建設與環境



THE HONG KONG
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香港理工大學

FACULTY OF CONSTRUCTION AND ENVIRONMENT

CONSTRUCTION & ENVIRONMENT

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建設及環境學院院刊



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Dean's Message 院長的話



2017 will be remembered for many celebrations held in honour of the 80th anniversary of PolyU and the Faculty of Construction and Environment (FCE), from the FCE Distinguished Lecture and Distinguished Chair Professor Inaugural Lecture Series to the Times Higher Education (THE) Innovation and Impact Summit where we showcased our

strengths in sustainable urban development to a Research Open Day organized by our Department of Civil and Environmental Engineering (CEE). Moreover, on 2 separate occasions, our Faculty was graced by the respective presence of Mr Chan Tze-Ching, the Council Chairman of PolyU, as well as Prof. Timothy W. Tong, President of PolyU, and Prof. Philip Chan, Deputy President and Provost, both of whom took time out of their busy schedules to visit our Department of Building and Real Estate (BRE). The start of the new year also saw the reunion with BRE of some of its alumni from the Class of 1967.

It gives me great pleasure to see the efforts of our staff, students, and alumni rewarded. PolyU's Distinguished Knowledge Transfer Awards, President's Awards for Excellent Performance/ Achievement, Outstanding Professional Services Awards, Outstanding Student Awards, and Outstanding Alumni Awards all give recognition where it is deserved. In addition, our academics have received numerous awards nationally and internationally, such as a State Scientific and Technological Progress Award, a Natural Science Award (first-class) of the Ministry of Education of China, a Global Innovation Award, and a Gold Medal from the 45th International Exhibition of Inventions of Geneva. Besides winning 28 competitive grants from the RGC General Research Fund (GRF) and 5 from the Early Career Scheme (ECS) this year, the achievements of our academic staff have no doubt contributed to our enviable positions in the QS World University Rankings by Subject 2017, which you will have a chance to read in detail on the next page.

To facilitate more collaborative research, a series of research salons was launched early this year. A major direction of the Faculty is integrating its research areas in energy, environment, urban hazards mitigation and urban informatics with its core area in construction for sustainable urban development and smart cities. By conducting high-impact multidisciplinary group research, I believe that the Faculty is well positioned to become a world leader in the construction, environment and sustainable urban development fields.

Ir Prof. You-Lin Xu
Dean of Faculty of Construction and Environment
Yim, Mak, Kwok & Chung Professor in Smart Structures
The Hong Kong Polytechnic University

2017 將是為人銘記的一年:在這一年,有連串慶祝理大和建設及環境學院成立八十周年的活動,包括本院舉辦的「傑出講座及傑出講座教授就職講座系列」、展示我們在可持續都市發展學科研實力的「泰晤士高等教育創新與影響高峰會」,以及土木及環境工程學系舉辦的「科研開放日」。我們亦很高興理大校董會主席陳子政先生,以及校長唐偉章教授和常務及學務副校長陳正豪教授,在百忙中抽空分別視察了學院和建築及房地產學系。另外,建築及房地產學系1967年畢業班的校友在年初重返校園、和我們共聚一堂於慶畢業五十周年,實屬難得。

我們的同事、學生和校友努力不懈,在理大的「卓越知識轉移項目獎」、「校長特設卓越表現/成就獎」、「傑出專業服務獎」、「卓越學生獎」及「傑出校友獎」中屢獲殊榮,可說是實至名歸,令我深感欣慰。本院學者不但獲校方嘉許,更勇奪無數國家及國際級獎項,如「國家科學技術進步獎」、國家教育部「自然科學獎」(一等獎)、「全球創新獎」,以及第四十五屆日內瓦國際發明展金獎。本年度,本院學者合共得到研資局轄下的「優配研究金計劃」二十八項撥款及「傑出青年學者計劃」五項撥款,足證成績斐然,對我們躋身2017年QS世界大學(分科)排名榜前列實在居功不少。(詳情請參閱本刊內文)

為鼓勵協作研究,本院年初安排了一系列「研究沙龍」,而我們的大方向之一,就是把有關能源、環境、城市減災及城市信息學的研究,與建設可持續都市及智能城市的核心研究融匯結合。我深信透過進行具影響力的跨領域協作研究,本院日後必可在建設、環境及可持續都市發展學上領導全球。

徐幼麟教授工程師 香港理工大學建設及環境學院院長 嚴、麥、郭、鍾智能結構教授

QS World University Rankings by Subject 2017

In the latest Quacquarelli Symonds (QS) World University Rankings by Subject, PolyU ranked 10th in a tie with the Swiss Federal Institute of Technology (ETH Zurich) for the study of Civil and Structural Engineering. Not far behind is the subject of Architecture and Built Environment at PolyU, which was ranked 15th. Both the subject areas are well represented by the academic expertise in the Faculty of Construction and Environment. In terms of one objective measure, namely H-index citations, PolyU tops the world in these two subject areas.

Launched in 2011, the annual QS World University Rankings by Subject is a comprehensive guide to a range of subjects. The rankings highlight the world's top universities in 46 subjects, based on academic reputation, employer reputation, and research impact.



2017 QS 世界大學(學科)排名榜

在最新公佈的QS世界大學(學科)排名榜上,理大與 瑞士聯邦科技學院在土木及結構工程學領域並肩躋身十 強。另外,理大在建設及建築環境學亦排名第十五,成 績驕人。在這兩個學術範疇,建設及環境學院均匯聚了 不少學者和專家;以統計論文獲引述次數的客觀指標H-指數而言,理大在這兩個學科更是全球之冠。

QS世界大學(學科)排名榜於2011年設立,資料非常全面。它涵蓋四十六個學科,每年都會根據院校的學術聲譽、僱主意見及科研影響力,公佈全球一流學府的名次。

EC/RGC Collaboration Scheme 2016/17



Dr Wang

Dr Yu-hong Wang of the Department of Civil and Environmental Engineering (CEE) has been awarded \$2,522,619 from the European Commission/Research Grants Council (EC/RGC) Collaboration Scheme. He will be developing new integrated porous pavement systems and implementing demonstrations of urban nature labs in Hong Kong

for 4 years with Prof. Mimu Airaksinen of Teknologian tutkimuskeskus VTT Oy in Finland.

2016/17年度歐洲委員會與研資局合作計劃

土木及環境工程學系的王予紅博士,最近獲「歐洲委員會與研資局合作計劃」資助二百五十二萬二千六百一十九元與芬蘭Teknologian tutkimuskeskus VTT Oy (VTT技術研究中心有限公司) 的Mimu Airaksinen 教授合作,在未來四年研發創新的綜合多孔路面系統,並在香港的城市環境進行試驗。

Structural Health Monitoring System Wins National Award



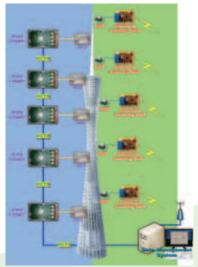
A mega-structure diagnostic and prognostic system for the Guangzhou New TV Tower has won a 2016 State Scientific and Technological Progress Award (second-class) for its developers. The good news was announced by the National Office for Science and Technology Awards in Beijing. Led by Prof. Yi-qing Ni of the Department of Civil and Environmental Engineering (CEE), the research integrates the use of sensors, communications, signal processing, and structural analysis to provide comprehensive services related to structural health monitoring and structural maintenance. Not only can the system prevent disasters by locating structural atrophy and damage, it can also assess structural safety right after a disaster has taken place.

For 5 years, the system monitored the TV Tower during its construction and in-service phases. With 16 types of more than 700 advanced sensors to continuously monitor the environmental factors and behavior of the structure in real-time, the system has effectively guaranteed the structure's safety and reduced its long-term operational and maintenance costs.

結構健康監測系統獲國家級獎項

國家科學技術獎勵工作辦公室傳來喜訊:為廣州新電視塔開發大型結構診斷及預測系統的科研人員獲頒2016年「國家科學技術進步(二等)獎」。此項研究由土木及環境工程學系倪一清教授領導,綜合應用傳感、通訊、信號處理及結構分析等技術,提供進行結構健康監測及維護所需的全面支援。該系統不但可通過監測及早發現結構退化及損壞的構件以預防災難發生,亦能在出現極端事件後立即評估結構是否安全。

在過去的五年中,該系統在廣州新電視塔施工期間 和啟用後一直持續運作,它運用十六種、共七百多個先 進傳感器持續實時監測環境因素及建築物的結構狀況, 有效保障其結構安全並減少運作及維修的長期開支。



The structural health monitoring system at the TV Tower in Guangzhou

Gold Medal for CEE Scholars at International Exhibition of **Inventions**

At the 45th International Exhibition of Inventions of Geneva held from 29 March to 2 April 2017, research on upcycling wood waste into particleboards by CO2 curing and adding low-carbon cement was honoured with a gold medal. Led by Dr Daniel Tsang, Mr Lei Wang (PhD student), and Prof. Chi Sun Poon of the Department of Civil and Environmental Engineering (CEE), the research developed an innovative and low-carbon technology using magnesia cement and carbon dioxide curing to upcycle wood waste into eco-friendly cementbonded particleboards. With many advantages over conventional materials such as thermal and acoustic Dr Tsang (right) with Mr Wang at the exhibition insulation, PolyU's eco-



friendly particleboards are excellent for use as interior wall panels or outdoor noise barriers.

土木及環境工程學系學者奪國際發 明展金獎

由土木及環境工程學 系團隊研發的低碳水泥刨花 板,在2017年三月二十九 日至四月二日於日內瓦舉行 的第四十五屆國際發明展上 榮獲金獎。該研究由曾超華 博士、王磊先生(博士生)及 潘智生教授領導,採用嶄新 的二氧化碳養護法,把加入 氧化鎂水泥的廢棄木材轉化 成環保水泥刨花板,隔熱及 隔音效果較傳統材料更為理 想,特別適合用作室內耐火 裝飾牆板和室外隔音板。

Natural Science Award for CEE Academic



Prof. Jianhua Yin

For producing outstanding results from their collaborative scientific research on a unified hardening constitutive theory for soils, Prof. Jianhua Yin of the Department of Civil and Environmental Engineering (CEE) and his 4-member team of researchers from Beihang University and Shanghai University have scored a 2016 Natural

Science Award (first-class) from the Ministry of Education. They were honoured in a presentation ceremony organized by the Beijing-Hong Kong Academic Exchange Centre on 25 May 2017.

土木及環境工程學系學者獲自然科

土木及環境工程學系的殷建華教授,聯同北京航 空航天大學及上海大學的四位科研人員,在研究土的統 一硬化本構理論上取得卓越成果,並獲國家教育部頒發 2016 年度高等學校科學研究優秀成果獎(科學技術)。 團隊於京港學術交流中心在2017年五月二十五日舉辦的 儀式上領受獎項。



Prof. Yin (left) with his award

Global Innovation Award for BSE Academic

At the TechConnect World Conference and Expo 2017 held in Washington, D.C. recently in May, Dr Lin Lu of the Department of Building Services Engineering (BSE) was honoured with a Global Innovation Award for her multi-functional nano-coating for glass. With its thermal insulation and photocatalysis properties, the superhydrophilic self-cleaning coating not only breaks down organic pollutants, but also blocks over 90% of near-

infrared light and 99% ultra-violet light.

Developed mainly with nanoscale TiO2 and Cesium Tungsten Bronze mixture particles, the highly costefficient coating can be widely used in building glass curtains (including shopping malls, offices), smart homes, aircrafts etc. Opportunities to commercialize this product are being actively explored with multinational companies.



Dr Lu with her award

屋宇設備工程學系學者獲「全球創 新獎 |

在五月於美國華盛頓舉行的「2017年TechConnect世界創新會議暨博覽會」上,屋宇設備工程學系的呂琳博士憑其團隊研發的多用途玻璃納米塗料奪得「全球創新獎」。此塗料有保溫隔熱和光催化特性,兼具自潔功能,不但可分解有機污染物,更能阻擋逾90%近紅外線及99%紫外光。

得獎塗料的主要原料是二氧化鈦納米粒子及銫鎢青銅混合物顆粒,成本效益極高,可廣泛用於建築物的玻璃幕牆(包括商場及商廈)、智能家居、飛機等等。正積極與跨國公司探討將塗料商業化的機會。

Ceremony for The President's Awards for Excellent Performance/Achievement 2015/2016, Faculty/School Awards of 2015/16 & 2014/15

A presentation ceremony for The President's Awards for Excellent Performance/Achievement 2015/2016 as well as the Faculty/ School Awards 2015/2016 and 2014/2015 was held on the evening of 12 May 2017 at the Hotel ICON. It was officiated by Prof. Timothy W. Tong, President of PolyU, and Prof. Philip Chan, Deputy President and Provost of PolyU. Several academics from the Faculty of Construction and Environment (FCE) were honoured at the event.

Receiving Faculty/School Awards of 2015/2016 were Atty. Stephen Mau of the Department of Building and Real Estate (BRE) in the Teaching category and Dr Ming-yin Chan of the Department of Building Services Engineering (BSE) together with Mr Vincent Luk, Director of Facilities Management, and Mr Jeffrey C.T. Wong, Senior Facilities Manager, in the Services (Team) category. The individual Faculty/School Awards of 2014/2015 went to Ir Dr Wallace Lai of the Department of Land Surveying and Geo-Informatics (LSGI) in the Teaching category and Prof. Hai Guo of the Department of Civil and Environmental Engineering (CEE) in the category of Research and Scholarly Activities. A team award in the Teaching category was also presented to Dr Charles Wong, Prof. Xiaoli Ding, Prof. Esmond Mok, Prof. Janet Nichol, and Miss Ran Zhang, who are all from LSGI, as well as Mr Roy Kam of the Educational Development Centre.

Awardees from FCE were congratulated by Prof. You-Lin Xu, Dean of FCE.

2015/2016「校長特設卓越表現/成就獎」暨2014/15 及2015/16「學院特設卓越表現/成就獎」頒獎禮

2017年五月十二日晚上,理大於唯港薈教學酒店舉辦2015/2016「校長特設卓越表現/成就獎」暨2014/15及2015/16「學院特設卓越表現/成就獎」頒獎禮,由校長唐偉章教授及副校長陳正豪教授主禮,建設及環境學院多位學者均獲得嘉許。

榮獲2015/2016年度學院獎項的同事,有建築及房地產學系的繆嘉榮律師(教學組別)及屋宇設備工程學系的陳銘賢博士(服務(團隊)組別)。陳博士的組員包括物業管理總監陸永樁先生及高級物業經理Jeffrey C.T. Wong先生。獲學院頒發2014/2015年度個人獎項的同事有土地測量及地理資訊學系的賴緯樂博士工程師(教學組別),以及土木及環境工程學系的郭海教授(科研及學術活動組別)。由幾位土地測量及地理資訊學系學者:黃文聲博士、丁曉利教授、莫志明教授、李真教授及張然小姐組成的團隊,則在2014/2015年度教學組別獲頒團隊獎項,同隊成員還有教育發展中心的甘振揚先生。

各得獎同事均獲院長徐幼麟教授衷心祝賀。



At the award ceremony



At the award ceremony

Outstanding Professional Services Awards 2016

On 14 February 2017, a ceremony for the Outstanding Professional Services Awards 2016 was held. Organized by PolyU's Technology and Consultancy (PTeC) Co. Ltd., the awards honoured departments and staff in consultancy activities. The Department of Land Surveying and Geo-Informatics (LSGI) won the Maximum Staff Participation Award with the highest percentage of academic staff participation in consultancy projects during the financial year, while the Department of Civil and Environmental Engineering (CEE) received a Merit Award in the Most Active Department category with the second highest aggregate invoiced value during the financial year for consultancy projects undertaken via PTeC.

The Most Active Consultant Award was won by Prof. Siu Lai Chan of CEE, while a Merit Award in the same category went to Prof. Ya-ping Du of the Department of Building Services Engineering (BSE). Individual awards were also given to Dr Daniel Tsang of CEE and Dr Johnny Wong of the Department of Building and Real Estate (BRE), who respectively won the Most Active New Consultant Award and a Merit Award in the same category.

The Multi-departmental Participation Award was won by a 4-strong team that monitored and evaluated the performance of innovative green technology under trial of a pilot green transport fund. Dr Wing-tat Hung of CEE was one of its members. A Merit Award went to another team for the provision of consultancy services to the Construction Industry Council on the strategy for management and reduction of construction and demolition waste in Hong Kong. Its members included Prof. Chi-sun Poon of CEE, Dr Patrick Lam of BRE, Dr Ann Yu of BRE, and Dr Lam-wah Cheung of CEE.

卓越專業服務獎 2016

理大科技及顧問有限公司(PTeC)於2017年二月十四日舉辦頒獎禮,嘉許在2016財政年度內提供卓越專業顧問及諮詢服務的學系和同事。土地測量及地理資訊學系憑學術人員參與顧問項目的比率最高,在頒獎禮中勇奪「最高比率員工參與獎」;土木及環境工程學系亦不遑多讓,成為「最活躍學系獎」優異獎得主。該系透過PTeC承接的顧問項目總金額,在芸芸學系中高躆次席。

個人獎項方面,「最活躍顧問獎」得主是土木及環境 工程學系的陳紹禮教授;屋宇設備工程學系的杜亞平教 授則在同一組別贏得優異獎。另外,大會還設有「最活 躍新進顧問獎」,分別由土木及環境工程學系的曾超華博 士,以及建築及房地產學系的黃國偉博士獲得大獎及優 異獎。

數位本院學者更榮獲「跨學系參與獎」。獲得大獎的四人團隊獲政府的綠色運輸試驗基金資助,監測及評估創新環保科技的績效,而其中一位成員,就是土木及環境工程學系的熊永達博士。另外,由潘智生教授(土木及環境工程學系)、林俊業博士(建築及房地產學系)、余帙芸博士(建築及房地產學系)及張林華博士(土木及環境工程學系)組成的團隊,亦在這個組別贏得優異獎。幾位學者就管理及減少香港建築和拆卸廢料的策略,向建造業議會提供了顧問服務。

Highly Commended Award for CEE Researchers

A research team led by Dr Songye Zhu from the Department of Civil and Environmental Engineering (CEE) has won a Highly Commended Award in the Digital Innovation category from the International Innovation & Research Awards 2016 organized by the Chartered Institute of Building (UK). In collaboration with Hong Kong's Hospital Authority and Chevalier (Construction) Co., the team has developed the first real-time construction vibration monitoring, assessment and alarm system in Hong Kong by leveraging the recent advances in sensing and software techniques. This system has been successfully implemented in Hong Kong's Blood Transfusion Service (BTS) Headquarters Extension Project since 2015.

土木及環境工程學系科研人員勇奪 殊榮



Dr Zhu

以土木及環境工程學系朱松曄博士為首的研究人員,在英國皇家特許建造學會主辦的2016國際創新及研究獎中勇奪「數碼創新組別」優異獎。團隊與香港醫院管理局及其士(建築)有限公司合作,運用先進的傳感、信號處理及軟件技術,研發了香港首個實時施工震動監察、評估及預警系統,並於2015年起成功

應用於香港紅十字會輸血服務中心總部擴建工程。

HKIPM Project Management Achievement Awards 2016

At the annual dinner of the Hong Kong Institute of Project Management (HKIPM) on 27 April 2017, Dr Daniel Chan, Associate Head (Teaching and Learning) and Associate Professor of the Department of Building and Real Estate (BRE), was honoured with a Project Management Achievement Award in the research category for his empirical study exploring the application of Pay for Safety Scheme in the construction industry of Hong Kong. His research team included Ir Prof. Albert Chan, Head of BRE, and Ms Tracy Choi, Research Associate.

香港項目管理學會「項目管理成就大獎」**2016**

在2017年四月二十七日的香港項目管理學會週年晚宴上,建築及房地產學系副系主任(教務及學務)兼副教授陳煒明博士獲頒研究組別的「項目管理成就大獎」。其實證研究旨在探討「支付安全計劃」在香港建造業的應用情況,研究團隊成員包括該系主任陳炳泉教授工程師及同系的研究人員蔡雅怡小姐。



Dr Chan (left) receiving his award

BRE Visiting Scholar Wins National Funding for Major Projects



Prof. Li

A visiting scholar in the Department of Building and Real Estate (BRE) has won funding for major projects from the National Social Science Foundation. Prof. Ying Li is a Professor in the School of Ethnic Minorities Culture at Yunnan Minzu University who is currently researching the literature of ethnic minorities from the

perspective of knowledge management with Dr Patrick Fong, Associate Head of BRE (Partnership), which is one of the units collaborating on the major projects. Dr Fong is leading a sub-project to preserve the culture, literature, language and architecture of the Dai, the Wa, and the Jingpo cross-border ethnic groups in a comprehensive repository, sharing and connecting with other like-minded researchers both within and outside China.

建築及房地產學系訪問學人獲國家 社科基金重大招標項目撥款

建築及房地產學系訪問學人李瑛教授,最近喜獲國家社科基金重大招標項目撥款。李教授是云南民族大學民族文化學院的教授,現正與建築及房地產學系副系主任(協作)方識華博士合作,從知識管理角度研究少數族裔的文學成果。這個由方博士領導的子項目,題名:傣族、佤族、景頗族文學研究成果資料集成,旨在全面保育少數民族的文化、文學、言語及建築,連結國內外的有志科研人員。



Findings from Heat Stress Studies Adopted by CIC

Research findings from the anti-heat stress studies led by Prof. Albert Chan, Head of the Department of Building and Real Estate (BRE), have been adopted in the latest reference materials by the Construction Industry Council (CIC) on Construction Site Welfare, Health, and Safety Measures. In addition to an anti-heat stress uniform designed by Prof. Chan's research team for construction workers, the studies recommended regular rest periods for workers to reduce exposure to hot weather, including an extra 15-minute break for the summer months from May to September. This mention by the CIC testifies to the impactful research done by Prof. Chan and his team.



Prof. Chan (middle)

抗熱研究的建議獲建造業議會採納

建造業議會最新出版的《建築工地福利、健康和安全措施參考資料》,採納了建築及房地產學系在其抗熱研究中提出的建議。在系主任陳炳泉教授領導下,研究團隊為建築工人設計了抗熱工作服,還建議讓後者在酷熱天氣下定期休息,並於五月至九月夏季期間額外增設十五分鐘小息,減低中暑風險。陳教授團隊的研究對香港建造業的健康安全影響深遠。

Joint Research Advocates Potential of Solar Energy

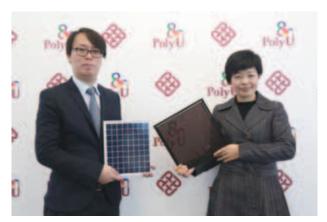
Two joint studies for public policy research by Dr Charles Wong of the Department of Land Surveying and Geo-Informatics (LSGI) and Dr Lin Lu of the Department of Building Services Engineering (BSE) have found that about 75% of buildings' rooftops in Hong Kong were suitable for implementing solar photovoltaic (PV) systems. If they were all installed for that purpose, they could supply about 10% of electrical power for the city's consumption, reducing 3 million tons of greenhouse gas emissions from local power plants accordingly every year.

Beginning in 2013 and lasting for more than 2 years, the study used geographic information system and remote sensing technology to calculate the buildings' overall potential for generating electricity based on an estimate of the unused building rooftop areas that could be installed with solar PV systems. Not only did the study find that 40% to 50% of days in 2013 were sunny in Hong Kong, it also noted the feasibility for more than 230,000 buildings here to take advantage of solar PV systems. The total surface area of the buildings' roofs was between 2,800 and 3,900 hectares, which is the equivalent of 147 to 200 Victoria Parks.

According to Dr Wong, the utility rate of the rooftops of commercial buildings along the harbour from Central to Wanchai, as well as those of several landmark structures such as the Cultural Centre, for installing solar PV boards could be as high as 90%. Dr Lu added that the electricity cost from roof-mounted solar PV systems is still expensive due to high local installation costs, the energy return on investing in rooftop solar PV systems is 3 years at most. Based on the 25-year life-span of a solar PV module, it is estimated the electrical power generated after the first 3 years will be free and will not have any pollution associated with it. Moreover, Dr Lu said the Hong Kong government could consider opening the market for solar PV systems from the mainland to reduce their installation costs. The study has been widely reported in the local press such as Ming Pao Daily News, Sing Tao Daily, and Ta Kung Pao.

聯合研究倡研發太陽能潛力

由土地測量及地理資訊學系的黃文聲博士,以及 屋宇設備工程學系呂琳博士聯合進行的兩項公共政策研 究顯示:香港約四份之三建築物的天台都適合安裝太陽 能光伏發電系統,假若事成,可供應全港所需約一成電 力,每年減少本地發電廠排放三百萬噸溫室氣體。



Dr Wong (left) and Dr Lu (right)

兩項研究均於2013年展開,歷時超過兩年。研究 人員應用了地理信息系統及遙感技術來估算全港可供裝 置太陽能板的樓宇天台空間,進而評估以這種方法發電 的潛力。以2013年為例,他們發現香港天晴的日子多 達四至五成,而適合在天台安裝太陽能板的樓宇則超過 二十三萬幢,總天台面積介乎二千八百至三千九百公 頃,相等於一百四十七至二百個維多利亞公園。

黃博士指出,中環至灣仔的臨海商廈,以及文化中心等幾幢地標建築的天台可用面積高達九成,較適合安裝太陽能板。呂博士補充,使用屋頂太陽能板發電的成本仍然高昂,是因為安裝費用浩大,太陽能板的回本期最長需時三年,以其使用壽命為二十五年計算,估計三年後便可生產零污染的免費電力。 她認為香港政府可考慮開放太陽能市場,引入內地太陽能系统安装承包商,減低安裝成本。是項研究在《明報》、《星島日報》及《大公報》等本地報章均有大篇幅報導。

Research Advances in High Speed Rail Facilitate its Export

High speed rail technology is a contemporary focus for land transportation worldwide, bringing enormous conveniences for billions of people. The relatively new Hong Kong branch of the National Rail Transit Electrification and Automation Engineering Technology Research Center (NRTEAET) has been contributing to applications for the mainland's high speed rail technology. According to its Director, Prof. Yiqing Ni, the advanced technology of Hong Kong complements the abundant resources for high speed rail development in the mainland, facilitating its export to the rest of the world. Not only does this align with the One Belt One Road initiative, it is also good preparation for Hong Kong's own high speed rail in the future.

The inter-disciplinary rail engineering research team at PolyU has been working closely with the NRTEAET research center at Southwest Jiaotong University (SWJTU) to boost the research output in that field, contributing much to China's rail industry in terms of innovative technologies and technology transfer. The research results from PolyU have been tested at SWJTU's spacious laboratory that can model a real-life high speed rail on a scale of 1:1, including simulating its speed at more than 400 km and the vibrations that result when a train is moving at high speed. Prof. Ni pointed out the close ties of SWJTU with the rail industry could facilitate wider recognition for Hong Kong's high speed rail technology and promote it even further.

New technologies for high speed rail include the installation of fiber optic sensors at various places on the train and along the tracks to monitor the realtime operational condition of trains. Data on uneven surfaces and wheel conditions can be obtained for assessing vibration levels and risks of derailment, thus enhancing the safety and comfort of high speed rail travel. A new monitoring system has also been designed to better understand the mutual effects of different parts of the train on one another. In addition to monitoring the operational condition of the high speed rail, such holistic data can be used to evaluate its design and contribute to its improvement. The research team at PolyU hopes the monitoring system can be expanded to include the control of signals and electricity in the future. Moreover, it is Prof. Ni's dream to turn China's high speed rail into a mobile monitoring system for the environment that can collect data related to air conditions and pollution levels as the trains pass through different areas.

研究成果有助高鐵走向世界

高鐵是現今全球陸路運輸的焦點,為數以十億計人 民帶來無限便利。新成立的國家軌道交通電氣化與自動 化工程技術研究中心(NRTEAET)香港分中心致力推動內地 高鐵技術的發展。分中心主任倪一清教授表示,香港擁 有先進技術,結合內地發展高鐵的豐富資源,有助中國 高鐵走向世界。這不但配合「一帶一路」國策,亦有利於 香港本身的高鐵發展。

近年,理大的鐵道工程跨學科研究團隊與西南交通 大學的NRTEAET研究中心合作無間,並在研發創新技術 及技術轉移兩方面取得重大成果,對中國的鐵道工業裨 益良多。理大會把研究所得交予西交大的實驗室測試。 西交大的地方寬敞,能以「一比一」的比例模擬真正的高 鐵列車,甚至模擬以超過四百公里車速行走所產生的震 動。倪教授指出,西交大與鐵道工業關係密切,有助提 升香港高鐵技術的認受性,有利其推廣工作。

為高鐵研發的其中一項新技術,是於車廂各處及路軌沿線安裝光纖感測器,實時監察列車運作情況。收集在不平坦表面和車輪的數據後,便可評估列車的震動程度及出軌風險,令高鐵旅程更安全及舒適。另外,團隊亦研發了新的監察系統,藉此加深了解列車不同組件的相互影響。這些數據非常全面,除可用於監察高鐵的運作情況,亦有助審視並改善鐵路設計。理大研究團隊期望監測系統日後能再進一步,兼具控制信號及電力的功能。倪教授的個人夢想,是把中國高鐵升級至流動環境監測系統,能收集列車所到之處的空氣狀況及污染程度數據。

International Symposium on Advances in Steel and Composite Structures 2016

The International Symposium on Advances in Steel and Composite Structures was held on 6 December 2016. Jointly organized by the Hong Kong branch of the Chinese National Engineering Research Centre for Steel Construction (CNERC) and the Hong Kong Constructional Metal Structures Association (HKCMSA), the symposium was attended by about 150 delegates, including engineering scholars, industry practitioners, and government employees. An opening speech was delivered by the guest of honour, Ir C.K. Hon, Permanent Secretary for Development (Works) of the Development Bureau of the Hong Kong government. This was followed by a report on the research and development activities of the CNERC by its Director, Ir Prof. K.F. Chung, and the signing of a collaboration agreement on constructional steel research between CNERC and Chongqing University's Research Center for Steel Structure Engineering. After a keynote report on the research and prospect of steel tubed concrete structures from Prof. X.H. Zhou, Academician of the China Academy of Engineering and President of Chongging University, 7 well-received presentations followed, including one on the effective use of high strength structural steel in building construction by Prof. K.F. Chung. Closing remarks were delivered by Dr Tak Ming Chan. Assistant Professor in the Department of Civil and Environmental Engineering, who also served as the Master of Ceremony for the symposium.

As a technical platform for leading researchers to share their research findings on advanced construction technology of steel and composite structures, the symposium was a great success. Its emphasis on practical applications was particularly enlightening for local engineers, who often have to work with steel and composite structures in super high-rise buildings, long-span bridges, and other public structures.



Signing a collaboration agreement

2016 鋼結構與組合結構工程技術國際研討會

由國家鋼結構工程技術研究中心 (CNERC) 香港分中心及香港建築金屬結構協會合辦的「鋼與組合結構工程技術國際研討會」,已於2016年12月6日舉行。當天與會的人士包括工程學者、業界工程師及政府人員,合共約一百五十人。國際研討會邀得特區政府發展局常任秘書長(工務)韓志強工程師為大會榮譽主禮嘉賓,並為大會致開幕辭。隨後,分中心主任鍾國輝教授匯報了國家鋼結構工程技術研究中心的研究及發展活動,並於開幕式中與重慶大學鋼結構工程研究中心簽署建築鋼材研究合作協議。



Ir Prof. Chung

開幕式結束後,中國工程院院士、重慶大學校長周緒紅教授就「鋼管約束混凝土結構的研究應用及發展」為大會發表主題報告。其後,由七位國際知名工程學者接力發表報告,包括美國的Reidar Bjorhovde教授、新加坡國立大學的劉德源教授、中國清華大學的石永久教授、中國同濟大學的李國強教授、英國倫敦帝國學院的Leroy Gardner教授、澳洲悉尼大學的Brain Uy教授和分中心主任鍾國輝教授。負責閉幕致辭的,是身兼研討會主持的分中心副秘書長陳德明博士。



At the symposium

是次國際研討會為"先進鋼及鋼混組合結構建築技術"提供了前沿的科研成果分享平台及國際交流機會,對於需要經常處理摩天大樓、大跨度橋樑及公共建築中鋼及組合結構的本地工程師來說,極具啟發意義。席間,各與會人士亦積極與各嘉賓及講者的技術討論及交流,會議氣氛良好正面。

CEE Scholars Work With EPD on Noise-Reducing Paving Material

3 scholars from the Department of Civil and Environmental Engineering (CEE) have been working with the Environmental Protection Department (EPD) of the Hong Kong government to test the feasibility of using a paving material made from recycled tires rubber asphalt to reduce traffic noise. The CEE researchers involved are Dr WT Hung, Dr Z Leng, and Dr LW Cheung, whose work with EPD not only ensures the rubber asphalt designs meet local needs, but also makes use of the latest technologies to effectively control and lower the temperature and smell of asphalt-paving, precluding any environmental problems that may come with it.

According to the EPD, based on the experiences of countries like Portugal, the Netherlands, and the US, where rubber asphalt has been used, the addition of a small number of recycled tires rubber beads weighing less than 2% in total to the asphalt, combined with an appropriate asphalt design, can reduce traffic noise by about 2 decibels without affecting the durability of the asphalt.

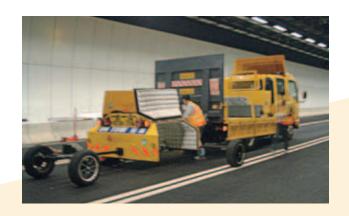
The use of rubber asphalt will be on trial in 2 areas of the New Territories, namely Shatin and Yuen Long, in the first quarter of 2017. In the long term, the authorities are considering building screens or paving with materials that do not create a lot of noise to facilitate noise reduction on roads with noise levels that exceed 70 decibels.

土木及環境工程學系學者夥拍環保署 研發消減噪音的鋪路物料

土木及環境工程學系三位學者正在與政府的環境保護署合作,測試使用以回收車胎生產的橡膠瀝青鋪路,從而降低交通噪音。三位參與這項計劃的同事為熊永達博士、冷真博士及張林華博士。他們不但要確保今次的橡化瀝青設計切合本地需要,亦須運用最新技術,有效控制和降低鋪設瀝青時的溫度及氣味,預防出現環境問題。

環保署表示,葡萄牙、荷蘭、美國等地均有使用橡膠瀝青的經驗:只要在瀝青中混入少量以回收車胎製造的膠珠(佔總重量少於百分之二),再配合適當的瀝青設計,即可在不損瀝青耐用度的情況下降低交通噪音約兩分貝。

沙田及元朗兩區將於2017年首季率先試用橡膠瀝青。長遠來說,當局已在考慮於噪音高於七十分貝的道路興建隔音屏障或使用靜音物料鋪路,達致消減噪音的目標。



FCE Research Salons

A series of research salons was initiated by the Faculty of Construction and Environment (FCE) early this year to cultivate a supportive research culture and provide a platform for each of its departments to develop its focused research areas.

The 6th FCE research salon was held on 8 May 2017 with a focus on further development of the Research Centre for Urban Hazards Mitigation. More than twenty FCE academic staff were in attendance, including Prof. You-Lin Xu, Dean of FCE, and Prof. Xiaoli Ding, Associate Dean (Partnership). After identifying some strengths and weaknesses of the Centre, they proceeded to discuss how the Centre could move forward to maximize its impact on society.

To further enhance the research performance of FCE and to cultivate a more collaborative and supportive research culture among faculty members, particularly to guide and support the development of junior/young staff members, those present concurred that the Faculty should consolidate the existing research centres in the Faculty.

Potential research areas that the Research Centre for Urban Hazards Mitigation could include studying multi-natural hazards caused by climate changes, multi-hazards mitigation, fire engineering, particularly building and tunnel fire prevention and mitigation as well as resilient cities.

The salon concluded with a change of the Centre's Directorship from Prof. You-Lin Xu to Prof. Xiaoli Ding. The new Deputy Directors are Prof. Asif Usmani, Head of the Department of Building Services Engineering (BSE), and Prof. Jian-hua Yin of the Department of Civil and Environmental Engineering (CEE).

The 5th research salon was held on 12 April 2017 with a focus on urban geo-hazards and mitigation, one of the research areas of the Department of Civil and Environmental Engineering (CEE). Organized by Prof. K.T. Chau, a leading scholar in this area, the salon was attended by Prof. Xu and Prof. Ding on behalf of FCE in addition to Prof. J.H. Yin, Dr Y.M. Cheng, Dr Andy Leung, Dr J.B. Zhu, and Dr Wallace Lai. They also explored the possibility for research collaborations across departments and disciplines.

Organized by Prof. Geoffrey Shen of the Department of Building and Real Estate (BRE), the 4th FCE research salon was held on 11 April 2017 with the participation of Prof. Y.L. Xu, Prof. X.L. Ding as well as 6 BRE academic and research staff, namely Dr Hongqin Fan, Dr Patrick Lam, Dr Yongtao Tan, Dr Ivy Wong, Dr Esther Yung, and Dr Orianna Guo. The latest research developments on various topics related to sustainable urban systems were discussed.

建設及環境學院研究沙龍

為推廣科研文化,協助轄下各學系鎖定重點科研範疇,建設及環境學院最近舉辦了一系列「研究沙龍」活動。



At the 6th research salon

建設及環境學院於2017年五月八日舉行了第六次研究沙龍,探討城市減災研究中心的發展路向。當天出席的學術人員超過二十位,包括院長徐幼麟教授及副院長(協作)丁曉利教授。眾人首先分析中心的專長與不足之處,接著討論日後的發展方略,以及如何增強對社會的影響力。

為了進一步提升本院的科研成績,鼓勵院內學術人 員在科研上合作和彼此支援,並給予年輕或新進同事特 別指導和支持,與會者贊同整合本院現有的研究中心。

城市減災研究中心的研究範疇,可包括由氣候變化 引發的各類天災及紓緩方法、消防工程(尤其是建築物及 隧道的防火及減災措施)及韌性城市。

沙龍結束前,徐幼麟教授公佈自己將退任研究中心主任一職,由丁曉利教授接替。新任副主任則有兩位,分別是屋宇設備工程學系系主任Asif Usmani教授和土木及環境工程學系的殷建華教授。

第五次「研究沙龍」於2017年四月十二日舉行,焦點是城市地質災害及減災措施,屬於土木及環境工程學系的研究範疇之一。負責統籌的周錦添教授是這方面的著名學者。出席者除殷建華教授、鄭榕明博士、梁日暉博士、朱建坡博士及賴緯樂博士,還有代表院方的徐幼麟教授和丁曉利教授。眾人亦探討了進行跨學系及學科研究的可能。



At the 3rd FCE research salon

The 3rd FCE research salon was held on 6 March 2017 to discuss ways to enhance the research performance of the Department of Land Surveying and Geo-Informatics (LSGI), which has identified 3 areas with urban informatics as its research theme, namely smart positioning and mobility, spatial big data modelling and analytics, as well as urban sensing and measurement. In attendance were Prof. You-lin Xu, Dean of FCE, Prof. Xiangdong Li, Associate Dean (Research), and 9 academic staff of LSGI, including Prof. John Shi, Head of LSGI, and Prof. Michael Goodchild, Chair Professor of Geographic Information Science, who had joined LSGI earlier this year under the Distinguished Chair Professor Scheme.

The 2nd FCE research salon was held on 17 February with the participation of 5 academics and about 10 research staff from the Department of Building Services Engineering (BSE). The latest research developments on various topics related to building energy were discussed by Dr Choongwan Koo, Dr Fu Xiao, Dr Lin Lu, Prof. Shengwei Wang, and Prof. Hongxing Yang respectively. As key members of one of the focused research areas of BSE, they were encouraged by Prof. Xu to suggest how crossdisciplinary research collaborations in their field of interest could be nurtured to deliver impactful research

The 1st FCE research salon was held on 13 January with a focus on digital construction, one of the research areas of the Department of Building and Real Estate (BRE). Organized by Prof. Heng Li, who is a leading scholar in this area, the salon was attended by Prof. Xu and Prof. John Shi on behalf of FCE in addition to some BRE colleagues.



At the 4th FCE research salon

於2017年四月十一日舉行的第四次「研究沙龍」,是由建築及房地產學系的沈岐平教授統籌,參與者除了徐幼麟教授及丁曉利教授,還有該系六位同事,包括樊宏欽博士、林俊業博士、譚永濤博士、黃小慧博士、容曉君博士及郭健博士。各人討論了與可持續城市系統有關的各項科研進展。

於2017年三月六日舉行的第三次「研究沙龍」,就討論了如何進一步提升土地測量及地理資訊學系的科研表現。席上,與會者確立了以智能定位及流動性、空間大數據建模及分析,以及城市感測與量測這三個城市資訊學的範疇為研究主題;參與討論的同事計有院長徐幼麟教授、副院長(科研)李向東教授及土地測量及地理資訊學系的九位學術人員,當中包括系主任史文中教授,以及透過「傑出講座教授計劃」在本年初以加入該系的Michael Goodchild教授(地理資訊科學講座教授)。

第二次「研究沙龍」則於二月十七日舉行,有屋宇設備工程學系的五位學者和接近十位研究人員參加。丘忠完博士、肖賦博士、呂琳博士、王盛衛教授及楊洪興教授,分別與研究人員討論跟建築節能有關的最新科研發展。這幾位學者鑽研的範疇,乃屋宇設備工程學系的重點研究領域之一。徐院長鼓勵他們多進行跨學科合作,藉此增強研究影響力。

首次「研究沙龍」是於一月十三日舉行,焦點是數碼 建築,屬於建築及房地產學系的研究範疇。負責籌備這 次活動的李恆教授乃這方面的專家。當天在座者除建築 及房地產學系的同事,還有代表院方的徐幼麟院長和史 文中教授。

CEE Research Open Day 2017

On 25 March 2017, a Research Open Day on environmental engineering and sustainable development was held as part of the celebrations for PolyU's 80th anniversary. Organized by the Department of Civil and Environmental Engineering (CEE), the event drew hundreds of participants to the campus. After welcoming remarks from Prof. You-Lin Xu, Dean of the Faculty of Construction and Environment (FCE), and Prof. William H.K. Lam, Head of CEE, a speech on the formulation of government policies related to climate change was given by Ms Christine Loh, the Under-Secretary for the Environment of the Hong Kong SAR Government. It was followed by an overview of the programme BEng (Hons) in Environmental Engineering and Sustainable Development by the programme leader, Prof. Shun-cheng Lee. In addition to presentations on research and advanced technologies for sustainable development by Prof. Tao Wang, Prof. Chi-Sun Poon, and Prof. Wei Chu respectively, there was a poster presentation of students' final year projects, alumni sharing sessions, and a lab visit with a demonstration led by Dr Daniel Tsang.

2017科研開放日

為慶祝理大八十週年校慶,土木及環境工程學系於2017年三月二十五日舉辦了「科研開放日」,展示該系在環境工程和可持續發展方面的成就。該活動吸引數以百計訪客參觀。本院院長徐幼麟教授與該系主任林興強教授發表開幕詞後,隨即由環境局副局長陸恭蕙女士致詞,闡述政府因應氣候變化而制訂的政策。土木及環境工程學系設有「環境工程與可持續發展學」(榮譽)工學工課程,課程主任李順誠教授特地為參加者介紹了該課程的特色,王韜教授、潘智生教授及朱威教授則分別講述為可持續發展所完成的研究及開發的先進技術。隨後由該系同學以海報介紹畢業專題研習,並有校友分享,最後由曾超華博士帶領參觀實驗室及相關示範。



At the Research Open Day

CRF Seminar



Prof. Mak introducing the CRF project

On 7 February 2017, about 30 scholars gathered for a research seminar on the development of design methodologies for the improvement of wind and thermal comfort in the urban environment. Supported by the Collaborative Research Fund (CRF) of the Hong Kong Research Grants Council, the research team working on the project was led by Prof. Cheuk-ming Mak of the Department of Building Services Engineering (BSE). After an opening speech by Prof. You-Lin Xu, Dean of the Faculty of Construction and Environment (FCE), Prof. Mak introduced the CRF project and its objectives. This was followed by 7 presentations on various topics related to the project,

協作研究基金研討會

約三十位學者於2017年二月七日雲集理大一個研討會,討論如何透過設計城市微環境從而改善市區的風及熱舒適度。是項研究獲香港研究資助局的協作基金資助,並由屋宇設備工程學系的麥卓明教授擔任組長。本院院長徐幼麟教授致開幕詞後,麥教授隨即向出席者講解研究項目的內容和目標,接下來是由科研人員發表與研究主題有關的七個報告,如對建築群中行人高度風舒適時色的預測,以及評估香港悶熱天氣下行人高度風舒適度的新規範。研討會最後由屋宇設備工程學系系主任AsifUsmani教授作總結發言。此研討會有助研究項目在本地業界發揮更大影響力。



Prof. Xu speaking at the seminar

such as predictions of pedestrian level turbulent flow characteristics in building surroundings and a new criterion for assessing pedestrian level wind comfort in hot and humid Hong Kong. A closing speech from Prof. Asif Usmani, Head of BSE, concluded the seminar, which helped to increase the impact of the CRF project on local industry.



Prof. Xu's presentation

Training Course for HyD Staff

A training course for staff of the Bridges and Structures Division of the Hong Kong Highways Department (HyD) was recently held. Provided by the Department of Civil and Environmental Engineering (CEE), the series of training was the culmination of a collaborative research project that began in May 2009 between PolyU and HyD to develop structural health prognosis tools for evaluating the Stonecutters Bridge under in-service conditions. 13 reports have been completed since then, addressing the following topics:

- (1) the 3D space frame (implicit) finite element modelling and analysis of global bridge;
- (2) the full 3D hybrid (implicit) finite element modelling and analysis of global bridge;
- (3) the partial 3D multi-scale (implicit) finite element modelling and analysis of local bridge components; and
- (4) the 3D solid (explicit) finite element modelling and analysis of local bridge components.

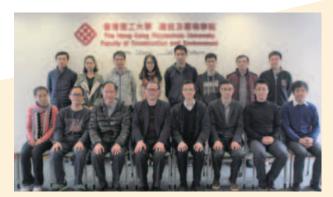
Divided into 3 separate parts, the training was led by Dr Songye Zhu's team from 8 to 10 February, and Prof. You-Lin Xu's team from 22 to 24 February. The final training from 8 to 10 March 2017 was led by Dr Yong Xia and Prof. Yiqing Ni's teams.

路政署員工培訓課程

土木及環境工程學系最近為路政署橋樑及結構部員工舉辦了一個培訓課程,作為理大與該署一項聯合研究的總結。該研究於2009年五月展開,旨在研發一套預測結構健康的工具,評估昂船洲大橋在通車後的情況,至今已完成十三個報告,涵蓋以下專題:

- (1) 橋樑整體的三維空間剛架(隱式)有限元建模與分析;
- (2) 橋樑整體的三維混合(隱式)有限元建模與分析;
- (3) 橋樑局部構件三維多尺度(隱式)有限元建模與分析; 以及
- (4) 橋樑整體与構件三維實體(顯式)有限元建模與分析。

課程分三部分:首部分由朱松曄博士的團隊主持,於二月八日至十日舉行;第二部分是二月二十二至二十四日,由徐幼麟教授的團隊主講;最後一節於三月八至十日,由夏勇博士及倪一清教授的團隊負責。



Prof. Xu (seated 4th from left) and Dr Songye Zhu (seated 3rd from right) with participants of the training course

New Book Co-authored by BRE **Academic**



Dr Chan

Dr Daniel Chan, Associate Head (Teaching and Learning) of the Department of Building and Real Estate (BRE), has co-authored a new book entitled Target Cost Contracting Strategy in Construction: Principles, Practices, and Case Studies. Based on the authors' 10 years of research and teaching experience in target cost contracts, this book presents the underlying principles and practicalities

of applying the target cost contracting strategy, along with a series of short case studies. Principles begin with the fundamentals, then cover the development of target cost contracting in major countries/cities, definitions of target cost contracting, perceived benefits, potential difficulties and critical success factors for implementation.

Practices include the target cost contracting approach and process in general, the key risk factors, risk assessment model, risk allocation and risk mitigation measures for target cost contracts in particular, together with a conceptual framework for the performance measurement of target cost contracts. Several short real-life case studies from the United Kingdom, Hong Kong, Australia and New Zealand are provided for further illustration.

The book will appeal to a wide spectrum of readers, from industrial practitioners to undergraduate students, researchers and academics interested in construction contracts and procurement methods.

建築及房地產學系學者合著新書面世

建築及房地產學系副主任(教務及學務)及副教授陳 煒明博士有份撰寫的新作《建築工程的目標成本合約制策 略:原則、實務及案例研究》已經出版。此書薈萃了陳博 士十年來教授和研究[目標成本合約制]的經驗,詳細解 述當中的基本原則及適用範疇,並有一系列簡明案例。 在有關合約原則的內容,作者首先解釋基本概念,然後 闡述目標成本合約制在各國/大城市的發展歷程,以及其 定義、採用時的優點、潛在困難與成功要素等。

講述實務的內容同樣豐富,包括制定目標成本合約 制的方法及執行程序、主要風險因素、風險評估模型、 風險分配及風險減小措施,以及評估目標成本合約制成 效的概念框架。作者更摘錄了英國、香港、澳洲及新西 蘭的數個簡短真實案例,以資説明。

此書適合不同的讀者,無論是業界人士、本科學生, 以至對建築合約及採購方法有興趣的研究人員及學者。



New Book Publication on Target Cost Contracting Strategy by BRE Academic Staff (Dr Daniel Chan)

New Book Co-authored by BSE Scholar



The new book co-authored by Prof. Yang

A new book in Chinese coauthored by Prof. Hongxing Yang from the Department of Building Services Engineering (BSE) was recently published by China Railway Publishing House as part of China's 12th Five-Year Key Publication Plan (2011-2015). Entitled Green Building Development and Application of Renewable Energy, the book illustrates the latest renewable energy applications for green building designs. Parts of the book were written by Dr

Ximeng Jiang from the Shenzhen Research Institute of Tsinghua University, Dr Yuanhao Wang, a part-time research fellow in BSE, and Mr Chen Xi, a PhD candidate in BSE.

屋宇設備工程學系學者合著新書

屋宇設備工程學系楊洪興教授參與撰寫的新作《綠 色建築發展與可再生能源應用》,最近由中國鐵道出版 社出版。該書闡述了適用於綠色建築的最新可再生能源 技術,屬中國《第十二五》重點出版規劃的一部分(2011-2015)。新書的合著者還有深圳清華大學研究院的姜希猛 博士、屋宇設備工程學系兼職研究員汪遠昊博士,以及 同系博士生陳曦先生。

Staff News 教職員消息

Establishment of Yim, Mak, Kwok & Chung Endowed Professorship in Smart Structures

Mr Yau Kwok-fai, Deputy Chairman and Chief Executive Officer of Vantage International (Holdings) Limited had recently made a generous donation to establish the Yim, Mak, Kwok & Chung Endowed Professorship in Smart Structures. Prof. Timothy W. Tong, President of PolyU, expressed the University's sincere gratitude to Mr Yau during an appreciation lunch held on 24 April 2017. The lunch was joined by three former teachers of the Kwun Tong Government Secondary Technical School (KTGSTS) namely, Mr Kwok Hei-leung, Ms Mak Suk-hing and Mr Yim Kwong-yung; Prof. Philip Chan, Provost and Deputy President of PolyU; Ir Prof. Ko Jan Ming, Emeritus Professor of Structural Engineering of PolyU; and Ir Prof. Xu You-lin, Dean of the Faculty of Construction and Environment, who is the appointee of the newly established professorship.

A graduate of PolyU predecessor the Hong Kong Polytechnic, Mr Yau has been a keen supporter of the development of his alma mater. Previously in 2016, in the capacity of Director of Vantage Charity Foundation, Mr Yau facilitated and supported the establishment of the Endowed Professorship in Sustainable Structures and Materials and named it after his former teacher Ir Prof. Ko Jan Ming. This year, he donated on his own behalf another professorship, which is in the area of smart structures, and named it after his four teachers Mr Yim Kwong-yung, Ms Mak Suk-hing, Mr Kwok Heileung and Ms Chung Wai-fan from the KTGSTS. Mr Yau wishes to honour the teachers' selfless dedication to their students and their great contributions to society through setting up the professorships.

成立嚴、麥、郭、鍾智能結構教授席

盈信控股有限公司董事會副主席及行政總裁游國輝先生慷慨捐款成立「嚴、麥、郭、鍾智能結構教授席」。理大校長唐偉章教授於2017年4月24日舉行的午宴上,代表大學向游國輝先生衷心致謝。出席午宴者包括游先生就讀觀塘官立工業中學時的三位老師:郭熙亮先生、麥淑卿女士和嚴光融先生:及理大常務及學務副校長陳正豪教授、理大結構工程學榮休教授高贊明教授、工程師,以及履任上述教授席的本院院長徐幼麟教授、工程師。

游國輝先生畢業於理大前身香港理工學院,一直熱心回饋母校。2016年,游先生促成由其擔任董事的盈信慈善基金有限公司設立以其老師高贊明教授、工程師命名的「可持續結構及材料教授席」;今年,游先生再以個人名義設立另一教授席,並以他就讀觀塘官立工業中學時的四位老師:嚴光融先生、麥淑卿女士、郭熙亮先生及鍾惠芬女士命名,以頌揚老師對學生的無私付出和對社會的偉大貢獻。



(from left) Prof. Philip Chan, Mr Hei-leung Kwok, Ms Suk-hing Mak, Mr Kwok-fai Yau, Prof. Timothy W.Tong, Mr Kwong-yung Yim, Ir Prof. Jan Ming Ko and Ir Prof. You-lin Xu

New Academic Staff



Prof. Goodchild

The Department of Land Surveying and Geo-Informatics (LSGI) has a new Chair Professor of Geographic Information Science. Michael F. Goodchild is Emeritus Professor of Geography at the University of California, Santa Barbara (UCSB), where he also holds the title of Research Professor. He also holds an affiliate appointment in the Department

of Geography at the University of Washington. Until his retirement in June 2012 he was Jack and Laura Dangermond Professor of Geography, and Director of UCSB's Center for Spatial Studies. He received his BA degree from Cambridge University in Physics in 1965 and his PhD in geography from McMaster University in 1969, and has received five honorary doctorates. He was elected member of the National Academy of Sciences and Foreign Member of the Royal Society of Canada in 2002, member of the American Academy of Arts and Sciences in 2006, and Foreign Member of the Royal Society and Corresponding Fellow of the British Academy in 2010; and in 2007 he received the Prix Vautrin Lud. He was editor of Geographical Analysis between 1987 and 1990 and editor of the Methods, Models, and Geographic Information Sciences section of the Annals of the Association of American Geographers from 2000 to 2006. He serves on the editorial boards of ten other journals and book series, and has published over 15 books and 500 articles. He was Chair of the National Research Council's Mapping Science Committee from 1997 to 1999, and of the Advisory Committee on Social, Behavioral, and Economic Sciences of the National Science Foundation from 2008 to 2010. His research interests center on geographic information science, spatial analysis, and uncertainty in geographic data. His appointment is for 1 year from 1 January 2017 to 31 December 2017 during which he will pay a maximum of 2 visits to PolyU and be in resident for a maximum of 3 weeks in aggregate.



Dr Cad

The Department of Building Services Engineering (BSE) welcomed a new assistant professor in March 2017. Dr Sunliang Cao obtained his Doctor of Science (Technology) in April 2014 from the School of Engineering, Aalto University (formerly known as Helsinki University of Technology), Finland. His Master of Science

degree was obtained in June 2010 from the University of Jyväskylä, Finland, while his Master thesis project was conducted at the Norwegian University of Science and Technology (NTNU), Norway. Before joining PolyU in 2017, he was successively employed as a research assistant, doctoral researcher and postdoctoral

新學術人員

土地測量及地理資訊學系最近增添了一位地理資訊科學講座教授。新加入的Michael F. Goodchild為加州大學里塔芭芭拉分校(UCSB)地理學榮休教授兼研究教授、華盛頓大學地理學系兼任教授,於2012年六月榮休前,一直擔任UCSB Jack and Laura Dangermond地理學教授及該校空間研究所所長。他於1965年取得劍橋大學物理學學士學位,1969年成為加拿大麥馬士達大學地理學博士,先後獲頒五個榮譽博士學位,2002年獲選美國國家科學院院士及加拿大皇家學會外籍會士,2006年入選美國人文與科學院院士,2010年晉身英國皇家學會外籍會士及不列顛學院通訊院士,並於2007年勇奪有地理學界最高榮譽之稱的Prix Vautrin Lud獎。

他分別於1987至1990年及2000至2006年擔任《地理分析》及《美國地理學家協會年報》(方法、模型及地理資訊科學部分)編輯,現時仍是另外十本學術期刊及叢書的編輯委員,合共出版了逾十五本書籍及五百篇論文,又曾分別於1997至1999年及2008至2010年出任國家研究局測繪科學委員會主席,以及國家科學基金轄下社會、行為及經濟學諮詢委員會的主席。他的研究興趣主要為地理信息科學、空間分析,以及地理數據的不確定性。

其任命於2017年一月一日開始,為期一年,期間將 最多兩次親臨理大,合共留駐最多三個星期。

於2017年三月二十日履新的曹孫亮博士,是最新加入屋宇設備工程學系的助理教授。他2014年四月畢業於芬蘭阿爾託大學工程學院(前稱赫爾辛基工業大學),獲授科學(科技)博士學位;之前留學芬蘭于韋斯屈萊大學,並在挪威科技大學進行碩士論文專題研究,2010年六月取得芬蘭于韋斯屈萊大學科學碩士學位。加入理大前,在阿爾託大學歷任研究助理、博士研究員及博士後研究員,精研低能耗及零能耗建築、先進的現場可再生能源系統、建築物耦合能源儲存方案、供熱通風與至氣調節科技,以及建築物、混合型智能能量網絡與新能源汽車的融合。另外,曹博士曾分別以芬蘭代表及芬蘭觀察員的身份,參與國際能源協會(IEA)太陽能制熱制冷項目(SHC)第44號任務(Task 44)/熱泵項目(HPP)第38號

researcher in Aalto University, Finland. Moreover, in January and February 2016, Dr Cao also worked as a Visiting Scientist at the Fraunhofer Institute for Solar Energy Systems (ISE), Germany, for a joint research between Fraunhofer ISE and Aalto University. His main research expertise is in the fields of low-energy and zero-energy buildings, advanced on-site renewable energy systems, building integrated energy storage solutions, HVAC technologies, and the integrations between buildings, hybrid smart grids and new energy vehicles. In addition, he participated in the International Energy Agency (IEA) - the Solar Heating and Cooling Programme (SHC) Task 44/ Heat Pump Programme (HPP) Annex 38 and IEA Energy in Buildings and Communities (EBC) Annex 67 as a Finnish representative and Finnish observer, respectively. So far, he has published more than 20 scientific publications, including 13 high-IF (impact factor) international SCI journal papers.



Dr Dong

The Department of Civil and Environmental Engineering (CEE) welcomed a new assistant professor in December 2016. Dr You Dong received his Bachelor's degree in Bridge Engineering from Hunan University in China in 2009 and his PhD in Structural Engineering from Lehigh University in the US. After that, he worked as a Postdoctoral

Research Associate at Lehigh. He has published several journal papers, refereed proceedings, and invited keynotes. He has also been a reviewer for some international scientific journals. Dr Dong is a committee member of two ASCE-SEI Technical Councils on Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems and Multihazard Mitigation. His research mainly focuses on the development of the next generation of civil and marine structures, incorporating risk, resilience, and sustainability in a life-cycle context. Specifically, he has formulated possible solutions to make our cities and communities safer, more resilient, and more sustainable.

任務(Annex 38) (Solar and Heat Pump Systems)及建築 與社區能源項目(EBC)第67號任務(Annex 67)(Energy Flexible Buildings)。他至今已發表了逾二十篇科學論文, 當中十三篇刊於高影響指數的SCI國際學術期刊。

土木及環境工程學系於2016年十二月增添了一位成員。新任助理教授董優博士是中國湖南大學2009年橋樑工程本科畢業生,於美國理海大學取得結構工程博士學位後,留校從事博士後研究。 他曾於好些學報及會議文集出版論文和應邀發表主題演講,又曾擔任數份國際科學期刊的審稿員。董博士現任美國土木工程師學會結構工程師分部轄下「結構系統全壽命周期性能、安全性、可靠性及風險」與「基于多重灾害的防災减災」技術理事會的委員。在全壽命周期的框架下,重點研究新一代中事會的委員。在全壽命周期的框架下,重點研究新一代中,並入海洋結構、其內含風險、恢復能力及可持續性,並已成功制訂一些可能方案,使現代城市和社區變得更安全、更有彈性,並具備更強的持續發展能力。

BRE Academic Reappointed to CITB

Prof. Yat-Hung Chiang of the Department of Building and Real Estate (BRE) has been reappointed to serve on the Construction Industry Training Board (CITB) for two more years from 1 January 2017 to 31 December 2018. The CITB was established under the Construction Industry Council Ordinance to develop the construction workforce through organizing training courses and conducting trade tests for assessing the skill level of construction personnel.

建築及房地產學系學者再獲委任為建 造業訓練委員會委員

建築及房地產學系的蔣日雄教授再度獲委任為建 造業訓練委員會委員;新任期於2017年1月1日開始, 2018年12月31日結束,為期兩年。該委員會是根據《建 造業訓練委員會條例》成立,目標是藉著舉辦培訓課程及 工藝測試,評定建造業工人的技術水平,為建造業培養 人才。

RTHK Broadcasts Housing Views of BRE Academic

In a radio broadcast on 21 January 2017 by RTHK. Prof. Eddie Hui of the Department of Building and Real Estate (BRE) aired his views on the current housing market in Hong Kong, which is in a state of flux due to the likelihood of rising interest rates and increased risks. Even though the prospects for home ownership are not rosy in what has been deemed the city with the most unaffordable housing, Prof. Hui believes the government has laid a foundation to address the problem. As a former member of the Long Term Housing Strategy Steering Committee, he had a chance to recommend some of the strategies that the government has implemented in the last few years to enhance the land supply for housing. For the short term, one of the stamp duties for residential properties was raised to 15% to discourage foreign buyers, speculators, and investors. In the longer term, the government has plans to reclaim more land outside of Victoria Harbour, develop some caves, rebuild old districts, change the use of some land, and reuse former quarries etc.

According to Prof. Hui, finding new land for development to address the problem of land scarcity is also feasible. At the same time, to strike a balance between the economy and the environment, plants and animals that have high ecological value should be preserved when new lands are being developed. With respect to location, the government should choose convenient sites with a range of amenities in place for citizens to be able to live comfortably.

The broadcast concluded with a hope by Prof. Hui for students to enter the real estate profession with a deep understanding of the issues involved and propose some constructive plans to solve the housing problem. The full broadcast can be found at http://programme.rthk.hk/channel/radio/player_popup.php?pid=1085&eid=413818&d=2017-01-21&player=mp 3&type=archive&channel=radio1#

許智文教授於港台節目發表對房屋政 策之意見



Prof. Eddie Hui

會前委員,他曾在過去數年提出多項策略,獲政府採納執行,以增加建屋的土地供應。短期而言,為打擊非本地買家、投機者及投資者,當局已把其中一項住宅物業印花税提高至百分之十五:長遠規劃方面,政府則計劃透過在維港以外填海,發展溶洞,重建舊區,改變部分土地用途,以及發展前礦場用地來增加土地供應。

許教授指出,物色新發展用地是解決土地不足的另一個可行方法;但與此同時,必須在經濟發展和環保兩方面作出平衡,保育有豐富生態價值的動植物。選址方面,政府應選擇交通方便和設有各項民生設施的地點,讓市民得以安居。

節目結束前,許教授勉勵有志投身房地產專業的學生深入了解市場情況,並提出一些有助解決房屋問題的計劃。如有興趣重溫節目,可登入http://programme.rthk.hk/channel/radio/player_popup.php?pid=1085&eid=413818&d=2017-01-21&player=mp3&type=archive&channel=radio1#

LSGI Scholar Honoured by Alma Mater

On 17 May 2017, Dr Wenbin Xu of the Department of Land Surveying and Geo-Informatics (LSGI) was honoured by Central South University (CSU) in Changsha, China, as one of its outstanding alumni. He was invited to share his wisdom with respect to professional trends and upcoming research areas for the future with current students of his alma mater. A platform was provided by CSU for more than a hundred of its successful alumni to serve as role models and career advisors that day. Over 30 forums dedicated to various professions gave students a chance to explore and plan for their future careers after graduation.

土地測量及地理資訊學系學者應邀回母校擔任講者

土地測量及地理資訊學系的許文斌博士應母校中南大學之邀,於2017年五月十七日重回舊地,與一眾仍然在學的師弟妹分享其專業發展之路及對未來科研趨勢的見解。該校逾百位卓越校友在這次活動中濟濟一堂,為後輩提供就業意見。當天設有三十多個論壇,涉及各個專業,幫助同學規劃畢業後的路向。



New Initiative for Service Learning by LSGI in Poverty-Stricken Hubei

During the winter term break in December 2016, a group of 35 students from the Department of Land Surveying and Geo-Informatics (LSGI) headed off to Wuhan, China, to engage in service-learning. Led by Prof. John Shi, Head of LSGI, the students worked with their counterparts from Wuhan University on a project to alleviate poverty within the LSGI service-learning framework of sustainable development in a rural area. They applied GIS techniques to help the villagers in Dawu, one of the poorest areas outside Wuhan in Hubei province, collect and organise information related to health and rural assets. They also arranged health care and orienteering workshops to facilitate the application of Geomatics skills by the local school children.

Highly appreciated by the village government, the service-learning project was deemed a great success, thanks to the generous support and donations from LSGI and some of its alumni.

土地測量及地理資訊學系學生湖北 扶貧

在2016年十二月寒假期間,土地測量及地理資訊學系系主任史文中教授率領三十五名同學遠赴湖北省武漢市,展開「服務學習」之旅,在以「促進鄉郊地區可持續發展」的既定框架下,與武漢大學學生合力扶貧。

他們前往位於武漢市外圍、屬於湖北省內最貧困地區之一的大悟縣,以GIS技術為村民收集及組織與衛生和鄉郊資源有關的資訊,又安排健康護理及野外定向工作坊,教導當地學童應用測繪技巧。



LSGI students serving the school children

大悟村政府高度評價這次「服務學習」之旅獲・非 常感謝土地測量及地理資訊學系及同學們的慷慨捐助和 支持。



The school children with LSGI staff and students



Prof. Shi distributing gifts to the school children

Outstanding Student Awards 2016

A ceremony for the annual Outstanding Student Awards was held on 21 February 2017. Winning the award for Outstanding Student of the Faculty of Construction and Environment (FCE) was Qianchen Sun, a final-year student for the BEng (Hons) in Civil Engineering who was also honoured with a similar award from the Department of Civil and Environmental Engineering (CEE). An exemplary student with a full scholarship from the Hong Kong Jockey Club for 4 years of study, Mr Sun has distinguished himself not only in his academic achievements, but also in his extra-curricular activities and community service. In addition to serving 2 student organizations at PolyU in a leading capacity, he volunteered in literacy projects for local and south Asian youths, providing educational services at Jiaji Middle School on Hainan island. He also spent a semester in 2015 as an exchange student at Purdue University in the US, where he was active in the soccer team, ran for charity, and facilitated an outing for students there to watch a national basketball game. As far as he was concerned, an outstanding student should be persistent, strategic about their goals, willing to explore and give back to society. He is on his way to fulfilling his dream of becoming a qualified civil engineer in Hong Kong, having completed summer internships with VSA-HK Ltd. and Fugro HK Ltd respectively.

Other FCE students honoured at the ceremony were Pei Wu of the Department of Building and Real Estate (BRE), Xinchang Li of the Department of Building Services Engineering (BSE), and Xuandi Fu of the Department of Land Surveying and Geo-Informatics (LSGI). They received the Outstanding Student Award of their respective departments.



Mr Sun (right) receiving his award from the President of PolyU

2016卓越學生獎頒獎典禮

其他在頒獎禮上獲嘉許的本院學生,還包括建築及 房地產學系的吳培、屋宇設備工程學系的李心暢,以及 土地測量及地理資訊學系的付璇迪 。三人均獲所屬學系 選為2016年的最卓越學生。

FCE Students Triumph in Smart-e Competition

A team of 3 surveying students from the Faculty of Construction and Environment (FCE) have emerged as the champion in the Smart-e Competition for Youth Housing in Hong Kong. Known as Genesis, the champion team was made up of Wong Ka Wai, Liu Man Chun, and Ku Tin Tsan. Their winning proposal was a revolutionary youth housing project called the Spring, which aims to provide an extensive common space, green components, and alternative revenue sources for a shared community, environmental sustainability, and long-term affordability. They have won a \$40,000 scholarship and full sponsorship to participate in the National Housing Conference to be held in Australia later this year.

5 other FCE students were rewarded for participating in the competition, which included civil engineering student Ng Siu Wai in the 1st Runner-up team of SPART as well as property management students Lam Wai Ming, Chan Man Ho, Chan Wai Kit, and Tsoi Ling Yui in the 2nd Runner-up team of BREER. Scholarships of \$30,000 and \$20,000 were presented to the 1st Runner-up team and 2nd Runner-up team respectively.

Prof. You-lin Xu, Dean of FCE, said, "It is my pleasure to see that students from our Faculty have triumphed in the Smart-e City Competition for Youth Housing in Hong Kong. They have shown their creativity in applying their knowledge to this issue, which is important for all those who are looking for space to grow and develop in the urban jungle of Hong Kong. I am sure they have learnt much from participating in this competition. I would like to thank Prof. Shiu Keung Tang, Associate Head of the Department of Building Services Engineering, for representing FCE, as well as his colleagues Dr Lin Lu and Dr Sunliang Cao for serving respectively as the competition advisor and one of the panel judges. Their hard work has ensured the success of our students."

Jointly organized by the Faculty of Business and FCE, the competition was sponsored by K & K Charity, which was founded in 2015 to support youth, education, and the underprivileged in Hong Kong.

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The Champion Team receiving the award from Dr Pamsy Hui of the Faculty of Business (left) and Prof. Shiu Keung Tang (right)

建設及環境學院學生智慧城市設計比 賽掄元

本院一支由三位建築測量學同學組成的隊伍,最近在「Smart-e city計劃書設計比賽」中勇奪冠軍。得勝隊伍取名Genesis,隊員有黃嘉威、廖聞晉及顧天燦。其得獎建議書提出了一個題為「春天」(Spring)的創新青年房屋計劃,目標是加入環保元素,為社區提供廣闊的共用空間和開拓另類收入來源,從而達致環境的可持續發展及兼顧其長遠承擔能力。三位同學除了贏得四萬港元獎學金,還可在本年末參與到澳洲舉辦的「全國房屋會議」。

本院還有五位同學在比賽中獲獎,包括亞軍隊 SPART成員之一的土木工程學學生吳韶偉,以及修讀物 業管理學的季軍隊BREER成員林偉明、陳文浩、陳偉傑 及蔡靈蕊。兩隊分別獲頒獎學金三萬及二萬港元。

理大建設及環境學院院長徐幼麟教授説:「看見建設及環境學院的同學在比賽中勝出,我感到十分欣慰。青年住屋對於所有在香港這個城市中成長、以及尋求發展空間的人來說,也是當前最切身的問題,所以我很高興我們的同學能靈活運用他們於大學課程裡學到的知識,就這個議題提出創意、實踐兼備的建議。我亦衷心感謝於百忙中抽空參與和籌備是次比賽的同事,包括屋宇設備工程學系副主任鄧兆強教授,以及同系的呂琳博士和曹孫亮博士,我相信同學從他們身上獲益良多。」

上述賽事由理大工商管理學院與建設及環境學院合辦,獲建灝慈善基金慷慨贊助。該基金於2015年創立, 宗旨是扶植香港的青少年、教育及弱勢社群。



The 2nd Runner-up Team receiving the award from Dr Cao (left)

Best Presenter Award for BRE Student

At the 9th RICS-RISM International Surveying Conference for Undergraduates held at the Kuliyyah of Architecture and Environmental Design, International Islamic University Malaysia on 7th and 8th April 2017, a surveying student from the Department of Building and Real Estate (BRE) won a Best Presenter Award. Mr Lau Chung Him presented a paper entitled "The Challenges of Adopting New Engineering Contract: A Hong Kong Study." Based on his dissertation, the work for the paper was supervised by Dr Wadu Mesthrige.

4 other surveying students from BRE also presented papers at the conference, which had "i-Surveyor: The Profession in The Digital Age" as its theme. Supported by PolyU's International Competition and Conference Participation Scheme, they all agreed it was a great learning experience just being there and listening to the voices of different scholars. Following are their details:

建築及房地產學系學生奪「最佳報告獎 |

在2017年四月七至八日假馬來西亞國際伊斯蘭大學建築及環境設計系舉行的RICS-RISM第九屆國際大學生測量研討會上,於建築及房地產學系修讀地產及建設測量學的劉頌謙同學勇奪「最佳報告獎」。在Wadu Mesthrige博士指導下,他以自己的畢業論文為藍本,撰寫「採用新工程合約的挑戰:香港研究」的報告。

該系其他四位修讀地產及建設測量學的同學,亦在 會上發表了有關其畢業論文的報告,詳情如下:



BRE students at the conference

Name of Student 學生	Title of Paper 論文題目	Supervisor 導師
HON Kin Wa 韓堅華	Risks of Running Design and Build Projects: Future Promotion in Hong Kong 執行「設計及建造」項目的風險:在香港推動前述模式的研究	林偉明博士
LI Man Ling 李汶靈	A Comparative Study of Built Heritage Conservation System between Hong Kong, Singapore and the United Kingdom 香港、新加坡及英國三地古建築保育制度的比較研究	Mr Thomas POON 潘乃棟先生
CHAN Hoi Ho 陳凱豪	Revitalizing Industrial Buildings (Wholesale conversion) On Land Use Optimization 通過活化工廈 (改裝整幢工廈) 善用土地的研究	Dr Edmond LAM 林偉明博士
POON Ka Lun 潘家麟	Economic Feasibility of Developing Urban Underground Space in Hong Kong 開發香港市區地底空間的經濟可行性研究	Mr Stephen MAU 繆嘉榮先生



Surveying students from BRE

幾位同學在理大的「國際賽事及研討會參與計劃」支持下,參與由皇家特許測量師學會(RICS)及馬來西亞皇家測量師學會(RISM)合辦的研討會,主題是「數碼年代的專業:i-測量師」。眾人一致認為能在席上聆聽不同學者的意見,已叫他們眼界大開、獲益良多。

FCE Students Shine in Youth Competition

A 7-strong team of students mostly from the Faculty of Construction and Environment (FCE) has won an Honourable Mention for their entry in the World Sustainable Built Environment Conference International Youth Competition 2017. The FCE students were Pei Wu, a final-year student in building engineering and management; Dongyang Wei, a student in environmental engineering and sustainable development; Chuanrui Yu, a student in building services engineering; Juegi Chen and Yining Hong, 2 students in surveying. They would like to thank Dr Patrick Fong, Associate Head (Partnership) of the Department of Building and Real Estate (BRE), for encouraging them to enter the competition. Their entry was a feasibility study adopting BIM technology on implementing sustainable and innovative technologies for tong lau's rehabilitation work.

In addition, one of the 8-member teams shortlisted for the International Youth Competition held in Hong Kong on 6 June 2017 consists of 4 students from the Faculty of Construction and Environment (FCE). They are Qiancheng Wang, Weicong Qin, and Bin Chen, all from the Department of Building and Real Estate (BRE), as well as Valeria Isabel Alvarado Roman, a PhD student from the Department of Civil and Environmental Engineering (CEE). Demonstrating the conference theme of "Transforming Our Built Environment through Innovation and Integration: Putting Ideas into Action," their entry was titled "The Application of Building Integrated Energy System in Hong Kong: Solid Oxide Fuel Cell (SOFC)-based Multi-generation Using Bio-gas from Waste". Serving as their team counsel is Prof. Ni Meng of BRE.

建設及環境學院學生獲青年賽優異獎

以建設及環境學院同學為骨幹的七人團隊,在2017年度「香港可持續建築環境全球會議」國際青年賽中贏得優異獎。團隊中的本院同學計包括建築工程及管理學應屆畢業班學生吳培、環境工程與可持續發展學學生魏東陽、屋宇設備工程學學生于傳睿、以及修讀地產及建設測量學的陳珏錡及洪翌寧。眾人對鼓勵他們參賽的建築及房地產學系副系主任(協作)方識華博士非常感激。在得獎報告中,他們運用了建築資訊建模(BIM)技術,探討以創新及可持續科技開展唐樓修復工程的可行性。

「世界可持續建築環境國際青年賽」於2017年六月六日在香港舉行,而其中一支入圍的八人隊伍,當中四名成員都是建設及環境學院學生,包括建築及房地產學系的王謙誠,覃偉聰及陳斌,以及土木及環境工程學系博士生Valeria Isabel Alvarado Roman。為了切合會議主題一「以創新與一體化徹底改變我們的建築環境:坐言起行」,他們的參賽作品涉及在香港應用建築物綜合能源系統,重點探討以固態氧化物燃料電池為基礎、利用廢料釋出生物氣體的多模式發電方法。團隊顧問是建築及房地產學系的倪萌教授。



FCE students at the International Youth Competition

FCE Students Receive HKHS Awards

On 21 January 2017, the Hong Kong Housing Society Award (HKHS Award) Presentation Ceremony was held at the World Trade Centre Club to recognize students with outstanding academic performance and also support needy students of related disciplines. 6 students from the Faculty of Construction and Environment (FCE) benefited from the awards, which were \$8000 each this year. Following are their details:

建設及環境學院學生獲香港房屋協會頒發獎/助學金

香港房屋協會於2017年一月二十一日假香港世界貿易中心會舉行頒獎禮,除了嘉許修讀相關學科的優異生,亦向有經濟需要的同學頒贈助學金。今年本院共有六位同學受惠,每人獲發的獎/助學金達八千港元。以下為得獎者詳情:



FCE students at the award ceremony

Name of Student 得獎學生	Dept. 學系	Course / Year
Cheng Yiu Sing 鄭曜昇	BRE	BSc (Hons) Property Management, Year 3 物業管理學(榮譽)理學士課程/三年級
Cheung Yuk Nam 張郁楠	BRE	BSc (Hons) Surveying, Year 2 地產及建設測量學(榮譽)理學士課程/二年級
Sze Cheuk Lam 施焯林	BRE	BSc (Hons) Building Engineering & Management, Year 4 建築工程及管理學(榮譽)理學士課程/四年級
Wong Kit Ming 黃潔明	BRE	HD Building Technology & Management (Surveying), Year 2 建築科技及管理學 (測量)高級文憑課程/二年級
Wong Ka Lok 黃家樂	BSE	BEng (Hons) Building Services Engineering, Year 4 屋宇設備工程學(榮譽)工學士課程/四年級
Wong Lai Kan 黃勵勤	CEE	BEng (Hons) Civil Engineering, Year 4 土木工程學(榮譽)工學士課程 /四年級

OSH Best Project Award 2016



Mr Khan (right) receiving his award

On 9 December 2016, a PhD candidate from the Department of Building and Real Estate (BRE) was honoured in a prize presentation ceremony at the Hong Kong Convention and Exhibition Centre. Organized by the Occupational Safety and Health (OSH) Council, the annual awards promote the importance of occupational safety and health. Based on the relevance, quality, and originality of his submission, Mr Hafiz Zahoor Ahmad Khan received a cash prize of \$3,000 and a shield for his investigation of the relationship between safety climate and safety performance in the construction of multi-storey buildings in Pakistan. He was supervised by Prof. Albert Chan, Head of BRE.

2016 職安局「最佳研究項目獎」

為了提升大專學生的職安健意識,職業安全健康局每年均頒發「最佳研究項目獎」,根據參賽報告及論文的適切性、質素及原創性,選出得獎同學:而2016年的得獎人之一,就是建築及房地產學系博士生Hafiz Zahoor Ahmad Khan。在2016年十二月九日假香港會議展覽中心舉行的頒獎禮上,他獲大會頒發了獎座及三千元獎金。他是建築及房地產學系系主任陳炳泉教授的學生,得獎研究項目旨在探討巴基斯坦多層大廈建築工程中工地安全意識與安全績效的關係。

BIM Competition 2016

5 students from the Department of Building and Real Estate (BRE) won an award for Best Presentation in the Building Information Modelling (BIM) Competition organized by Paul Y. Engineering Co. A presentation ceremony on 20 December 2016 honoured Chen Jueqi, a student of surveying and 4 other students in building engineering management: Lau Ka Yi, Wong La Yan, Wong Pui Sze, and Wu Pei. Adopting BIM technology to design buildings on a site shaped like the number 70

2016建築資訊建模大賽

保華建業於2016年十二月二十日舉行的「建築資訊建模大賽」頒獎典禮上,把「最佳報告獎」頒發予建築及房地產學系五位同學。得獎團隊中,四位是建築工程及管理學學生,包括劉家怡、黃麗茵、黃珮詩及吳培和修讀地產及建設測量學的陳珏錡。他們採用「建築資訊建模」(BIM)技術,在一個近似阿拉伯數字「70」的地形上設計了一組建築群,以配合該公司慶祝創辦七十周年的主題。得獎模

to coincide with the 70th anniversary of the company, the students developed a practical and sustainable model that involved an overall estimation and a budget. They would like to thank Dr Patrick Fong, Associate Head of BRE (Partnership), for encouraging them to enter the competition, as well as Prof. Heng Li and Dr Huang Ting for their technical assistance.

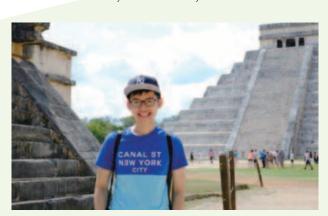


The students with their awards

型體現了實用與可持續發展的特質,而在建模過程中,他們則需進行整體估算及制訂預算。幾位同學除了感激鼓勵他們參賽的副系主任(協作)方識華博士,亦衷心感謝提供技術支援的李恆教授和黄霆博士。

Voyage of Discovery for BRE Student

A surveying student from the Department of Building and Real Estate (BRE), Terrence Ku, went on a Visiting Student Programme to the Wharton School at the University of Pennsylvania (UPenn) in the US for the spring semester of 2015/16. It was an unforgettable experience for him. Not only was he exposed to a different learning environment, he also became more mature and independent as a result of his time studying overseas. He learnt much from his classmates at UPenn, whose passion and enthusiasm in the classroom were conducive for interactive discussions with the professors. Moreover, the focus on case studies gave him a taste of what it was like for professional consultants to solve problems in the real world. The intense personal development he experienced was not limited to the classroom. In addition to making friends from around the world, Terrence had a chance to explore Mexican culture during spring break with a visit to Cancun. He greatly enjoyed meeting all the amazing people there. Now more confident than ever, he is optimistic about the future because he knows he can overcome any difficulties that may come his way.



Mr Ku in Cancun

建築及房地產學系學生留美學習之旅

在建築及房地產學系修讀地產及建設測量學的顧天燦同學,於2015/16學年參加了理大的「學生訪問計劃」,在美國賓夕凡尼亞大學華頓商學院度過了難忘的春季學期。遠赴異國,處身截然不同的學習環境,使他變得成熟獨立;當地同學的學習熱誠及與教授間的互動討論,更讓他獲益良多。校方著重案例研究,使他體會對論,更讓他獲益良多。校方著重案例研究,使他體會對論,更讓他獲益良多。校方著重案例研究,使他體會對論,更讓他獲益良多。校方著重案例研究,使他體會對論,更讓他獲益良多。校方著重案例研究,使他體會對論,更讓他獲益良多。校方著重案例研究,使他體會對於生活更大學的課餘生活,還於實際,



Outstanding PolyU Alumni Awards

On 25 April 2017, a presentation ceremony for the Outstanding PolyU Alumni Awards was held at the Hotel ICON to honour the 7 awardees. 2 of them were alumni of the Faculty of Construction and Environment (FCE) and its predecessor, namely, Mr Mike Wong (Higher Diploma in Surveying (Building Surveying)/1977 and Master of Science in International Real Estate/2003) and Ir Eric Ma (Diploma in Structural Engineering, 1982; Higher Diploma in Structural Engineering, 1984).

As an Adjunct Professor of the Department of Building and Real Estate (BRE), Mr Mike Wong has staunchly supported his alma mater over the years. Designated a Distinguished Building Surveyor by the Hong Kong Institute of Surveyors, Mr Mike Wong is a registered professional surveyor and an Authorized Person. Currently Deputy Managing Director of Sun Hung Kai Properties Limited, he has supervised hundreds of residential and commercial projects over the years, covering ICC and IFC, the two tallest landmark skyscrapers in Hong Kong. Professional commitments aside, he is equally dedicated to the betterment of the community, serving as a member of the Hong Kong Housing Society and a council member of the Construction Industry Council.

理大傑出校友

兩位在2016年榮膺學系傑出校友的建設及環境學院畢業生,較早前再下一城,獲選為理大新一屆傑出校友。他們是理工學院1977年測量(建築測量)學高級文憑及理大2003年國際房地產理學碩士畢業生黃植榮先生(建築及房地產學系傑出校友),以及理工學院1982年結構工程學文憑及1984年結構工程學高級文憑畢業生馬紹祥工程師(土木及環境工程學系傑出校友)。頒獎儀式已於2017年四月二十五日隆重舉行。

黃校友為本院建築及房地產學系客座教授,多年來 不遺餘力支持母校,曾獲香港測量師學會選為卓越建築 測量師。他是註冊專業測量師兼認可人士,現任新鴻基 地產副董事總經理,多年來統籌的住宅及商業項目數以 百計,包括全港最高的兩大地標摩天大樓:環球貿易廣 場和國際金融中心。除了專業成就卓越,黃校友亦致力 貢獻社會,現為香港房屋協會委員及建造業議會成員。



Mr Wong (second from right) receiving his award

As Secretary for Development of the HKSAR Government, Ir Eric Ma oversees a broad portfolio of policy areas ranging from urban planning to heritage conservation, with a special focus on addressing the supply-demand imbalance for land and housing in Hong Kong. His previous experience gained from senior positions in construction and consulting firms has made him eminently qualified to take up the challenge. He was Managing Director of Maunsell Consultants Asia Ltd, responsible for major development projects in Hong Kong. In 2010, he was tasked by AECOM with expanding its overseas business in Asia, and was the Group's Executive Vice President for Civil and Infrastructure Business in the Asia-Pacific Region before he was appointed Under Secretary for Development in January 2014.

Jointly organized by PolyU and the Federation of PolyU Alumni Associations, the biennial Outstanding PolyU Alumni Awards honour outstanding graduates of PolyU and its forerunning institutions – the Government Trade School, the Hong Kong Technical College and the Hong Kong Polytechnic – for their remarkable professional achievements and contributions to the community and their alma mater.

馬紹祥工程師現任香港特別行政區政府發展局局長,執掌的政策範疇涵蓋城市規劃及文物保護,尤其著重改善土地及房屋的供求失衡問題,憑藉其多年任職建築及顧問公司高層的經驗,絕對具備應付相關挑戰的條件。他任職茂盛(亞洲)工程顧問有限公司董事總經理期間,專責香港多項大型發展項目:2010年轉職艾奕康有限公司,擔任集團的亞太區土木及基礎設施執行副總裁,負責擴展亞洲業務,直至2014年一月獲委任為發展局副局長。



Ir Ma (second from right) receiving his award

「理大傑出校友」獎由理大與理大校友會聯會合辦, 每兩年一次,旨在表揚理大及其前身(香港官立高級工業 學院、香港工業專門學院及香港理工學院)畢業生的專業 成就,以及對社會和母校的重大貢獻。

Class of 1967 Visits BRE

On 5 January 2017, about a dozen alumni and some of their spouses from the Class of 1967 paid a visit to the Department of Building and Real Estate (BRE) in celebration of their 50th anniversary since graduating from the former Building Department of the Hong Kong Technical College, one of PolyU's predecessors. Led by Prof. Kenneth Pang, himself a member of the class, the alumni were mostly retired engineers, surveyors, and technicians. After a warm welcome from Prof. Albert Chan, Head of the Department of Building and Real Estate (BRE), Prof. You-Lin Xu, Dean of the Faculty of Construction and Environment (FCE), gave a presentation on the recent development and achievements of FCE. This was followed by a briefing from Prof. Chan on the evolution of BRE from the past to the present. A video to commemorate PolyU's 80th anniversary in 2017 with the theme of shaping the future was played for the visitors, who were presented with FCE photo frames and BRE anti-heat stress polo shirts as souvenirs. They were also given a tour of the Ng Wing Hong Laboratory for Sustainable City, a classroom and a lecture theatre. It was a memorable occasion for all of them.



The visiting alumni with a few BRE staff

Outstanding BRE Alumnus Stays Active in Retirement

A recipient of the 2012 Outstanding Alumni Award from the Department of Building and Real Estate (BRE) has kept himself busy in his golden years. Ir Peter Mok was recently interviewed by Ming Pao about his retirement, which began 10 years ago. According to a plan he made in his early 20s, he has led a full life by spending the first 20 years of his life learning as much as possible, the next 40 years in work before retiring at the age of 60. He did a thorough self-assessment one or two years before his retirement to ensure he was mentally prepared for it and would continue to live happily. For Ir Mok, life does not stop with retirement. Perhaps because he does not have to worry about anything now, he sticks to a routine of playing golf and learning about Chinese medicine on Mondays, playing tennis and occasionally attending meetings of the Hong Kong Institute of Construction Managers on Tuesdays, spending time with his grandchildren and learning to play the saxophone on Wednesdays, as well as doing whatever he likes on Thursdays and Fridays. His thirst for knowledge has made him try to learn a little bit of everything. For half a year, he has been learning how to draw and sketch in the style of the world-famous painter Xu Beihong. Firmly believing that it is important to go with the flow and adapt to a new way of life in retirement, he is prepared to step out of his comfort zone to explore the world. He has plans to go backpacking in English-speaking European countries by himself in the future. This was something he never had time to do when he was young. He is certainly making up for that now.

1967年畢業班校友重訪建築及房地 產學系

十餘位在1967年畢業的校友攜同配偶,於2017年一月五日到訪建築及房地產學系,慶祝他們自理大前身香港工業專門學院畢業五十週年。這群資深校友以退休工程師、測量師及技術員為主,團長彭贊榮教授也是該年的畢業生。眾人獲系主任陳炳泉教授接待,院長徐幼麟教授並向他們親自簡介建設及環境學院的最新消息及成就。陳教授接著講述學系的發展歷程,播放理大為今年八十週年校慶而攝製、以「成就未來」為主題的短片,並向眾校友致送本院相架及由建築及房地產學系研發的抗熱T恤,以資留念。另外,一行人還獲安排參觀伍永康可持續城市發展實驗室、課室及演講廳,眾人均感這次活動意義深長。



Prof Xu presenting the recent development and achievements of FCE

建築及房地產學系傑出校友「退而不 憂」享受精彩生活



Ir Mok

建築及房地產學系2012年傑出校友 莫國和工程師最近接受《明報》專訪, 暢談十年前開始的精彩退休生活。原 來他早於二十出頭已有完整的「生涯 規劃」:人生首二十年努力學習,接 著四十年全力工作,到了六十歲便享 受退休生活。到了臨近退休前的一至 兩年,他便進行詳細的自我評估,確

保已有充足心理準備。莫校友認為退休生活可以同樣精彩。他制訂了一個「生活時間表」: 週一打高球和學中醫; 週二打網球、偶爾參加香港營造師學會的會議; 週三家庭日,見見孫兒和學吹色士風; 週四至週五則自由活動,做自己喜歡的事。他求知慾強,很多事情都有興趣嘗試,近半年學習國畫,臨摹已故大師徐悲鴻的畫風。莫校友深信退休是新生活的開始,而他已準備好走出「舒適區」探索世界,獨個兒到歐洲的英語國家展開背包之旅,一圓年輕時沒時間實現的夢想。



International Summit on Belt and Road Innovation and Entrepreneurship

In celebration of PolyU's 80th Anniversary, Zhejiang University's 120th Anniversary and the 20th Anniversary of the Zhejiang University-PolyU Joint Centre, Ir Prof. Xu You Lin, Dean of the Faculty of Construction and Environment (FCE) and Prof. Albert Chan, Head of the Department of Building and Real Estate (BRE), together with a programme team of BRE's MSc in International Real Estate-Zhejiang (IRE), were invited to the International Summit on Belt and Road Innovation and Entrepreneurship cum Dinner Gathering in Hangzhou on 22 April 2017.

Guests-of-honour included Prof. Li Lu, Director-General of the Department of Educational, Scientific and Technological Affairs at the Liaison Office of The Central People's Government in the Hong Kong SAR, Mr Guo Huawei, Chief of the Department of Education in the Zhejiang Province of China and Mr Eddie Ng Hak Kim, SBS, JP, Secretary for Education of the HKSAR Government. In addition, Prof. Sir James Mirrlees, Nobel Laureate in Economic Sciences for 1996, shared his wisdom and insight on the theme of innovative growth with respect to the Belt and Road Initiative in his keynote speech. There were also two related plenary sessions exploring business opportunities and entrepreneurship on the one hand and education and innovation on the other.

「一帶一路」創新創業國際高峰論壇

為慶賀理大創校八十周年、浙江大學一百二十周年及兩校聯合中心成立二十周年,本院院長徐幼麟教授、建築及房地產學系系主任陳炳泉教授,以及該系負責國際房地產理學碩士課程的教學團隊應邀前往杭州,出席於2017年四月二十二日舉行的「一帶一路」創新創業國際高峰論壇暨兩校聯合中心校友及學員聯誼晚宴。

是次論壇的主禮嘉賓包括中央人民政府駐香港特別 行政區聯絡辦公室教育科技部部長李魯教授、浙江省教育 廳廳長郭華巍先生,以及香港特別行政區教育局局長吳 克儉先生。1996年諾貝爾經濟學獎得獎者莫理斯爵士更 應邀發表主題演講,分享與「一帶一路」有關的創新經濟 發展智慧。另外,論壇還設有兩節全體會議,分別探討 「一帶一路」帶來的商機與創業,以及相關的教育與創新。



Participants at the International Summit

Afterwards, a dinner gathering was held for guests, alumni, students and staff to celebrate this important milestone and catch up with one another. Prof. Timothy W. Tong, JP, and Prof. Wu Zhaohui, the respective Presidents of PolyU and Zhejiang University, gave a rapturous welcome to everyone at the gathering, where the official establishment of the Zhejiang University-PolyU Joint Centre's Alumni Association was announced.

A symbol of the flourishing relationship between PolyU and Zhejiang University, this one-day summit was a roaring success, bringing together diverse perspectives on the subject of 'Belt and Road Innovation and Entrepreneurship.'

在論壇結束後舉行的晚宴,有不少嘉賓、校友、學生和教職員出席,聚舊寒暄之餘,更重要的是一起慶祝這個重要的里程碑。理大校長唐偉章教授及浙大校長吳朝暉教授致辭時,除歡迎各人抽空出席,還欣然宣佈「浙江大學-香港理工大學聯合中心校友聯誼會」正式成立。

這次高峰論壇十分成功,不但匯聚了各方專家就「一帶一路創新創業」這個議題各抒己見,更展現理大與浙大 合作無間,情誼與日俱增。



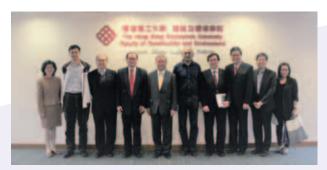
(from left) Ir Prof. You-Lin Xu (3rd in the front), Prof. Albert Chan (4th in the front) and Dr Stanley Yeung, Programme Leader of IRE (5th in the 2nd row), together with a programme team of BRE's MSc in International Real Estate (Zhejiang) and an outbound BRE Student

Council Chairman's Visit to FCE

On 15 March 2017, Mr Chan Tze-Ching, Council Chairman of PolyU, visited the Faculty of Construction and Environment (FCE) to get a better understanding of FCE and see how he could help it achieve more. He met with Prof. You-Lin Xu, Dean of FCE, Prof. Xiang-Dong Li, Associate Dean (Research), Prof. Geoffrey Shen, Associate Dean (Teaching), Prof. Albert Chan, Head of the Department of Building and Real Estate (BRE), Prof. Asif Usmani, Head of the Department of Building Services Engineering, Prof. William Lam, Head of the Department of Civil and Environmental Engineering (CEE), and Prof. John Shi, Head of the Department of Land Surveying and Geo-Informatics (LSGI). Prof. Xu gave a presentation on the Faculty's academic programmes and research impact as well as the direction of the Faculty's development. Mr Chan congratulated FCE on its 2017 QS subject rankings. opining that the University should build on FCE's strengths and support those areas which would have significant impact and scale. He added that leadership and critical mass were also important factors for success.

校董會主席到訪本院

理大校董會主席陳子政先生於2017年三月十五日親臨本院視察,除了藉此加深對院務的了解,亦期望審視大學可如何促進本院的發展。陳主席會見了院長徐幼麟教授、副院長(科研)李向東教授、副院長(教務)沈岐平教授、建築及房地產學系系主任陳炳泉教授、屋宇設備工程學系主任Asif Usmani教授、土木及環境工程學系主任林興強教授,以及土地測量及地理資訊學系主任史史中教授。徐院長向陳主席簡介了本院的課程、研究成果及發展路向。陳主席亦藉此機會恭賀本院在2017年QS世界大學(學科)排名榜上取得佳績,並表示校方應善用本院的優勢,支持具潛力的研究範疇:他亦認為出色領導和群聚效應都是成功的要素。



The Council Chairman with the management of FCE and the Council Secretary

Times Higher Education (THE) Innovation and Impact Summit

To empower universities' economic and social impact through innovative research and teaching, the Times Higher Education (THE) Innovation and Impact Summit was organized to provide a platform for university and business leaders to explore this pressing issue. Speakers from PolyU included its President, Prof. Timothy W. Tong, its Vice President (Research Development), Prof. Alexander Wai, and Prof. Angelina Yuen, Vice President (Student and Global Affairs).

A breakout session of the Summit was held on 31 May 2017. Prof. You-Lin Xu, Dean of the Faculty of Construction and Environment (FCE), gave an overview of recent innovations and impact on sustainable urban development in FCE. This was followed by presentations on selected research in geo-informatics, environment, and building energy from Prof. John Shi, Head of the Department of Land Surveying and Geo-Informatics (LSGI), Prof. Xiangdong Li, Associate Dean (Research), and Prof. Shengwei Wang, Chair Professor of the Department of Building Services Engineering (BSE), respectively. In addition, there was an exhibition of posters highlighting the research impact made by the four departments in FCE. Participants also visited the Smart Construction Laboratory, the Underground Utility Survey Laboratory, and the Fire Engineering Laboratory under the guidance of Prof. Heng Li of BRE, Dr Wallace Lai of LSGI, and Dr Nai Kong Fong of BSE respectively.



At the breakout session



Prof. Albert Chan (left) talking about his research on the anti-heat stress uniform

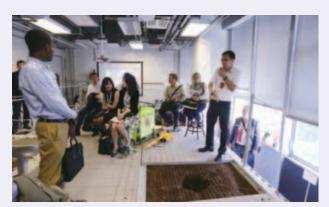
泰晤士高等教育創新與影響高峰會

為了探討大學如何透過創新研究與教學加強其經濟和社會影響力,理大與《泰晤士高等教育》聯合主辦了創新與影響高峰會。理大方面的講者包括校長唐偉章教授、副校長(科研發展)衛炳江教授,以及副校長(學生及環球事務) 阮曾媛琪教授。

在2017年五月三十一日舉行的高峰會分組會議上,院長徐幼麟教授向與會者介紹了本院在可持續城市發展學上的最新發明和影響力。徐院長發言後,土地測量及地理資訊學系系主任史文中教授、副院長(科研)李向東教授及屋宇設備工程學系講座教授王盛衛教授,分別講述了本院在地理信息學、環境及建築物節能方面的部分研究。分組會議設有海報展覽,扼要展示本院四大學系的科研影響力。另外,參加者還獲邀在李恆教授(建築及房地產學系)、賴緯樂博士(土地測量及地理資訊學系)及方乃剛博士(屋宇設備工程學系)分別帶領下,參觀建築虛擬模型實驗室、地下管線測量實驗室及消防工程實驗室。



Prof. Shen (left) and Prof. Xu (right) with one of the summit participants



A visit to the Underground Utility Survey Laboratory



The HKIE accreditation team with some leading academic staff of FCE

HKIE Accreditation Visit

On 17 January 2017, an accreditation exercise was held by the Hong Kong Institution of Engineers (HKIE) at the Faculty of Construction and Environment (FCE). The HKIE accreditation team, comprising a visiting team, an Assessor, the Sydney Accord Review Panel and the Secretariat, met with Prof. You-Lin Xu, Dean of FCE; Prof. Geoffrey Shen, Associate Dean in Teaching; Prof. Albert Chan, Head of the Department of Building and Real Estate (BRE); Prof. Asif Usmani, Head of the Department of Building Services Engineering (BSE); Prof. William Lam, Head of the Department of Civil and Environmental Engineering (CEE), and other leading academic staff to review 3 full-time Higher Diploma (HD) programmes, namely, the HD in Building Technology and Management (Engineering), the HD in Building Services Engineering, and the HD in Civil Engineering.

Following a combined session discussing strategic and generic issues, 3 parallel sessions were conducted, one for each of the programmes. At each session, all the academic staff involved in teaching the programme under review were in attendance, together with the respective department head.

The HKIE accreditation team collected views from external stakeholders, including representatives of the Advisory Board members, external examiners, and employers of the graduates. In addition to a review of student outcomes for accreditation purposes, as evidenced by assignments, projects, laboratory reports etc., there was a tour of the Industrial Centre, where training common to the 3 departments was demonstrated before specific training for students from different departments was presented in separate locations. Accreditation team members also had a chance to visit departmental facilities like laboratories. Other campus facilities such as the library and the English Language Centre were visited by Ir Prof. Richard Yuen, Chairman of the visiting team, and one member of the Secretariat.

To get a better picture of the students and graduates of the HD programmes, 3 recent graduates and 6 current students (3 from each year) of each programme were interviewed by the accreditation team. The full day of accreditation activities concluded with an executive summary session with the Dean, Associate Dean, department heads, programme leaders and other key staff.

香港工程師學會認證視察

2017年一月十七日,香港工程師學會派員探訪建設及環境學院,為建築科技及管理學(工程)、屋宇設備工程學,以及土木工程學三個由本院開辦的全日制高級文憑課程進行認證。由視察人員、評審員、悉尼協議審視小組及秘書處成員組成的學會認證團隊,會見了院長徐幼麟教授、副院長(教務)沈岐平教授、建築及房地產學系主任陳炳泉教授、屋宇設備工程學系主任Asif Usmani教授、土木及環境工程學系主任林興強教授及其他主責學術人員。

雙方先集中討論策略性及一般事務;其後,與會者分成三組,分頭討論三個高級文憑課程的事宜。在每一組,除有關學系的主任,有份授課的學術人員均全體列席。

學會認證團隊亦有收集顧問委員會委員、校外考官、畢業生僱主代表等校外持份者的意見。除了審視日常功課、專題研習報告、實驗報告等足以顯示學生學習成果的文件,認證團隊還參觀了工業中心,首先觀看三個學系共通培訓的上課情況,然後再前往不同地點,了解不同學系學生需接受的專門訓練,並探訪各學系的專用設施(如實驗室)。另外,團隊主席袁國傑教授及學會秘書處一位成員還參觀了大學圖書館、英語中心等校園設施。

為加深對學生及畢業生的了解,認證團隊會見了每個高級文憑課程的三名新畢業生及六名學生(一、二年級各三人)。最後一整天的認證工作以院長、副院長、各系主任、課程主任及其他主要人員均有參與的行政摘要報告會議作結。



Going over the executive summary in the concluding session

Senior Management of PolyU Visits BRE

On 19 April 2017, the President of PolyU, Prof. Timothy W. Tong, and the Deputy President and Provost, Prof. Philip Chan, visited the Department of Building and Real Estate (BRE) for an update on the department's recent developments and achievements in the areas of teaching, research and partnership in support of the PolyU's strategic plan. Meetings were held with Prof. You-Lin Xu, Dean of the Faculty of Construction and Environment (FCE), Prof. Albert Chan, Head of BRE, Prof. Edwin Chan, Acting Associate Head (Research), Dr Daniel Chan, Associate Head (Teaching), Dr Patrick Fong, Associate Head (Partnership), and other academic staff to discuss issues of mutual concerns. Taking this opportunity, BRE also showcased its latest research accomplishments in construction health and safety, digital construction and sustainable urban systems. Live demonstrations were made during the tours to its flagship facilities, notably by Prof. Heng Li in the Smart Construction Laboratory and Dr Orianna Guo in the Ng Wing Hong Laboratory for Sustainable

The afternoon visit concluded with the encouragement of the university's senior management for BRE to meet the challenges ahead on its road map for the betterment of PolyU.



Senior management visiting BRE

理大主管人員視察建築及房地產學系

理大校長唐偉章教授聯同常務及學務副校長陳正豪教授,於2017年四月十九日下午視察建築及房地產學系,藉此了解該系在教務、科研及協作方面配合校方「策略發展計劃」所取得的進展。兩人與院長徐幼麟教授、系主任陳炳泉教授、署理副系主任(科研)陳漢雲教授、副系主任(教務)陳煒明博士、副系主任(協作)方識華博士及多位學術人員舉行了連串會議,討論雙方同感關注的事項。系方亦借此良機,介紹在工地安全與健康、數碼建築,以及可持續城市系統上的最新科研成果,並安排兩人參觀學系的旗艦設施,由李恆教授及郭健博士分別在「智能建築實驗室」與「伍永康可持續城市發展實驗室」即場示範。

結束視察前,兩位大學主管勉勵學系的同事再接再 厲,為理大再創新天。



At the meeting

New Programme Proposals Reviewed by Panel

On 22 May 2017, a panel comprising of officials from the Hong Kong Government and academe met to review and prioritize 4 new programmes for the Academic Development Proposal (ADP) exercise for the 2019-2022 triennium, one from each department of the Faculty of Construction and Environment (FCE). The panel members were Prof. Philip Chan, Deputy President and Provost of PolyU; Ir Chi-Chiu Chan, Ex-Director of the Drainage Services Department, Immediate Past President of the Hong Kong Institution of Engineers (HKIE), and member of the Construction Industry Council; as well as Ir Dr Raymond Cheung, Chief Assistant Secretary (Works) of the Development Bureau of the Hong Kong Government. After they were welcomed by Prof. You-Lin Xu, Dean of FCE, Prof. Geoffrey Shen, Associate Dean (Teaching), gave an overview of the meeting. Panel members heard from Prof. John Shi, Head of the Department of Land Surveying and Geo-Informatics (LSGI), Prof. William Lam, Head of the Department of Civil and Environmental Engineering (CEE), Prof. Asif Usmani, Head of the Department of Building Services Engineering (BSE), and Prof. Albert Chan, Head of the Department of Building and Real Estate (BRE), who took turns introducing their respective programme proposal, namely, the BSc (Hons) in Urban Informatics for Smart Cities, the BEng (Hons) in Sustainable Structural and Fire Engineering, the BEng (Hons) in Building Ecology Engineering, and the Bachelor of Global Construction (Hons). An open discussion following the four presentations facilitated the panel review. Comments were also sought from a fourth panel member, Ir Chi-Keung Hon, Permanent Secretary for Development (Works).

Participants at the meeting

評審小組審視本院建議開辦的新課程

一個由特區政府官員及大學學者組成的評審小組於 2017年五月二十二日舉行會議,因應2019-2022年「學 術發展建議工作」審視及為四個新策劃的課程評定優次。 在這些新課程中,建設及環境學院四大學系各佔其一。 當天與會的小組成員包括理大常務及學務副校長陳正豪 教授,渠務署前署長、香港工程師學會上屆會長兼建造 業議會成員陳志超工程師,以及特區政府發展局總助理 秘書長 (工務) 張偉文博士工程師。院長徐幼麟教授致歡 迎詞後,副院長(教務)沈岐平教授隨即簡介會議概要, 並由土地測量及地理資訊學系系主任史文中教授、土木 及環境工程學系系主任林興強教授、屋宇設備工程學系 系主任Asif Usmani教授,以及建築及房地產學系系主任 陳炳泉教授接力介紹其學系擬開辦的課程 — 智慧城市 資訊學(榮譽)理學士課程、可持續結構及消防工程學(榮 譽)工學士課程、建築生態工程學(榮譽)工學士課程,以 及全球建築(榮譽)學士課程。四位系主任報告完畢後, 會議進入自由討論環節,對小組了解這些課程很有幫 助。另外,小組亦有徵詢第四位成員 — 發展局常任秘書 長(工務)韓志強工程師的意見。



(from left) Prof. Xu with 3 members of the review panel, Ir Chan, Prof. Chan, and Ir Dr Cheung



Prof. Shen giving an overview

RICS-University Annual Partnership Meeting

The Annual Partnership Meeting between the Royal Institution of Chartered Surveyors (RICS) and PolyU was held on 18 January 2017. It was attended by 4 representatives from RICS as well as departmental representatives and programme leaders from the Faculty of Construction and Environment (FCE). After a briefing by RICS on its current position and latest developments, PolyU responded with its own position, led by an overview from Prof. Geoffrey Shen, Associate Dean (Teaching). This was followed by reports from Dr Daniel Chan, Associate Head of the Department of Building and Real Estate (BRE), Dr Lilian Pun, Associate Head of the Department of Land Surveying and Geo-Informatics (LSGI), and programme leaders concerned.

Subsequently, both sides reviewed course provision and course development, including an annual monitoring report, an external examiner's report, threshold standards, research strategies, and the employability of graduates. They also reviewed their mutual aims and objectives, such as the development of collaborative programmes/ research in China, inclusion of relevant postgraduate level programmes, scholarships/ sponsorships etc.

The meeting concluded with the following 3 calls for proposals from the RICS Research Trust, which is a registered charity for the public benefit.

- 1) Improving early cost advice for potential construction and infrastructure projects;
- 2) Data, empowerment and the role of the future professional;
- 3) Natural capital and land management transactions.

皇家特許測量師學會──理大週年合作 會議

皇家特許測量師學會(RICS)與理大一年一度的合作會議已於2017年一月十八日舉行,與會者包括學會四位代表和建設及環境學院的學系代表與幾位課程主任。會議先由RICS介紹該會最新發展,接著是由副院長(教務)沈岐平教授簡要講述本院情況。建築及房地產學系副主任陳煒明博士、土地測量及地理資訊學系副主任潘鄭淑貞博士及有關的課程主任,亦一一在會上匯報課程概況。

其後,雙方審視了課程的安排和發展,包括週年監察報告、校外考官報告、門檻標準、科研策略及畢業生的就業情況。大家亦檢討了彼此的共同目標,如在中國開展協作項目/研究、增設相關的深造課程、獎學金等。

會議亦知悉註冊公益慈善組織 — RICS科研信託基金徵求下述三項研究的建議書:

- 為可能上馬的建造及基建項目提供更佳的早期成本諮詢;
- 2) 數據、授權及專業人員日後的角色;
- 3) 自然資本與土地管理交易。



At the partnership meeting

CEDD Visits FCE

On 12 April 2017, 4 engineering practitioners from the Civil Engineering and Development Department (CEDD) of the Hong Kong government visited the Faculty of Construction and Environment (FCE) to explore possible collaboration in research on underground space development. Led by Mr Wai Keung Pun, Head of the Geotechnical Engineering Office at CEDD, the government engineers were introduced to FCE by its Dean, Prof. You-Lin Xu. Mr Pun and his colleagues took turns sharing what they do at CEDD with 4 academics from the Department of Civil and Environmental Engineering (CEE) whose research relates to underground space development. They included Prof. Kam Tim Chau, Chair Professor of Geotechnical Engineering, Prof. Jianhua Yin, Chair Professor of Soil Mechanics, Dr Yung Ming Cheng, and Dr Jianbo Zhu, who respectively presented their research in this area. It was a mutually productive meeting for all concerned.

土木工程拓展署人員到訪

特區政府土木工程拓展署四位工程人員於2017年四月十二日到訪本院,探討合作研究發展城市地下空間的事宜。院長徐幼麟教授向以土力工程處處長潘偉強先生為首的來賓介紹了本院情況;潘先生及其同事則輪流向四位在座的土木及環境工程學系學者講述在署內的工作。該四位學者為岩土工程學講座教授周錦添教授、土力學講座教授殷建華教授、鄭榕明博士及朱建波博士。他們均從事與發展地下空間有關的研究,並分別在席上闡述了其研究近況。雙方均對是次交流十分滿意。



The visitors with some CEE academics

UCEA Opening

A ceremony to commemorate the official opening of the University Research Facility in Chemical and Environmental Analysis (UCEA) was held on 14 March 2017. The President of PolyU, Prof. Timothy W. Tong, officiated at the opening ceremony, which was attended by Prof. Philip Chan, Deputy President of PolyU, Prof. Wing-tak Wong, Dean of the Faculty of Applied Science and Textiles (FAST) and Director of UCEA, Prof. You-Lin Xu, Dean of the Faculty of Construction and Environment (FCE), and Prof. Xiangdong Li, Associate Dean (Research) of FCE and Associate Director of UCEA.

Jointly managed by the FAST and FCE, the UCEA provides an interdisciplinary platform for chemical and environmental research. It has 18 major equipment in 9 different laboratories, ranging from a high resolution mass spectrometer, a solid state nuclear magnetic resonance spectroscope to a third generation DNA sequencer.



At the opening

理大化學和環境分析中心實驗室正式 啟用

理大於2017年三月十四日為其「化學和環境分析中心實驗室」舉行啟用儀式,除主禮的唐偉章校長,同場見證的還有常務及學務副校長陳正豪教授、應用科學及紡織學院院長兼中心主任黃永德教授、本院院長徐幼麟教授,以及本院副院長(科研)兼中心副主任李向東教授。

該中心由應用科學及紡織學院與本院共同管理,為 化學及環境學提供跨領域的研究平台,九個實驗室裡設 有十八組大型儀器,包括高解像度質譜儀、固體核磁共 振波譜儀,以及第三代DNA測序儀。

HKICM/ HKIPM Joint CPD Seminar

On 16 March 2017, a continuing professional development (CPD) seminar on a holistic risk assessment model for target cost contracts was held at PolyU. Jointly organized by the Hong Kong Institute of Construction Managers (HKICM) and the Hong Kong Institute of Project Management (HKIPM), the seminar was supported by the Department of Building and Real Estate (BRE) and the Hong Kong Institute of Value Management (HKIVM). Altogether, 138 people attended the seminar, which was led by Sr Dr Joseph Chan, Lecturer in Quantity Surveying and Property Management at PolyU's School of Professional Education and Executive Development, and Dr Daniel Chan, Associate Professor in Construction Project Management and Associate Head (Teaching and Learning) of BRE. The former shared with the audience the basic concepts and principles of target cost contracts, while the latter highlighted the outturn performance of some local construction projects procured by target cost contracts or New Engineering Contracts (NEC), as well as the future development trend of target cost contracts and NEC in Hong Kong.

HKICM/ HKIPM 聯合持續專業發展 研討會

2017年三月十六日,香港營造師學會及香港項目管理學會於理大合辦了一個有關「目標成本合約整體風險評估模式」的持續專業發展研討會。這項活動獲建築及房地產學系及香港價值管理學會大力支持,多達一百三十八人參與,講者為理大專業進修學院工料測量及物業管理學講師陳慶麟博士測量師,以及建築及房地產學系建築項目管理副教授兼副系主任(教務與學務)陳煒明博士。陳慶麟博士講解了目標成本合約的基本概念和原則;陳煒明博士則重點剖析一些採用「目標成本合約」或「新工程合約」(NEC)的本地建築工程的績效,以及兩者在香港的發展趨勢。



Dr Daniel Chan speaking at the seminar

Taught Postgraduate Info Day

An Info Day for the Postgraduate Scheme in Construction and Environment was held on 14 January 2017. Around 200 prospective students attended the overview by Prof. Geoffrey Shen, Associate Dean (Teaching). This was followed by separate introductions to the postgraduate programmes offered by the Faculty of Construction and Environment Prof. Shen giving an overview (FCE) and its 4 departments



respectively. Altogether, 12 MSc/PgD programmes were introduced. The number of people attending these parallel sessions was almost 300.

深造課程教育資訊日

建設及環境學院於2017年 一月十四日舉行了「深造課程教 育資訊日」。當天,副院長(教 務)沈岐平教授首先向出席的約 二百位同學講解概況,接著便由 負責同事分頭介紹由學院及四大 學系開辦的十二項碩士及深造文 憑課程,參與這些分組講座的同 學接近三百人。

PolyU JUPAS Consultation Day 2017

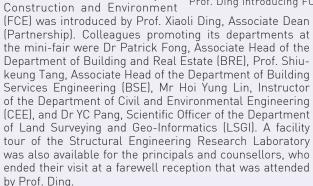
On 20 May 2017, a Consultation Day was held for prospective students in the Joint University Programmes Admissions System (JUPAS) on the PolyU campus. The Faculty of Construction and Environment (FCE) organized an information seminar plus a separate consultation session for the Broad Discipline of Construction and Environment (BDCE). Prof. Geoffrey Shen, Associate Dean (Teaching) introduced FCE and BDCE at the info seminar, which was followed by presentations from Dr Daniel Chan, Associate Head of the Department of Building and Real Estate (BRE), Dr W.L. Lee, Associate Head of the Department of Building Services Engineering (BSE), Prof. K.F. Chung, Associate Head of the Department of Civil and Environmental Engineering (CEE), and Prof. John Shi, Head of the Department of Land Surveying and Geo-Informatics (LSGI), on the respective departments. There were also consultation sessions for 7 BSc/ BEng and 5 Higher Diploma programmes offered by the four departments. In addition to getting the latest updates on the range of programmes available, JUPAS applicants were briefed on admission strategies and interview skills. It was a great opportunity for them to learn more about our programmes before they reprioritize their JUPAS programme choices.

2017理大聯招課程諮詢日

理大在2017年五月二十日舉辦聯招課程諮詢日,建 設及環境學院因此於當天特別安排了講座及一個有關「建 設及環境廣泛學科」課程的選科輔導環節。講座上,副院 長(教務)沈岐平教授率先講述本院及該課程的資料,建 築及房地產學系副系主任陳煒明博士、屋宇設備工程學 系副系主任李慧玲博士、土木及環境工程學系副系主任 鍾國輝教授,以及土地測量及地理資訊學系系主任史文 中教授則緊接介紹其所屬學系。另外,四大學系還為有 意修讀七個理學/工學學士與五個高級文憑課程的同學安 排了選科輔導。除了可以掌握理大的最新課程資訊,聯 招申請人還即場獲授入學攻略和面試技巧,對他們重新 審視聯招選科決定大有幫助。

PolyU Counsellors Days 2017

Around 70 high school principals and school counsellors from around the world recently came to PolyU to learn more about the university and its programmes for undergraduates. Held from 5 to 7 April 2017, the PolyU Counsellors Days showcased the diversity of the University's faculties and schools. The Faculty of





Prof. Ding introducing FCE

理大輔導主任日 2017

理大於2017年四月五日至 七日舉辦「輔導主任日」,介紹 大學及其本科課程,吸引了各國 約七十位中學校長及學校輔導主 任參加。活動凸顯了理大院系的 多樣化,而負責介紹建設及環境 學院的,就是副院長(協作)丁 曉利教授。四大學系亦各自派出 代表,在這個小型博覽會上主持

推廣工作。他們分別是建築及房地產學系副系主任方識華 博士、屋宇設備工程學系副系主任鄧兆強教授、土木及環 境工程學系導師林海勇先生,以及土地測量及地理資訊學 系科學主任彭奕彰博士。參與者更在工作人員陪同下參觀 「結構工程研究實驗室」。活動結束前,院方還特地安排了 由丁教授親自出席的歡送會。

Visit from BUT

On 10 April 2017, a few academics from the Beijing University of Technology (BUT) visited the Faculty of Construction and Environment (FCE). Prof. Dong Li, Prof. Yan Zhang, and Dr Huiping Zhen met with Prof. You-Lin Xu, Dean of FCE, Prof. Geoffrey Shen, Associate Dean (Teaching), and Dr Henry Lee of the Department of Civil and Environmental Engineering (CEE) to update one another on the progress made in a joint PolyU-BUT project entitled "Sewage-derived Resource Recovery for Smart City." In addition to sharing the energy balance from their respective reactors, they also discussed plans for a potential project on a pilot-scale mainstream Anammox study in Beijing and other cities in China. To facilitate further collaboration, Dr Henry Lee was invited to visit BUT in the summer or fall to follow-up on the proposed plans.

北京工業大學學者到訪

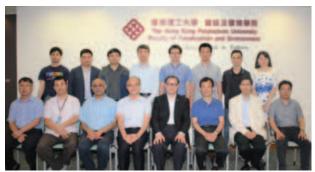
2017年四月十日,北京工業大學(BUT)幾位學者到 訪建設及環境學院,包括李冬教授,張岩教授及曾輝平 博士。他們與院長徐幼麟教授、副院長(教務)沈岐平教 授,以及土木及環境工程學系的李伯亨博士會面,就雙 方合作進行的「智能城市污水衍生資源回收計劃」互相通 報進展。除分享各自的反應器所產生的能源,大家還討 論了在北京及其他內地城市試行主流 Anammox 厭氧氨氧 化研究的可能性。為利便合作,李博士已獲邀於未來數 月內訪問北工大跟進有關計劃。

Visit by Southwest Jiaotong University (SWJTU)

A delegation from the School of Civil Engineering of Southwest Jiaotong University (SWJTU) visited the Faculty of Construction and Environment (FCE) from 24 to 26 May 2017. Led by Prof. Pu Qianhui, Dean of the School, the delegation included Prof. Yan Qixiang, Associate Prof. Zhan Yulin, Associate Prof. Chen Rong, and Lecturer Zhou Xi. They were welcomed by Prof. You-Lin Xu, Dean of FCE, and Prof. Xiaoli Ding, Associate Dean (Partnership). Several meetings were held to explore collaboration between the two schools. In attendance were Prof. Heng Li of the Department of Building and Real Estate (BRE), Prof. Asif Usmani, Head of the Department of Building Services Engineering (BSE), Prof. Jian-hua Yin of the Department of Civil and Environmental Engineering (CEE), Prof. Zhilin Li of the Department of Land Surveying and Geo-Informatics (LSGI), and a number of FCE academic staff.

西南交通大學代表團來訪

西南交通大學土木工程學院一個代表團於2017年五月二十四至二十六日到訪本院,與院長徐幼麟教授及副院長(協作)丁曉利教授會面。代表團以該院院長蒲黔輝教授為首,團員分別為晏啟祥教授、詹玉林副教授、陳嶸副教授及周禕講師。為探討兩院日後的合作空間,雙方舉行了多次會議,建築及房地產學系的李恆教授、屋宇設備工程學系系主任Asif Usmani教授、土木及環境工程學系的殷建華教授,以及土地測量及地理資訊學系的李志林教授均有列席。



The visitors with some FCE academic staff

Visit by Central University of Finance and Economics

A group of visitors led by Prof. Wenbin Li, Dean of the School of Management Science and Engineering and Professor in the Department of Real Estate Management at the Central University of Finance and Economics, visited the Faculty of Construction and Environment (FCE) on 9 January 2017. They were met by Prof. Geoffrey Shen, Associate Dean (Teaching) of FCE and Dr Patrick Fong, Associate Head (Partnership) of BRE. Possible collaborations in several teaching and learning areas were discussed, including the implementation of outcome-based education, the enhancement of student exchange between the two faculties, further collaboration in educational research and student learning under the one-belt one-road initiative.

中央財經大學代表來訪

中央財經大學一個代表團於2017年一月九日到訪建設及環境學院,團長為該校管理科學與工程學院院長兼房地產開發與管理系教授李文斌。眾人與本院副院長(教務)沈岐平教授和建築及房地產學系副系主任(協作)方識華博士見面,商討在多個教學範疇合作的可能,包括實行「目標為本」的教育模式,促進雙方學生交流,以及在「一帶一路」概念下,於教育研究及學生學習兩方面加強合作。



The visitors with Dr Fong (far left) and Prof. Shen (far right)

FCE Hosts Visitors from Kazakhstan

2 visitors from the National School of Physics and Math (Astana city branch) in Kazakhstan came to the Faculty of Construction and Environment (FCE) on 27 February 2017. Mr Gabit Bekakhmetov, Principal, and Mr Abay Zharlygap, Head of the Department of Computer Science and Robotechnics, were introduced to FCE by Prof. Xiaoli Ding, Associate Dean (Partnership) and its 4 departments respectively by Dr Daniel Chan. Associate Head of the Department of Building and Real Estate (BRE), Prof. Asif Usmani, Head of the Department of Building Services Engineering (BSE), Prof. William Lam, Head of the Department of Civil and Environmental Engineering (CEE), and Prof. John Shi, Head of the Department of Land Surveying and Geo-Informatics (LSGI), together with his colleague Dr George Liu. In attendance was Mr Eric Lo, Deputy Director of the International Affairs Office. The visitors were also taken on tours of the Fire Engineering Laboratory by Prof. Asif Usmani, the Lab for Geographic Information System by Prof. John Shi, the Construction Virtual Prototyping Laboratory by Mr Xintao Yang of BRE, and the Water Analysis Laboratory by Dr Ben Leu of CEE.

On 30 March 2017, Mr Darkhanbek Kozhabekov, Vice President of the "Bilim-Innovation" International Social Foundation, and Mr Daniyar Izmailov, Career Counselor of Nurorda International School in Kazakhstan, paid a visit to PolyU to learn more about the University, particularly the Faculty of Construction and Environment (FCE). Prof. Xiaoli Ding, Associate Dean (Partnership) of FCE, introduced the Faculty to the visitors, while the undergraduate programmes of its 4 departments were introduced respectively by Dr Michael Sing of the Department of Building and Real Estate (BRE), Prof. Shiu Keung Tang, Associate Head of the Department of Building Services Engineering (BSE), Prof. William Lam, Head of the Department of Civil and Environmental Engineering (CEE), and George Liu of the Department of Land Surveying and Geo-Informatics (LSGI). Besides touring the campus, the visitors also met with a few current students from Kazakhstan.



The visitors with some academic staff of FCE

哈薩克教育界人士到訪

哈薩克國立物理及數學學校(阿斯塔納分校)校長Gabit Bekakhmetov,聯同該校電腦科學與機械人技術系系主任Abay Zharlygap於2017年二月二十七日到訪本院,獲副院長(協作)丁曉利教授接待,建築及房地產學系副系主任陳煒明博士、屋宇設備工程學系系主任Asif Usmani 教授、土木及環境工程學系系主任林興強教授,以及土地測量及地理資訊學系的系主任史文中教授及劉志趙博士分別向他們講述所屬學系的概況,理大國際事務處副總監盧嘉麒先生亦有在座。兩位來賓其後獲安排在有關負責人陪同下參觀本院設施,包括消防工程實驗室(Asif Usmani教授)、地理信息系統實驗室(史文中教授)、建築虛擬模型實驗室(建築及房地產學系楊新濤先生)及水分析實驗室(土木及環境工程學系呂紹元博士)。



Prof. Ding (left) with Mr Bekakhmetov

2017年三月三十日,"Bilim-Innovation"國際社會基金會副會長Darkhanbek Kozhabekov先生聯同哈薩克Nurorda國際學校就業輔導主任Daniyar Izmailov先生到訪理大,希望了解大學、尤其是建設及環境學院的資料。副院長(協作)丁曉利教授向兩人講解本院情況後,便由建築及房地產學系的成振邦博士、屋宇設備工程學系副系主任鄧兆強教授、土木及環境工程學系系主任林興強教授,以及土地測量及地理資訊學系的劉志趙博士分別介紹四大學系的本科課程。除參觀大學校園,院方還安排他們與現時在理大就讀的幾位哈薩克學生見面。



Some FCE staff with the visitors from Kazakhstan



LSGI staff with visitors from National Cheng Kung University, Taiwan

LSGI Receives Overseas Visitors

The Department of Land Surveying and Geo-Informatics (LSGI) has been active in exploring student exchanges and research collaborations with overseas universities. In this connection, Prof. John Shi, Head of LSGI, Prof. Xiaoli Ding, Associate Dean (Partnership) of the Faculty of Construction and Environment (FCE), Prof. Wu Chen, Associate Head (Research), Dr Lilian Pun, Associate Head (Academic), and Dr George Liu, Chairman of LSGI's Partnership Committee, have recently met with several visiting delegations, including a delegation led by Prof. Kai-Wei Chiang, Chairman of the Department of Geomatics, National Cheng Kung University in Taiwan, a team from the University of Jaen in Spain, and Prof. Brian Leung, Head of the Department, Nazarbayev University in Kazakhstan. Cooperation between LSGI and the visiting universities can be expected to intensify in the future.

海外大學代表到訪土地測量及地理資 訊學系

土地測量及地理資訊學系一向致力促進與海外大學的學生交流及科研協作。因此,系主任史文中教授、建設及環境學院副院長(協作)丁曉利教授、副系主任(科研)陳武教授、副系主任(學術)潘鄭淑貞博士,以及該系協作委員會主席劉志趙博士等多位教學人員最近會見了多位海外來客,包括以系主任江凱偉教授為首的台灣成功大學測量及空間資訊學系代表團、西班牙哈恩大學訪問團,以及哈薩克納扎爾巴耶夫大學系主任Brian Leung教授。該系日後將加強與這些大學合作。

Indian Construction Company Visits FCE

On 11 January 2017, a few representatives of AFCONS Infrastructure Limited, the third largest construction company in India, visited the Faculty of Construction and Environment (FCE) to explore areas of mutual interest with respect to research and academic courses for staff development purposes. They were welcomed by Prof. You-Lin Xu, Dean of FCE, and Prof. Xiaoli Ding, Associate Dean (Partnership). It was a fruitful meeting for all concerned.



The visitors with their hosts

印度建築翹首到訪本院

2017年一月十一日,本院院長徐幼麟教授及副院長(協作)丁曉利教授接見了AFCONS Infrastructure Limited 幾位代表。該公司為印度第三大建築企業,今次來訪,旨在探討合作科研及為培訓員工而開辦學術課程的事宜。與會者坦誠交換意見,同感獲益良多。

Visit to Brunei by LSGI

Representing the Department of Land Surveying and Geo-informatics, Prof. John Wenzhong Shi, Chair Professor and Head of Department, Dr Lilian Pun, Associate Head of Department and Dr Charles Wong, Higher Diploma Programme Leader, visited the Survey Department in Brunei and Brunei Institute of Geomatics on 9 January 2017. During the visit, they met with government officials of the Survey Department and Mr Pengiran Matusin Matasan, President of Brunei Institute of Geomatics in Brunei.

The visit focused on programme development of LSGI, partnership matters, and further opportunities for collaboration, particularly with aspect to education for prospective international students from the Survey Department in Brunei. Possibilities for providing training opportunities to the Survey Department in the future were also explored. The visit was successful in promoting international recognition of the FCE and LSGI.

土地測量及地理資訊學系代表出訪 汶萊

土地測量及地理資訊學系系主任兼講座教授史文中教授、副系主任潘鄭淑貞博士,聯同該系的高級文憑課程主任黃文聲博士於2017年一月九日遠赴汶萊,拜會當地政府測量局及汶萊地理信息科學學院,與該局官員及學院院長Mr Pengiran Matusin Matasan會面。

今次出訪,主要是探討土地測量及地理資訊學系的課程發展,以及彼此加強合作的空間,特別是汶萊測量局派員以國際學生身份到該系進修的事宜。雙方亦討論了日後為該局人員提供培訓的可能。此行對提升本院與土地測量及地理資訊學系的國際認受性裨益甚大。



The LSGI visitors with the Survey Department of the Brunei government

LSGI Visit to Singapore

Prof. John Wenzhong Shi, Chair Professor and Head of LSGI, Dr Lilian Pun, Associate Head, and Dr Bo Wu, MSc Programme Leader of the Department of Land Surveying and Geo-Informatics (LSGI), paid a visit to the National University of Singapore (NUS), the Singapore Land Authority, and the Singapore Polytechnic from 8 to 9 November 2016. In addition to promoting Geomatics education to students of the Singapore Polytechnic, they also heard from Dr Victor Khoo, Deputy Director of Land Survey, who shared developments on 3-D city projects by NUS and the government of Singapore.



At the Singapore Polytechnic

土地測量及地理資訊學系獅城之行

土地測量及地理資訊學系系主任兼講座教授史文中教授,聯同副系主任潘鄭淑貞博士及該系碩士課程主任吳波博士,於2016年十一月八日至九日到訪新加坡國立大學(NUS)、新加坡土地管理局及新加坡理工學院。三人除了向新加坡理工學院的學生推廣地理信息科學教育,還拜會了管理局的副土地測量總監Dr Victor Khoo,聆聽他介紹新加坡國立大學與當地政府合作開展的三維城市發展項目。



Students of the Singapore Polytechnic

Education Road Shows in Malaysia

From 13 to 17 December 2016, some PolyU representatives visited Malaysia to promote the university on the Further Study Interactive Education Road Shows. One of them was Dr Matthew Pang, Scientific Officer of the Department of Land Surveying and Geo-Informatics (LSGI), who participated in exhibitions in Kluang, Malacca, Seremban, and Petaling Jaya to introduce PolyU's undergraduate programmes, admission requirements, the multicultural campus life and opportunities for scholarships to more than 2,000 high-school students. On exhibit was Virtual PolyU, a research product of LSGI that Malaysian students could use to virtually explore the PolyU campus from more than 2500 km away by putting on a Virtual-Reality (VR) headset. In addition to meeting with prospective students, Dr Pang also met with officials of various universities to discuss possibilities for establishing student exchanges.



Seeing PolyU in VR

馬來西亞巡迴教育展

理大多位代表於2016年十二月十三至十七日遠赴 馬來西亞舉辦互動巡迴教育展,其中一位成員為土地測 量及地理資訊學系科學主任彭奕彰博士。他參與了在居 鑾(柔佛州)、馬六甲、芙蓉市(森美蘭州)及八打靈再也 (雪蘭莪州)的展覽,向當地超過二千名高中生介紹理大 的學士課程、收生要求、文化多元的校園生活及各類獎 學金。活動最特別之處,是配置了由該系研發的「神遊理 大」軟件:只要戴上虛擬實境耳筒,即使是遠在二千五百 公里外的馬來西亞學生,亦可在虛擬世界中探索理大校 園。除了接觸準理大學生,彭博士還拜會了當地多家大 學的負責人,商討設立學生交流計劃的可能。

FCE Distinguished Lecture and Distinguished Chair Professor Inaugural Lecture Series

In celebration of the 80th Anniversary of The Hong Kong Polytechnic University (PolyU), the Faculty of Construction and Environment (FCE) has launched the FCE Distinguished Lecture and Distinguished Chair Professor Inaugural Lecture Series. A total of ten lectures will be delivered in 2017 by distinguished scholars from different parts of the world and newly appointed Distinguished Chair Professors of PolyU. The lectures are generously sponsored by the FCE Alumni Associations. Following are the details of some of the lectures so far:



為慶賀理大八十周年校慶,建設及環境學院推出了「FCE傑出講座及傑出講座教授系列」。在2017年,來自世界各地的出色學者及理大新任命的「傑出講座教授」將應邀主講一共十個講座。這項大型學術活動獲得建設及環境學院校友會聯會慷慨贊助,以下是已落實細節的部分講座資料:



Prof. David Nethercot,

Distinguished Chair Professor of Structural Engineering and Steel Construction in the Department of Civil and Environmental Engineering at PolyU and Emeritus Professor of Imperial College London, gave a distinguished Chair Professor inaugural lecture entitled "Designing Buildings to Better Resist Progressive Collapse." (21 February 2017)



Prof. Michael Goodchild.

Distinguished Chair Professor of Geographic Information Science in the Department of Land Surveying and Geo-Informatics at PolyU and Emeritus Professor of Geography at the University of California at Santa Barbara, gave a distinguished Chair Professor inaugural lecture entitled "Technologies of Space and Place." (8 March 2017)



Prof. Jose Torero, Professor of Civil Engineering and Head of the School at the University of Queensland in Australia, gave a distinguished lecture entitled "Integrating Fire Safety into Modern Building Design." (17 March 2017)



Prof. Guy Pierre Brasseur,

Distinguished Chair Professor of Climate Change and Environment in the Department of Civil and Environmental Engineering at PolyU and a Senior Scientist at the Max Planck Institute for Meteorology in Germany, gave a distinguished Chair Professor inaugural lecture entitled "Predictability of the Evolution of the Earth System." [15 May 2017]



Prof. Brian Collins, Director of the International Centre for Infrastructure Futures and Professor of Engineering Policy at the University College London, gave a distinguished lecture entitled "Research in Infrastructure – A Transformative Opportunity." [18 May 2017]



Prof. Stewart Fotheringham,

Professor of Computational Spatial Science in the School of Geographical Sciences and Urban Planning at Arizona State University, gave a distinguished lecture entitled "Dealing with Spatial Heterogeneity: Recent Developments with a Focus on Geographically Weighted Regression." (1 June 2017)

Invitation for Programme Admissions

Master of Science (MSc)/Postgraduate Diploma (PgD)	理學碩士 / 深造文憑	Department
Building Services Engineering	屋宇設備工程學	BSE
Civil Engineering	土木工程學	CEE
Construction and Real Estate	建築及房地產學	BRE
Construction Law and Dispute Resolution	建築法及爭議解決學	BRE
Environmental Management and Engineering	環境管理及工程學	CEE
Facility Management	設施管理	BSE
Fire and Safety Engineering	消防及安全工程學	BSE
Geomatics (Geographic Information Systems)	測繪及地理資訊學(地理資訊)	LSGI
Geomatics (Surveying)	測繪及地理資訊學(測量)	LSGI
High Performance Buildings	高效能建築	BSE
International Real Estate*	國際房地產	BRE
Project Management	項目管理	BRE
Sustainable Urban Development	可持續城市發展學	FCE
Bachelor's Degree	學士學位	Department
Broad Discipline of Construction and Environment	建設及環境廣泛學科	FCE
Building Engineering and Management	建築工程及管理學	BRE
Building Services Engineering	屋宇設備工程學	BSE
Civil Engineering	土木工程學	CEE
Environmental Engineering and Sustainable Development	環境工程與可持續發展學	CEE
Geomatics (Geo-Information Technology/ Land Surveying/ Utility Management and Surveying)	測繪及地理資訊學(地理資訊科技 / 土地測量 / 管線設施測繪與管理)	LSGI
Property Management	物業管理學	BRE
Surveying	地產及建設測量學	BRE
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Higher Diploma	高級文憑	Department
Building Services Engineering	屋宇設備工程學	BSE
Building Technology and Management (Engineering)	建築科技及管理學(工程)	BRE
Duildie e Technology and Manager at (Commission)	- + + + + + + + + + + + + + + + + + + +	BRE
Building Technology and Management (Surveying)	建築科技及管理學(測量)	BKE
Civil Engineering	建築科技及官理學(測量) 土木工程學	CEE

^{*}Offered at the PolyU Zhejiang outpost

For programme details, please contact the departments or visit their websites: 如欲查詢詳細課程資料,請聯絡相關學系或瀏覽學系網頁:

Department of	
Building and Real	
Estate (BRE)	
建築及房地產學系	

2766-5807/5808/7770 www.bre.polyu.edu.hk Department of Building Services Engineering (BSE)

屋宇設備工程學系

3400-3597 www.bse.polyu.edu.hk Faculty of Construction and Environment (FCE)

建設及環境學院

3400 8496 www.polyu.edu.hk/fce Department of Civil and Environmental Engineering (CEE) 土木及環境工程學系

2766-6068 www.cee.polyu.edu.hk Department of Land Surveying and Geo-Informatics (LSGI) 土地測量及地理資訊學系

2766-5968 www.lsgi.polyu.edu.hk

Programme Entrance Requirements 課程入學要求

Please check the most up-to-date information on the Study@PolyU website at www.polyu.edu.hk/study.

請於 Study@PolyU 查閱最新資料,網址為 www.polyu.edu.hk/study.

Enquiries on Application and Admission 查詢申請及入學

Academic Secretariat The Hong Kong Polytechnic University Hung Hom, Kowloon, Hong Kong

香港理工大學教務處 香港九龍紅磡

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asadmft@polyu.edu.hk Full-time Bachelor's degree & sub-degree programmes -

local applicants

全日制學士學位及非學位課程 — 本地申請人

asnlocal@polyu.edu.hk Full-time Bachelor's degree & sub-degree programmes -

non-local applicants

全日制學士學位及非學位課程 — 非本地申請人

Forthcoming Events 最新消息

6th Professional Lighting Design Convention (PLDC)

Date: 1-4 November 2017

Venue: The Palais des Congres de Paris

Details: www.pld-c.com

23rd Congregation and Faculty Prize Presentation Ceremony

Date: 31 October - 1 November 2017

Venue: Jockey Club Auditorium, The Hong Kong Polytechnic University

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劉志趙博士

士地測量及地理資訊學系

歡迎投稿,所有稿件請交

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