疇 (BSc(Eng) 1972, PhD 1979), participated in the building of Container Terminal No. 5. The company also worked jointly with Maunsell on Container Terminals No. 8 and 9.

Martin Kwong on site at Terminal No. 9

The New Engineer: Martin Kwong Hoi-chau

As the Managing Director of one of the major international engineering consultancy firms in Hong Kong, Martin Kwong Hoi-chau has undertaken many important infrastructure projects, including the Route 3 expressway which links Hong Kong Island to the Kowloon Peninsula and the New Territories. The project posed the challenge of building eight lanes at the Kwai Chung Corridor, on top of the existing ten lanes. Kwong's work typifies Hong Kong's speedy and innovative approach to providing essential infrastructure to its citizens.

A firm believer in the principle that the role of the engineer should change with the times, Kwong says: "Engineers used to be

concerned about three things: time, quality and budget. The focus has shifted to three different priorities: health and safety, public consultation and sustainable development." Sustainable development for Kwong means giving high priority to environmental concerns.



Lee Shing-see 李承仕(BSc(Eng) 1964) and his two predecessors, Kwong Honsang 鄭漢生 (BSc(Eng) 1963) and Kenneth Kwok Wai-kai 郭惠階 (BSc(Eng) 1955) as the then Secretary for Works have made significant contributions to Hong Kong's infrastructure. As Secretary for Works from 1995 to 1999, Kwong Hon-sang was responsible for the completion of most of the core airport projects. Lee was Project Manager of the New Airport Projects Co-ordination Office in the early 1990s. Billy Lam Chung-lun 林中麟 (BA 1970), the Chief Executive of the Airport Authority from 1998 until 2001, was the Director of the New Airport Projects Coordination Office. Lam is currently the Managing Director of the Urban Renewal Authority. The Hong Kong International Airport was awarded World's Best Airport 2001 & 2002 by Skytrax Research in London and Cargo Airport of Year 2002 by *Air Cargo News*.

Airlines

Hong Kong's flagship airline is Cathay Pacific Airways, which is now under the leadership of Philip Chen Nan-lok 陳南祿 (BA 1977, DipMS 1983, MBA 1984). In 1997, Chen was the first Chinese to assume the position of Director and Chief Operating Officer of Cathay Pacific Airways. In 1996, he was awarded a Fellowship by the Royal Aeronautical Society, UK. He is also Chairperson of Ocean Park Corporation Board.

In 2000, Cathay Pacific posted a record profit, doubling that achieved in 1999. It won the Best Airline – Business Class award at the *Travel Trade Gazette* Annual Travel Awards 2001, the ninth year the airline had picked up this prestigious award. It was just voted Best Airline – Asia in a global poll of more than 4 million travellers and ranked overall as the No. 2 airline in the world.

Dragonair is another local airline that runs flights mainly to the Chinese mainland and Asian countries. It became one of the most profitable airlines in the world when Chen was its Chief Executive from 1994 to 1997.

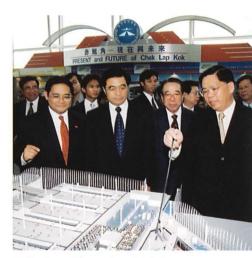
Shipping

As an entrepôt in Asia, shipping is one of Hong Kong's important industries. Major shipping companies include Shun Tak and COSCO. Shun Tak Holdings Ltd's shipping origin dates back to 1961 when Shun Tak Shipping Company Ltd was founded by Stanley Ho Hung-sun 何鴻燊 (1939-1941, HonDSocSc1987). Ho is the first to introduce Hydrofoil (1964) and Jetfoil (1975) services between Hong Kong and Macau. With 30 "TurboJet" vessels, the largest fleet of its kind in the region, Shun Tak has been the market leader on the Macau route. Shun Tak, with Ho as the Group Executive Chairman, is now a public company which operates four core businesses – shipping, property, hospitality and investments. The current Executive Director of Shun Tak Holdings Ltd is Ambrose So Shu-fai 蘇樹輝 (BSc 1973).

Based in Hong Kong, COSCO (Hong Kong) Group Ltd is the regional headquarter of COSCO Group, an important mainland state-owned enterprise engaged in transoceanic shipping activities. Its core business includes bulk carrier and freight service, shipping agency and the container business. COSCO HK also invests in infrastructure and property development, industry and trade, high technology, hotels, travel agency, airfreight and insurance. Gordon Kwong Che-keung 鄭志強 (BSocSc 1972), its Managing Director since May 1998, is the only Hong Kong local sitting on the management board of the main company, serving as Executive Director and Vice President. A chartered accountant and previously a partner of PricewaterhouseCoopers Hong Kong, Kwong's former roles include Director of the Hong Kong Clearing Co Ltd and Stock Options Clearing House Co Ltd, and Convenor of the Hong Kong Stock Exchange's Compliance Committee and the Listing Committee.



Kwong Hon-sang (left)



Billy Lam Chung-lun (right) together with Airport Authority Chairman Victor Fung Kwok-king 馮國經 (left) described the layout of the Hong Kong International Airport to the Vice President of the PRC, Hu Jintao 胡錦濤 (second left), 1999



Philip Chen Nan-lok



Public Transport Network

Hong Kong is among the very few metropolitan cities where serious traffic congestions are relatively rare. An imaginative approach to overcoming geographic constraints, a unique local feature, is an efficient transport network of tunnels. The Lion Rock Tunnel was the first to be completed in 1967, followed by the construction of a series of tunnels. Edmund Leung Kwong-ho 梁廣灝 (BSc(Eng) 1967), the Chairman of Hyder Consulting, was in charge of the installation of electrical and mechanical facilities for Aberdeen Tunnel in 1972, the design of the electrical and mechanical systems for Junk Bay Tunnel in 1986 and Tate's Cairn Tunnel in 1988.

Balance and Variety: Edmund Leung Kwong-ho

Edmund Leung Kwong-ho, a mechanical engineer and Chairman of Hyder Consulting, a major engineering consulting firm in Hong Kong, has been involved in many landmark projects in Hong Kong and China over the past 30 years.

Leung worked on the Kwun Tong line of the MTR and provided project management assistance for the completion of the extension of Hong Kong Convention and Exhibition Centre in preparation for the handover in 1997.

Leung also has substantial experience in China dating back to the 1980s, when, on behalf of GEC, he led a team of British nuclear engineering experts to negotiate for the controversial Daya Bay project with the mainland. In 1994, he helped Guangzhou Metro Railway plan the interface of operation with design.

Everyday, more than ten million passenger journeys in Hong Kong are made on the public transport system. For many years, bus and ferry services were franchised to a few companies. In the late 1990s, in a bid to improve service quality, competition was introduced.

Among the four public bus operators in Hong Kong, the largest is The Kowloon Motor Bus Company (1933) Ltd, which is also one of the largest road passenger transport operators in Southeast Asia. John Chan Cho-chak 陳祖澤 (BA 1964, DipMS 1971) has been the Managing Director of the company since 1993. When KMB was founded in 1933, its bus fleet consisted of 106 small, single-deck buses. Today, with 13,600 staff, the company's 4,500 buses operate on a network of around 400 bus routes, transporting three million passengers every day. In 1997, The Kowloon Motor Bus Holdings Ltd was established, comprising various branches that were responsible for franchised and non-franchised transport services, Chinese mainland transport services as well as non-transport business (e.g. property development and multi-media business).



CEO with Strong Community Involvement: John Chan Cho-chak

John Chan worked in the government for almost 30 years, except for the period between 1978 to 1980 when he left the Civil Service to become the Executive Director and General Manager of Sun Hung Kai Finance Co Ltd. Among the key posts he held over the years were Private Secretary to the Governor, Deputy Secretary (General Duties), Director of Information Services, Deputy Chief Secretary, Secretary for Trade and Industry and Secretary for Education and Manpower.

Chan is a former Chairman of Hong Kong Securities Clearing Company Ltd. He also holds various community appointments, including being a steward of the Hong Kong Jockey Club, Board Member of the Community Chest and Council Chairman of the Hong Kong University of Science and Technology.

Chapter 5

The company with the longest history in providing non-franchised bus services is Kwoon Chung Motors Co Ltd, founded in 1948. James Wong Chung-pak 黃松柏 (BSocSc 1972), Chairman of Kwoon Chung Bus Holdings, and his brothers took over their father's business in the 1970s. They groomed the company from one that ran a few school buses into a public company (listed in 1996) that currently operates

a fleet of over 380 buses, serving schools, factories and housing estates. Its bus services now extend to the Chinese mainland.

There are three major rail systems in Hong Kong: the Mass Transit Railway (MTR), the East Rail (the former Kowloon-Canton Railway or KCR) and the Light Rail. The MTR is run by the MTR Corporation



(MTRC) while the East Rail and Light Rail are run by the Kowloon-Canton Railway Corporation (KCRC). Both chief executives of the MTRC and KCRC are HKU graduates.

The MTRC was established in 1975 as a wholly owned government statutory corporation. The first passenger train set off

on the Kwun Tong line in 1979. The MTR completely changed Hong Kong's traffic situation. It is envied and indeed modelled after by many similar transport systems in the region.

In 2000, Jack So Chak-kwong 蘇澤光 (BA 1969), Chairman and Chief Executive, led the MTRC to a successful public listing in Hong Kong and within a year the MTRC had become one of the constituent stocks of Hong Kong's Hang Seng Index.



The Airport Railway, one of the ten core projects of the new Airport

At the Forefront of Change: Jack So Chak-kwong

Jack So Chak-kwong was a civil servant from 1969 to 1977. Prior to joining the private sector he was the assistant to Jack Cater, the founder and first Commissioner of the Independent Commission Against Corruption.

He joined Sun Hung Kai Securities in 1977. He helped Sun Hung Kai set up its office in Beijing. He also played a critical part in developing the first modern hotel in China.

Under his leadership, the MTRC has diversified into property development and management, international consultancy services and major project works. Its commercial activities also include poster advertising, telecommunication services and kiosk rental along the railway. The MTRC has also adopted many new technologies, such as the Octopus Card, which is an electronic smartcard fast expanding into a pervasive means of payment.

"I have been fortunate enough to be involved in a lot of pioneering moves which synchronised with the development of Hong Kong," said Jack So.



Jack So Chak-kwong at public listing of MTR shares

For the longest time, the KCR was Hong Kong's major mass transportation system. The East Rail first came into service in 1910 as a single track system. It was completely overhauled in 1983 when it was electrified and double tracked. The railway had operated as a government department but since 1982 KCRC was created

as an independent organisation. Among the earlier graduates, Lam Po-hon 林保漢 (BSc(Eng) 1941), who joined the Civil Service as an apprentice engineer in the Public Works Department in 1941, has been the General Manager, Railway, since 1958.

The East Rail operates suburban mass transit between Hung Hom and Lo Wu. It also runs inter-city passenger services to Guangzhou on its own trains and provides access for other inter-city trains running to and from Guangzhou, Shanghai and



The Kowloon-Canton Railway

Beijing. The Light Rail began in 1988, providing passenger services for the North West New Territories. Martin Kwong Hoi-chau was responsible for approving the design of civil and building works for the Light Rail in Tuen Mun and Yuen Long.

Policy Secretary Turned CEO: Yeung Kai-yin

Yeung Kai-yin 楊啟彥 (BA 1962), a former government policy Secretary, has been the Chairman (1996-2001) and Chief Executive Officer of the KCRC since 1996. The KCRC has been expanding its network and a new mass transit system, West Rail – Phase I, will run from the North West New Territories to Kowloon when it opens in 2003.

During his 32 years of service in the government, Yeung has held key posts, including Commissioner of Hong Kong Export Credit Insurance Corporation, Director-General of Industry, Secretary for Education and Manpower, Secretary for Transport, and Secretary for the Treasury.

Leung Chi-keung 梁志強 (BA 1964, MA 1969), then a professor at HKU, is known in Hong Kong for his contributions to transport in the 1980s when he chaired the Transport Advisory Committee. Leung is a known scholar on China's transportation. He was later the founding Director of Hong Kong Institute of Education.



Plover Cove

Utilities

Reservoirs

Water supply has always been a major challenge for Hong Kong ever since it was founded as a trading settlement in 1841. Before the advent of water from Guangdong, Hong Kong relied largely on reservoirs and many early graduates of HKU were involved in their construction. Among them was Vincent Chan Hing-chiu 陳慶釗 (BSc(Eng) 1960) who later became Chairman of Scott Wilson (Hong Kong). As a young engineer, Chan helped in the construction of Plover Cove, Hong Kong's second biggest fresh water reservoir. A significant achievement in the history of Hong Kong's water supply, in 2000, Plover Cove was short-listed as one of Hong Kong's Ten Engineering Wonders.



Power and Gas Supply

The pattern of power supply in Hong Kong reflects both economic and social trends over the years. China Light & Power Co and Hongkong Electric shifted from oil to coal supply at the end of the 1970s, but changed largely to gas in the 1990s because of environmental concerns. Many HKU graduates have held important positions in both companies.



Water shortage in the 1960-1970s

Tso Kai-sum 曹棨森 (BSc(Eng) 1954) the Group Managing Director of Hongkong Electric since 1997, and appointed to the board in 1985, has been in the power industry for over 20 years. When Tso joined the company in 1966, the power station of Hongkong Electric was located in North Point. Tso supervised the subsequent move of the station to Ap Lei Chau. Hongkong Electric later built a power station on Lamma Island, which has one of the highest generating capacities in the world.

One of the leading contractors in sub-contracting for power-plant projects, General Electric Co of Hong Kong, appointed James Chiu 趙雅各 (BSc(Eng) 1964) as Managing Director in 1984.



Tso Kai-sum

Management of Change: James Chiu

In 1984 James Chiu was the first Chinese to become the Managing Director of General Electric Co (GEC) of Hong Kong Ltd, the subsidiary of a traditional British engineering company. When GEC changed its name to Marconi in 1999, Chiu became its first Chairman of the Asia Pacific region until he retired in 2001. Chiu was also the first Chinese Chairman of the British Chamber of Commerce (1992-1994).

He initiated localisation of the company's expertise in Hong Kong the same year he was appointed Managing Director, preparing the company to focus on the China market. Marconi now has five successful joint ventures on the mainland.

Chiu is also the former President of the Hong Kong Institute of Engineers (1990-1991) and the former President of the Hong Kong Electrical & Mechanical Contractors' Association (1993-1999).





Yeung Pak-sing

Yeung Pak-sing 楊佰成 (BSc(Eng) 1973) was with China Light & Power for 17 years. He participated in the negotiation of the Daya Bay Nuclear Plant, and was General Manager of a CLP subsidiary that constructed large power plants in China. Yeung decided in 1992 to start his own business to help the Chinese mainland solve the problem of power shortage by investing into small and medium size power stations. Yeung's company not only draws in capital from Europe and Hong Kong to invest into power plants in China, it also participates in the management and operation of the projects. As of 2001, he has invested into nine projects mainly in Fujian, his home province, and Jiangsu.

Gas is the third major energy source in Hong Kong after oil and electricity. The Hong Kong and China Gas Co (also known as Towngas) was the oldest public

utility in Hong Kong founded in 1862. It now supplies gas to 1.32 million homes and 13,000 industrial and commercial users. Alfred Chan Wing-kin 陳永堅(BSc(Eng) 1974, MSc 1983), Managing Director of the company since 1997, has initiated and overseen several innovative projects to create new products, improve safety and reduce risks. Chan's achievements were recognised with the Outstanding Industrial Engineer award in 1999. James Kwan Yuk-choi 關育材 (BSc (Eng) 1973) and Yeung Ka-shing 楊家聲 (BSocSc 1974) are also in the senior management of the company. Towngas has recently expanded its scope of business and service to the Pearl River Delta of China.



Alfred Chan Wing-kin (middle), James Kwan Yuk-choi (right) and Yeung Ka-shing

Architecture

Hong Kong is a metropolitan city built on some 1,000 square kilometres of land – an irresistible challenge to any talented architect. Those who graduated from the University have responded to the challenge in full measure and withstood keen competition from architects of international prestige to make their mark on Hong Kong's landscape.

HKU graduates have won numerous international awards, which have been the envy of other countries in the region. Among them is Edward Ho Sing-tin who designed Discovery Bay Phase I and No. 9 Queen's Road, both of which won awards. His other outstanding work includes Chi Fu Fa Yuen and Hong Kong Park. Ho was awarded the Hong Kong Institute of Architects' (HKIA) Silver Medal for Excellence in Architecture in 1974 for the design of the Hong Kong Sheraton Hotel.

> A student bookmark in the early 1980s

Architect as Politician: Edward Ho Sing-tin

Edward Ho Sing-tin, a partner of Wong Tung & Partners, one of the largest architectural firms in Hong Kong, has a long history of public service that ranges from his own profession to politics, academia, art and culture. A former honorary secretary of the HKU Students' Union, Ho was President of the Hong Kong Institute of Architects (HKIA)(1983-1984), Chairman of the Board of Hong Kong Industrial Estates Corporation (1992-

2001), a member of the Accreditation Panel on the Hong Kong Academy for Performing Arts (1988), a Hong Kong Basic Law Consultative Committee member (1985-1989), a Legislative Council member (1987-2000) and an Executive Council member (1991-1992).

He is one of the founding members of the Liberal Party and one of the longest serving Legislative Council members, since elections were first introduced into the legislature in 1985.

In his capacity as the convenor of the Professional Sub-Group of the Basic Law Consultative Committee member and the first convenor of the Nine Professionals Group, Ho succeeded in ensuring that the professions continue to enjoy their autonomy in accreditation under the Basic Law.

Simon Kwan Sin-ming 關善明 (BArch 1967, PhD 1989) is renowned for designing public institutions. His portfolio includes Hong Kong University of Science and Technology, Hong Kong Productivity Council Building, HKU Phase V

Redevelopment and his award-winning work on the Hong Kong Academy for Performing Arts, the Jockey Club Environmental Building, Hong Kong Industrial Technology Centre and Tuen Mun Technical Institute. Kwan, also a keen antique collector and a painter, was elected by the Hong Kong Artists' Guild as Architect of the Year in 1989, and was awarded Certificates of Merit by the HKIA in 1985, 1989, 1996 and 1997.

Dennis Lau Wing-kwong 劉榮廣 (BArch 1970) is a partner of Dennis Lau & Ng Chun Man Architects & Engineers (HK), one of the largest local architectural firms in Hong Kong. Lau has designed some of the tallest landmarks in the region, such as The Centre and the Central Building in Hong Kong and CITIC Plaza in Guangzhou. Other well-known buildings he designed are the Lee Theatre Plaza, Lee Gardens Redevelopment, and the award-winning Aberdeen Market Complex, Tsuen Wan Columbarium and Hung Hom Bay Centre.

Andrew Lee King-fun 李景勳 (BArch 1956), a principal partner of Andrew Lee King Fun & Associates, was President of the HKIA from 1975 to 1976. Lee believes that in the future, architects will concentrate on integrating the unique style and culture of the local community with environmental protection and energy use reduction. His more recent creations are the AIA Tower in North Point and the CEF Life Tower in Wanchai.

Anthony Ng Heung-hung 吳享洪 (BA(ArchStud) 1970, BArch 1972) is known for environmentally-conscious designs, typified by the award-winning Verbena Heights. Other examples are the Housing Department building at Tseung Kwan O, St Joan of Arc Secondary School, the Regional Council Complex at Tsing Yi and Repulse Bay Apartments.





Edward Ho (right) as a member of the Housing Authority



Simon Kwan Sin-ming



Andrew Lee King-fun



The Hong Kong Cultural Centre and the Clock Tower



Pau Shiu-hung 鮑紹雄 (BArch 1967), the Director of the Architectural Services Department since 1997, is one of the longest serving architects in the government. Pau has designed many municipal facility projects including market complexes, playgrounds, sports grounds and swimming pools. He is best known for the design of the Hong Kong Cultural Centre, the Hammer Hill Road Leisure Pool Complex

> and Kowloon Walled City Park. He has won awards for the Hong Kong Coliseum, the Urban Council Chamber and Offices, and Kowloon Central Library.

> Jackson Wong Chak-sang 王澤生 (BArch 1955) was the first HKU graduate to establish a major architecture firm in Hong Kong – Wong & Ng, later renamed Wong & Ouyang (HK). Among the best known of Wong's designs are Villa Monte Rosa, Whampoa Garden, Hyatt Regency Hong Kong, Hang Seng Bank Headquarters Building and Pacific Place I and II.

Lam Wo-hei 林和起 (BArch 1971) joined Wong Ng Ouyang & Associates in 1971 and had become its principal partner since 1976. He is currently Director of three subsidiaries under Wong & Ouyang Group of Companies. His representative projects include Gateway I & II, Times

Square, Hong Kong Gold Coast and Pacific Place. Lam was also involved in the conceptual and detailed design of the dramatic extension to the Hong Kong Convention and Exhibition Centre.

Rocco Yim Suen-kee 嚴迅奇 (BA(ArchStud) 1974, BArch 1976) is regarded as one of the best young architects in Hong Kong. In 1990, he was elected Architect of the Year by the Hong Kong Artists' Guild. Over the years, he has won numerous international and local prizes and awards. The most outstanding was the First Prize Award at the Bastille Opera International Competition in Paris in 1983. He earned a citation at the Japan National Theatre International Competition in Tokyo in 1986 and an Honourable Mention at the Biblioteca Alexandrina International Competition in 1989. His designs that have won HKIA awards include the HKU Graduate House, Citibank Plaza, Lok Fu Shopping Centre II, Pak Sha O Youth Hostel and Mong Tung Wan Youth Hostel.

Bringing the Public into Architecture: Rocco Yim Suen-kee

"Architecture is not only about the utilisation rate, or the use of materials. It is about shaping the city. It is about how the building relates to the environment," says Rocco Yim Suen-kee. Yim advocates factoring the "public element" into a design to allow public access to a building so that it can enhance the quality of the total environment. Yim used this concept in his design of Lok Fu Commercial Centre and Citibank Plaza.

Yim designed a bamboo pavilion for the Festival of Vision, Berlin-Hong Kong that lasted from July to September 2000 at Haus der Kulturen der Welt in Berlin. Reviewers said that Yim's pavilion "echoes that of the curving Haus der Kulturen der Welt", and "juxtaposes the traditions of the East with those of the West".

Apart from his European ventures, Yim also maintains close connections with China. He keeps up academic exchanges with universities in China, including Tongji University and People's University. His company, Rocco Design, designed the Tianjin Exhibition Centre and the Hilton Hotel of Beijing.

Bernard Vincent Lim Wan-fung 林雲峰 (BA(ArchStud) 1979, BArch 1981, MSc(Urban Planning) 1985), now an academic at The Chinese University of Hong Kong and Principal of the Architecture Design and Research Group (AD+RG), has worked on numerous educational, government, housing and commercial

Chapter 5

developments. These include the Hong Kong Museum of History, Hong Kong Science Museum (Phase 1), Lingnan University Tuen Mun campus, and residential and community projects in Shanghai. Before joining the Chinese University and AD+RG, Lim was a director of P&T Group, formerly known as Palmer and Turner, one of the oldest and largest international architectural and engineering practices in Southeast Asia. Many of his projects have won awards for excellence in architectural design, energy efficiency and environmental sensitivity.

To many developers, cost-effectiveness has often been the major consideration in Hong Kong's architectural designs, with little attention given to quality of space, aesthetic value and the sustainable development of the community. Despite that, many HKU students and graduates have moved towards environmental friendly designs, and designs that integrate modern styles with local culture. Such ideas, however, are not always fully embraced by the government and private developers. The government tends to overuse standard designs for projects such as public housing, community centres, schools and markets. Nonetheless, there have been some encouraging signs recently such as design competitions for housing projects, the setting up of a Building Innovation Unit in the Buildings Department, and landprice exemption for environmental facilities. HKU graduates have made a significant contribution to these projects.

Steve Leung Chi-tien 梁志天 (BA(ArchStud) 1978, BArch 1981, MSc(UrbanPlanning) 1986) is one of the top interior designers in Hong Kong. He started his own business in 1988 and established Steve Leung Architects Ltd and Steve Leung Designers Ltd in 1997. He was among the 31 international designers who won the Andrew Martin International Award in 1999, an award deemed as the Oscar in interior design. His recent works include Symphony Bay, the Belcher's, and Sorrento.

Surveying

The history of surveying in Hong Kong dates back to 1843 with the arrival of the first Surveyor General from Britain. Local training, however, did not start until the 1960s when the first diploma course was offered. HKU offered the first degree in building (B Building) in 1975, and it was subsequently changed to Bachelor of Science in Quantity Surveying (BSc(QS)). Today, many HKU graduates hold senior positions in the surveying profession, while others pursue an academic career.



- Chan Choi-hing 陳財興 (BA(ArchStud) 1980, B Building 1981), Director, Levett & Bailey, Chartered Quantity Surveyors
- Chan Man-wai 陳文偉 (MSc(ConstProject Man) 1988, PhD 1998), Head of Estates, Hong Kong Institute of Education
- Cheung Tat-tong 張達棠 (BSc(QS) 1985), Managing Director, OLS International, HK
- Patrick Kwok Ping-ho 郭炳濠 (PDipSurv (RealEstDev) 1998), Executive Director, Henderson Land Development Co
- Lau Ping-cheung 劉炳章 (MSc(Const ProjectMan) 1990), Director, WTP (Hong Kong)

- Philip Lo Kai-wah 羅啟華 (BA(ArchStud) 1980, B Building 1981), Director, Levett & Bailey, Chartered Quantity Surveyors
- So Chee-sing 蘇志成 (BA(ArchStud) 1978, B Building 1979), Assistant General Manager, Henderson Land Development Co
- Gregory Tung Yau-ming 董友明 (BSc(QS) 1987), Director, James R Knowles (Hong Kong)
- Kenneth Wong Pak-keung 黃伯強 (MSc(ConstProjectMan) 1992), Director of Estates, HKU
- Peter Wong Tin-yu 黃天瑜 (BA(ArchStud) 1980, B Building 1981), Director, MDA Hong Kong, Quantity Surveyors and Construction Cost Consultants



Bernard Lim Wan-fung





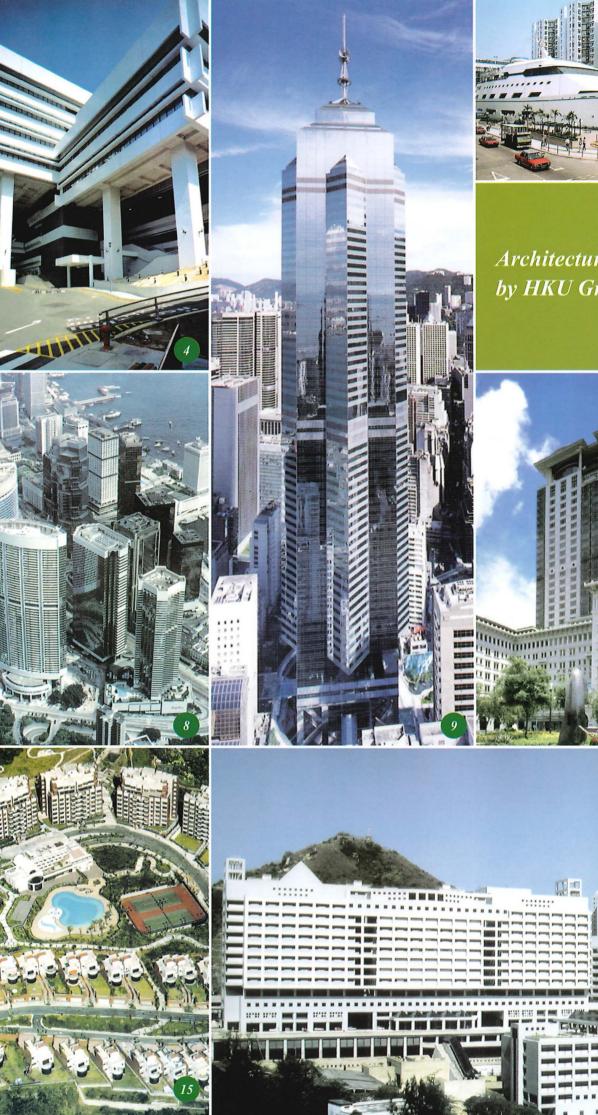














Architectural Works by HKU Graduates

> E-目前這個現在是

> > LLLL











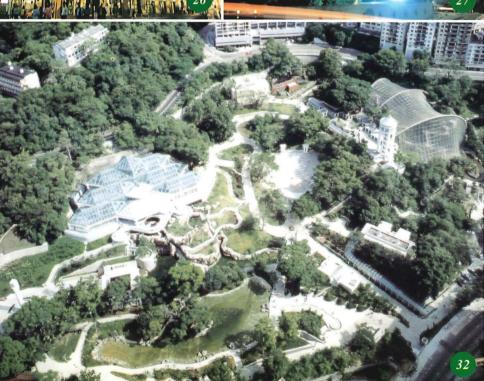
Male and the second second

20



Architectural Works by HKU Graduates







Architectural Works of HKU Graduates

- 1. CEF Life Tower, Andrew Lee King-fun (1956)
- 2. Citicorp Centre, Roger Wong Siu-wing (1970), Lam Wo-hei (1971) and Adam Leung Hoi-fat (1980)
- 3. Hang Seng Bank Headquarters Building, Jackson Wong Chak-sang (1955), Winston Sung Ham-hang (1970), Lam Wo-hei (1971) and Henry Ho Tai-hing (1977)
- 4. Main Library Extension of HKU, Jackson Wong Chak-sang (1955), Lam Wo-hei (1971), Ha Si-hung (1974) and Patrick Cheung Pui-tak (1984)
- Whampoa Garden, Jackson Wong Chak-sang (1955), Winston Sung Ham-hang (1970), Lam Wo-hei (1971), Robert Lam Ping-hong (1977) and Gallant Chan Ka-po (1985)
- 6. Hong Kong University of Science & Technology, Simon Kwan Sin-ming(1967)
- 7. Hong Kong Convention and Exhibition Centre Extension, Patrick Chung Sing-kit (1967), Winston Sung Ham-hang (1970), Lam Wo-hei (1971) and Ha Si-hung (1974)
- Pacific Place I & II, Jackson Wong Chak-sang (1955), Winston Sung Ham-hang (1970), Patrick Kwan Kwok-wah (1971). Lam Wo-hei (1971), Artur Auyeung Chi-king (1973), Eva Chan Kit-wah (1973), Kusol Im-Erbsin (1973), Michael Chan Tse-ho (1982), Nelson Chu Nai-fun (1982) and Johnnie Lai Yu-leung (1982)
- 9. The Center, Dennis Lau Wing-kwong (1970)
- 10. The Peninsula Hotel Extension, Rocco Yim Suen-kee (1976)
- 11. Graduate House, the University of Hong Kong, Rocco Yim Suen-kee (1976)
- 12. Wong Chuk-hang Complex for Elderly, Simon Kwan Sin-ming (1967)
- 13. Hong Kong Gold Coast, Lam Wo-hei (1971), Robert Lam Ping-hong (1977) and Josie Dee (1978)
- 14. The Hong Kong Baptist University, Bosco Ho Hin-ngai (1968) and Johnny Lee Chung-yiu (1968)
- 15. Savana Gardens, Tommy C.K. Ling (1969) and Victor Chan (1971)

- 16. Pamela Youde Hospital, Edward Ho (1963), Francis Wong (1971) and Silina Kwok (1982)
- 17. AIA Tower, Andrew Lee King-fun (1956), Peter Cho Wing-cheong (1979) and Angela Lee Lap-chi (1996)
- 18. No. 9 Queen's Road Central, Edward Ho (1963), Jim Tong (1970) and Ivan So (1980)
- 19. Himont Technical Centre of Tai Po Industrial Estate, Kenneth T.H. Chan (1972)
- 20. Gateway I & II, Harbour City, Patrick Chung Sing-kit (1967), Lam Wo-hei (1971), Nelson Chu Nai-fun (1982)and Margaret Wong Yin-wah (1993)
- 21. Kowloon Walled City Park, Pau Shui-hung(1967), Wong Shiu-kwan (1969) and Kwan Pak-lam (1974)
- 22. Lingnan University, Bernard Lim Wan-fung (1979)
- 23. Methodist Church, Dominic Kwan Wing-hong (1970)
- 24. Korean International School, Daniel Chi Wuh-cherng (1983)
- 25. Central Plaza, Dennis Lau Wing-kong (1970)
- 26. Lee Theatre Plaza, Dennis Lau Wing-kwong (1970)
- 27. Citibank Plaza, Rocco Yim Suen-kee (1976)
- 28. Kowloon Shangri-La Hotel, Jackson Wong Chak-sang (1955), Lam Wo-hei (1971) and Edmond Mok Yat-fan (1975)
- 29. Pacific Club, Tommy C.K. Ling (1969) and Victor Chan (1971)
- 30. Tierra Verde/ Maritime Square, Edward Ho (1963), Owen Tang (1973), Vivian Cheng (1982), Silina Kwok (1982) and Jim Ho (1985)
- Dragon Centre, Edward Ho (1963), Jim Tong (1970), Own Tang (1973) and Tony Tang (1989)
- 32. Hong Kong Park, Edward Ho (1963), Jim Tong (1970), Y.M. Mok (1974) and Allarakhia Mohsin (1983)
- 33. Times Square, Lam Wo-hei (1971), Arthur Auyeung Chi-king (1973), Josie Dee (1978), George Tam Tin-sui (1987) and Ringo Cheung Che-chung (1988)

Source: "Servicing and Shaping Hong Kong", 50th Anniversary, Department of Architecture, The University of Hong Kong 1950-2000 Note: year of graduation in parenthesis



Reclamation of West Kowloon: creation of new space

Urban Planning and Sustainable Development

Although the first Town Planning Ordinance of Hong Kong was enacted in 1939 and various government mechanisms for town planning emerged in the decades that followed, modern concepts of town planning, where social considerations are accommodated in physical construction, emerged only in the 1970s.

Chau Cham-son 周湛燊 (BArch 1956), the then Principal Government Town Planner (1978-1984) and the first Director of Buildings & Land (1986-1989), was instrumental in establishing a fully-fledged Town Planning Office in the 1980s with the modern concept of urban planning. The Planning Department was set up in 1990 and started a thorough review of the Town Planning Ordinance. Peter Pun Kwokshing 潘國城 (BA 1961, MA 1967, PhD 1980) was previously Director and Bosco Fung Chee-keung 馮志強 (BA 1969, MPhil 1973) is the current Director of the Department.

Chow Che-King 周子京 (BSc(Eng) 1955) started as a resident site staff and held the position of the Director of Territory Development



Chau Cham-son

Department when he retired in 1995. During his 40 years government service, he managed many major projects

including Tai Lam Chung dams, Chek Lap Kok Airport feasibility study, Tsing Ma Bridge design and new town developments at Sha Tin and Tseung Kwan O. The current Director is James Wong Hung-kin 黃鴻堅 (BSc(Eng) 1968).

The government started building new towns on the outskirts of Hong Kong in the 1950s, beginning with Kwun Tong and Tsuen Wan. A HKU graduate who has been heavily involved in the development of new towns is Francis Bong Shu-ying 龐述英 (BSc(Eng) 1964), who joined Maunsell Consultants in 1975 and directed projects for new towns in Shatin, Tai Po, Sheung Shui, Shek Wu Hui and Junk Bay.



Social considerations are accommodated in urban planning since the 1970s



Taking Engineering Consultancy into China: Francis Bong Shu-ying

Francis Bong Shu-ying is Chairman of Maunsell Consultants Asia Holdings, one of the world's largest urban development, infrastructure and environmental engineering consultancy firms, and a director of the AECOM Group, which merged with Maunsell in 2000.

Bong was the Project Engineer for the Ap Lei Chau Bridge in the 1970s and the Project Director for the Hong Kong Eastern Corridor in the early 1980s. He was also responsible for the overall planning and initial design of the Chek Lap Kok Airport.

Under his leadership, Maunsell became one of the two largest foreign



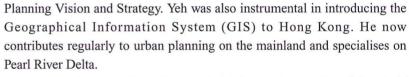
Ap Lei Chau Bridge

engineering consulting firms in China. His major projects in China include the principal consulting work for the Yangpu development project in Hainan, the dredging scheme for the Minjiang River in Fuzhou, the Urban Renewal Study of Shanghai (1983), and the design review and preparation of tendering documents for the first freeway in China – the Beijing-Tianjin-Tanggu Highway (1985).

Bong has also been involved in the training of young engineers for many years and advocates the human and environmental factors, including the interests of the minority in the overall engineering process.

In the early 1980s, when Hong Kong was rapidly developing its new towns, Anthony Yeh Gar-on 葉嘉安 (BA 1974), now Chair

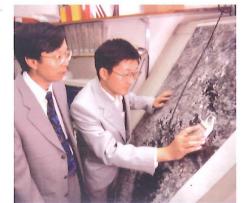
Professor of HKU's Centre of Urban Planning and Environmental Management (CUPEM), was instrumental in turning the planning objective from self-contained job opportunities to high connectivity among new towns and the city centre. He also served as a Specialist Adviser in developing the blueprint Hong Kong 2030 –



In a recent report, *Hong Kong: World City or Great City of the World* (2000), Ng Mee-kam 伍美琴 (BA 1983, MSc(UrbanPlanning) 1986) and Peter Hills, Professor and Director at CUPEM, benchmarked Hong Kong against other major cities in the world. It indicated that although Hong Kong performed well in terms of economy-related indicators, it compared unfavourably with other cities in social and cultural realms. It found Hong Kong to be strong in traditional economic activities and weak in knowledge-based and internationally competitive service industries. Their

findings are increasingly echoed by developments in reality.

Graduates of CUPEM have assumed key responsibilities in town planning and environmental management, in government, environmental protection organisations, planning consulting companies or academic institutions. Among them, Andrew Lam Siu-lo 林筱魯 (MSc(UrbanPlanning) 1989) is the Director of City Planning Consultants and is the immediate past President of Hong Kong Institute of Planners.



Anthony Yeh Gar-on (left)

Graduates in the Fields of Town Planning and Environmental Management:

- Elvis Au Wai-kwong 區偉光 (BSc(Eng) 1983, MSc(UrbanPlanning) 1988), Assistant Director of the Environmental Protection Department
- Au Wing-hay 歐永禧 (MSc(UrbanPlanning) 1985), Principal Transport Officer of the Transport Department
- Phyllis Li Chi-miu 李志苗 (BA 1981, MSc(UrbanPlanning) 1983) and Ling Kar-kan 凌嘉勤 (MSc(UrbanPlanning) 1983), Chief Town Planners of the Planning Department
- Mak Chai-kwong 麥齊光 (BSc(Eng) 1973, MSc(UrbanPlanning) 1985), Project Manager of the Territory Development Department
- John Ng Cheuk-yee 伍灼宜 (BA(ArchStud) 1973, BArch 1975, MSc(UrbanPlanning) 1986), Chief Architect of the Housing Department
- Stephen Tang Man-bun 鄧文彬 (BA(ArchStud) 1978, BArch 1980, MSc(UrbanPlanning) 1987), Chief Architect of the Architectural Services Department
- Tsang King-man 曾景文 (BSc(Eng) 1977, MSc(UrbanPlanning) 1985), Chief Engineer of the Transport Department
- Zina Wong Chun-ah 黃振亞 (BSocSc 1972, MSocSc 1983), Assistant Commissioner of the Transport Department
- Marco Wu Moon-hoi 鄔滿海 (MSocSc 1983), Deputy Director of the Housing Department

Yeung Yue-man 楊汝萬 (BA 1962) is internationally reputed for his work on urban development. He once worked for International Development Research Centre and is since known for his contributions in international development. His studies and consultancies extends from Hong Kong to China and Asia. He was once Registrar and is now Director of Hong Kong Institute of Asia-Pacific Studies at The Chinese University of Hong Kong.



Bridging different functional parts of the city



Integration of art and engineering: Tsing Ma Bridge and Ting Kau Bridge

Engineering

Many engineering graduates of HKU also play a significant part in the building of Hong Kong's physical infrastructure during a critical period of its development. There is hardly another city in the world that can offer such an opportunity for creative engineering. The scale, the speed and the variety of development, all located in such a small place, are unparalleled.

Examples of top executives in international engineering firms include: Raymond Ho Chung-tai 何鍾泰 (BSc(Eng) 1963), a former director of Maunsell, the first Chinese to hold the position of director in an international engineering firm in Hong Kong; Anthony Shum Chun-kin 岑鎮堅 (BSc(Eng) 1977), the Managing Director of Maunsell; Martin Kwong Hoi-chau; Edmund Leung Kwong-ho; Kenneth Lau To-koon 劉道貫 (BSc(Eng) 1969), previously Managing Director of Hyder and currently Executive Director of Paul Y Construction Co Ltd.

An Advocate for the Engineering Sector: Raymond Ho Chung-tai

Raymond Ho Chung-tai, a former director of Maunsell, was the first Chinese to hold the position of director in an international engineering firm in Hong Kong. In his 38-year career, much of that time was spent at Maunsell Consultants Asia Limited, where he was Partner and Senior Director for 18 years.

Ho has been involved in numerous projects including major infrastructure work of the new towns of Shatin and Tseung Kwan O and the new KCR railway stations from Kowloon Tong to Lo Wu. His engineering expertise has extended to high-rise commercial and residential buildings, bridges, highways, tunnels, hospitals and other major components of Hong Kong's infrastructure.

Ho is a member of the Legislative Council representing the Engineering Functional Constituency and was President of the Hong Kong Institute of Engineers from 1987 to 1988.

He has served as Council Chairman of City University of Hong Kong, Chairman of the Transport Advisory Committee, Member of the Basic Law Consultative Committee, Member of the New Airport Consultative Committee and Deputy Chairman of the Hong Kong Council of Academic Accreditation.

Tsang Chiu-kwan 曾昭群 (BSc(Eng) 1970), Executive Director of Ryoden, the leading engineering contracting firm, has been involved in many major vertical transportation (lifts and escalator) projects. He is also known for his contribution to the improvement of professional standards in the construction industry.





Standing up for the Profession: Tsang Chiu-kwan

Tsang Chiu-kwan helped form the Hong Kong Electrical and Mechanical Contractors' Association and was President from 1987 to 1993. The association was



instrumental in establishing standard legal procedures against non-payment risks. Tsang has also campaigned for the registration of construction workers in order to ensure site safety and project quality.

Tsang took Ryoden into the China market 20 years ago. Ryoden has carried out many vertical transportation projects for major Hong Kong and mainland buildings such as the Hong Kong International Airport and the Jing Mao Tower in Shanghai; and electrical and mechanical installation such as the Hong Kong Convention and

Exhibition Centre Extension, the MTR Tsing Yi Station and The Centre.

Engineer of Renaissance: Lee Chack-fan

Lee Chack-fan 李焯芬 (BSc(Eng) 1968, MSc(Eng) 1970), Chair Professor in Geotechnical Engineering at HKU, serves as a consultant and technical adviser to numerous energy and infrastructure projects in China and overseas. As an established engineer in Canada, he returned to Hong Kong in 1993. He brings in international perspectives in his consultancy work for the construction of the Three Gorges Dam of the Yangtze River. A member of the Provisional Construction Industry Co-ordination Board, Lee also serves on the Slope Safety Technical Review Board, advising the government on slope safety and landslip prevention issues. He played an instrumental role in setting up the Jockey Club Research and Information Centre for Landslip Prevention and Land Development. The Centre has developed cost-effective slope stabilisation measures as well as improved methods of slope design and quality assurance, Lee has completed a comprehensive assessment of the seismic risk of the Hong Kong region and carried out seismic hazard analysis for the Tsing Ma, Ting Kau and Kap Sui Mun bridges.

Lee is also an influencial figure in cultural development in Hong Kong. He is Chairman of the Centre for Promotion of Chinese Culture and is a member of the Culture and Heritage Commission. His profound knowledge of Buddhism is pivotal in the launching and development of Buddhism studies in the University.

Graduates Serving as Presidents of Hong Kong Institute of Engineers:

King Sing-yui 金新宇 (BSc(Eng) 1940, HonDSc 1981) (1958-1959) Chung Sze-yuen 鍾士元 (BSc(Eng) 1941, HonDSc 1976) (1960-1961) Raymond Ho Chung-tai 何鍾泰 (BSc(Eng) 1963) (1987-1988) James Chiu 趙雅各 (BSc(Eng) 1964) (1990-1991) Leung Tin-pui 梁天培 (BSc(Eng) 1967, MPhil 1982) (1993-1994) Edmund Leung Kwong-ho 梁廣灝 (BSc(Eng) 1967) (1995-1996) Francis Bong Shu-ying 龐述英 (BSc(Eng) 1964) (1997-1998) Chan Ching-chuen 陳清泉 (PhD 1982) (1999-2000) John Luk Wang-kwong 陸宏廣 (BSc(Eng) 1966, MSc(Eng) 1968, PhD 1982, LLM 1990) (2000-2001)

Joseph Chow Ming-kuen 周明權 (BSc(Eng) 1964) (2001-2002)



Vertical transportation system in the Hong Kong International Airport, provided by Ryoden



Lee Chack-fan (left) at a construction site of the Yang Tze River Three Gorges Dam

Environmental Protection and Education

One major aspect of Hong Kong's infrastructure development is the concern for the environment, not only as a social issue, but also as an essential factor in



Simon Chau Siu-cheong

sustainable development. The Department of Earth Sciences of HKU was founded in 1995 in direct response to the need for trained geologists, geophysicists, engineering geologists and environmental geologists in Hong Kong.

The first environmental group in Hong Kong, Conservancy Association (長春社), was set up as early as 1968. One of its founders is Sarah Liao Sau-tung 廖秀冬 (BSc 1973, MPhil 1977, PhD 1985). Liao has been Managing Director of EHS Consultants, an environment concern business, before joining the government as Secretary for Environment, Transport and Works in 2002. She was known for her environmental conscious

presentations during China's successful bidding in 2001 for the 2008 Olympics. The current Chairman of Conservancy Association is Albert Lai Kwong-tat 黎廣德 (BSc(Eng) 1980, MSocSc 1984).



Albert Lai Kwong-tat (third left, front) in Tibet

Simon Chau Siu-cheong 周兆祥 (BA 1970, MPhil 1977) is among the early pioneers committed to the environmental movement in Hong Kong. He championed the "Green" movement in books, newspaper columns and media interviews and has become a role model for leading a simple, green lifestyle. Chau is one of the founders of Green Power (綠色力量) (1988) and has been its Chairman for many years. In 1988, he also founded the Produce Green Foundation, running two organic farms as business units to support the work of Green Power. In 1995, Chau set up the Vegetarian Society of Hong Kong. He hopes to raise himself to a spiritual level, through prayers, yoga, qi gong and other activities, leading a simple life and environmental protection.

It was only in 1986 that the government established the Environment Protection

Department. The 1990s saw the more active participation of many environmental groups such as Green Power and World Wide Fund For Nature Hong Kong (WWF Hong Kong). There has also been an increasing concern in the community over pollution problems, especially air and water pollution. Many HKU graduates have joined these green groups and actively participate in the movement. Environmental protection, originally regarded as the idealistic slogan of an idealistic few, has become widely accepted in the community. In 1999, the government formally adopted the concept of sustainable development as a key policy objective.



Sarah Liao Sau-tung (right) and Deng Yaping 鄧亞萍

In 1986, the Chinese government started building a nuclear power plant at Daya Bay. Over 116 non-government organisations in Hong Kong formed an alliance in protest against the plant. The alliance was led by Harwood Fung Chi-wood 馮智活 (BSc 1979), a clergyman of the Hong Kong Sheng Kung Hui. This was one of the largest social campaigns in Hong Kong related to the environment.

The growth of environmental concerns in Hong Kong has also given the Kadoorie Farm a new mission. Gary Ades (PhD 1995) has successfully turned the farm into a centre for conservation and environmental education. Many HKU graduates have also contributed to the transformation of the farm.

Kadoorie Farm & Botanic Garden



The Kadoorie Farm was established in 1956 as an experimental and extension farm. Given the decline in farming in Hong Kong, in 1994, Gary Ades, known as the "Batman of Hong Kong" (because of his expert knowledge of Hong Kong bats), was placed in charge of transforming the farm into a centre for conservation and environmental education.

Now called Kadoorie Farm and Botanic Garden, it boasts a wealth of natural flora and fauna. Over half of Hong Kong's plants are now growing on its hillsides. Ades' conservation work includes the protection and propagation of rare and endangered native plants such as orchids and ferns, the propagation and care of native trees in forest restoration, and the rehabilitation of native animal species such as injured raptors, mammals and reptiles. He also runs a rescue centre for smuggled animals. Every year, over 100,000 people visit the farm.

In 1998, Ades set up a South China Biodiversity Team. In collaboration with scientists, institutes and government departments in China, they are assessing the biodiversity of forest reserves in South China and will develop a strategy to reverse the decline in forest biodiversity in the area.

Kadoorie Farm also houses many HKU PhDs and experts in Biology. They include Lawrence Chau Kam-chiu 周錦超 (PhD 1994), expert in plants and the ecology of fire; John Fellowes (PhD 1997), expert in ants and primates; Miguel Lau Wai-neng 劉惠寧 (PhD 1998), expert in amphibians and Romer's tree frogs; and Billy Hau Chi-hang 侯智恆 (BSc 1991, MSc(EnvMan) 1994, PhD 2000), expert in native trees. Other biology experts include Gloria Siu Lai-ping 蕭麗萍 (MPhil 1992), orchids; Vicky Lam Wing-yee 林詠怡 (MPhil 1999), trees and shrubs; and Wong Lun-cheong 黃倫昌 (MPhil 1999), birds.



Romer's tree frog, an endemic species that can only be found in Hong Kong



Gloria Siu (third right) at an expedition at Mulun Nature Reserve, Guangxi, 1998



Gary Ades (second left, front), known as the "Batman of Hong Kong"



Miguel Lau Wai-neng (second right), Graham Reels (MPhil 1994) (fourth), Lawrence Chau Kam-chiu (fifth), John Fellowes (sixth), Huang Rui-jiang (PhD student) (seventh) and Billy Hau Chi-hang (first left), all from the Department of Ecology and Biodiversity



Lew Young Lo-nin (right) at Mai Po

In the neighbourhood of the Kardoorie Farm, there is the University's Kardoorie Agricultural Research Centre where undergraduate training and postgraduate research are conducted.

While the Kadoorie Farm provides a mountainside ecology, Mai Po and Deep Bay are ideal as wet and marshland nature reserves and are known as a haven for migratory birds. Lew Young Lo-nin 楊路年 (PhD 1991) has been concurrently in charge of the Mai Po Ecology Centre and WWF Hong Kong for ten years. Due to WWF and Young's efforts, 1,500 hectares of wetlands were formally designated a Wetland of International Importance in 1995 under the

Ramsar Convention, an intergovernmental treaty to promote wetland conservation. Since 1995 Young has successfully expanded the reserve from an emphasis on protecting birds to biodiversity and ecology in general, covering fish, shrimps, mangroves, water quality and insects. Mai Po is also famous for its shrimp farms,

or gei-wai (基圍), which are good examples of sustainable economic uses. In the past decade, Young has significantly multiplied the number of gei-wai. As an education centre, the Mai Po Centre and Natural Reserve attracts over 400 groups of primary and secondary students annually.

Daniel Chan Kwong-on 陳 鑛 安 (MSc 1965), at HKU's Kadoorie Agricultural Research Centre and

Daniel Chan Kwong-on

Department of Zoology, set up a gene bank to conserve rare native chickens from South China. From this valuable resource, a selective breeding programme was established to produce a commercial hybrid with superior meat quality in terms of flavour and texture. This is now endorsed by the Agricultural Fisheries and Conservation Department and local chicken farmers and marketed under the name of Ka Mei chicken (嘉美雞).

Another HKU graduate who has devoted his career to environmental protection and education is Ho Kin-chung 何建宗 (PhD 1991). Ho is an expert in red tides and water pollution. In 1993-1994, Ho visited the Great Wall Research Station of the PRC in Antarctica and took three expeditions to the North Pole in the late 1990s to conduct global research on harmful marine algae and biogeography. He has been the Vice-Chairman of the China Polar Museum Foundation and Chairman of Green

Power Hong Kong since 1997.

Man Chi-sum 文志森 (PhD 1996) is Ho's associate in Green Power. He is an expert on sustainable development in China, particularly environmental policy and planning and has been the Chief Executive of the group since 1998. In its early years, Green Power concentrated on promoting a green and healthy lifestyle. Today, Ho and Man focus more on "Education in Environment". Teachers and students are encouraged to undertake on-site learning about the environment and tours have been organised for Hong Kong students to study ecology in Sabah and South Africa. Man and Ho also give practical on-site advice to schools on how to implement green measures.



Man Chi-sum



Ho Kin-chung as student

Hung Wing-tat 熊永達 (PhD 1996) is an advocate of green transport policies. Since the early 1990s, he has promoted the concept of a pedestrian city with a minimum number of roads. He states that since roads take up nearly a third of the



Hung Wing-tat

available land, they are the main cause of severe air and noise pollution. His plan for all-weather, comfortable pedestrian walkways, with shopping facilities alongside encourages short-to-medium distance walking. Some of Hung's ideas will be realised in the government plan announced in 2000 to build a green city on the old Kai Tak airport site.

As an academic, Jim Chi-yung 詹志勇 (BA 1975, MPhil 1978) has been known for his study of urban trees. Sometimes known as the "King of Trees" (樹王), Jim is particularly interested in the multiple impacts of urban growth on nature, and the

development of urban environment with natural elements. His research has international implications, but his findings are also translated into the planning, planting and management of the urban forest in Hong Kong, both by the government and by the private sector. Jim is currently the Dean of Arts at the University.

There are many other academics, whose research are basic and have world-wide



Yam Wing-wah

implications, but also bears significant contributions to local developments. Among them are two world-renowned chemists Che Chi-ming 支志明 (BSc 1978, PhD 1982), who is at the forefront of Green Chemistry, and his student, Yam Wing-wah 任詠華 (BSc 1985, PhD 1988). Che was the first Hong Kong scientists elected, in 1995, Fellow of the Chinese Academic of Sciences. He was the youngest among all Fellows. Yam was honoured by the same prestigious Fellowship in 2001, again as the youngest member. Both of them are Chair Professors at HKU.



The Sweet Gum (liquidambar formosana) (楓香), by Lily Pond, about 60 years old, is one of the champion trees in Hong Kong. The tree has accompanied numerous HKU alumni and alumnae, especially during examination times and romantic sojourns.



Che Chi-ming



The Mai Po Marshes Nature Reserve



A student visit to Mai Po, 2001

Swire Institute of Marine Science

Besides Mai Po, WWF Hong Kong in collaboration with the Swire Institute of Marine Science (SWIMS), and therefore its graduates, has brought about very significant impacts on marine ecology of Hong Kong. The Institute, founded in

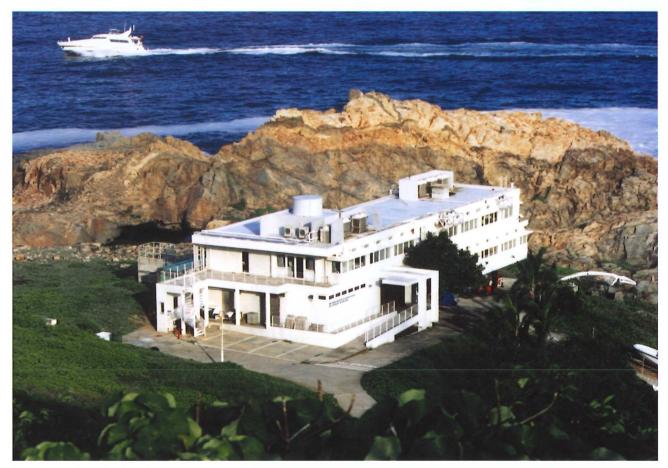


Laboratory, Swire Institute of Marine Science

1990, is strategically situated on the shores of Cape D' Aguilar (Hok Tsui Wan, Hong Kong's first marine reserve) of the Hong Kong Island. Its impact include the enactment of the Marine Park Ordinance which makes Hoi Ha Wan Hong Kong's first protected Marine Park, and of the Environmental Impact Assessment Ordinance which caused recently KCRC to change the Long Valley plans, as well as the role of Mai Po in sharing with school teachers so they may inculcate their students with these environment protection concepts. Its impact has extended also to China - Mai Po trains wetland conservationists for the mainland and acts as consultant to many projects including saving the panda in Wulong Conservation.

The Institute has a wide range of impacts on the ecology of Hong Kong. Lee Shing-yip 李成業 (BSc 1982, MPhil 1985, PhD

1989) works with WWF Hong Kong on mangrove ecology at the Mai Po Marshes Nature Reserve. Peter R.J. Collison (PhD 1997) made breakthrough in the study of the growth and reproduction of corals. He is among the research group who has



SWIMS at Cape D' Aguilar

established an experimental artificial reef at Hoi Ha Wan. Lindsay J. Porter (PhD 1999) and Edward M. Parsons (alias Chris Parsons) (PhD 1997) are pioneers in the study of Chinese white dolphin starting from late 1993. Winnie Tang Shuk-ming 鄧淑明 (BA 1992, PhD 1999) established a marine coastal Geographic Information



System (GIS) database with the aim of creating conservation maps and a management strategy for Hong Kong's shores and coastal seas. Tang is General Manager, ESRI Hong Kong which specialises on GIS and serves Greater China.

Besides, David Dudgeon (PhD 1981) is a specialist in the ecology of freshwaters. He is currently Head of the Department of Ecology and Biodiversity, which has been the first in Hong Kong to teach ecology and the first to feature environmental protection in its academic programmes.

HKU students organised the International Youth Summit with the theme of sustainable development in 2001.

The Observatory

The Hong Kong Observatory (HKO), formerly the Royal Hong Kong Observatory, has gained considerable international reputation on weather forecast and meteorology. The first HKU graduate joining the HKO is perhaps Chin Ping-chuen 陳秉泉 (BSc 1950, PhD 1971), who has become famous internationally. The first local director of HKO was Patrick Sham Pak 岑柏 (BSc(Gen) 1957, BSc(Sp) 1958) (1983-1995). The current Director of HKO, since 1997, is Lam Hung-kwan 林鴻鋆 (BSc(Gen) 1969, BSc(Sp) 1970, PhD 1983). Most recently Johnny Chan Chung-leung 陳仲良 (BSc 1974, MPhil 1976), an academic at City University of Hong Kong specialising in typhoons and monsoons, who used to be a member of HKO, was invited to head Shanghai's Typhoon Research Institute.