

建設與環境

THE HONG KONG  
POLYTECHNIC UNIVERSITY  
香港理工大學

# 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



### Dean's Message

It is my greatest honor to serve as the new Dean of the Faculty of Construction and Environment. An exciting time lies ahead of all of us. The local construction industry is undergoing an explosion of growth, fuelled by the demand for mass housing and superb infrastructure. Unprecedented

urbanization in China and Hong Kong has raised global concerns about the natural environment. Issues of sustainable development will remain a top priority in the coming years. We must be ready to face these challenges and take advantage of new opportunities as a Faculty of Construction and Environment.

Besides carrying out our mission to nurture quality graduates for society, we will continue to conduct world-class research in strategic areas to advance knowledge and develop new technologies to meet the changing needs of society. The fruits of our intellectual works should benefit the community at large. In this connection, we actively seek to collaborate with industry to share our expertise. We will also consolidate our 4-year academic programmes to attract promising students, whose success will further enhance our reputation as a Faculty.

I look forward to working together with you all to maximize our performance, so the Faculty can be the best of its kind, and every colleague can achieve his/her full potential. Thank you again for your trust and support.

**Prof. You-Lin Xu**  
Dean of Faculty of Construction and Environment  
The Hong Kong Polytechnic University

### 院長的話

擔任建設及環境學院院長是我的莫大榮幸。本地建造業受龐大的房屋及基建需求帶動，勢頭強勁，增長驚人；內地與香港高速城市化，令各方廣泛關注自然環境，展望未來，如何達致可持續發展，勢將繼續成為社會的頭等大事。由此可見，我們將要面對一個挑戰與機遇參半的不平凡時代，而作為專門研究建設與環境的學院，自然需作好準備。

除了履行為社會作育英才的使命，本院也會繼續在重點領域進行尖端研究，探求知識，研發嶄新科技，與時並進，緊貼社會需要。我們堅信學術與科研成果必須「利民」，故一向積極與業界合作，藉此分享技術與知識。另外，我們亦會整固現時的四年制課程，吸引潛質優秀的學生。學院日後將因他們的成功故事享譽更隆。

我非常期盼與大家一起工作，精益求精，使學院成為同儕中的翹楚，每位同事亦能盡展潛能，一舒抱負。承蒙各位信賴支持，再次衷心致謝。

**徐幼麟教授**  
建設及環境學院院長  
香港理工大學



# Research Activities

## 研究薈萃

### Results of RGC Competitive Funding Schemes 2014/15

The 2014/15 application results for the RGC General Research Fund (GRF) and Early Career Scheme (ECS) were announced on 30 June 2014. Due to their similar nature, the application results for these two schemes have been combined in the following analysis, which does not include the Public Policy Research (PPR) Scheme, since it is no longer managed by RGC.

### 香港研究資助局 2014/15 年度競爭性撥款結果

香港研究資助局 2014/15 年度「優配研究金」及「傑出青年學者計劃」的申請結果於六月三十日公佈。由於性質相近，我們綜合了兩個資助計劃的申請結果，一併於下文分析。至於不再由研資局管理的「公共政策研究計劃」，則不包括在內。

Dept. 學系	GRF Grants 優配研究金 (GRF)	ECS Grants 傑出青年 學者計劃 (ECS)	Overall success rate 整體成功率	Total amount of competitive funding (including GRF& ECS) (HK\$) 獲批競爭性撥款總額 (包括 GRF 及 ECS) (港幣 \$)	Amount per eligible staff member (HK\$) 獲批競爭性撥款總額 (包括 GRF 及 ECS) (港幣 \$)
BRE	4	0	20%	\$ 2,410,341	\$ 104,797
BSE	8	N/A	44%	\$ 5,144,849	\$ 233,857
CEE	12	3	48%	\$ 9,965,941	\$ 269,350
LSGI	5	1	40%	\$ 4,259,731	\$ 236,652
Total	29	4	39%	\$21,780,862	\$ 217,809

Comparisons of departmental performance over the past 10 years using 2 indicators, namely the number of grants per year and the average funding amount per academic staff member (only eligible staff members are counted) are shown in Figures 1 and 2 respectively. In terms of the number of grants per year, the rankings of our four departments are CEE, BSE, LSGI and BRE. In terms of average funding amount per academic staff member, the rankings of our four departments are: CEE, LSGI, BSE and

我們使用兩項指標—即每年獲撥款宗數(圖一)及合資格教研人員人均撥款額(圖二)—比較了四個學系最近十年的表現，得出的排名依次為：土木及環境工程學系、土地測量及地理資訊學系、屋宇設備工程學系、建築及房地產學系。總的來說，各學系近年的表現雖有起伏，但全學院合計，人均撥款額及獲撥款宗數在最近五輪撥款週期(即2010/11年度起)均穩步上揚。「優配研究金」方

BRE but the differences between the first three departments are small. In general, the performances of the four departments in recent years have varied in their ups and downs, but both the average funding amount and the total number of grants awarded to our Faculty have shown a gradual and steady increase over the past five rounds (i.e. since 2010/11). For the GRF scheme, the Faculty also leads other Faculties/Schools in the University in terms of the submission rate, success rate, and average funding amount per academic staff member this year.

面，無論以申請率、成功率或本年度的教員人均撥款額衡量，本院的表現均較理大其他學院優勝。

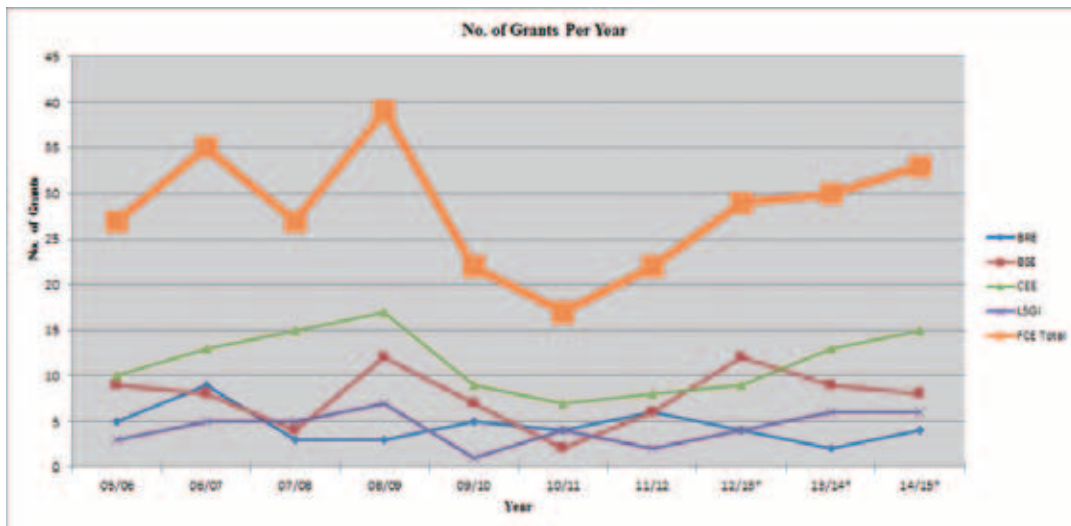


Figure 1: Comparison of Number of Grants per Year between Departments  
圖一：各學系每年獲批資助項目的比較

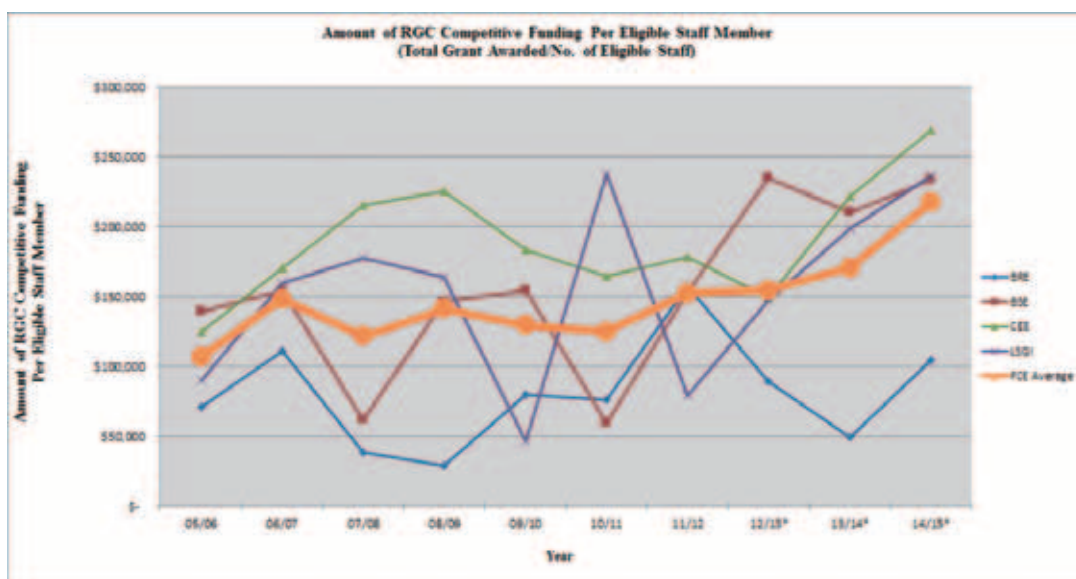


Figure 2: Comparison of Amount of RGC Competitive Funding per Eligible Staff Member between Departments  
圖二：各學系每各合資格教員獲研資局批出競爭性撥款的金額比較

Within the broad field of construction and environment, we still lead all other local universities by a big margin in the GRF/ECS exercises. In the Civil Engineering, Surveying, Building and Construction (CESBC) disciplines of the Engineering Panel, PolyU has ranked number 1 since 1994/95 in terms of both the number of GRF/ECS projects supported and the total grant value won, consistently winning around or over 40% of all GRF/ECS grants allocated in these disciplines. The distribution of the amount of GRF/ECS funding in the 2014/15 round among local universities is shown in Figure 3. We received 44.55% of the total amount of available funding in the CESBC disciplines.

在建築及環境學的廣義領域，本院在兩個資助計劃的表現仍然大幅度領先其他本地大學。在工程學學科小組下的「土木工程、測量、建造工程」科目範圍，不論是獲「優配研究金」或「傑出青年學者計劃」資助的總宗數或總撥款金額，理大自1994/95年度起一直獨佔鰲頭，穩佔這兩個資助計劃對有關學科批出的總撥款的四成上下。圖三顯示了2014/15年度「優配研究金」及「傑出青年學者計劃」對本地大學的撥款分配情況。在「土木工程、測量、建造工程」科目範圍，本院獲得的資助佔總撥款額44.55%。

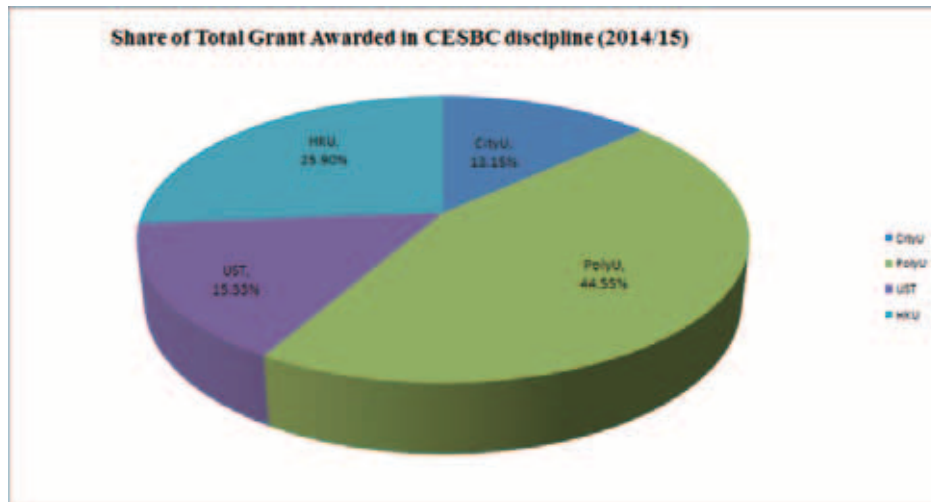


Figure 3: Distribution of GRF/ECS Funding in the CESBC Disciplines among Institutions in the 2014/15 Round  
圖三：各大學於 2014/15 年度在「土木工程、測量、建造工程」科目範圍獲「優配研究金」及「傑出青年學者計劃」撥款的情況

Of the 33 GRF/ECS grants awarded to the Faculty this year, 4 were awarded outside the CESBC disciplines. As a result, the Faculty won 29 grants (or 39%) totalling HK\$19,582K out of the 74 GRF/ECS grants awarded by RGC in the CESBC disciplines in the present (i.e. 2014/2015) round. The University as a whole was awarded with 31 GRF/ECS grants in the CESBC disciplines, 2 of which were awarded to other Faculty Department(s)/School(s).

This year, the funding results of both GRF and ECS Scheme are encouraging. The average funding per project is HK\$671K which is the highest among all local universities in CESBC disciplines. For GRF, PolyU shares of the total grant value awarded in the CESBC disciplines exceeded 40%. For ECS, we have been awarded 6 grants, which represent 75% of the 8 grants awarded by RGC in the CESBC disciplines.

本院今年合計獲前述兩個資助計劃批出三十三項撥款，其中四項不屬於「土木工程、測量、建造工程」的範疇。研資局今次在「土木工程、測量、建造工程」科目範圍合共批出七十四項，本院佔了二十九項總值一千九百五十八萬二千港元的撥款，即 39%；在土木工程、測量及建造工程的範疇，理大合共獲優配研究金/傑出青年學者計劃批出三十一筆撥款，當中只有兩筆由本院以外的學系/學院取得。

今年，我們申請「優配研究金」及「傑出青年學者計劃」資助的結果令人鼓舞。每個項目的平均撥款額為六十七萬一千港元，是「土木工程、測量、建造工程」範疇裡所有本地大學之冠。本院獲「優配研究金」撥款的總資助額均佔高逾四成。「傑出青年學者計劃」方面，本院共有六個項目獲得資助，佔了「土木工程、測量、建造工程」科目範圍批出的八宗資助的 75%。

## Research on Mapping and Analysis of Chang'E-3's Landing Site Published

Research characterizing Chang'E-3's landing site on the moon has recently been published in *Earth and Planetary Science Letters*, a top international journal in Earth and planetary science. Co-authored by Dr Bo Wu, Assistant Professor of the Department of Land Surveying and Geo-Informatics, his research students Lei Ye and Si Qiao, and 4 researchers from the China Academy of Space Technology, the paper is titled "Topographic modeling and analysis of the landing site of Chang'E-3 on the Moon." Congratulations to Dr Wu and his team, whose contributions facilitated the historic landing of Chang'E-3 on the Moon in December 2013.

## 嫦娥三號著陸點地形地貌分析研究結果發表

有關嫦娥三號月球表面著陸點的研究，最近已於國際知名的地球及行星科學期刊 *Earth and Planetary Science Letters* 發表。該論文是由土地測量及地理資訊學系助理教授吳波博士、其學生 葉磊 及 喬思，以及中國空間技術研究院四位研究員合著，名為《嫦娥三號登月地點地形地貌建模及分析》。他們努力耕耘，為嫦娥三號在 2013 年十二月歷史性登陸月球作出了重大貢獻。恭喜吳波博士及其團隊。





## PolyU-HIT Joint Workshop on Sustainable Urban Water Environment

The 3rd workshop between PolyU's Research Institute for Sustainable Urban Development and the State Key Laboratory of Urban Water Resources and Environment (SKLUWRE) of Harbin Institute of Technology was held at the PolyU campus on 6-7 June 2014. After an opening speech by Prof. Albert Chan, interim Dean of FCE, on the first day, the latest findings by researchers from both PolyU and HIT were presented. The second day was spent on group discussion in the following three areas:

- Development of innovative wastewater treatment technologies for synergy of water reuse, energy generation, and resource recovery
- Regional water pollution monitoring and simulation at a large scale with the aid of spatial remote sensing technologies
- Heterogeneous transmission of environmental pollutants from air phase, of land/soil phase into water phase through the interface

PolyU scholars participating in the workshop included Prof. CHU Wei, Prof. KO Jan-Ming, Prof. LI Pei, Prof. LI Xiang-Dong, Prof. LI Xiang-Zhong, Prof. WANG Tao, Prof. YANG Hong-Xing, Dr GUO Hai, Dr Henry Po-Heng LEE, Dr Ben Shao-Yuan LEU, Dr Dan TSANG, Dr Charles WONG, Dr WU Bo, and Mr DONG Feifei (on behalf of Dr NI Meng).



## 理大 — 哈工大第三輪可持續城市水環境聯合研討會

由理大可持續城市發展研究院與哈爾濱工業大學城市水資源與水環境國家重點實驗室(SKLUWRE)合辦的第三屆研討會，於2014年六月六至七日在理大舉行。首日由建設及環境學院暫任院長陳炳泉教授首先致開幕詞然後雙方的與會學者們交流了各自最新的研究進展；次日圍繞以下三個內容進行了詳細的小組討論：

- 研發將廢水回用，發電及資源回收功能於一體的新式廢水處理技術
- 利用空間遙感技術進行大尺度區域水污染監測及模擬的研究
- 關於環境污染物在空氣，土壤和水體之間異相傳輸機理的研究。

參與工作坊的理大學者包括朱威教授、高贊明教授、李蓓教授、李向東教授、李湘中教授、王韜教授、楊洪興教授、郭海博士、李伯亨博士、呂紹元博士、曾超華博士、黃文聲博士、吳波博士及董飛飛先生(倪萌博士的代表)。





## FCE Scholars Rake in NSFC Research Grants

The Faculty of Construction and Environment (FCE) is proud of the following FCE academics who have recently been awarded research grants from the National Natural Science Foundation of China (NSFC). Since 5 of them are in the early stages of their career, their grants came from the Young Scientists Fund, which is one of NSFC's programs to train talented researchers by supporting independent research. Below are the details of the winning projects and their principal investigators.

## 本院學者獲國家自然科學基金委員會撥款

最近，有多位同事獲國家自然科學基金委員會(NSFC)批出研究撥款，本院為此深感自豪。由於當中五位是年輕學者，其撥款是由委員會屬下的「青年科學基金」撥出，透過資助獨立的研究項目，培育潛質優厚的新銳成材。以下是獲資助研究項目的詳情及首席研究員名單。

Principal Investigator 首席研究員	Department 學系	Project Title 項目名稱	Amount Awarded (RMB) 批准金額	Start Date of Project 開始日期	End Date of Project 結題日期
Dr Ronghui Qi 綦戎輝博士 	BSE 屋宇設備工程	Investigation on the dynamic film waves and its effect on the heat and mass transfer of falling film liquid desiccant air-conditioning system 降膜溶液除濕空調系統中的液膜動態波動及其傳熱傳質研究	250,000	1/1/2015	12/31/2017
Dr Jianguo Dai 戴建國博士 	CEE 土木及環境工程	Interfacial Debonding in FRP-strengthened Steel/Concrete Structures Subjected to Combined Thermal and Mechanical Loading 溫度和荷載共同作用下 FRP 加固混凝土 / 鋼結構的介面剝離機理及控制	800,000	1/1/2015	12/31/2018
Dr Wanyang Gao 高皖揚博士 	CEE 土木及環境工程	Performance-based approach for fire resistance evaluation and fire-insulation design of FRP-strengthened reinforced concrete (RC) beams 基於性能的 FRP 片材加固鋼筋混凝土梁耐火性能評估與防火設計	250,000	1/1/2015	12/31/2017
Dr Dan Tsang 曾超華博士 	CEE 土木及環境工程	Fate and Transport of Chromium(VI)/Arsenic(V)-loaded Nanoscale Zero-Valent Iron in Groundwater 納米級零價鐵負載六價鉻 / 五價砷在地下水的遷移轉化	250,000	1/1/2015	12/31/2017
Dr Jianbo Zhu 朱建波博士 	CEE 土木及環境工程	Mechanism of stress wave energy attenuation in jointed rock masses 應力波在節理岩體中的能量衰減機制	260,000	1/1/2015	12/31/2017
Dr Jun Hu 胡俊博士 	LSGI 土地測量及地理資訊	Method of estimating three-dimensional displacements with InSAR by considering spatial-temporal correlation of observations 考慮觀測值時空相關性的 InSAR 三維形變估計方法	240,000	1/1/2015	12/31/2017
Dr Bo Wu 吳波博士 	LSGI 土地測量及地理資訊	Refined 3D Lunar Surface Reconstruction from Image Intensity and Shadow Information Constrained by Low-Resolution Digital Terrain Model 稀疏數位地形模型約束下基於影像明暗與陰影恢復形狀的精細月球地表三維重建	800,000	1/1/2015	12/31/2018

Congratulations to all of them.

謹此祝賀以上各位！

## PolyU-MIT Joint Workshop on Sustainable Water Project

A workshop on sustainable water project was held on 11 November 2014 at the Hong Kong Polytechnic University. Jointly organized by the Research Institute for Sustainable Urban Development (RISUD) at PolyU and the Massachusetts Institute of Technology (MIT), the workshop focused on evaluating strategies for integration of seawater toilet flushing and saline sewage reclamation for nutrient recovery and potential reclaimed water use. Bringing together leading scholars in the field, including Prof. John H. Lienhard, Director of the Center for Clean Water and Clean Energy at MIT, and Prof. Andrew Whittle of MIT's Department of Civil and Environmental Engineering, the workshop consisted of 7 presentations on related issues by different speakers, who were welcomed by Prof. You-lin Xu, Dean of the Faculty of Construction and Environment, and Prof. Jin-Guang Teng, Director of RISUD. RISUD scholars who presented their research included Dr Steven Boles, Dr Po-Heng Lee, Prof. Pei Li, Prof. Xiang-dong Li, and Prof. Hong-xing Yang. The discussions following the presentations aimed to identify topics of mutual interest and develop a proposal for larger scale research collaboration between the two institutions.



## 理大－麻省理工持續水資源工程聯合作坊

由可持續城市發展研究院 (RISUD) 與麻省理工學院 (MIT) 合辦的可持續水資源工程工作坊，於2014年十一月十一日在理大順利舉行。工作坊旨在集中評估結合海水沖廁及回收含鹽污水以達致養份回收及增加再生水用途的策略，有不少這方面的頂尖學者參與，包括麻省理工學院 (MIT) 潔淨水及潔淨能源研究中心總監 John H. Lienhard 教授，以及該校土木及環境工程學系的 Andrew Whittle 教授。建設及環境學院院長徐幼麟教授和可持續城市發展研究院院長滕錦光教授致歡迎詞後，各學者陸續就有關議題發表了共七份報告。在會上闡述研究報告的研究院學者包括理大博爾思博士、李伯亨博士、李蓓教授、李向東教授及楊洪興教授。報告完畢後，與會學者進行了討論，期望找出雙方同感興趣的專題，為彼此開展較大規模的科研合作提出建議。



## BRE Academic's Scholarly Activities Rewarded with Research Funding

Dr Meng NI of the Department of Building and Real Estate has recently received funding support of HK\$125,000 from the Scottish Funding Council and the Research Grants Council Joint Research Scheme for a collaborative research project with Prof. John Thomas SIRR Irvine of the University of St. Andrews. Titled "Development of Nanostructured Solid Oxide Cell for Steam-carbon Dioxide Co-electrolysis," the project will be supported for 12 months. Congratulations to Dr NI, who has also delivered 5 invited/keynote lectures at various international conferences between May and September 2014, including one in Italy, one in Korea, and three in mainland China.



Dr Meng Ni (on right)  
倪萌博士(右)

## 建築及房地產學系學者積極參與科研及學術活動

建築及房地產學系的倪萌博士最近獲「蘇格蘭撥款委員會與香港研資局合作研究計劃」批出港幣十二萬五千元，與聖安德魯斯大學的 John Thomas SIRR Irvine 教授進行一項名為「開發納米結構固態氧化物電池進行蒸汽二氧化碳共電解」的研究，為期一年。在科研工作以外，倪博士亦經常獲邀請參與其他學術活動，以2014年五月至九月為例，已五度應

邀在國際會議上發表主題/專題演講，當中三次在中國內地，意大利及韓國亦各有一次。

## BSE Academics Develop App for Monitoring Indoor Environmental Quality



Dr Horace Mui  
梅國威博士

Dr Horace MUI Kwok Wai and Dr WONG Ling Tim of the Department of Building Services Engineering have recently launched an app for monitoring indoor environmental quality. The fruit of ten years of research, it integrates the findings from a longitudinal survey with the standards for indoor environmental quality established in Hong Kong and the United States

into a system that scores the level of satisfaction with the air in three types of indoor environment: residences, offices, and classrooms. The app is currently available for free download only by users of iOS, to be shortly followed by an Android version.



Dr Wong Ling Tim  
王寧添博士

According to Dr Wong, it is easy to make use of the app. Once information such as indoor temperature, number of people, whether windows are open or closed has been inputted, users will get an assessment with respect to the comfort acceptance level of heat,

sound, brightness, and indoor air quality, giving them a preliminary idea of the environmental quality of their residences. The calculators of air quality in offices and classrooms are mainly for the use of facility managers. As such, they include indicators to monitor the levels of carbon dioxide etc.

“When you see an assessment of indoor air quality that is failing, that means there is a lack of air circulation indoors. Accumulating too much carbon dioxide can lead to the presence of germs indoors. But since carbon dioxide is colorless and odorless, it is difficult to detect and easily neglected.” Dr Mui suggests people can open the doors and windows at home to maintain air circulation there, while enhancing the ventilation and reducing the human density when there is a problem with the indoor air quality of offices and classrooms.

## 屋宇設備工程學系學者發明手機應用程式監測室內環境質素

屋宇設備工程學系的梅國威博士及王寧添博士經過十載努力，成功把一項縱向研究的結果結合港、美兩地的室內環境質素標準，推出了監測室內環境質素的手機應用程式，可以量度住宅、辦公室及課室三種室內環境的空氣質素滿意程度。新程式現時雖只供iOS使用者免費下載，但不久便會推出Android版本。

王博士表示這個應用程式簡單易用，只要輸入室內溫度、室內人數、窗戶是關閉或打開等基本資料，就可從溫度、聲響、光暗及空氣質素幾方面評估室內的舒適程度，對住宅的環境質素有基本了解。至於針對辦公室及課室空氣質素的計算器，主要供設施管理人員使用，因此包含測量二氧化碳濃度的指示器。

「如結果顯示室內空氣質素不佳，便表示通風出現問題；二氧化碳一旦過多，或會令室內滋生病菌。由於二氧化碳無色無味，使我們容易忽略問題。」梅博士建議打開家中門窗，保持空氣流通；如辦公室和課室的空氣質素欠佳，則可以改善通風設施和降低使用者密度。



## LSGI's Innovative Lunar Mapping Techniques on Show at Science Museum

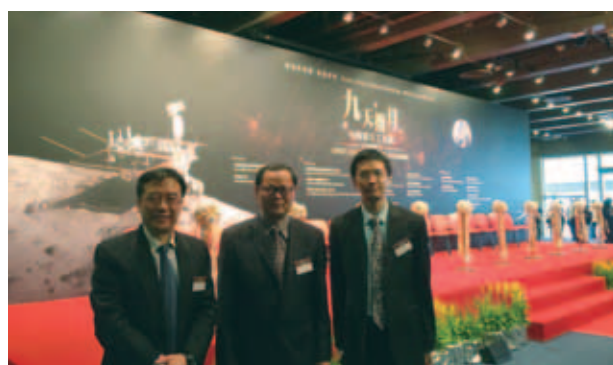
An exhibition on China's Lunar Exploration Programme was launched on 21 July 2014 at the Hong Kong Science Museum. Featuring specially designed interactive exhibits, including the lunar lander for Chang'E-3, the Yutu Lunar Rover, Long March rockets, simulations of the launch site and the lunar rover, the exhibition highlights PolyU's participation in the space technology used for the Chang'E-3 mission, such as the innovative lunar mapping techniques and products developed by Dr Bo Wu, Assistant Professor of the Department of Land Surveying and Geo-Informatics (LSGI), and his team. Funded by the China Academy of Space Technology, their research findings were deployed in the topographical analysis of the Chang'E-3 landing area and the selection of the landing site, ultimately contributing to the successful landing of Chang'E-3 on the moon last December.

Organized by the Home Affairs Bureau and the China National Space Administration, the exhibition was open to the public until 24 August 2014.

## 香港科學館展出土地測量及地理資訊學系月球地形測繪新技術

香港科學館在2014年七月舉辦了一個有關中國探月工程的展覽，展出多組為探月而研製的互動展品，包括嫦娥三號著陸器、玉兔號月球車、長征火箭，以及著陸點和月球車的場景模型等。展覽亦重點介紹了理大參與嫦娥三號探月任務所應用的月球測繪新技術和成果。這些新技術是土地測量及地理資訊學系助理教授吳波博士的團隊應中國空間技術研究院的邀請所研發，用於分析嫦娥三號備選著陸地區的地形地貌及選取合適登陸地點，助嫦娥三號最終在去年十二月成功著陸。

這次展覽由特區政府民政事務局及國家航天局合辦，展期為2014年七月二十一日至八月二十四日。



## LSGI Scholar Participates in InnoCarnival

Dr Man Sing WONG, Charles, Assistant Professor of the Department of Land Surveying and Geo-Informatics (LSGI), delivered a public seminar on Urban Heat Islands in Hong Kong at the InnoCarnival on 2 November 2014 in the Hong Kong Science Park.

Urban Heat Island effect, resulting from urbanization and global warming, has been shown to be more obvious in Hong Kong. PolyU researchers have been monitoring Hong Kong's urban heat islands using satellite and aerial images for over ten years. The seminar gave the audience an insight into the Urban Heat Island effect, including the technologies used for monitoring, and the facts of anthropogenic heat emission in urban areas of Hong Kong.

InnoCarnival 2014 is organized by the Innovation Technology Commission of the HKSAR Government around the theme of Technology for a Better Living in three dimensions, namely Intelligent Living, Quality Living and Green Living. It featured more than 800 activities such as large-scale exhibitions, workshops, seminars, guided tours for the public to gain hands-on experience of the convenience and fun brought about by innovation and technology in our daily lives.

## 土地測量及地理資訊學系學者參與「創新科技嘉年華」

2014年11月2日，土地測量及地理資訊學系助理教授黃文聲博士應香港創新科技署邀請，在香港科學園主講「創新科技嘉年華」其中一場公開講座，闡述香港的熱島效應。

由都市化及全球暖化引發的熱島效應在香港越趨嚴重。近十多年來，理大科研人員一直通過航空及航天影像監測香港的情況。黃博士的講座旨在向公眾講解熱島效應的有關資訊，包括監測技術及香港市區的氣溫變化。

「創新科技嘉年華2014」由政府創新科技署主辦，以「創出新生活、科研建未來」為主題，圍繞智慧生活、優質生活及綠色生活三大範疇，安排大型展覽、工作坊、研討會、導賞團等逾八百項公眾活動，旨在讓市民親身感受創新科技為日常生活帶來的便利和樂趣。



## Trilateral Forum Seeks Novel Ways for Developing New Towns

A trilateral forum exploring new ways of developing new towns in Hong Kong was held on 26 August 2014. Organized by the Research Institute for Sustainable Urban Development (RISUD), the forum brought together senior government officials, industry practitioners, and scholars with expertise on the topic. After a welcoming speech by Prof. Timothy Tong, President of PolyU, the Director of RISUD, Prof. Jin-Guang Teng, introduced RISUD. Keynote speeches were delivered by Ir Chi-sing Wai, Permanent Secretary for Development (Works), and Ir Dr Andrew K.C. Chan, Chairman of Arup Group Trusts as well as Chairman of RISUD's International Advisory Committee (IAC). Sessions on various aspects of sustainable development followed, with four by local members of the IAC and three by industry leaders. This was followed by an in-depth exploration of the following five themes in separate sessions: planning for social-economic-environmental integration, smart infrastructure for sensing cities, pedestrian-oriented mobility, self-contained environmental systems, energy efficiency and renewable energy. Participating scholars from FCE included Prof. Edwin Chan, Prof. Wu Chen, Prof. Xiaoli Ding, Prof. William Lam, Prof. Xiangdong Li, Prof. Chi Sun Poon, Prof. Yiqing Ni, Dr Lilian Pun, Prof. Shengwei Wang, and Prof. Hongxing Yang. Their respective presentations were well received and generated much discussion.



## 新市鎮發展新模式三方論壇

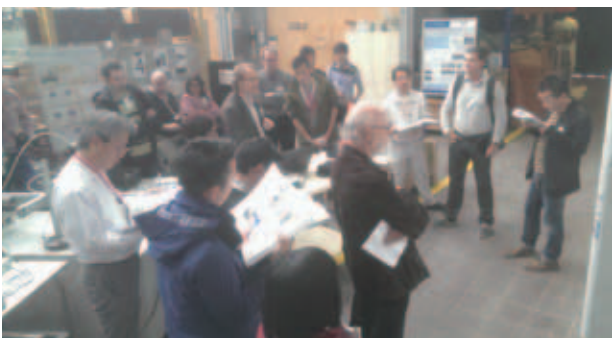
可持續城市發展研究院(研究院)於2014年八月二十六日召開了一個三方論壇，匯集政府高層、業界及學者，探討在香港發展新市鎮的新模式。理大校長唐偉章教授致歡迎詞後，研究院院長滕錦光教授隨即向與會者介紹該院的工作及理念。當日安排了兩場主題演講，講者分別為發展局常任秘書長(工務)韋志成工程師，以及奧雅納集團信託主席兼可持續城市發展研究院轄下國際諮詢委員會(IAC)主席陳嘉正博士工程師。其後，IAC本地成員及業界領袖分別組成四個及三個小組，討論關於可持續發展的多個議題；接著下來就是分組討論，深入探討以下五個主題，包括社會、經濟及環境的綜合規劃、感官城市的智能基建、行人優先的交通流動性、獨立自足的環境系統，以及能源效益與再生能源。參與今次論壇的建設及環境學院學者計有陳漢雲教授、陳武教授、丁曉利教授、林興強教授、李向東教授、潘智生教授、倪一清教授、潘鄭淑貞博士、王盛衛教授及楊洪興教授。眾人高度評價他們的報告，討論氣氛熾熱。





## LSGI Cohosts Workshop for Engineers in Berlin

On 19-25 June 2014, a group of 20 engineers from all over the world attended a workshop on non-destructive damage assessment and environmental measurement methods. Co-organized by the Federal Institute of Materials Research and Testing (BAM) in Berlin and Ir Dr Wallace W.L. Lai of the Department of Land Surveying and Geo-Informatics, this is the second year that the workshop has been held. Participants were an international group, with nationalities including Japan, Brazil, USA, Slovenia, Sweden, Mauritius and Hong Kong. They were taught a range of technologies for nondestructive testing in civil engineering (NDT-CE), from classical NDT, concept of validation, principles and hands-on practice of ground penetrating radar, to ultrasonics, thermography, laser-induced spectroscopy, geophysical methods, pile testing, electrochemistry of corrosion process, to NDT data fusion, etc. They also visited a test site in Horstwalde (a forest 50km away from Berlin), where they observed a few practical site work demonstrations and enjoyed a German-style BBQ lunch. The workshop turned out to be very successful and highly rated by the participants.



## 土地測量及地理資訊學系與德國BAM於柏林合辦工程師工作坊

來自日本、巴西、美國、斯洛文尼亞、瑞典、毛里裘斯及香港的二十位工程師，於2014年六月十九至二十五日雲集德國柏林，參與一個有關非破損檢測及環境測量方法的工作坊。這項活動由德國聯邦物料測試及研究院 (BAM) 與土地測量及地理資訊學系的賴緯樂博士工程師合作籌備，今年已是第二度舉辦。透過今次行程，參與的工程師可以學習多種用於土木工程的非破損檢測技術(NDT-CE)，如傳統的非破損檢測方法、驗證的概念、探地雷達的原理及實際應用、超聲波、紅外線熱成像技術、鐳射誘導光譜學、地球物理方法、樁基測試、侵蝕過程的電化，以及非破損檢測的數據融合。另外，一行人還獲安排到距離柏林五十公里、位處Horstwalde的森林試驗場，觀摩數項即場示範及一嚐德國風味的燒烤午餐。參加者對工作坊的反應極佳，證明活動非常成功。

德國聯邦物料測試及研究院位於柏林，設有十一個部門及五十三個分部，其中一個專門研究非破損檢測及環境測量方法。





## Exhibition of Findings from Urban Heat Island Study by LSGI

On 27 June 2014, an opening ceremony for an exhibition on monitoring Hong Kong's Urban Heat Island was held at the Hong Kong Science Museum. Giving the public an idea of the temperatures in Hong Kong's urban areas and global warming trends, the contents of the exhibition were provided by Prof. Janet NICHOL of the Department of Land Surveying and Geo-Informatics (LSGI) and her research team, who have been monitoring Hong Kong's urban heat island effect using satellite and aerial images for over a decade.

Besides Prof. NICHOL, officiating guests at the ceremony included Mr LAI Sau Tak, Edwin, Assistant Director of the HK Observatory; Professor Xiao-li DING, Head of LSGI; Professor YEUNG Yau Yuen, Professor and Associate Head of the Department of Science and Environmental Studies at the Hong Kong Institute of Education (Expert Advisor of the Hong Kong Science Museum) and Ms SIT Man, Karen, Acting Chief Curator of the Hong Kong Science Museum.

On display at the Science News Corner of the Science Museum till the end of December 2014, the exhibition features thermal satellite images captured on hot summer days and nights as well as 3-dimensional thermal models, which can show how different building designs, materials, and planning practices affect the formation of urban heat islands.



## 土地測量及地理資訊學系於香港科學館展出研究資料

香港科學館於2014年六月二十七日舉行了一個城市熱島效應展覽的揭幕儀式。有關展覽的資料是由土地測量及地理資訊學系李真教授及其研究團隊提供，旨在向公眾講解香港市區的溫度變化和全球暖化趨勢。該團隊過去十多年來一直利用衛星及航空影像監察香港市區的熱島效應。

除李真教授，當日參加揭幕儀式的嘉賓還有香港天文台助理台長黎守德先生、土地測量及地理資訊學系系主任丁曉利教授、香港教育學院科學與環境學系副系主任楊友源教授(香港科學館專家顧問)，以及香港科學館署理總館長薛雯女士。

展覽在科學館的科訊廊舉行，至2014年12月底結束。該展覽包括衛星拍攝的炎熱夏季的晝夜溫度影像及三維溫度模型，以展示不同建築設計、建材和規劃手法怎樣影響市區熱島的形成。



## Motor Vehicle Emissions Control Workshop (MoVE) 2014



On 25-27 June 2014, more than 250 people gathered on the campus of PolyU for the Motor Vehicle Emissions Control Workshop (MoVE) 2014. Co-organized by the Ministry of Environmental Protection of the People's Republic of China, the Environmental Protection Department of the Hong Kong Government, and PolyU's Department of Civil and Environmental Engineering, the workshop promoted the dissemination of information on the latest technologies for reducing emissions in order to protect public health.

The opening session was officiated by Mr WANG Jian, Deputy Director-General, Ministry of Environmental Protection, China; Ms Anissa WONG, Permanent Secretary for Environment and Director of Environmental Protection and Professor Timothy TONG, President of PolyU. Keynote speeches were delivered by Mr Mike WALSH and Dr Carlos DORA. With six focus sessions and over 25 presentations, the workshop was a great success for all its participants.

## 汽車尾氣排放控制研討會 2014

2014年六月二十五至二十七日，逾 250名參加者雲集理大，出席由國家環境保護部、特區政府環境保護署與土木及環境工程學系合辦的「汽車尾氣排放控制研討會 2014」。這項活動旨在交流用以減少汽車廢氣的最新技術，保障公眾健康。

研討會獲國家環境保護部副司長汪鍵先生、特區政府環境局常任秘書長兼環境保護署署長王倩儀女士，以及理大校長唐偉章教授親臨主持揭幕儀式；主題講者方面，則有國際專家 Mike WALSH 先生及世界衛生組織的 Carlos DORA 博士。活動分為六個焦點環節，在會上發表的報告超過 25 份，所有參加者均感收穫良多。



## The 10<sup>th</sup> International Workshop on Bifurcation & Degradation in Geomaterials (IWBDG)

The 10th International Workshop on Bifurcation & Degradation in Geomaterials (IWBDG) was held on 28-30 May 2014 at PolyU. Organized by Prof. K.T. Chau of the Department of Civil and Environmental Engineering, the workshop was sponsored financially by the Faculty of Construction and Environment and Fong On Construction Limited. Prof. Timothy Tong, President of PolyU, opened the conference with a welcoming speech on the first day. With 67 participants from 16 countries and 55 presentations, the workshop was a great success in disseminating the latest research in the field. It continued its legacy of promoting broad interest in geomechanics since the first workshop in Germany more than 25 years ago. The proceedings of the 10th IWBDG have been published by Springer.

## 第十屆岩土損傷及分義理論國際研討會

由土木及環境工程學系周錦添教授籌辦的第十屆「第十屆岩土損傷及分義理論國際研討會」(IWBDG)，於2014年五月二十八至三十日在理大順利進行。首屆活動於德國舉辦，至今已有逾二十五年歷史。今屆研討會的經費獲本院及晃安建設有限公司資助，理大校長唐偉章教授更親臨首天的開幕禮致辭，來自十六個國家的六十七名參加者，合共發表了五十五份報告，不但促進了研究資訊的流通，也傳承了其推廣岩土力學的傳統。這次會議論文集由 Springer 出版社以書本形式出版。





## BRE Academic Delivers RGC Public Lecture



In the afternoon of 28 September 2014, Prof. Edwin HW Chan of the Department of Building and Real Estate gave a public lecture organized by the Research Grants Council on social considerations for urban renewal and urban planning, with a focus on integrating the elderly in public open spaces. The talk in Cantonese was held in one of the

lecture theatres at the Hong Kong Central Library. With the scarcity of land and the intense pressure for economic growth in Hong Kong, public open spaces tend to be sacrificed for urban (re)development. Prof. Chan's lecture explored the opportunities in urban renewal and examined how public open spaces could enhance the concept of active aging and improve the quality of life of the elderly as integral to our society.

## 建築及房地產學系學者應研資局邀請主講公開講座

2014年九月二十八日下午，建築及房地產學系的陳漢雲教授應邀為研究資助局主辦的一個公開講座擔任主講，闡述市區重建及都市規劃須考慮的社會因素，特別是長者與公共空間的融合問題。今次活動假香港中央圖書館以粵語進行。香港土地供應緊張，但高度重視經濟發展，在市區發展和重建過程中，公共空間往往成為犧牲對象。陳教授在演講中闡述了市區重建帶來的機遇，並解說怎樣善用公共空間推廣「積極老齡化」，提升身為社會重要成員的長者的生活質素。

## FCE Hosts Forum for Writing Research Proposals

A forum on writing successful proposals for research grants was held on the morning of 1 August 2014 for academic staff in the Faculty of Construction and Environment (FCE). Sharing their experiences for getting funded by the Research Grants Council (RGC) were Prof. Jian-hua Yin from the Department of Civil and Environmental Engineering, Dr George Liu from the Department of Land Surveying and Geo-Informatics, Dr Ni Meng from the Department of Building and Real Estate, and Prof. Jian-lei Niu from the Department of Building Services Engineering, who also spoke from his perspective as a panel member of the RGC. Their experiences ranged from their success in securing funding from RGC's Collaborative Research Fund, its Early Career Scheme, and its General Research Fund. The only speaker not from FCE was Prof. Kenneth Leung from the Department of Biology of the University of Hong Kong.

Prof. Y.L. Xu, Dean of FCE, emphasized the importance of remaining competitive in RGC's annual funding exercise at the beginning of the forum, which concluded with remarks from Prof. Xiang Dong Li, Associate Dean (Research) of FCE.



## 科研撥款申請書寫作要訣論壇

2014年八月一日上午，學院為院內教學人員舉辦論壇，探討撰寫科研撥款申請書的要訣，並邀請曾成功獲研資局資助的同事分享心得。當日的講者包括土木及環境工程學系的殷建華教授、土地測量及地理資訊學系的劉志趙博士、建築及房地產學系的倪萌博士，以及屋宇設備工程學系的牛建磊教授。幾位同事曾分別獲研資局的協作研究金計劃、傑出青年學者計劃、以及優配研究金計劃資助，牛教授更是該局學科小組委員，可以同時從申請者及審批者的角度分析申請書寫作技巧。除本院同事，香港大學生物科學學院的梁美儀教授當日亦撥冗擔任講者。

論壇開始時，本院院長徐幼麟教授一再強調保持競爭力，每年成功爭取研資局科研撥款的重要性。本院副院長(科研)李向東教授亦提出了寶貴意見，為當日的討論作結。







# Awards & Achievements

優秀學者 成績斐然

## 2014 Dean's Awards

The Faculty of Construction and Environment is pleased to have the following staff receiving the 2014 Dean's Award for Outstanding Achievement in Research Funding, which recognizes the success of staff in securing external competitive research grants (by achieving a total score of not less than 3 from the funding schemes recognized for the Award in the past 3 calendar years, or a total score of not less than 4 in the past 5 calendar years). Following are their names, projects funded, and funding sources:

- 1) Prof. CHAN Ping Chuen Albert, BRE (third time awardee)

## 2014年院長特設卓越表現獎

建設及環境學院2014年「院長特設卓越表現獎(科研經費)」的得獎名單已經揭曉。此獎旨在嘉許成功爭取校外科研撥款的同事，他們須在最近三年從認可資助計劃取得最少三分，或最近五年的總分不少於四分。以下是各得獎者、獲資助的研究項目和資助來源的簡介。

- 1) 陳炳泉教授、建築及房地產學系 (第三度獲獎)



The following projects of Prof. Chan received external funding over the past three years:

- Evaluating the Economic, Social, and Cultural Impacts of Revitalizing Industrial Buildings in Hong Kong [Allocated the RGC Public Policy Research in 2012]
- Developing a Personal Cooling System (PCS) for Combating Heat Stress in the Construction Industry [Allocated the RGC General Research Fund in 2013]
- Improving Safety Communication of Ethnic Minorities in the Construction Industry [Allocated the CPU Public Policy Research in 2013]

以下是陳教授最近三年獲資助的研究項目：

- 活化工廈對香港經濟、社會及文化的影響評估 (在2012年獲研資局「公共政策研究資助計劃」資助)
- 為本地建造業工人研發預防中暑的冷凍衣研究 (在2013年獲研資局「優配研究金計劃」資助)
- 改善少數族裔在建造業的安全溝通研究 (在2013年獲中央政策組「公共政策研究資助計劃」資助)

2) Dr CHAU Chi Kwan, BSE (first time awardee)

2) 周志坤博士、屋宇設備工程學系 (首度獲獎)



The following projects of Dr Chau received external funding over the past three years:

- Development of Building Design and Planning Guidelines for Reducing Noise Annoyance and Restoring Stress (Allocated the RGC General Research Fund in 2012)
- On the Study of Effect of Aesthetics Appearance of Vegetated Noise Barriers on Noise Annoyance Moderation (Allocated the Environment and Conservation Fund in 2012)
- An Investigation of the Impact of Natural Sounds on the Acceptability of Acoustic Environment within Residences (Allocated the RGC General Research Fund in 2013)

以下是周博士最近三年獲資助的研究項目：

- 制訂建築設計及規劃指引以減少噪音滋擾及紓緩壓力研究 (在2012年獲研資局「優配研究金計劃」資助)
- 植物隔音屏障優美外觀對減輕噪音滋擾作用研究 (在2012年獲「環境及自然保育基金」資助)
- 自然聲音對住所內聲學環境可受性影響調查 (在2013年獲研資局「優配研究金計劃」資助)

3) Dr CHEN Mingli, BSE (second time awardee)

3) 陳明理博士、屋宇設備工程學系 (再度獲獎)



The following projects of Dr Chen received external funding over the past three years:

- New Method for Retrieving the Evolution of Leader Charge Density Based on Electric Field and Photographic Observations of Rocket-triggered Lightning (Allocated the RGC General Research Fund in 2011)
- Development of Self-organized 3D Physical-stochastic Model for Downward Negative Stepped Leader and its Attachment to Grounded Structures (Allocated the RGC General Research Fund in 2012)
- New Approach for Evaluating the Effect of Electromagnetic Field Propagating over Rough Earth Surface with Lightning Data and its Result Interpretation with Modelling (Allocated the RGC General Research Fund in 2013)

以下是陳博士最近三年獲資助的研究項目：

- 基於火箭觸發閃電的電場及光學觀測資料來推導先導電荷密度演變的新方法 (在2011年獲研資局「優配研究金計劃」資助)
- 下行負極性梯級先導及其連接打擊地面建築物過程的三維自持物理-隨機模型的開發 (在2012年獲研資局「優配研究金計劃」資助)
- 利用閃電數據評估粗糙地球表面對電磁場傳播影響的新方法及通過建模闡釋其結果 (在2013年獲研資局「優配研究金計劃」資助)

4) Prof. CHOW Wan Ki, BSE (second time awardee)

4) 周允基教授、屋宇設備工程學系 (第二度獲獎)



The following projects of Prof. Chow received external funding over the past three years:

- Aspects of Open Kitchen Fires in Tall Buildings and Protection Alternatives (Allocated the RGC General Research Fund in 2011)
- Wind Action on Supertall Building Fires and Spread to Adjacent Areas (Allocated the RGC General Research Fund in 2012)
- A Study of Internal Fire Whirl in Vertical Shafts with Open Roofs (Allocated the RGC General Research Fund in 2013)

以下是周教授最近三年獲資助的研究項目：

- 高層大廈內開放廚房火災及保障措施研究(在2011年獲研資局「優配研究金計劃」資助)
- 超高層大廈風火效應及週邊擴展(在2012年獲研資局「優配研究金計劃」資助)
- 頂部開口的豎井內火旋風的研究(在2013年獲研資局「優配研究金計劃」資助)

5) Dr LU Lin, BSE (second time awardee)

5) 呂琳博士、屋宇設備工程學系 (再度獲獎)



The following projects of Dr Lu received external funding over the past three years:

- Investigating Thermal Performance of Pile Ground Heat Exchanger with Spiral Coils and its Thermal Effects on the Pile Foundation (Allocated the RGC General Research Fund in 2012)
- Investigating the Thermal and Long-term Thermo-mechanical Performances of Energy Piles with Cast-in U-tubes (Allocated the RGC General Research Fund in 2013)
- Study on the Development Potential and Energy Incentives of Rooftop Solar Photovoltaic Applications in Hong Kong (Allocated the CPU Public Policy Research in 2013)

以下是呂博士最近三年獲資助的研究項目：

- 樁基螺旋型線圈地熱換熱器的熱性能及其對地基的熱效應研究(在2012年獲研資局「優配研究金計劃」資助)
- 鑄有U形管能量樁的熱性能及長期熱機械性能研究(在2013年獲研資局「優配研究金計劃」資助)
- 香港屋頂太陽能光伏發展潛力和能源激勵政策的研究(在2013年獲中央政策組「公共政策研究資助計劃」資助)



## 6) Dr GUO Hai, CEE (second time awardee)

## 6) 郭海博士、土木及環境工程學系 (再度獲獎)



The following projects of Dr Guo received external funding over the past three years:

- Air Exchange between South China Sea and Subtropical Continental Regions of South China: Chemical and Meteorological Characterization [Allocated the Natural Science Foundation of China in 2013]
- Photochemical Formation of Alkyl Nitrates and their Impacts on Ozone Production under Urban Polluted Atmosphere [Allocated the RGC General Research Fund in 2013]
- Can we get rid of Smoggy Days in Hong Kong? Formation Mechanism and Control Strategies [Allocated the CPU Public Policy Research in 2013]

以下是郭博士最近三年獲資助的研究項目：

- 海陸風相互作用下中國南海海域的大氣化學和氣象特徵研究 (在2013年獲「國家自然科學基金」資助)
- 城市污染大氣層中亞硝酸酯的光化學形成及其對臭氧生成的影響研究 (在2013年獲研資局「優配研究金計劃」資助)
- 香港能否擺脫煙霧迷漫的日子 — 形成機理與控制策略 (在2013年獲中央政策組「公共政策研究資助計劃」資助)

## 7) Prof. LAM Hing Keung William, CEE (second time awardee)

## 7) 林興強教授、土木及環境工程學系 (再度獲獎)



The following projects of Prof. Lam received external funding over the past five years:

- Advanced Models for Sustainable Multimodal Transit Systems - An Activity-based Approach in Networks with Uncertainties and Climate Changes [Allocated the RGC General Research Fund in 2009]
- Journey Time Estimator for Traffic Surveillance and Incident Detection under Network Uncertainties [Allocated the RGC General Research Fund in 2010]
- Covariance Analysis for Estimating Stochastic Origin-Destination Demands from Classified Traffic Counts with Day-to-day and Seasonal Effects [Allocated the RGC General Research Fund in 2012]
- A Network Equilibrium Approach for Simultaneous Estimation of Activity and Travel Choices in Multi-modal Transportation Network [Allocated the RGC General Research Fund in 2013]

以下是林教授最近五年獲資助的研究項目：

- 可持續發展的多方式公交系統建模——使用基於個人活動的方法考慮網路不確定性和氣候變化的影響 (在2009年獲研資局「優配研究金計劃」資助)
- 網路不確定環境下用於交通監測和事故探測的行程時間估計模型 (在2010年獲研資局「優配研究金計劃」資助)
- 考慮逐日及季節性影響基於分類車輛流量資料和協方差分析的隨機交通需求估計方法 (在2012年獲研資局「優配研究金計劃」資助)
- 多模式交通網絡中個人活動選擇與出行選擇同步決策的網絡均衡模型研究 (在2013年獲研資局「優配研究金計劃」資助)

8) Prof. LI Xiang-dong, CEE (second time awardee)

8) 李向東教授、土木及環境工程學系 (再度獲獎)



The following projects of Prof. Li received external funding over the past three years:

- The Interactions among Biodegradable Chelants, Soil Microbes, and Plant Roots in the Phytomanagement Process of Metal-contaminated Soils (Allocated the RGC General Research Fund in 2011)
- Air-surface Exchange of Persistent Organic Pollutants (POPs) and Heavy Metals (MNs) in Peri-urban Agricultural Ecosystems of the Pearl River Delta, South China (Allocated the NSFC/RGC Joint Research Scheme in 2011)
- Ecology and Biodiversity of Benthic Marine Ecosystems before and after the Trawling Ban in Hong Kong Coastal Waters – Sediment Quality Study (Allocated the RGC Collaborative Research Fund in 2012)

以下是李教授最近三年獲資助的研究項目：

- 金屬污染土壤植物修復中可生物降解螯和劑、土壤微生物，以及植物根系的主要相互作用研究 (在2011年獲研資局「優配研究金計劃」資助)
- 珠三角地區都市周邊農業生態系統中持久性有機污染物(POPs) 與重金屬 (MNs) 的空氣表面交換研究 (在2011年獲「國家自然科學基金委員會/研資局聯合科研資助基金」資助)
- 香港海底生態系統在禁止近岸拖網捕魚前後的生態及生物多樣性 – 沉積物質素研究(在2012年獲研資局「協助研究金計劃」資助)

9) Prof. TENG Jin-guang, CEE (first time awardee)

9) 滕錦光教授、土木及環境工程學系 (首度獲獎)

The following projects of Prof. Teng received external funding over the past five years:

- Debonding in FRP-strengthened RC Beams: Effects of Load Distribution and U-jacket Anchorage (Allocated the RGC General Research Fund in 2009)
- Hybrid FRP-concrete-steel Double-skin Tubular Beams (Allocated the RGC General Research Fund in 2010)
- Beam Weakening in Combination with FRP Strengthening for Enforcing the Strong Column/Weak Beam Hierarchy in RC Frames (Allocated the RGC General Research Fund in 2011)
- Fundamental Research on the Use of FRP Composites to Achieve High Performance and Longevity for Major Structures (Allocated the National Basic Research (973) Programme in 2013)

以下是滕教授最近五年獲資助的研究項目：

- FRP 加固鋼筋混凝土樑的剝離：負載分佈及U形錨固的影響 (在2009年獲研資局「優配研究金計劃」資助)
- FRP 鋼筋混凝土雙壁空心樑 (在2010年獲研資局「優配研究金計劃」資助)
- 為了在鋼筋混凝土框架中採用強柱弱樑結構而進行的橫樑弱化及FRP加固 (在2011年獲研資局「優配研究金計劃」資助)
- 應用FRP實現重大工程結構高性能與長壽命的基礎研究 (在2013年獲國家重點基礎研究發展計劃 – 973 計劃資助)

10) Prof. YIN Jian-hua, CEE (second time awardee)

10) 殷建華教授、土木及環境工程學系 (再度獲獎)



The following projects of Prof. Yin received external funding over the past year:

以下是殷教授最近一年獲資助的研究項目：

- A Unique Multi-Functions Large-Scale Physical Model Testing Facility for Study of the Impact of Debris Flow on Flexible Barriers and Geo-Hazards in Hong Kong (Allocated the RGC Collaborative Research Fund in 2013)
- 香港獨有的泥石流-柔性防護欄碰撞和地質災害研究的大型多功能物理模型試驗設施(在2013年獲研資局「協作研究金計劃」資助)

11) Prof. NICHOL Janet, LSGI (second time awardee)

11) 李真教授、土地測量及地理資訊學系 (再度獲獎)



The following projects of Prof. Nichol received external funding over the past three years:

以下是李真教授最近三年獲資助的研究項目：

- Integrated Warning System for Monitoring and Prediction of Dust Storm Events in Hong Kong (Allocated the Environment and Conservation Fund in 2012)
- 監測香港出現沙塵暴的綜合預警系統 (在2012年獲「環境及自然保育基金」資助)
- Ventilation of a High-rise Compact City (Allocated the RGC Collaborative Research Fund in 2013)
- 高樓密佈都市的通風研究 (在2013年獲研資局「協作研究金計劃」資助)
- Temperature Projection over Hong Kong and The Pearl River Delta using Remote Sensing and Dynamic Modelling (Allocated the RGC General Research Fund in 2013)
- 使用遙感及動態建模技術預測香港及珠三角地區氣溫研究 (在2013年獲研資局「優配研究金計劃」資助)

The Dean's Award for Outstanding Achievement in Research Funding consists of a cash prize of HK\$15,000 and a certificate signed by the Faculty Dean. Each awardee will also receive a research grant of HK\$200,000 for use over a period not exceeding 48 months.

除了現金獎港幣一萬五千元及由院長簽署的嘉許狀，每位「院長特設卓越表現獎(科研經費)」得主還可領取一筆港幣二十萬元的研究撥款，在四年內使用。

In addition, the Dean's Award for Outstanding Publication Achievement (Category I: Highly Cited papers) has been awarded to Prof. Jin-Guang TENG for the following two papers:

另外，本院亦公佈了新一回「院長特設卓越表現獎(著作)(類別 I: 高引用的論文)」的得獎人。滕錦光教授憑兩篇文章獲獎，詳情如下：



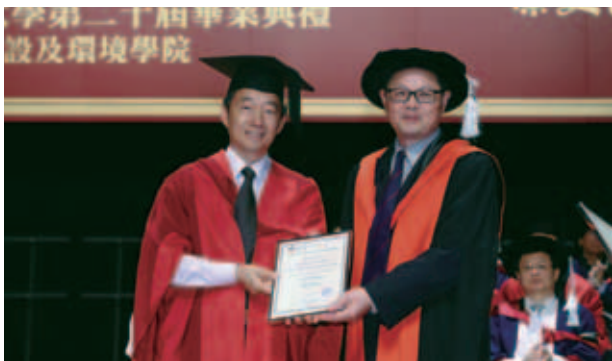
Title 論文題目	Authors 作者	Journal 學術刊物
Design-Oriented Stress-strain Model for FRP-Confined Concrete FRP 束混凝土面向設計的應力應變模型	L Lam, JG Teng 林力、滕錦光	<i>Construction and Building Materials</i> Volume 17, Issue 6, Pages 471- 489 [Sep/Oct 2003] <i>建築與建造材料學報</i> 第 17 卷第 6 期 471- 489 頁 (2003 年 9 月/10 月)
Full-Range Behavior of FRP-to-Concrete Bonded Joints FRP- 混凝土搭接接頭的全過程受力性能研究	H Yuan, JG Teng, Rudolf Seracino, ZS Wu, J Yao 袁鴻、滕錦光、Rudolf Seracino、吳智深、姚諫	<i>Engineering Structures</i> Volume 26, Issue 5, Pages 553-565 [April 2004] <i>工程結構學報</i> 第 26 卷第 5 期 553-565 頁 (2004 年 4 月)

Achievements in academic programme development were also rewarded. The programme team for the MSc/PgD in Sustainable Urban Development received the Dean's Award for Outstanding Achievement in Academic Programme Development. Led by Prof. Hong-xing Yang of the Department of Building Services Engineering, team members included Prof. Li-yin Shen of the Department of Building and Real Estate as well as Miss Virginia Yu of the Faculty Office.

Congratulations to all the above colleagues, who were honoured at the 20th Faculty Congregation and Prize Presentation Ceremony on 4th and 5th November 2014.

至於「院長特設卓越表現獎(課程發展)」的得主，就是負責「可持續城市發展學」理學碩士/深造文憑課程的一組同事。以楊洪興教授(屋宇設備工程學系)為首，組員包括建築及房地產學系的申立銀教授，以及學院辦事處的余碧媚小姐。

恭喜上述各位同事。各獎項已於2014年十一月四至五日舉行的建設及環境學院第二十屆畢業暨頒獎典禮頒發。



## Distinguished Chinese Scholars Honoured

Two renowned scholars from the Chinese mainland, Prof. Xu Guanhua and Prof. Wang Huijun, nominated by FCE Departments were honoured by The Hong Kong Polytechnic University on 25 November at a Presentation Ceremony of the Distinguished Chinese Visiting Scholars Scheme, presided over by PolyU President Professor Timothy W. Tong.



Prof. Xu Guanhua  
徐冠華院士

Professor Xu Guanhua is an expert in remote sensing and geographic information. He has acted as the leader of Expert Advisory Group of the National Basic Research Programme (973 Programme) since 2011. Prof. Xu has long been engaged in the study of remote sensing, earth information science and organization management of science and technology. He was in charge of science projects for the national sixth, seventh and eighth five-year plans for 15 years (1981-1995). He has achieved breakthroughs in computer image analysis and processing as well as satellite images used to study resource-regenerated investigation, making significant contributions to the science and technology development of remote sensing and geographic information system in China. Prof. Xu has contributed a lot to implementation of system reform, promotion of scientific and technological innovation and industrialization of science and technology. He has done a lot of excellent work for formulation of the National Medium and Long-term Science and Technology Development Plan (2006-2020).

Prof. Xu Guanhua was elected as a Member of the Chinese Academy of Sciences (CAS) in 1991. He served as the Vice President of the CAS from 1994 to 1995. He also served as Vice Minister of the Ministry of Science and Technology (MOST) between 1995 and 2001 and Minister of the MOST from 2001 to 2007. Prof. Xu is also a Fellow of the World Academy of Sciences for the Advancement of Science in Developing Countries.

Professor Wang Huijun is an atmospheric physics expert, the first in China to couple an Atmospheric General Circulation Model with a mixed layer ocean model and a thermal sea ice model, and simulated the climate changes induced by the CO<sub>2</sub> doubling. His result was cited by the 1992 Supplementary Report of the Intergovernmental Panel on Climate Change (IPCC). He has many contributions towards improving the seasonal climate prediction in China and most of his work are original and have importance to the operational climate prediction. He has published more than 230 journal papers in China and other countries, among which, more than 140 SCI-extended papers. He has served as the Chief Editor of *Advance in Atmospheric Science* and is currently the Chief Editor of *Atmospheric and Oceanic Science Letters*. His academic honours include the Second-class National Natural Science Award and the Prize for Scientific and Technological Progress of Ho Leung Ho Lee Foundation. Prof. Wang was elected as a Member of the CAS and a Member of the Norwegian Academy of Technological Science in 2013.

The scientists have presented public lectures and had in-depth academic exchanges with academic staff and students in FCE on both scientific issues and future research collaborations.

## 表揚傑出中國訪問學人



Prof. Wang Huijun  
王會軍院士

十一月二十五日，理大校長唐偉章教授主持「傑出中國訪問學人計劃－成就表揚典禮」，向卓越的內地學者致敬。得獎人中的徐冠華教授及王會軍教授，由本院轄下的學系提名。徐冠華院士，遙感和地理信息專家。1991年當選為中國科學院院士，1994至1995年任中國科學院副院長。1995年起任國家科學技術部副部長，2001至2007年任國家科學技術部部長。自2011年起，擔任國家重點基礎研究發展計劃（「973計劃」）專家顧問組組長。

徐冠華院士長期從事遙感、地球信息科學研究和科技組織管理工作。在國家「六五」、「七五」、「八五」三個五年計劃期間（1981至1995年），擔任國家科技專案與課題負責人，在衛星圖像電腦處理與分析、衛星圖像用於再生資源調查等方面研究取得了新的突破，為中國遙感和地理信息系統科學技術的發展作出重要的貢獻。2007年從部長職位退休後，徐院士主要進行中國可持續發展的研究，特別是在組織和推動全球氣候變化研究方面作出了極大努力，取得了重要進展。在科技管理領域，徐院士在實施科技體制改革、推進科技創新、促進科技產業化等方面做了大量卓有成效的工作，組織了《國家中長期科學和技術發展規劃綱要（2006-2020年）》的制定和有關科技計劃的實施。

王會軍院士，大氣科學家，1964年出生於黑龍江。1986年畢業於北京大學地球物理系天氣動力學專業，1991年在中國科學院大氣物理研究所獲博士學位。畢業後在原所留任助理教授、副教授及教授等職，並於2001年8月至2014年5月擔任中國科學院大氣物理研究所所長。現任竺可楨－南森國際研究中心主任。

王院士為中國首位科學家，結合大氣環流模式、多層海洋層模式以及熱海冰模式，並模擬二氧化碳排放量倍增可能引發的氣候轉變。他的研究成果，得到聯合國政府間氣候變化專門委員會在1992年發表的補充報告引用。在1970年代後期，他比較東亞夏季季候風十年間的變化，發現跨年代的轉弱，啟發其他學者進行大量的有關研究。王院士及其研究團隊發現，南極振動與中國華北中部夏季降雨量以及西北太平洋熱帶氣旋活動有密切的關係。王院士為提升中國季節氣候的預測作出極多貢獻，其原創的研究工作亦對氣候預測極為重要。

王院士於2013年當選為中國科學院院士、挪威技術科學院院士。曾在國內外重要期刊發表學術論文230餘篇，其中140餘篇為SCI（網路版）論文。曾任期刊《Advance in Atmospheric Science》主編，現為期刊《Atmospheric and Oceanic Science Letters》主編。曾獲國家自然科學獎二等獎、何梁何利基金科學與技術進步獎。

在港期間，他們除了舉辦公開講座，亦有與本院師生就學術及日後的科研合作事宜深入交流。

## CEE Scholar Wins APEC Science Prize



On 17 September 2014, Dr Agachai Sumalee, Associate Professor of the Department of Civil and Environmental Engineering, was honoured in Beijing with the 2014 Asia-Pacific Economic Cooperation (APEC) Science Prize for Innovation, Research and Education (ASPIRE).

Nominated by the Innovation and Technology Commission for the prestigious prize, Dr Sumalee staved off his competition with a traffic management system that greatly reduced commuting times in the congested streets of Bangkok. An acknowledgement of Dr Sumalee's meritorious research in intelligent transportation systems, transport modeling and planning, as well as his close collaboration with scientists from other APEC countries, the award comes with USD 25,000 in prize money from the sponsors, Wiley and Elsevier, publishers of scholarly scientific knowledge. Congratulations to Dr Sumalee, whose research has made it possible for highway managers to predict traffic conditions and prevent congestion.

## 土木及環境工程學系學者榮獲亞太經合組織科學獎

土木及環境工程學系副教授 Agachai Sumalee 博士於 2014 年九月十七日親赴北京，領取由亞太經合組織頒發的 2014 年度「科學創新、研究及教育獎」。

Sumalee 博士是由政府創新科技署提名競逐這個獎項，並憑一套大大縮短在曼谷繁忙地區上下班乘車時間的交通管理系統脫穎而出。此獎不但肯定他在智能交通運輸系統、交通運輸模型和規劃研究上的成就，也嘉許他致力與亞太經合組織其他成員地區的科學家緊密合作。獎項設有現金獎二萬五千元，由國際知名的科學期刊出版社 Wiley 及 Elsevier 共同捐出。Sumalee 博士的研究成果，有助公路管理人員預測交通狀況，減少擁塞。



## CEE Scholars Win Award for Air Pollution Research

In June 2014, Prof. Xiangdong Li and Dr Hai Guo of the Department of Civil and Environmental Engineering were honoured with a first-class Scientific and Technological Award from the Guangdong Provincial Government for their work on regional air toxic pollutants and their environmental effects. Conducted in collaboration with researchers from the Guangzhou Institute of Geochemistry of the Chinese Academy of Sciences, the research has promoted spontaneous monitoring of global persistent organic pollutants (POPs); and created a platform for internationally advanced volatile organic compounds (VOCs) analysis and atmospheric process simulation. Providing key data on the secondary air pollution in the Pearl River Delta region, their work has highlighted the environmental processes of toxic pollutants, greatly facilitating assessments of human respiratory exposures to air toxic substances as well as the effects of pollutants on water and soil. Congratulations to them for such a well-deserving honor.



Prof. Xiangdong Li  
李向東教授



Dr Hai Guo  
郭海博士

## 土木及環境工程學系學者獲空氣污染研究獎項

2014 年六月，廣東省政府向土木及環境工程學系的李向東教授及郭海博士頒發科學技術一等獎，表揚兩人研究區域空氣有毒污染物對環境的影響。獲獎研究是與中國科學院廣州地球化學研究所的科研人員合作，除了推動自發監察全球難降解有機污染物 (POPs)，也為各國進一步分析揮發性有機化合物 (VOCs) 及模擬大氣過程打造了合作平台。在科研人員努力下，該研究就珠三角地區的二次空氣污染提供了重要數據，突顯有毒污染物的環境過程，大大有助評估空氣中有毒物質對人體呼吸系統及水土的影響。兩位學者今次獲獎，絕對實至名歸。恭喜！恭喜！



## CEE Academics Honoured with 2014 Takuji Kobori Prize

The work of Dr Songye Zhu, Associate Prof. of the Department of Civil and Environmental Engineering, and Prof. You-lin Xu, Dean of the Faculty of Construction and Environment, was recently awarded the 2014 Takuji Kobori Prize by the International Association for Structural Control and Monitoring. They had co-authored a top-ranked paper titled "Long-term condition assessment of suspenders under traffic loads based on structural monitoring system: Application to the Tsing Ma Bridge" with Dr Shunlong Li and Prof. Hui Li, both of the Harbin Institute of Technology, and Dr Zhi-wei Chen of Xiamen University.



Dr Songye Zhu  
朱松擘博士



Prof. You-lin Xu  
徐幼麟教授

Congratulations to Dr Zhu and Prof. Xu, who also came first with Dr Wen-ai Shen in Elsevier's 2013 Engineering AudioSlides Challenge. Their AudioSlides presentation of their co-authored paper titled "Linear electromagnetic devices for vibration damping and energy harvesting: modeling and testing" was selected by a panel of editors-in-chief of various engineering journals as the winner.

由土木及環境工程學系副教授朱松擘博士及本院院長徐幼麟教授合撰的論文，最近獲國際結構控制及監測協會 (IASCM) 頒發 2014 「小堀鐸二獎」。該文題為「依據結構監測系統對懸索橋吊索在交通載荷下的長期狀態評估：青馬大橋案例研究」，其他合著者包括哈爾濱工業大學的李順龍博士及李惠教授，以及廈門大學的陳志為博士。

另外，由朱、徐兩位聯同沈文愛博士製作的短片報告，也在 Elsevier 出版社舉辦的 2013 年工程學報告短片挑戰賽中掄元。他們利用短片介紹合著的論文「基於線性電磁設備的減振及能源採集：模擬及測試」，獲得由多個工程學期刊總編輯組成的評審團垂青，在芸芸參賽作品中脫穎而出，勇奪冠軍。

## CEE Academic Honoured with Outstanding Paper Award



An Outstanding Paper Award has recently been won by Dr Cheng Yung Ming of the Department of Civil and Environmental Engineering. Based on citations and impact from the last five years, the award was given for the paper entitled "Three-dimensional slope failure analysis by the strength reduction and limit equilibrium methods" that was published in

early 2009 (Vol. 36) by *Computers and Geotechnics*, an international Grade A journal. The award consists of a certificate and cash. The paper topic is now part of a new book by Dr Cheng on slope stability analysis and stabilization. Congratulations to Dr Cheng and his co-authors, Dr W.B. Wei, and Dr L. Li!

## 土木及環境工程學系學者以出色論文獲嘉許

土木及環境工程學系的鄭裕明博士，最近憑一篇出色論文獲本院頒發獎項嘉許。獎項是以論文在最近五年獲引用的情況和影響力為評審準則。鄭博士的得獎論文題為「應用強度折減及極限平衡方法進行三維滑坡分析」，最先於 2009 年初在國際 A 級學術期刊《電腦與岩土力學》(第 36 卷)發表；而他有關斜坡穩定性分析及加固的新書裡，亦有章節談論該文所探討的專題。

得獎人將獲發獎狀及獎金。謹此祝賀鄭博士及論文的兩位合著者 — 韋文兵博士及李亮博士！

## LSGI Academic Scoops Early Career Award 2014/15



Dr Wong Man Sing of the Department of Land Surveying and Geo-Informatics has received an Early Career Award for his study of anthropogenic heat flux for heterogeneous urban areas in Hong Kong with remote sensing. As part of the Early Career Scheme of the Research Grants Council, the

competitive award is intended to nurture junior academics for a career in education and research. Congratulations to Dr Wong.

## 土地測量及地理資訊學系學者獲 2014/15「傑出青年學者計劃」資助

土地測量及地理資訊學系的黃文聲博士獲「傑出青年學者計劃」資助，利用遙感技術研究香港市區不同地點的人為排熱情況。此計劃由香港研究資助局管理，旨在培育新進學者，為日後發展教研事業打好基礎，競爭十分激烈。恭喜黃博士！

## Asia Pacific Project Management Awards 2014

## 亞太項目管理獎 2014

An experimental study on health and safety measures for working in hot weather has won top honors in the Asia Pacific Project Management Awards (Research) 2014. Led by Prof. Albert Chan of the Department of Building and Real Estate (BRE), the multi-disciplinary research team included Prof. Francis Wong (BRE), Dr Michael Yam (BRE), Dr Daniel Chan (BRE), Prof. Joanne Chung from the Hong Kong Institute of Education, Prof. Esmond Mok (LSGI), Dr Geoffrey Shea (LSGI), Dr Del Wong from the Technological and Higher Education Institute of Hong Kong, Prof. Herbert Biggs from the Queensland University of Technology, and Dr Donald Dingsdag from the University of Western Sydney. On behalf of his team, Prof. Chan received the award at the Project Management Congress in Beijing on 29-30 November 2014.



Submissions were judged by a panel of eminent project managers and researchers representing both the profession and academia. Prof. Chan's demonstrated achievements in the project management aspects of the project won awards in both the local and international categories. A High Commendation Award was given to his colleague from the same department, Dr Lam Tsun Ip. Congratulations to them all.

本院一個有關工人在酷熱天氣下工作的健康及安全措施實驗性研究，最近在2014年亞太項目管理(研究)大賽中贏得多個獎項。這項研究由建築及房地產學系的陳炳泉教授領導，團隊成員來自多家夥伴院校，除了同學系的黃君華教授、任志浩博士及陳煒明博士，還包括香港教育學院的鍾慧儀教授、土地測量及地理資訊學系的莫志明教授及余裕佳博士、香港高等科技教育學院的王培林博士、昆士蘭科技大學的Herbert Biggs教授，以及西悉尼大學的Donald Dingsdag博士。頒獎禮是在亞太項目管理會議於2014年十一月二十九至三十日假北京召開期間舉行，陳炳泉教授特別親赴當地代表團隊領獎。

比賽評審團是由多位知名的項目經理及研究人員組成，在業界及學術界均有充分代表性。陳教授主持的這項研究，在項目管理的多個範疇上均表現出色，因此同時在本地及國際組別奪獎。另外，建築及房地產學系的林俊業博士亦獲頒卓越獎。

恭喜以上幾位同事！

## Green Building Award 2014

## 環保建築大獎 2014

At the Green Building Award Presentation Ceremony cum Hong Kong Green Building Council 5th Anniversary Dinner on 20 November 2014, Prof. Hongxing Yang and his research team from the Department of Building Services Engineering and the Renewable Energy Research Group of the Research Institute for Sustainable Urban Development were honoured with a Merit Award in the Building Products and Technologies Category for their highly dispersed screen-printable nanocomposite paste for self-cleaning curtain walls. Their cost-effective and environmental friendly innovation can be used to make highly transparent multifunctional coatings on glass. Congratulations to Prof. Yang and his team, which includes Dr Lin Lu and Dr Yuanhao Wang.



香港綠色建築議會於2014年十一月二十日舉辦環保建築大獎頒獎禮暨五周年晚宴。以楊洪興教授為首的科研團隊，是今屆「建築產品及科技類別」優異獎得主之一。團隊由屋宇設備工程學系及可持續城市發展研究院轄下的可再生能源研究小組人員組成。他們研發了一種高分散的納米複合塗料，可通過絲網印刷工藝在玻璃表面製備透明度高的多功能塗層，使玻璃幕牆產生自潔功能，不但環保，也有很好的成本效益。

謹此恭喜楊教授、呂琳博士及汪遠昊博士等多位得獎同事。

## Overseas Scholarship Scheme Supports 2 FCE Academics

The Faculty of Construction and Environment (FCE) is pleased to have Dr Fan Hongqin of the Department of Building and Real Estate and Dr Dai Jianguo of the Department of Civil and Environmental Engineering receiving funding from the Overseas Scholarship Scheme (Teaching Development). Dr Fan will visit the University of British Columbia in Vancouver from 9 February to 1 March in 2015 to study the application of team based learning and service learning in construction related programmes, while Dr Dai visited the Faculty of Engineering, Architecture, and Information Technology at the University of Queensland (UQ) in Australia from 29 September to 21 October 2014 to study the development of new teaching methods and research collaborations. Congratulations to both of them, who were selected for by a 7-strong panel that included Prof. Ding Xiaoli, Associate Dean (Partnership) of FCE.

Dr Dai would like to take this opportunity to thank Prof. Sritawat Kitipornchai and his colleagues in the School of Civil Engineering at UQ for their kind hospitality and PolyU for the financial support that made this visit possible. He believes his investigation of how two subjects, Introduction to Structural Design and Design of Concrete Structures, are taught at UQ has been very enlightening for FCE, which has similar subjects. The structural units at PolyU and UQ are both among the top in the world. It is hoped that bilateral research collaborations between the two Faculties would also strengthen as a result.



Dr Dai Jianguo  
戴建國博士



Dr Fan Hongqin  
樊宏欽博士

## 學者獲獎學金赴海外進修

本院兩位學者獲校方的「海外獎學金計劃(教學發展)」資助，稍後將到外地進修。兩人分別是建築及房地產學系的樊宏欽博士，以及土木及環境工程學系的戴建國博士。樊博士將於2015年二月九日至三月一日到訪溫哥華英屬哥倫比亞大學，研究怎樣在建築學課程實踐「團隊學習」及「服務學習」；戴博士則於本年九月二十九日至十月二十一日南下澳洲，在昆士蘭大

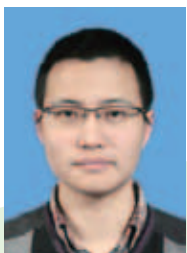
學的工程、建築及資訊科技學院研習新的教學法和探討科研合作機會。所有申請獎學金的個案，都是由包括本院副院長(對外合夥)丁曉利教授在內的七人小組審批，競爭激烈。兩位同事能夠脫穎而出，實屬可喜可賀！

戴博士除了感謝昆士蘭大學土木工程學院Sritawat Kitipornchai教授及其同事的盛情款待，還有理大的財政資助，使今次學術訪問得以實現。在昆士蘭大學期間，他深入研究「結構設計入門」及「混凝土結構設計」兩個科目的教學方法，認為對開設了類似科目的本院極具參考價值。事實上，理大與昆大的結構工程均居世界前列，希望通過這次訪問，可促進兩個學院在科研方面的合作。



The brand new building at the University of Queensland for advanced engineering

## CEE Post-doctoral Fellow Grabs Best Paper Award



At the 13th International Symposium on Structural Engineering (ISSE-13) in Hefei, China during 24-27 October, a Post-doctoral Fellow from the Department of Civil and Environmental Engineering (CEE), Dr Wan-yang Gao, was honoured with a Best Paper Award. The paper is titled "Simple Method for Predicting the Fire Resistance of Unprotected FRP-strengthened RC

Beams." The winning paper was co-authored by Dr Jian-Guo Dai and Prof. Jin-Guang Teng, who were the chief supervisor and co-supervisor of Dr Gao's PhD study at CEE.

ISSE-13 is an official conference sponsored by the National Natural Science Foundation of China (NSFC) and jointly organized with Hefei University of Technology. The ISSE conference series was named the International Symposium on Structural Engineering for Young Experts (ISSEYE), and it has been held regularly every two years in a major city in China since 1990. The aim of this conference series is to provide a forum for experts from the structural engineering and construction community to exchange and share recent advances in both research and practice.

## 土木及環境工程學系博士後研究員奪最佳論文獎




在本年十月二十四日至二十七日於安徽舉行的第十三屆結構工程國際學術研討會(ISSE-13)上，土木及環境工程學系博士後研究員高院楊博士獲頒發「最佳論文獎」。得獎論文題為「預測裸露FRP加固鋼筋混凝土樑耐火性能的簡單方法」，合著者包括其博士論文首席導師戴建國博士及副導師滕錦光教授。

ISSE-13是獲國家自然科學基金委員會(NSFC)正式支持的會議，由合肥工業大學聯合主辦。ISSE研討會系列源自「國際結構工程青年學者研討會」(ISSEYE)，自1990年起每兩年一個中國大城市舉行，旨在為結構工程及建築界專才打造溝通平台，從而交流科研及實務兩方面的最新進展。



## FCE Awards for Outstanding PhD Thesis 2013/14

The Faculty of Construction and Environment is pleased that the following PhD graduates were selected for its Outstanding PhD Thesis Awards, which come with a cash prize of HK\$10,000 and a certificate signed by the Dean. Details of the awards are as follows:

Awardee 得獎人	Department 學系	Title of Thesis 論文題目	Chief Supervisor 導師
Dr Ronghui Qi 綦戎輝博士 	BSE 屋宇設備 工程	Study on Heat and Mass Transfer of Internally Heated Liquid Desiccant Regeneration for Solar-assisted Air-conditioning System 針對太陽能輔助溶液除濕空調系統中的內熱型再生器內的流動及傳熱傳質研究	Dr Lin Lu 呂琳博士
Dr Zhenhao Ling 凌鎮浩博士 	CEE 土木及環境 工程	Integrated Data Analysis and Characterization of Photochemical Ozone in Subtropical Hong Kong 香港地區臭氧的光化學特性及綜合數據分析	Dr Hai Guo 郭海博士
Dr Siwei Liu 劉思威博士 	CEE 土木及環境 工程	Second-order Design and Advanced Analysis of Hybrid Steel and Concrete Framed Structures 鋼 - 混凝土組合框架結構的二階設計及高等分析法	Prof. S. L. Chan 陳紹禮教授

Congratulations to all the awardees, who were honoured at the 20th Congregation and Faculty Prize Presentation Ceremony in November 2014.

## 建設及環境學院 2013/14「優秀博士論文獎」

本院三位博士生獲選為2013/14年度「優秀博士論文獎」，每人可獲現金獎港幣一萬元及由院長簽署的獎狀。以下是他們的個人和負責導師簡介：

恭喜以上三位畢業生。他們於2014年十一月的第二十屆學院畢業暨頒獎典禮上正式領獎。

## BRE PhD Candidate Receives Best Paper Award

At the 3rd Applied Research Conference in Africa (ARCA) on 7-9 August 2014 in Accra, Ghana, Ernest Effah Ameyaw, a PhD candidate from the Department of Building and Real Estate, was honoured with an Overall Best Paper Award for 2014. His paper was titled "Implementing public-private partnership water supply projects in Ghana: A model of critical success factors." Ernest is in his final year of PhD studies under the supervision of Prof. Albert Chan. Congratulations to both of them.

## 建築及房地產學系博士生獲最佳論文獎

在2014年八月七至九日於加納首都阿克拉舉行的第三屆非洲應用研究會議上，建築及房地產學系博士生Ernest Effah Ameyaw以「在加納推行公私合營供水項目的成功要素模型」一文，榮獲大會頒發「整體最佳論文獎」。Ernest是陳炳泉教授的高足，現修讀最後一年博士課程。恭喜兩位。



Ernest Effah Ameyaw (on left) receiving his award

## Associate Head of BRE Appointed to CITB



Prof. Chiang Yat-Hung, Associate Head of the Department of Building and Real Estate, has been appointed to serve on the Construction Industry Training Board (CITB) for a two-year term from 1 January 2015 to 31 December 2016. 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. It will no doubt benefit from the wealth of experience Prof. Chiang has in that regard. Congratulations to Prof. Chiang.

## 建築及房地產學系副系主任獲委任為建造業訓練委員會委員

建築及房地產學系副系主任蔣日雄教授最近獲政府委任為建造業訓練委員會(建訓會)成員，任期為2015年一月一日至2016年十二月三十一日，一共兩年。建訓會是根据《建造業議會條例》成立，宗旨是透過舉辦培訓課程及工藝測試，評定建造業工人的技術水平，為業界培育人才。蔣教授業內經驗豐富，必然可為建訓會作出重大貢獻。

## Staff Promotions

Two academics from the Department of Building and Real Estate have been promoted to Associate Professors in July 2014. They are Dr Fan Hongqin and Dr Yu Tit Wan.



Dr Fan received his Bachelor's degree in Hydraulic Structure Engineering from Tsinghua University in 1991, MSc in Construction Engineering and Management from the University of British Columbia in 2003, and PhD in Construction Engineering and Management from the University of Alberta in 2007. He had 10 years of hands-on experience in the

construction industry before switching to academia. He worked with the China Harbor Engineering Company from 1991 to 2000, as a project engineer in the project management of Macau International Airport, CHEC between 1993 and 1995, and with All-span Engineering and Construction Ltd. in Canada in 2000. He was a part-time Instructor at the University of Alberta in 2006/2007, an Assistant Professor of Construction Technology at the Missouri Western State University in Saint Joseph, Missouri, USA in 2007/2008 before joining The Hong Kong Polytechnic University in 2008.



Dr Yu has a BSc degree in Building from the University of Brighton in the UK and a MSc degree in Construction Management from the City University of Hong Kong. She obtained a PhD from the Department of Building and Real Estate at The Hong Kong Polytechnic University in 2007. She started her profession as an Assistant Architect and worked for a number of different

professional firms in architecture, quantity surveying, as well as the Hong Kong Housing Authority. Dr Yu was appointed as an Assistant Professor in Value Management and Construction Management by the Department of Building and Real Estate at The Hong Kong Polytechnic University in September 2007. She was promoted to Associate Professor in July 2014. Dr Yu has a strong track record and has published extensively on the broad theme of project management in leading construction management journals and international conference proceedings.

## 晉升之喜

建築及房地產學系有兩位學者於2014年七月獲擢升為副教授，分別為樊宏欽博士及余帙芸博士。

樊博士在1991年取得清華大學水力結構工程本科學位，2003年成為英屬哥倫比亞大學建築工程及管理理學碩士，2007年獲阿爾伯塔大學頒授建築工程及管理哲學博士學位，加入學術界前在業界有十年的實踐經驗，1991至2000年任職中國港灣建設總公司，在1993至1995年間，以項目工程師的身份參與澳門國際機場的項目管理工作。他於2000年轉投加拿大All-span Engineering and Construction Ltd，於2008年加入理大前，曾分別在阿爾伯塔大學(2006/2007)及美國密蘇里西州立大學(2007/2008)擔任兼任導師及建築科技助理教授。

余博士持有英國布萊頓大學理學學士(建設學)及香港城市大學理學碩士(建造管理)學位，2007年於本院建築及房地產學系取得哲學博士學位，早年曾在不同建築師樓、工料測量師行，以及香港房屋委員會任職助理建築師及工料測量師，2007年九月獲聘為建築及房地產學系助理教授，執教價值管理及建造管理學。於2014年七月晉升為副教授，余博士是活躍的學者，經常就項目管理這個廣泛議題在著名建築管理學期刊及國際會議文集發表論文。



Another staff promoted to Associate Professorship in July 2014 was Dr Songye ZHU of the Department of Civil and Environmental Engineering (CEE). He obtained his BSc and MSc degrees in Structural Engineering from Tongji University, China in 2000 and 2003 respectively, and a PhD degree in Civil Engineering from Lehigh University, USA in

2008. He joined The Hong Kong Polytechnic University as an Assistant Professor in April 2008. He teaches courses in structural mechanics and construction materials, and supervises undergraduate and graduate students in research projects. Currently he serves as Director of the Hong Kong Section of the American Society of Civil Engineers, Editor of *Advances in Structural Engineering* (an international journal), and Secretary of the Research Centre for Urban Hazards Mitigation. Dr Zhu has been striving to promote the development and application of multi-disciplinary technology in civil engineering structures via his research and teaching at PolyU. In particular, his research works at PolyU are devoted to smart materials and structures, structural control and health monitoring, energy harvesting and regeneration technology. He has published more than 30 refereed journal papers and 60 conference papers, and won numerous publication awards from international journals and conferences. Congratulations on his promotion.

土木及環境工程學系的朱松擘博士亦於2014年七月正式晉升為副教授。他分別於2000及2003年修畢同濟大學結構工程學學士及碩士學位，2008年獲授美國理海大學土木工程學博士學位，同年四月起擔任理大助理教授，執教有關結構力學及建築物料的科目，並擔任本科生及研究生的專題研究導師，現任美國土木工程師學會香港分會理事、國際學術期刊《結構工程進展》編輯，以及理大城市減災研究中心秘書。朱博士教研並重，致力研發和在土木工程結構應用跨領域技術，在理大的科研重點包括智能建築物料及結構、結構控制及健康監測，以及環境發電及再生科技，歷年發表了超過三十篇獲引用的學術期刊論文及六十份會議論文，在國際學術期刊及會議屢獲論文獎項。

謹此代表學院同仁恭喜朱博士！

## New Academic Staff

### Dr Queena K Qian



Dr Queena K QIAN has been appointed Research Assistant Professor in the Department of Building and Real Estate with effect from 1 August 2014. She was a Post-Doc Fellow in the same department from 2012 to 2014. Her PhD thesis, entitled "Barriers to Promote Building Energy Efficiency - A Transaction Costs Perspective" was selected for an FCE

Outstanding PhD Thesis Award by the Hong Kong Polytechnic University in 2012. She was awarded an Endeavour Australia Cheung Kong Fellowship to conduct Post-Doc research at the University of South Australia in 2013. She was also a Fulbright scholar (2010) at Lawrence Berkeley National Laboratory, UC Berkeley and Washington University in St Louis, USA. Her Post-Doc fellowship was awarded by the Central Bidding Scheme of PolyU. During her two-year Post-Doc period with BRE, she drafted proposals and won a few research grants, such as PPR, CIC, and CIIHK, amounting to over 2M HK dollars. Her research interests are green building promotion, building energy efficiency, transaction costs, low carbon city development, elderly friendly precinct design, sustainable urban planning, waste management, governance and incentive schemes, etc. She teaches research methodology.

## 新教職員

### 錢坤博士

2014年八月一日起擔任建築及房地產學系助理教授(研究)的錢坤博士，為該系2012至2014年的博士後研究員，其論文「交易成本角度下的建築節能推廣障礙」，於2012年獲本院頒發「卓越博士論文獎」。2013年，她獲「澳洲毅進長江學者獎學金」資助，遠赴南澳洲大學進行博士後研究；在此之前，亦曾以富布萊特學者身份(2010)，在美國勞倫斯伯克利國家實驗室、加州大學柏克萊分校及聖路易斯的華盛頓大學從事研究，其博士後獎學金也是透過理大的中央競投計劃取得。在建築及房地產學系擔任博士後研究員的兩年裡，她參與起草多份研究建議，並數度成功向「公共政策研究資助計劃」、建造業議會、香港建造業研究學會等爭取撥款，累計逾二百萬港元。其研究興趣包括環保建築的推廣、建築節能、交易成本、低碳城市發展、長者友好小區設計、可持續城市規劃，以及廢物的管理、監管和減廢獎勵機制。她教授學生進行研究的方法。



### Dr Ivy Wong



The Department of Building and Real Estate welcomed another new Research Assistant Professor in September 2014.

Dr Ivy Wong received her PhD in Planning (2013) from the University of British Columbia, Master of Development Planning (2004) with High Distinction from the University of Queensland, and BSc (Hons) in Real Estate (1998) from the Hong Kong Polytechnic University.

As a General Practice Surveyor, she started her career with a private real estate firm, in which she gained practical experience in property management. Subsequently, she worked for three government departments in Hong Kong, including the Lands Department, the Housing Department, and the Rating & Valuation Department.

Dr Wong has a good track record in publications in the fields of real estate and urban studies. Her papers were published in SSCI/SCI journals such as *Environmental Impact Assessment Review*, *Urban Studies*, *Cities*, *Housing Studies*, and *Habitat International*. In the past five years, she received a full scholarship and two competitive research grants to support her doctoral research at the University of British Columbia. Her research interests focus on real estate development, property taxation, land ownership reforms, urban development and local governance.

### Dr Esther, Hiu Kwan Yung



Another new Assistant Professor in the Department of Building and Real Estate is Dr Esther Hiu Kwan YUNG, who received MSc and PhD degrees from the Department of Real Estate and Construction at the University of Hong Kong. She also received a Bachelor of Architecture from the University of New South Wales, Australia in 1997.

Dr Yung worked as an assistant architect in two architectural firms in Hong Kong before studying for her PhD. Esther has also been employed as a visiting lecturer in the Department of Building and Real Estate (BRE) since 2001. After obtaining her PhD, she worked as a research officer in a non-governmental organization for the handicapped for two years. Dr Yung joined the Hong Kong Polytechnic University as a Postdoctoral Research Fellow in BRE in 2009. She has published extensively in top refereed journals, including *Landscape and Urban Planning*, *Urban Affairs Review*, *Cities* and *Habitat International*, etc. Dr Yung has played the role of a Co-Investigator in four winning GRF and PPR projects. Her research interests include urban sustainability, built heritage conservation, urban planning and active ageing.

### 黃小慧博士

建築及房地產學系在2014年九月再增添一位助理教授(研究)。

新加入該系的黃小慧博士為理大校友，1998年取得房地產學(榮譽)理學士學位，2004年以特優成績修畢澳洲昆士蘭大學發展規劃學碩士課程，2013年獲英屬哥倫比亞大學頒授哲學博士(規劃學)學位。

黃博士最初在房地產公司擔任產業測量師，積累物業管理經驗；其後加入政府，先後在地政總署、房屋署及差餉物業估價署任職。

她發表了多篇有關房地產和城市研究的著作，文章散見於《環境影響評估檢討》、《城市研究》、《城市》、《房屋研究》、《國際居住研究》等SSCI/SCI學術期刊，在英屬哥倫比亞大學修讀博士的五年裡，成功取得一個全額獎金及兩筆研究撥款。房地產發展、物業稅、土地業權改革，以及城市發展與當地管治，都是她最感興趣的研究範疇。

### 容曉君博士

容曉君博士是建築及房地產學系另一位新加入的助理教授，1997年澳洲新南威爾斯大學建築學本科畢業，其後在香港大學房地產及建設系深造，先後取得理學碩士及哲學博士學位。

修讀博士前，她曾在香港兩所建築師樓任職助理建築師，並於2001年起擔任本院建築及房地產學系訪問講師；取得博士學位後，在一家服務傷殘人士的非政府組織出任研究主任，歷時兩年。2009年，她以博士後研究員的身份加入建築及房地產學系，多年來著作甚豐，論文散見於《景觀與城市規劃》、《城市事務評論》、《城市》、《國際居所》等頂級學術期刊。容博士在四個獲「優配研究金」及「公共政策研究資助計劃」撥款的研究項目中，擔當合作研究員的重要角色。其研究興趣包括城市的可持續發展、古建築保護、城市規劃及活躍老化。

### Dr Chan Tak Ming



Dr Chan Tak-Ming joined the Department of Civil and Environmental Engineering in July 2014 as an Assistant Professor in Structural Engineering.

Dr Chan graduated from the University of Hong Kong in 2001 with a first class honours degree in Civil Engineering. He started his structural engineering career by joining Arup as a

Graduate Structural Engineer. He received his Master's degree with Distinction in Structural Steel Design in 2004 and was awarded a PhD in the area of Tubular Structures in 2008 both from Imperial College London.

Dr Chan joined the University of Warwick as an Assistant Professor in 2007 and was then promoted to Associate Professor in 2012. In 2007, he was awarded the First Prize for the best oral presentation in the Young Researchers' Conference from the Institution of Structural Engineers (IStructE). His first and second PhD students also won the First Prize in the 2012 and 2013 competition respectively. He is currently an Honorary Associate Professor at the University of Warwick. He is a Chartered Member of the IStructE, committee member of the UK mirror group for Eurocode 3 and the Education and Training Committee of the HK Constructional Metal Structures Association. He is also an Associate Editor for *Advances in Structural Engineering* and a member of the Editorial Board for *Structures and Buildings*.

Dr Chan's research interests focus on the structural stability and resistance of metallic, concrete-metallic, pultruded FRP and smart structures under extreme events with particular emphasis on using an appropriate combination of experimentation, theoretical analysis and computational techniques to obtain knowledge for the development of design guidance.

### Dr Zhe Wang



Dr Zhe Wang received his PhD degree in Environmental Engineering from Shandong University, China, in 2011. During 2008-2009, he was awarded a government scholarship from the China Scholarship Council and spent one year as a joint PhD student at Harvard University. After graduation, he joined the Department of Civil and Environmental Engineering at

PolyU as a Research Associate in March 2012 and became a Postdoctoral Fellow in January 2013. He commenced his appointment as Research Assistant Professor in the same department on 28 July 2014.

Dr Wang's research interests include field and laboratory measurements of air pollutants, atmospheric heterogeneous chemistry, secondary aerosol formation, aerosol hygroscopicity, and cloud-aerosol-gas interactions. He has participated in several large atmospheric field studies in urban and rural areas of China (including Hong Kong), investigated the characteristics of carbonaceous aerosols and secondary organic aerosol formation, and also developed experimental system and initiated laboratory and modeling studies on cloud condensation nuclei property of particles. He has published 16 peer-reviewed scientific papers and presented at international conferences and workshops. His recent research focused on the heterogeneous chemistry of reactive nitrogen and production of atmospheric secondary aerosols, by using state-of-the-art instruments and multiphase modeling.

### 陳德明博士

陳德明博士於2014年7月加入土木及環境工程學系，擔任結構工程學助理教授。

陳博士於2001年獲香港大學頒發土木工程學一級榮譽學位；畢業後於奧雅納集團任職見習結構工程師，並繼續進修，2004年以優等成績成為倫敦帝國學院碩士（結構鋼設計），2008年於該學院修畢博士學位，專攻管狀結構。

陳博士於2007年起在英國華威大學擔任助理教授，同年奪得英國結構工程師學會 (IStructE) 青年研究員研討會一等獎，2012年晉升為副教授，其首兩位博士學生亦分別於2012及2013年在上述比賽獲得一等獎。他現於英國華威大學擔任榮譽副教授。他除了是英國結構工程師學會正式會員，也是英國為歐盟標準 3 成立的鏡子小組及香港建築金屬結構協會教育及培訓委員會的成員、《Advances in Structural Engineering》副編輯，以及《Structures and Buildings》編務委員。

陳博士擅長研究金屬、混凝土金屬、拉擠纖維增強聚合物及智能結構在極端情況下的結構穩定性及抗力，特別是怎樣適當地結合實驗、理論分析和運算技術，從而獲取制訂設計指引所需的知識。

### 王哲博士

王哲博士於2011年取得山東大學環境工程學博士學位。在2008-2009年期間，他獲得中國留學基金委獎學金，在美國哈佛大學以聯合培養博士生訪問學習一年。畢業後，他於2012年3月加入香港理工大學土木及環境工程學系擔任副研究員，其後於2013年1月轉任為博士後研究員，從事大氣環境污染的研究。他於2014年7月28日出任同一學系的助理教授(研究)一職。

王博士的研究領域包括野外及實驗室大氣污染物測量、大氣非均相化學、二次大氣氣溶膠生成、氣溶膠吸濕性質、及雲霧-氣溶膠-氣體相互作用等。他曾參與多項在城市及偏遠地區開展的大氣化學綜合觀測項目，研究了碳質氣溶膠及二次有機氣溶膠的生成特徵，並開發試驗裝置和發起實驗室及模型實驗來研究納米級大氣顆粒物的雲凝結核特性。已發表數十篇研究論文，並在國際學術會議和研討會上發表多次演講報告。他的最新研究旨在利用先進的儀器及多相化學模型來研究大氣反應性氮氧化物的非均相過程，及其對大氣二次氣溶膠生成的影響。

# Student News

## 學生消息

### High Employment Rate for FCE Degree Graduates

In a 2013 survey conducted by PolyU's Office of Careers and Placement Services, it was found that over 90% of graduates from the Faculty of Construction and Environment were employed/ self-employed within six months of graduation. Only 5.4% were engaged in full-time further studies. For both 2012 and 2013, graduates from the BSc programme in Building Engineering & Management, the BEng in Civil Engineering, and the BEng in Building Services Engineering had average salaries that were among the highest (\$20,005, \$18,655, and \$18,231 respectively in 2013; \$18,262, \$17,242, and \$16,004 respectively in 2012). The change in average salary was highest for those from the BSc programme in Environment & Sustainable Development, from \$12,114 to \$16,667 in just one year, representing a 37.6% increase.

### 建設及環境學院本科畢業生深受僱主歡迎

理大就業服務處在2013年進行的調查顯示，建設及環境學院逾九成本科生在畢業後半年內創業或成功就業，選擇全職繼續進修者則佔5.4%。建築工程及管理學、土木工程學，以及屋宇設備工程學三個學位課程的畢業生平均薪酬，在2012及2013連續兩年位居三甲（2013年依次為\$20,005、\$18,655及\$18,231；2012年分別為\$18,262、\$17,242及\$16,004）。環境與可持續發展學理學士課程畢業生的薪酬變動則最為明顯，在一年間從\$12,114 跳升至\$16,667，增幅達37.6%。

### 21<sup>st</sup> FCE Students' Association

On 9 October 2014, student representatives of the 21<sup>st</sup> FCE Students' Association met with Prof. You-Lin Xu, Dean of FCE, and Prof. Geoffrey Shen, Associate Dean of FCE. They presented their plans for 2014-15, which included competitions in various sports, a mega sale, a singing contest, and a Christmas party with other local universities. These activities will no doubt give PolyU students much to look forward to.

### 建設及環境學院第二十一屆學生會

2014年十月九日，院長徐幼麟教授及副院長沈岐平教授會見了學院第二十一屆學生會的代表。學生代表在會上提出了2014-15年度的活動大計，包括舉辦各類運動賽事、大型賣物會、歌唱比賽，以及與本地其他大學合辦聖誕舞會，林林總總，盡見精彩，理大同學必然引頸以待。





## FCE Students Shine in Innovation Competition

At the 7th Innovation Competition in Construction Engineering and Management on 4 July 2014 in Beijing, two teams of research students from PolyU's CIB student chapter won second and third prizes (5000 and 3000 RMB respectively) for their entries. Organized by Tsinghua University, the annual competition was sponsored by Gammon Construction Company Limited. Following are details of the winning teams and their entries:

	Team members (Dept.) 隊員 (學系)	Title of Report 報告專題
2 <sup>nd</sup> Prize 二獎	Liang Xin (team leader, BRE), Sun Bingxia (BRE), Zheng Wei (BRE), Cui Dongjin (BSE), Xue Peng (BSE) 梁昕 (隊長, BRE), 孫冰夏 (BRE), 鄭微 (BRE), 崔冬瑾 (BSE), 薛鵬 (BSE)	A Smart Data Mining Approach for Detecting Individuals' Activity Travel Behavior and its Applications in Urban and Transport Planning 一種基於智慧資料採擷的個人出行行為發現演算法及在城市和交通規劃的應用
3 <sup>rd</sup> Prize 三獎	Leng Ling (team leader, CEE), Guo Shan (BRE), Lin Xue (BRE), Gao Ran (BRE) 冷冷 (隊長, CEE), 郭姍 (BRE), 林雪 (BRE), 高然 (BRE)	Intelligent Anaerobic Greywater Treatment and Reuse System for Realizing Smart City - Case Study in Beijing 智慧城市智慧灰水處理及回用系統

Congratulations to all the team members and the Honorary Advisor to PolyU's CIB Student Chapter, Prof. Francis Wong of the Department of Building and Real Estate.

## 本院同學創新比賽成績驕人

在本年七月四日於北京舉行的「第七屆建設工程與管理創新競賽」中，代表國際建築工程研究與創新理事會理大學生分會的同業兵分兩路，勇奪第二及第三獎，分別獲得獎金5000及3000元人民幣。這項一年一度的活動由清華大學主辦、金門建築有限公司贊助。以下是得獎隊員及參賽項目的詳情。

恭喜各位得獎者及擔任國際建築工程研究與創新理事會理大學生分會榮譽顧問的黃君華教授。



## Scholarship Students Graduate with Distinction

The following postgraduates who were supported by Entry Scholarships have recently graduated with Distinction in the second semester of 2013/14. They shared their thoughts on what studying at PolyU has meant for them below.

## 獎學金得主以優異成績畢業

在2013/14學年第二季，有幾位曾經獲得獎學金的碩士畢業生以優異成績完成課程，以下是這些尖子對理大生活的感想和大計。

Name 畢業生	Most memorable experience at PolyU 在理大最難忘的回憶 / 經歷	Advice for other students 對師弟妹的忠告	Future Plans 計劃
FUNG Ho Kit, MSc in Civil Engineering 土木工程學理學碩士 	Sharing my learning experience with my classmates and friends 與同學和朋友分享學習體驗	Learn and study from principle rather than remember the rules without understanding them 與其囫圇吞棗，把定律死記硬 背，不如鑽研事物的原理，取 其精髓	To become a good, innovative civil engineer and make great contributions to society 成為出色、有創意的土木工程 師，努力回饋社會
HE Wei, MSc in Geomatics (GIS) 何薇、測繪及地理資訊 學(地理資訊)理學碩士 	I cherish every moment spent in the library. I can find almost everything I want to read there. 很珍惜在圖書館溫習的時光， 我希望翻閱的資料，差不多全 可以在那裡找到	Take every chance to communicate with the teachers seriously, no matter whether it is a class presentation, an assignment, or a private discussion after class. 無論是班上匯報、平時的功課 或下課後的私下討論，我們都 要把握向老師請教的機會	Find a job, and realize my personal value in my career 找份合適工作，在發展事業的 過程中體現個人理念
KAO Chun, MSc in Construction Law and Dispute Resolution 高俊、建築法及爭議解 決學理學碩士 	Doing group projects with my fellow classmates was an excellent experience because I could understand how people from different professions perceive, analyse and solve problems. 與同學一起完成小組專題習作 的過程中，讓我體會到專業背 景不同的人，各有一套理解、 分析和解決問題的方法。	I was inspired by my mentor who told me that in order to achieve good academic results, we should have determination, good time management, and keep improving our study tools. 導師的說話深深啟發了我：要 考取好成績，決心、妥善安排 時間，以及持續改善學習技 巧，三者缺一不可。	With the knowledge I gained in this programme, I am planning to pursue further studies in the field of law and arbitration. 修畢課程後，我已具備一定的 學術基礎，因此計劃繼續進修 法律及仲裁知識。
KWOK Fung Wai Raiko, MSc in Fire & Safety Engineering 郭逢偉、消防及安 全工程學理學碩士 	Getting an Entry Scholarship to study this MSc course 獲「新生獎學金」修讀碩士課 程	Believe in yourself. Studying in a systematic way is essential for success. 要對自己有信心！必須採用系 統化的方法學習，才可取得理 想成績	I am considering further studies at PolyU or HKU for a doctoral degree. 考慮在理大或港大修讀博士學 位
LAU Ki Cheong, MSc in Building Services Engineering 劉祈昌、屋宇設備 工程學理學碩士 	I made valuable friendships with some classmates who assisted me not only in my studies but also my work. 與同學建立了寶貴友情。從學 業到工作，他們都能助我一臂 之力	Understanding the theories behind the things we learnt is more important than remembering the methodology. 明白事物背後的原理，較背誦 方法更重要	I will focus on my work and is planning to apply to be a chartered engineer. 會專注工作，打算申請成為註 冊工程師

## FCE Students Rewarded for Entrepreneurship and Innovation

At the PolyU Micro Fund award ceremony held in Hotel ICON on 29 September 2014, entrepreneurship and innovation were rewarded. The teams for Experiential Learning Programme and the Higher Education and Research Information Online Platform each received HK\$100,000 seed fund to implement their sound business propositions. Team members included, both of the Department of Land Surveying and Geo-Informatics (LSGI), for the former project and, both of the Department of Building Services Engineering, for the latter.

The teams that won Grand Awards in the Innovation stream each received HK\$10,000 cash for their projects. The team for Carpet-Generator included from LSGI, while the team for The Era, the first university-based hydroponic farming programme in Hong Kong, included again. Congratulations to all these FCE students.

## 本院學生創業理念及新意獲嘉獎

理大微型基金計劃於2014年九月二十九日在唯港薈教學酒店舉行頒獎典禮，嘉許本年度出色的學生創業計劃。分別提出「十年樹人」體驗式學習活動課程及「高等教育及科研資訊網上平台」的隊伍，雙雙獲得基金撥出港幣十萬元種子基金，實踐創業大計。前者的成員莊恩傑及胡雪峰，均為土地測量及地理資訊學系學生；後者的隊員宋孟傑及毛寧，則來自屋宇設備工程學系。

在創新組別獲得金獎的隊伍，可各獲現金獎港幣一萬元開展得獎計劃。構思地毯發電機的其中一位隊員王磊，是土地測量及地理資訊學系學生；而首個以大學為水耕種植基地的「盛放」計劃，其中一位成員正是已獲種子基金支持的莊恩傑。

恭喜各位得獎同學。





## Study Tours Enrich Learning of BRE Students

An unforgettable experience of university studies is the opportunity to participate in study tours, which often leave lasting memories for students. For about 5 days at the end of May 2014, over 90 students from the Department of Building and Real Estate went on various study tours. Following are the details.

25 students studying property management visited Osaka to learn more about construction and real estate in Japan. Led by Dr Milton Lau and Dr Stanley Yeung, they visited Osaka's Museum of History, the Osaka Castle Park, Tsutankaku, and the Floating Garden. They also attended a seminar on the current property market in Japan, which was delivered by professionals from the Japan Real Estate Institute, a company that provides appraisals and consulting services for real estate investment. Another seminar on municipal waste management in Japan was given by Prof. Akihiro Tokai at Osaka University, where PolyU students discussed their ideas on urban waste management and conservation policies of environmental resources with their Japanese counterparts.

42 students from the BSc (Hons) in Surveying programme visited Kuala Lumpur to learn more about heritage preservation, construction technology, and urban planning. Led by Prof. Eddie Hui and Dr M.J. Wadu, they visited the Faculty of Built Environment of the University of Malaya, the Faculty of Architecture, Planning, and Surveying of the Universiti Teknologi MARA, the Royal Institution of Surveyors Malaysia, as well as the Construction Industry Development Board and Construction Research Institute of Malaysia.

30 students studying Building Engineering and Management visited South Korea from 20-25 May 2014. Led by Dr Hongqin Fan and Dr Steven Tsang, they toured the Songdo International Business District, which is being developed as a sustainable city with more than 40% of its area reserved for green spaces, including a park of 100 acres, 16 miles of bicycle lanes, numerous charging stations for electric vehicles, and a waste collection system that eliminates the need for garbage trucks. Besides learning the past, present, and future of Incheon in an exhibition, students also visited Seoul National University and Yonsei University, where they learnt about Korean culture.

## 遊學體驗助建築及房地產學系學生開闊眼界

大學生活有很多難忘片段，出外遊學就是其中之一。在2014年五月底，建築及房地產學系有九十多位同學就得到這個寶貴機會，踏上約五天的遊學之旅。

其中二十五位修讀物業管理的同學，在柳志康博士及楊志威博士率領下前往日本大阪，了解當地建築及房地產業近況。一行人除了參觀大阪歷史博物館、大阪城公園、通天閣及空中庭園等著名景點，也參加了一個有關日本物業市場現況的講座。該講座是由專門提供房地產投資諮詢及鑑定評估服務的日本不動產研究所的專家主持。行程中另一項學術活動，就是到大阪大學出席由東海宏教授主講的日本城市廢物管理研討會，同學可藉此與日方討論對市區廢物管理及環境資源保育政策的看法。

四十二位修讀地產及建設測量學(榮譽)理學士課程的同學，亦在差不多時間前往吉隆坡，觀摩當地的古蹟保育、建築科技及城市規劃情況。領頭的是許智文教授及M.J. Wadu博士。短短幾天，眾人走訪了馬來亞大學的建築環境學院、馬來西亞工藝大學建築、規劃及測量學院、馬來西亞皇家測量師學會、馬來西亞建築業發展局及建築學研究所。

另外，有三十位修讀建築工程及管理學的同學則由樊宏欽博士及曾偉藩博士率領，於五月二十至二十五日前往南韓，參觀現時銳意發展為可持續城市的「松島國際商業區」。該處逾四成面積已預留作綠化空間，包括一個佔地一百公頃的公園、十六里長的自行車徑、大量電動車充電站，以及不需垃圾車的廢物收集系統。除了參觀關於仁川市歷史及未來規劃的展覽，同學還到訪首爾大學及延世大學，了解韓國文化。



## CEE Students Participate in SAKURA Exchange Programme

A delegation of three CEE students led by Dr Jian-Guo Dai visited National Yokohama University, Japan during 16-24 August 2014 for the SAKURA Exchange Programme in Science. Prof. Gu Linshen, Director of the Joint Institute between PolyU and Sichuan University for Disaster Management and Reconstruction, also led three mainland students there. Organized by the Japan-Asia Youth Exchange Programme in Science, the main purpose of the visit was to share the Japanese experience in disaster prevention and reduction. Many lectures and technical visits were arranged during the week-long exchange programme, which enabled CEE students to learn about the state-of-the-art in Japan in the fields of urban planning, earthquake disaster prevention, and post-disaster reconstruction. On the last day, CEE students had a chance to experience an artificial earthquake. The friendliness of the host made it a really pleasant trip. CEE students were deeply impressed by the history of Yokohama City and the charm of Yokohama China Town, where they were treated to a farewell dinner.



## 土木及環境工程學系同學參加櫻花科技計劃

戴建國博士於2014年八月率領三位土木及環境工程學系同學遠赴日本橫濱國立大學，參與於十六至二十四日舉行的「櫻花科技計劃」，同場者還有由「四川大學-香港理工大學災後重建與管理學院」院長顧林生教授帶領的三位內地學生。今次活動由「日本-亞洲青少年科技交流項目」主辦，旨在借鏡日本的防災及減災經驗。在長達一星期的行程中，有不少講課及技術示範，讓幾位同學得以見識日本在城市規劃、預防地震及災後重建方面的尖端科技。到了最後一天，他們更有機會感受模擬地震的威力。橫濱市的歷史令大家印象深刻，加上接待單位親切好客，又特別在當地華埠安排餞別晚宴，使眾人度過了極為愉快的學習之旅。



## CIOB (HK) Outstanding Student Award 2013/14

A recent graduate of the BSc (Hons) in Surveying from the Department of Building and Real Estate, Sze Chung Yuen, Keith, has won a CIOB (HK) Outstanding Student Award. Organized by the Chartered Institute of Building (CIOB) to promote excellence in Construction Project Management, the award was presented to Keith for his empirical study of identifying and analyzing key success criteria and critical factors for public sector design-and-build construction projects in Hong Kong. He was honoured with an award certificate and a prize cheque of \$4000 at the CIOB (HK) annual dinner on 12 September 2014 at the New World Millennium Hotel in Tsim Sha Tsui East. Congratulations to Keith and his former supervisor, Dr Daniel Chan, who nominated him for the award.

## 英國特許建造學會(香港分會)卓越學生獎 2013/14

剛於建築及房地產學系修畢測量學(榮譽)理學士課程(工料測量專業)的施忠源同學，最近榮獲英國特許建造學會(香港分會)頒發2013至2014年度「卓越學生獎」。此獎項以提升建築工程管理的專業水平為宗旨，而施忠源同學今次獲嘉許的畢業論文研究，就是辨識及分析香港公營工程項目中採用「設計及建造」合約的主要成功量度標準及因素。學會在2014年九月十二日假尖沙咀東部千禧新世界香港酒店舉行週年晚宴，並於席上向他頒發獎狀及港幣四千元之獎金支票。除了祝賀得獎人，也要恭喜身為提名人兼論文導師的陳煒明博士！





# Alumni News

## 校友消息

### Outstanding Alumni Awards 2014

The Faculty of Construction and Environment was pleased that the Outstanding Alumni Awards were conferred on the following distinguished individuals at the 20th Congregation and Faculty Prize Presentation Ceremony on 4-5 November 2014.

The Department of Building and Real Estate honoured Prof. CHAN Ka Kui, a Higher Diploma graduate in Surveying and Building Technology in 1971, and Mr LAU Ping Cheung, who graduated from the Hong Kong Polytechnic with a Higher Diploma in Quantity Surveying in 1974.



Prof. Chan Ka Kui  
陳家駒教授

### 2014年建設及環境學院傑出校友

建設及環境學院第二十屆畢業暨頒獎典禮於2014年十一月四至五日隆重舉行。今年，共有下述五位成就卓越的人士獲頒發「傑出校友」榮銜。

建築及房地產學系的得獎人有兩位，分別為1971年測量及建築科技高級文憑畢業生陳家駒教授，以及1974年工料測量學高級文憑畢業生劉炳章先生。

陳教授為新昌營造集團有限公司前董事總經理，但其成就遠超測量及建造業界，曾任戴麟趾爵士康樂基金委員會主席、職業安全健康局副主席、城市規劃委員會委員及香港康體發展局委員，1992年晉身太平紳士，並於1998年獲政府頒發銅紫荊星章。他現為專門協助貧苦青少年的慈善組織——芥菜種基金會(Mustard Seed Foundation)的主席、「明愛之友」副主席，並身兼多個政府委員會的委員。



A former Managing Director of Hsin Chong Construction Company Limited, Prof. Chan's achievements are not restricted to the surveying profession and construction industry. He was appointed by the government to serve as Chairman of the Sir David Trench Fund Committee, Vice Chairman of the Occupational Safety and Health Council, and member of both the Town Planning Board and the Sports Development Board. He was appointed as a Justice of the Peace in 1992 and received the Bronze Bauhinia Award in 1998. Currently, he is the Chairman of the Mustard Seed Foundation, a charitable organization helping young people from underprivileged families, Vice-Chairman of Friends of Caritas, and a member of various government committees.

With an illustrious career in surveying, Mr Lau has been serving Hong Kong as a former member of the HKSAR Legislative Council, a former non-executive Director of the Urban Renewal Authority, former chairman of the Infrastructure Development Advisory Committee of the Trade Development Council, and a former member of the Long-term Housing Strategy Steering Committee. Currently, Mr Lau is a member of the Economic Development Commission as well as the Convener of its Working Group on Professional Services, a member of the Council of The Hong Kong Polytechnic University and a Project Director at SOCAM Asset Management (HK) Ltd of the Shui On group of companies.

在測量界卓有成就的劉炳章校友同樣熱心服務社會，曾任香港特別行政區立法會議員、市區重建局非執行董事、香港貿易發展局轄下基建發展諮詢委員會主席，以及長遠房屋策略督導委員會成員。現時，劉校友是政府經濟發展委員會的成員，並擔任委員會轄下專業服務業工作小組的召集人。另外，他也是香港理工大學校董會成員，以及瑞安集團轄下瑞安建業資產管理(香港)有限公司董事(項目發展)。



Mr LAU Ping Cheung  
劉炳章先生



Ir Eagle Mo Cheung Ying  
巫翔鷹工程師

The Department of Building Services Engineering paid tribute to Ir MO Cheung Ying Eagle, who graduated from PolyU with a Bachelor's degree in 1997 before getting a Master degree from The University of Hong Kong in 2006. A Managing Director of Telemax Environmental and Energy Management Limited, Ir MO has been involved in numerous large scale projects over the past 17 years, such as The Venetian Macau Hotel and Casino, Beijing Olympic Games Complex, and many local and overseas development projects, from commercial buildings, hotels, residential buildings, to data centres and resorts. She and her team designed Holiday Inn Express Hong Kong Soho Hotel, the first green hotel in the world, which achieved 4 platinum awards in Green Building Accreditations (LEED, BEAM Plus, Green Mark, and China Green Building Label).

獲屋宇設備工程學系致敬的傑出校友巫翔鷹工程師，分別於1997及2006年取得理大學士及香港大學碩士學位，現任特立美環保及能源管理有限公司董事總經理。在畢業至今的十七年裡，她參與過澳門威尼斯人酒店及賭場、北京奧運綜合場館等無數本地和海外大型項目，曾處理商業樓宇、酒店、住宅大廈、數據中心及度假村等各類工程。由其團隊設計的香港蘇豪智選假日酒店，是全球首家綠色酒店，獲得美國LEED、香港BEAM Plus、新加坡Green Mark及中國綠色建築的白金級別認證。



Ir Prof. Choy Kin-Kuen  
蔡健權教授工程師

The Department of Civil and Environmental Engineering honoured Ir Prof. CHOY Kin-Kuen, who graduated from the Hong Kong Polytechnic with a Higher Diploma in Structural Engineering in 1974 and an Associateship in Structural Engineering in 1975, which provided him with a sound foundation for pursuing his career in the engineering profession. A senior member of a number of local and overseas engineering bodies like the Hong Kong Institution of Engineers, Institution of Civil Engineers and Institution of Structural Engineers in U.K., Prof. Choy became a Director of the Structural Division of Meinhardt (C&S) Ltd. in 2013 after 33 years of public service. He is one of the pioneers in setting up the current building control and site supervision system administered by the Buildings Department. He also steered the development of the Code of Practice for foundation and building demolition, which won the respect of the building industry.

The Department of Land Surveying and Geo-Informatics (LSGI) honoured a 2005 PhD graduate with its Outstanding Alumni Award. Prof. Zhiwei Li was a postdoc in LSGI before becoming a professor in 2007 at Central South University, where he has been Head of the Department of Geomatics for many years. An outstanding researcher, Prof. Li has published extensively in the fields of atmospheric effects on InSAR, data filtering algorithms for SAR interferograms and applications of InSAR in some important scientific fields. 5 of his research projects have been supported by the National Natural Science Foundation of China, including one Excellent Young Scholar project. He has received several research awards in recognition of his research achievements, including two First-Class Natural Science Awards from the Ministry of Education of China and one First-Class National Surveying and Mapping Science and Technology Award.

Congratulations to all the award recipients, whose presence at the ceremony was indeed an inspiration for the FCE graduates.

土木及結構工程學系傑出校友蔡健權教授工程師，是香港理工學院結構工程學高級文憑1974年畢業生，翌年成為理工學院結構工程學院士，為他在工程專業的發展奠下穩固基礎。他是香港工程師學會、英國土木工程師學會、英國結構工程師學會等多個本地及海外工程專業團體的資深會員，2013年出任Meinhardt (C&S) Ltd. 結構分部董事前，服務政府三十三年之久。蔡教授是屋宇署現行建築物管制及工地監管制度的制訂者之一，並牽頭訂立有關地基及拆卸工程的守則，對業界貢獻良多。



Prof. Zhiwei Li  
李志偉教授

土地測量及地理資訊學系的2014年傑出校友是2005年博士畢業生李志偉教授。李教授曾於土地測量及地理資訊學系進行博士後研究，2007年出任中南大學教授，擔任該校Department of Geomatics系主任多年。李教授是出色的科研工作者，就干涉合成孔徑雷達(InSAR)的大氣影響、SAR干涉圖數據過濾算法，以及InSAR在一些重要科學範疇的應用發表過很多文章。他有五個研究專案獲國家自然科學基金委員會資助，當中一個為「傑出青年學者基金」項目。出色的科研成就為李教授多次贏得嘉許，包括國家教育部兩個自然科學獎一等獎，以及一個國家測繪科技獎一等獎。



## BRE Alumnus Promoted to Senior Lecturer



An alumnus from the Department of Building and Real Estate, Dr Bo (Paul) Xia, has recently been promoted to Senior Lecturer at the School of Civil Engineering and Built Environment at Queensland University of Technology in Australia. He obtained his PhD degree in late 2010 under the supervision of Prof. Albert Chan. His main research

interests focus on construction management, project delivery systems, and sustainable building and construction (with particular interest in sustainable retirement villages for older people). Though he is in the early stages of his academic career, he has published many papers in leading international journals, secured a number of publication awards and research grants, and acted as editorial board member for international journals. A dedicated teacher that is constantly striving to improve student learning outcomes, he is currently serving as principal supervisor to three PhD students.

## CEE PhD Graduate Begins Academic Career Down Under



Dr Shishun Zhang, a PhD graduate of the Faculty of Construction and Environment (FCE), has been appointed a Lecturer in Civil Engineering in the School of Civil, Mining and Environmental Engineering at the University of Wollongong in Australia. Dr Zhang received his PhD degree from the Department of Civil and Environmental Engineering in

May 2012. He undertook his PhD research under the supervision of Professor Jin-Guang TENG, Chair Professor of Structural Engineering, and his thesis on the behaviour and modelling of RC beams strengthened in flexure with near-surface mounted FRP strips won an FCE Award for Outstanding PhD Thesis. After completing his PhD study, he worked as a Postdoctoral Fellow with Prof. Jin-Guang TENG for around two years. His research interests include FRP-strengthened concrete structures, nonlinear finite element analysis of structures, application of fiber-optic sensing systems in civil structures, and seismic retrofit of RC frames. Dr Zhang is sincerely grateful to Prof. Jin-Guang Teng for his invaluable guidance, inspiration and supervision during his PhD study, which strongly motivated him to pursue an academic career.

## 建築及房地產學系校友晉升高級講師

建築及房地產學系最近接獲喜訊！校友夏波博士獲其任教的澳洲昆士蘭科技大學土木工程及建築環境學系升為高級講師。他是陳炳泉教授的高足，於2010年底取得哲學博士學位，專門研究建築管理、項目營建系統及可持續建築，對可持續的長者住宅尤感興趣。儘管在學術之路起步不久，他已在頂級國際學術期刊發表了不少文章，幾次取得論文獎項及研究撥款，並在好些國際學報擔任編務委員。身為人師，他不斷求進，致力提升教學效果，現時是三名博士生的首席論文導師。

## 土木及結構工程學系博士畢業生獲聘出任澳洲大學講師

本院博士畢業生張世順博士，最近被澳洲臥龍崗大學土木、采礦及環境工程系聘為土木工程學講師。張博士是土木及結構工程學系校友，於2012年五月獲授博士學位。張博士在結構工程學講座教授滕錦光教授的指導下完成了其博士學習，其論文《嵌入式FRP板條加固鋼筋混凝土梁的力學性能及數值模擬》曾勇奪本院「傑出博士論文獎」。畢業後，他以博士後研究員的身份與滕教授共事接近兩年，研究興趣包括FRP加固混凝土結構、結構的非線性有限元分析、光纖傳感系統在土木結構的應用，以及鋼筋混凝土框架的抗震改進。張博士非常感激滕教授的悉心指導、啟迪和勉勵，他亦因此立志在教育事業上打拚，期望成為出色學者。





# Events

## 活動剪影

### 20<sup>th</sup> Congregation of FCE

On 4-5 November 2014, the 20th Congregation and Prize Presentation Ceremony of the Faculty of Construction and Environment was held in the Jockey Club Auditorium of the PolyU campus. It was eagerly anticipated by both graduates and their families, who packed the auditorium along with the invited guests. There were six sessions in all, one for each of our four departments, and two sessions for graduates from our postgraduate programmes. More than 1500 students were honoured at the ceremony, which had its share of memorable moments. Besides inspirational speeches from the guests of honour, who included Mr Au Choi Kai Johnny, Ir Victor Cheung Chi Kong, Ir Hon Chi-keung JP, Mr Cheng Wai-pun Ben, outstanding students from our departments also delivered heartfelt valedictory speeches.

Prof. You-lin Xu, Dean of the Faculty, urged the graduates to move on to the next phase in their lives. With their skills and knowledge, graduates were told they all have a role to play in ensuring that the problems posed by urbanization, by pollution, by global warming, and by technological changes do not threaten our future.

All who attended found the occasion memorable and edifying.

### LSGI Marks 30<sup>th</sup> Anniversary in 2014

On 29 May 2014, the Department of Land Surveying and Geo-Informatics (LSGI) celebrated its 30th anniversary with a series of activities, the most anticipated one being a symposium on the challenges and opportunities of geomatics education and research. Speaking at the opening ceremony were Prof. Timothy TONG, President of PolyU; Prof. Albert CHAN, interim Dean of the Faculty of Construction and Environment; and Prof. Xiaoli DING, Department Head of LSGI. Prof. CHAN was particularly effusive about the various achievements of the department, which have benefited Hong Kong's construction industry and contributed to the sustainable development of our community. In attendance were Prof. KO Jan-Ming and Prof. TENG Jin-Guang, Director of the Research Institute for Sustainable Urban Development (RISUD), who also congratulated LSGI in a written message.

### 建設及環境學院第二十屆畢業典禮

二零一四年十一月四至五日，建設及環境學院於理大賽馬會綜藝館舉行第二十屆畢業暨頒獎典禮，畢業生、家長和應邀出席的來賓聚首一堂，熱鬧非常。典禮分六節，學院轄下四個學系各佔一節，餘下兩節則專為深造課程的畢業同學而設，獲頒授學位的畢業生逾一千五百人。主禮嘉賓區載佳先生、張志剛工程師、韓志強工程師太平紳士，及鄭偉斌先生分別在四個學系的畢業禮上致辭，鼓勵畢業同學把握機遇，精益求精；多位優異畢業生亦上台致畢業謝辭，表達對母校和老師的謝意。

本院院長徐幼麟教授致辭時鼓勵畢業同學勇敢迎接人生的新一頁，以他們的專業技術和知識，回饋社會，協助解決城市化、污染、全球暖化、科技轉變等引起的問題，共建美好將來。

出席者深感這是一個難忘和別具意義的盛會。

### 土地測量及地理資訊學系欣慶成立三十周年

2014年五月二十九日是土地測量及地理資訊學系慶祝成立三十周年的大日子。為誌其盛，學系特別舉辦一系列活動，而當中最叫人期待的，就是以「測繪及地理資訊學教研工作的機遇與挑戰」為題的大型研討會。當日，理大校長唐偉章教授、本院暫任院長陳炳泉教授，以及土地測量及地理資訊學系系主任丁曉利教授先後在開幕禮上致辭。陳教授特別提到學系多年來促進香港建造業和社會的可持續發展，貢獻良多、成就使人讚嘆。高贊明教授及可持續城市發展研究院院長滕錦光教授除出席活動，後者更撰文祝賀。

With three sessions on a range of topics, the symposium was facilitated by Prof. Esmond MOK, Prof. John SHI, and Prof. Wu CHEN. Besides PolyU colleagues and LSGI alumni, participants at the symposium included guests from international and local professional associations and institutions, industrial and academic partners, as well as overseas and local universities. They were also given a tour of LSGI's new office on campus. The special day concluded with a dinner gathering at Regal Kowloon Hotel, where alumni from different years had a chance to catch up with one another. It was a memorable event for all present.



上述研討會分為三個環節，分別由莫志明教授、史文中教授及陳武教授主持。與會者除了理大同事和該系校友，還有不少國際及本地專業團體的嘉賓、業界和學術界的合作夥伴，以及海外和本港大學的代表。討論完畢，眾人獲安排參觀學系的新辦公室。到了晚上，學系假富豪九龍酒店舉辦聚餐，讓不同年代的校友聚首一堂，閒話當年，眾人均感盡興。

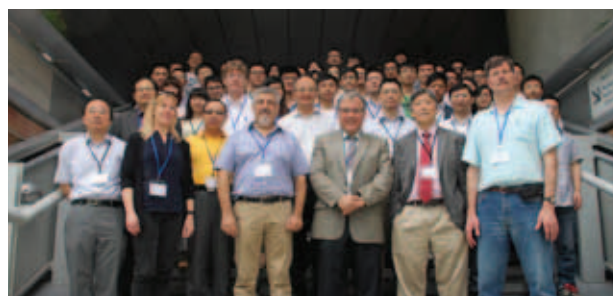


## LSGI Hosts Croucher Foundation Summer Course

On 26-31 May 2014, more than 50 students from universities and government agencies of Hong Kong and mainland China gathered on the campus of PolyU for a course on GPS/ Beidou/ GNSS Satellite Positioning, Navigation, and Earth Observation. Generously supported by the Croucher Foundation, participants were welcomed by the interim Dean of the Faculty of Construction and Environment, Prof. Albert Chan, and the then Head of the Department of Land Surveying and Geo-Informatics (LSGI), Prof. Xiaoli Ding, on the first day. Officiating at the opening ceremony was the Course Director, Dr George Zhizhao Liu, who said, "Satellite-based positioning and navigation are key technologies of the 21st century that have changed people's lifestyles. The Croucher Summer Course is an excellent opportunity for students to gain state-of-the-art knowledge on these topics. At the same time, they can network with one another and familiarize themselves with the Hong Kong Polytechnic University." Ten distinguished international experts were invited to give lectures on modern satellite positioning and navigation technologies, which were very well received.

## 土地測量及地理資訊學系獲裘槎基金會贊助暑期課程

2014年五月二十六日至三十一日，五十多名來自本港及內地大學和政府機構的學員齊集理大，參加一個獲裘槎基金會贊助、有關全球定位系統/中國北斗系統/全球導航衛星系統及大地觀測的暑期課程。開課當日，本院前暫任院長陳炳泉教授，以及時任土地測量及地理資訊學系系主任丁曉利教授均有出席致辭。主持開課儀式的課程主任劉志趙博士指出：「衛星定位及導航技術是廿一世紀的主要科技，已改變人類的生活方式。參加裘槎基金會暑期課程，不但是汲取最新資訊的黃金機會，又能彼此交流，並增進對理大的認識。」課程邀得十位國際知名專家授課，講述現代的衛星定位及導航科技，全皆大獲好評。



## 20<sup>th</sup> Asia Construct Conference

On 13-14 November 2014, about 30 delegates from 9 different countries and region met at Hotel ICON for the 20th Asia Construct Conference, which was organized to promote construction industries in Asia by identifying and sharing good practices. The delegates were welcomed by the President of The Hong Kong Polytechnic University, Prof. Timothy W. Tong, and the Chairman of the Construction Industry Council, Mr Lee Shing See. The Secretary for Development of the HKSAR, Mr Chan Mo Po, Paul, presented a paper on the building opportunities in Hong Kong, particularly in east Lantau island, while the Chairman of Hopewell Holdings Ltd., Sir Gordon Wu, talked about stronger materials for construction and city transportation, amongst other things.

## 第二十屆亞洲建造研討會

2014年十一月十三至十四日，來自九個國家及城市的約三十位代表齊集唯港薈，出席第二十屆亞洲建造研討會。這項活動旨在集思和分享良好的業內守則規範，從而促進建造業在亞洲的發展。當日，理大校長唐偉章教授及建造業議會主席李承仕先生首先代表主辦機構歡迎與會人士；特區政府發展局局長陳茂波先生隨後致辭，講述香港—特別是大嶼山東部—為建造業提供的構遇。合和實業有限公司主席胡應湘爵士也是講者之一，主講優質建築物料及城市運輸。



With a theme on meeting the need for resources in the construction industry, the conference focused attention on construction economics and the management of construction resources. Prof. Chiang Yat-Hung of the Department of Building and Real Estate presented a co-authored paper on the major problems facing the construction industry in Hong Kong and some proposed measures to address them. It was well received by all in attendance, as were the site visits to the Express Rail Terminal and the West Kowloon Cultural District on the second day of the conference.

今次研討會是以建造業的資源需求為主題，討論內容因此聚焦在建築經濟學及建築資源管理兩個範疇。建築及房地產學系的蔣日雄教授在會上發表了一篇合著論文，提出香港建造業面對的主要難題及解決方案，獲在座者一致讚賞。翌日，眾人獲安排實地參觀高鐵總站及西九龍文化區，獲益良多。



## Summer School for Outstanding Students

43 outstanding postgraduate and senior undergraduate students from leading universities around the world had a preview of what research studies in construction and environment at PolyU would be like at the 3rd annual Summer School held from 6-15 August 2014. Co-organized by the Faculty of Construction and Environment (FCE) as well as the Research Institute for Sustainable Urban Development (RISUD), the Summer School attracted over 150 applicants with strong academic records who are interested in pursuing further studies. Of those who attended the Summer School, more than half came from mainland China, with a few from countries like Pakistan, Canada, the United States, and even one from Peru.

After welcoming remarks by Prof. Y.L. Xu, Dean of FCE, and Prof. Jin-Guang Teng, Director of RISUD, the students were introduced to the four departments of FCE, with Dr Michael Yam representing the Department of Building and Real Estate, Dr Vivien Lu the Department of Building Services Engineering, Prof. C.S. Poon the Department of Civil and Environmental Engineering, and Dr Wallace Lai the Department of Land Surveying and Geo-Informatics. They also visited the various labs of the respective departments.

With twelve seminars delivered by FCE academics on different areas related to construction and environment, students were exposed to the range of expertise that they could expect from FCE should they choose to undertake doctoral studies at PolyU. Individual consultations at the end of the week gave students a chance to identify potential supervisor(s) for their studies.

## 菁英學生參與本院暑期課程

四十三名來自全球一流大學的菁英研究生及本科高年級生，參加本院於2014年八月六日至十五日舉行的第三屆暑期課程，優先體驗在理大修讀建設及環境學深造課程的滋味。這項活動由本院及可持續城市發展研究院合辦，吸引逾一百五十名有志繼續進修的優異生申請；參加者中，超過半數為內地學生，亦有來自巴基斯坦和美加，其中一人更是遠道從秘魯來港。

本院院長徐幼麟教授及可持續城市發展研究院院長滕錦光教授致歡迎詞後，四大學系的代表陸續發言，向參加暑期課程的同學介紹系內概況。四位致詞的同事包括任志浩博士（建築及房地產學系）、呂琳博士（屋宇設備工程學系）、潘智生教授（土木及環境工程學系）及賴緯樂博士（土地測量及地理資訊學系）。同學其後更獲安排參觀各學系的實驗室，全面了解理大學習生活。

暑期課程裡，共有十二節由本院學者主講的講座，涵蓋建設及環境學的不同範疇，讓有意在理大修讀博士學位的研究預早瞭解本院專長的科研項目。到了課程尾聲，同學更可以利用個別諮詢的機會物色日後的論文導師。





## HKIE Hi-Tech Fiesta 2014

An exhibition of the latest technological development in different engineering disciplines was held at the Kowloon Bay International Trade and Exhibition Centre on 8 June 2014. Organized by the Hong Kong Institution of Engineers (HKIE), the Hi-Tech Fiesta focused on High Gear for New Technology: A Mindset for Change, promoting the engineering profession to the general public by showcasing its latest technologies for the sustainable development of the community.

On display were cooling vests and a newly designed anti-heat stress work uniform for protecting construction workers from heat stress. Developed by Prof. Albert Chan and his research team from the Department of Building and Real Estate, the vests and the anti-heat stress uniform were the products of a study commissioned by the Occupational Safety and Health Council, and a research grant funded by the Research Grants Council. Findings from an experimental research on health and safety measures for working in hot weather were also distributed.

Another attraction at the Fiesta was the innovative technology for road traffic that was developed by Prof. William Lam, Head of the Department of Civil and Environmental Engineering. His prototype for estimating travel times has been applied to numerous intelligent transportation systems of the government's Transport Department.

Game booths, workshops with robots as the theme, and various contests made the Fiesta a fun event for young and old alike.

## 香港工程師學會創意嘉年華 2014

由香港工程師學會主辦的創意嘉年華2014，於六月八日假九龍灣國際展貿中心舉行。這項活動以「思維創新天、科技闖巔峰」為題，旨在向市民介紹工程界為社會永續發展而研發的最新科技，涵蓋領域十分廣泛。

會場展出了一系列有關防止建築工人中暑的工作服及冷凍背心。這些產品的研發測試是由建築及房地產學系陳炳泉教授領導的建築健康安全小組進行，受研資局/職業安全健康局支持。該團隊曾就建築工人在酷熱天氣下工作的保健及安全措施進行實驗研究，研究結果已納入香港建造議會最新版《在酷熱天氣下工作的工地安全指引》。

由土木及環境工程學系系主任林興強教授研發的道路交通先進預測技術，是嘉年華另一亮點。運輸署不少智能交通系統，均應用了林教授用以估算交通時間的算式原型。

除了展出大量新產品和新科技，嘉年華還設有遊戲攤位、機械人工作坊及多項比賽，深受相關媒體及廠商關注。



## Meeting Highlights Social Responsibility of FCE

At the International Advisory Board (IAB) meeting on 6 November 2014, Prof. Geoffrey Shen, Associate Dean of the Faculty of Construction and Environment (FCE), and three representatives from FCE, met with three members of the IAB, including Prof. Gang Pei, President of Tongji University; Prof. Guanng Su, President Emeritus of Nanyang Technological University in Singapore; and Prof. Jianhua Wang, Director of State Key Laboratory of Electrical Insulation and Equipment and Professor of Xi'an Jiaotong University. Representing some of FCE's initiatives in the area of social responsibility were Prof. Shengwei Wang of the Department of Building Services Engineering, Dr Barbara Siu of the Department of Civil and Environmental Engineering (CEE), and Mr Wai-kei Kong of the Department of Building and Real Estate. Prof. Wang gave a presentation on integrating academic research with practical applications, with a particular focus on the design optimization and optimal control of air-conditioning systems at the International Commerce Centre, the tallest building in West Kowloon. Dr Siu showed how she incorporated a service learning component into her course, where FCE students served the community by engaging in field investigations for a project on age-friendly community. 18 students from the BSc (Hons) programme in Building Engineering & Management also took part in a self-initiated voluntary reconstruction project to design and supervise the Panyun Primary School in Guangxi from September 2005 to April 2007. According to Mr Kong, it was a great opportunity for students to apply their knowledge to help those in need and gain actual experience at the same time.

## 建設及環境學院代表匯報履行社會責任概況

在2014年十一月六日舉行的最新一輪國際顧問委員會(IAB)會議上，副院長沈岐平教授聯同本院三位代表與委員會的三位成員會面，包括同濟大學校長裴鋼教授、新加坡南洋理工大學榮休校長徐冠林教授，以及西安交通大學電力設備電力絕緣國家重點實驗室主任王建華教授。三位與會的本院代表，分別為屋宇設備工程學系的王盛衛教授、土木及環境工程學系的邵泳怡博士，以及建築及房地產學系的江偉基先生。會上，王教授特別以全港最高建築物——西九龍環球貿易廣場的設計優化及空調系統最優控制為例，說明怎樣把學術研究成果與實際生活結合。邵博士則講解如何落實「服務學習」的概念，安排修讀其課程的學生參與「老齡友善社區」計劃的現場調查，服務社會。另外，從2005年九月至2007年四月，有十八位建築工程及管理學(榮譽)理學士課程的同學，曾義務參與設計和監督重建位於廣西的潘雲小學。江先生補充說，這是同學學以致用的大好機會，運用知識幫助別人之餘，亦可同時汲取經驗，充實自己。



## PolyU Hosts Visitors from Cambridge

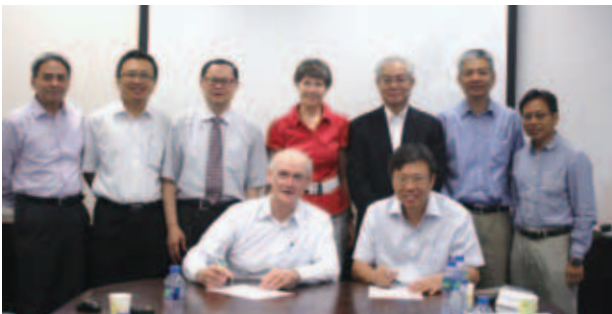
On 3 July 2014, the Research Institute for Sustainable Urban Development (RISUD) and the Faculty of Construction and Environment (FCE) hosted two visitors from Clare Hall, one of the colleges of the University of Cambridge. Mr Ranj Majumdar, Development Director, and Ms Alex Courage, Project Manager for International Programmes, were on a mission to seek the partnership of PolyU scholars in a project focusing on air pollution in China, its challenges and possible solutions. Besides meeting Prof. Alex Wai, Vice President (Research Development), and Prof. Angelina Yuen, Vice President (Institutional Advancement and Partnership), the visitors also met Prof. Y.L. Xu, Dean of FCE; Prof. Jin-Guang Teng, Director of RISUD; and Prof. Tao Wang, Chair Professor of Atmospheric Environment, to discuss opportunities for research collaboration. It is expected that the proposed research programme will be part of a long-term partnership between the two institutions.

## 劍橋大學代表來訪商談科研合作可能

2014年七月三日，可持續城市發展研究院與建設及環境學院聯袂接待了兩位來自劍橋大學克萊爾學堂的訪客——發展總監Ranj Majumdar及國際合作計劃項目經理Alex Courage。兩人今次到訪，是希望與理大學者合作進行一項專題研究，探討內地的空氣污染情況、帶來的問題及解決方案。他們除與分別負責科研發展和學院發展及合作的兩位副校長——衛炳江教授及阮曾媛琪教授見面，還與本院院長徐幼麟教授、可持續城市發展研究院院長滕錦光教授，以及大氣環境學講座教授王韜教授討論了科研合作的可能。雙方預計未來會建立長期的夥伴關係，當中包括今次提出的研究項目。



## Visit by Queensland University of Technology (QUT)

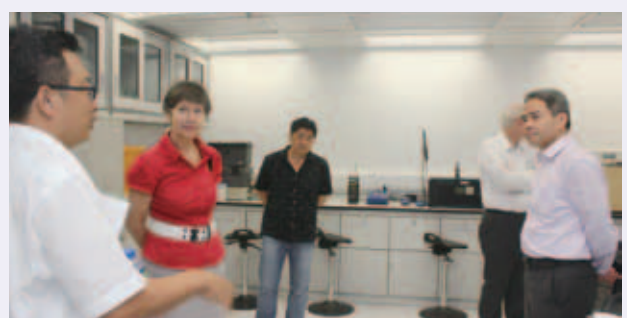


A group of four delegates from the Queensland University of Technology (QUT) visited PolyU on 4 July 2014 for a meeting with the Dean of the Faculty of Construction and Environment (FCE), Prof. Y.L. Xu, and the Director of the Research Institute for Sustainable Urban Development (RISUD), Prof. Jin-Guang Teng. Led by Prof. Ian MacKinnon, Director of QUT's Institute for Future Environments, the Australian delegates proposed the establishment of an Australia-China Centre for Advancements in Air Quality Science and Control, whereby academics from QUT and PolyU could collaborate in research to further scientific understanding of the multidimensional problem of air pollution and its impact on human health and the environment. Also at the meeting were Prof. Ko Jan-ming, Senior Advisor of RISUD, and a few professors from the Department of Civil and Environmental Engineering (CEE), including Prof. Wang Tao, Chair Prof. of Atmospheric Environment; Prof. Lee Shun-cheng, and Dr Hung Wing-tat, as well as Prof. Cheung Chun Shun from the Department of Mechanical Engineering. The visitors were given a tour of FCE's Air Labs and Odour Lab. A letter of intent to work towards an International Cooperation Agreement once specific collaborative activities have been identified was later signed by both universities.

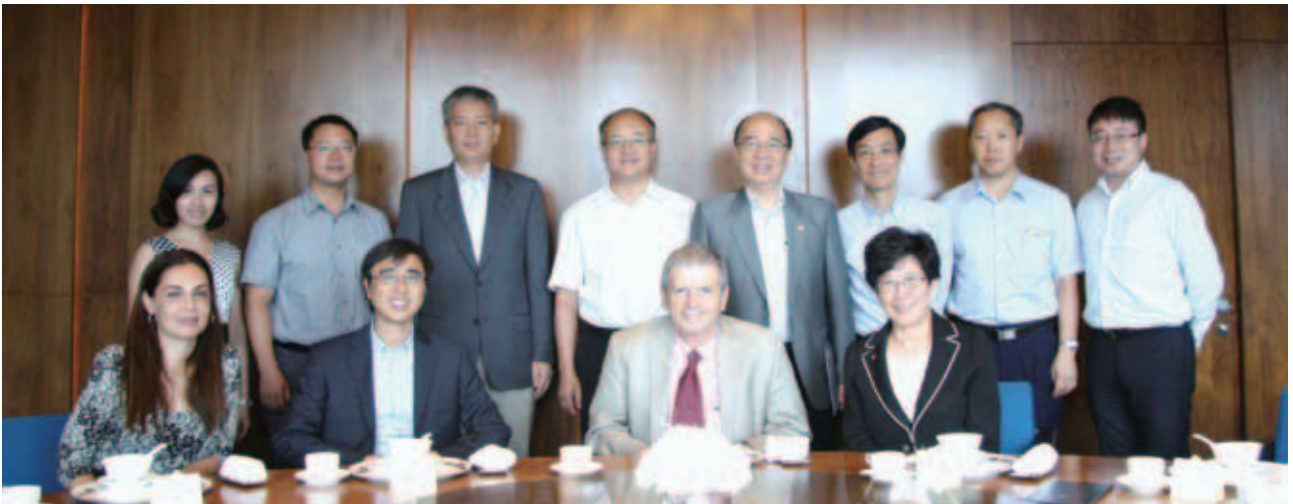
## 昆士蘭科技大學代表團到訪



昆士蘭科技大學一個四人代表團於2014年七月四日到訪理大，與本院院長徐幼麟教授和可持續城市發展研究院院長滕錦光教授會面。訪問團團長為該校「未來環境研究院」院長Ian MacKinnon 研究中心，為兩所院校的學者建立科研合作平台，從科學角度多方面加深瞭解空氣污染問題，以及它對人類健康和環境構成的影響。當日出席會議者還有可持續城市發展研究院高級顧問高贊明教授、土木及環境工程學系的幾位學者(王韜講座教授(大氣環境學)、李順誠教授、熊永達博士)，以及機械工程學系的張鎮順教授。另外，幾位來賓也參觀了本院轄下的空氣及氣味實驗室。兩大其後簽署了意向書，同意待確立特定合作項目後締結國際合作協議。







## FCE Cohosts Visitor from Technion

On 12 September 2014, Prof. Moshe Sheintuch of Technion - Israel Institute of Technology visited PolyU to recruit strong candidates for post-doctoral fellowships at the Technion in Israel and faculty positions at the newly established Technion-Guangdong Institute of Technology in Shantou. Prof. Sheintuch introduced the post-doctoral programme at Technion to a group of PhD students/post-doctoral fellows from Chemical, Civil and Environmental Engineering, as well as supporting science fields like applied chemistry and applied math. Prof. Sheintuch also met with Prof. X.L. Ding, Associate Dean of the Faculty of Construction and Environment; Prof. William Lam, Head of the Department of Civil and Environmental Engineering; Prof. T. Wang, Chair Professor of Atmospheric Environment; and Dr Meng Ni, Associate Professor of the Department of Building and Real Estate, who were all interested in building research links with Technion. It was a productive meeting for all concerned.

## 接待以色列理工學院教授

以色列理工學院(Technion)的Moshe Sheintuch教授於2014年九月十二日到訪理大，希望吸引優秀人才申請該校的博士後研究獎學金，並為新近在汕頭成立的以色列廣東理工學院物色教研人員。他向一批在理大修讀化學、土木及環境工程，以及應用化學和應用數學等輔助科學的博士生/博士後研究員介紹Technion的博士後研究計劃，並與本院多位有興趣與Technion建立科研聯繫的學者見面，包括副院長丁曉利教授、土木及環境工程學系系主任林興強教授、大氣環境學講座教授王韜教授，以及建築及房地產學系副教授倪萌博士。與會者皆感收穫良多。

## North China Institute of Aerospace Engineering Visits FCE

On the morning of 24 September 2014, a group of visitors from the North China Institute of Aerospace Engineering met with Prof. Xiaoli Ding, Associate Dean of the Faculty of Construction and Environment, and Prof. William Lam, Head of the Department of Civil and Environmental Engineering (CEE) to explore their mutual interests. Amongst other things, they discussed the professional discipline of civil engineering and the construction profession, building specialized laboratories for the profession of civil engineering, as well as innovation and development in architectural design. It was an insightful exchange for all concerned. They also toured some labs of CEE before ending their visit.

## 北華航天工業學院代表團到訪

北華航天工業學院一批來賓於2014年九月二十四日上午到訪本院，與副院長丁曉利教授及土木及環境工程學系系主任林興強教授會面，討論彼此同感興趣的事宜，如土木工程專業訓練及建造專業、土木工程專業的建造學專用實驗室，以及建築設計的創新與發展，並參觀該系一些實驗設施。大家坦誠交流，同感獲益良多。





## Joint PhD Programme between PolyU and the University of Calgary Planned

A collaborative Cotutelle PhD Programme between the University of Calgary in Canada and The Hong Kong Polytechnic University is in the works after a letter of intent was signed by both parties. Representing the University of Calgary was its Vice-Provost, Prof. Janaka Ruwanpura, who visited PolyU on 20 October 2014 for a meeting with Prof. Alex Wai, PolyU Vice President (Research Development), Prof. You-lin Xu, Dean of the Faculty of Construction and Environment, and Prof. William Lam, Head of the Department of Civil and Environmental Engineering. They also discussed the potential for collaborative research projects between the two Universities.

## 理大與卡爾加里大學籌辦博士課程

加拿大卡爾加里大學與理工大學最近已簽署意向書，著手籌備一項由雙方共同派遣導師監督的聯合博士生項目。卡大副教務長Janaka Ruwanpura教授特別於2014年十月二十日到訪理大，與副校長(科研發展)衛炳江教授、本院院長徐幼麟教授，以及土木及環境工程學系系主任林興強教授會面，商討雙方開展科研合作的可能性。



## PolyU Education Info Day 2014



On 11 October 2014, the Faculty of Construction and Environment (FCE) promoted its various academic programmes to the public as part of the PolyU's Info Day. Officiating at the opening ceremony were Prof. Timothy W. Tong, President of PolyU; Prof. You-Lin Xu, Dean of FCE; Prof. Xiangdong Li and Prof. Xiaoli Ding, Associate Deans; and the Heads of the four departments, Dr Michael Yam (BRE), Prof. Wan Ki Chow (BSE), Prof. William Lam (CEE), and Prof. John Shi (LSGI). Each department exhibited its accomplishments and various programmes demonstrated their specialty. The information seminar for the BEng (Hons) in Civil Engineering registered the biggest show of interest, with a crowd of more than 150, followed closely by that for the BSc (Hons) in Environment & Sustainable Development as well as in BSc (Hons) in Surveying. A special session for career teachers and principals from secondary schools was led by Prof. Geoffrey Shen, Associate Dean (Teaching), who introduced the Faculty and the Broad Discipline of Construction and Environment to them. They also heard from Prof. Chiang Yat-hung, Associate Head (BRE); Prof. Chan Kwok-tai, Associate Head (BSE); Prof. William Lam, Head (CEE); and Dr Lilian Pun, Associate Head (LSGI) about the undergraduate programmes of the four departments. There were also consultations and guided visits to different laboratories for prospective students, who had a chance to get their questions answered before they decide on a programme of study.

## 理大2014教育資訊日



理大於2014年十月十一日舉辦教育資訊日，身為大學一員的建設及環境學院亦有參與，向公眾介紹學院的各項課程。當日的主禮嘉賓計有校長唐偉章教授、本院院長徐幼麟教授、副院長李向東教授及丁曉利教授，以及四大學系的系主任——任志浩博士(建築及房地產學系)、周允基教授(屋宇設備工程學系)、林興強教授(土木及環境工程學系)和史文中教授(土地測量及地理資訊學系)。各學系均展出其科研/學術成果，並有形形色色的項目和示範，講解學系的特色與專長。關於土木工程學(榮譽)工學士課程的講座最受歡迎，有超過一百五十人入座，緊隨其後的是環境與可持續發展學(榮譽)理學士及地產及建設測量學(榮譽)理學士課程。負責教務的副院長沈岐平教授，特別出席了一個招待中學輔導老師和校長的環節，向他們介紹本院概況及「建設及環境廣泛學科」課程；而其他學士學位課程，則由建築及房地產學系副主任蔣日雄教授、屋宇設備工程學系副主任陳國泰教授、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副主任潘淑淑博士分別講解。有意申請的學生還獲安排參觀不同實驗室及參加諮詢會，在決定前弄清種種選科及申請疑問。

## Orientations for New Students



On 27 August 2014, more than 160 newly admitted postgraduates to the taught master's programmes of the Faculty of Construction and Environment (FCE) were given an orientation to FCE. On hand to welcome them were Prof. You-Lin Xu, Dean of FCE, and Prof. Geoffrey Shen, Associate Dean (Teaching) and Chairman of the Postgraduate Scheme. After an introduction of the four departments by their respective representatives, Dr Michael Yam of the Department of Building and Real Estate (BRE), Dr Nai-Kong Fong of the Department of Building Services Engineering (BSE), Prof. William Lam of the Department of Civil and Environmental Engineering (CEE), and Prof. John Shi of the Department of Land Surveying and Geo-Informatics (LSGI), students met with their own programme leaders in one of 9 break-out sessions, which cover the range of specialties in the Taught Postgraduate Scheme.

In a similar event, a Welcoming Day was held on 29 August 2014, which was attended by more than 400 undergraduates. Officiating at the occasion were Prof. Timothy Tong, President of PolyU; Prof. Keith Chan, Dean of Students; Mrs Dorinda Fung, Director of Student Affairs; Prof. You-Lin Xu, Dean of FCE; Prof. Xiaoli Ding, Associate Dean (Partnership); Prof. Geoffrey Shen, Associate Dean (Teaching); Dr Michael Yam, Interim Head (BRE); Prof. Jian-lei Niu, Acting Head (BSE); Prof. William Lam, Head (CEE); and Prof. John Shi, Head (LSGI). Besides welcome sessions by the four departments of FCE, there was an orientation for students who chose to study the Broad Discipline of Construction and Environment (BDCE). They were introduced to the BDCE curriculum by its programme leader, Prof. Onyx Wai (CEE). The other academic advisors for BDCE, Prof. Y.H. Chiang (BRE), Prof. K.T. Chan (BSE), and Dr Lilian Pun (LSGI), also had a chance to introduce their respective departments. It was an informative day for all those in attendance.

## 新學年迎新活動



本院於2014年八月二十七日為新錄取的全日制授課式碩士課程新生舉辦迎新活動，有超過一百六十位同學參加。院長徐幼麟教授及副院長(教務)兼碩士組合課程主席沈岐平教授致歡迎辭後，便由任志浩博士(建築及房地產)、方乃剛博士(屋宇設備工程)、林興強教授(土木及環境工程)及史文中教授(土地測量及地理資訊)分別介紹四大學系的概況。院方因應授課式碩士組合課程涵蓋的範疇安排了九個分組會面環節，同學可選擇合適的一個，與自己的課程主任見面。

為本科新生而設的迎新日則於八月二十九日舉行，參加者超過四百人，主禮嘉賓計有理工大校長唐偉章教授、學務長陳振沖教授、學生事務總監馮陳敏慈女士、本院院長徐幼麟教授、副院長(協作)丁曉利教授、副院長(教務)沈岐平教授、建築及房地產學系暫任系主任任志浩博士、屋宇設備工程學系署理系主任牛建磊教授、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系主任史文中教授。除了四大學系的迎新環節，當日還有特別為「建設及環境廣泛學科」新生而設的活動，由課程主任韋永康教授(土木及環境工程學系)介紹課程大綱，而學術顧問蔣日雄教授(建築及房地產學系)、陳國泰教授(屋宇設備工程學系)及潘鄭淑貞博士(土地測量及地理資訊學系)，則分別介紹所屬學系的資料。同學無不感到收穫良多。



**2015/16 Entry Scholarship for  
the Postgraduate Scheme in  
Construction and Environment**

*Application deadline: 1 January 2015*



## Faculty Public Lectures 建設及環境學院公開講座



**Prof. Wen-Tso Liu** of the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign gave a public lecture entitled "Microbial Ecology in Methanogenic Wastewater Treatment Processes." (9 June 2014)



**Prof. Siew Hwa Chan** of the Maritime Institute at the Nanyang Technological University in Singapore gave a public lecture entitled "Power to Gas." (3 July 2014)



**Prof. Henrik Linderoth** of the School of Engineering at the University of Jonkoping in Sweden gave a public lecture entitled "BIM – Will It Transform the Industry, or Will It Be Business as Usual?" (9 July 2014)



**Prof. Jianhua Yin**, Chair Prof. of PolyU's Department of Civil and Environmental Engineering, gave a Chair Professor inaugural lecture entitled "Elastic Visco-Plastic Modeling of the Time-Dependent Stress-Strain Behavior of Soils and Applications." (16 July 2014)



**Prof. Helen Lingard**, Research Council Future Fellow, of RMIT University in Australia gave a public lecture entitled "Designing for Construction Workers' Health and Safety: Organizing Projects to Achieve Technological Risk Controls." (20 August 2014)



**Prof. S.L. Chan**, Chair Prof. of PolyU's Department of Civil and Environmental Engineering, gave a Chair Professor inaugural lecture entitled "Research, Design and Practice for Second-order Direct Analysis of Structures." (28 August 2014)



**Prof. Peter Durre** of the Institute of Microbiology and Biotechnology at the University of Ulm in Germany gave a public lecture entitled "The Acetone-butanol Fermentation: From History to Regulatory Networks to Recent Applications." (17 September 2014)



**Dr. W. Phillip Yen** of the International Bridge Seismic Committee gave a public lecture entitled "Multi-Hazard Mitigation of Transportation Infrastructure." (15 October 2014)



**Prof. Xingbo Liu** of the Mechanical & Aerospace Engineering Department of West Virginia University in the US gave a public lecture entitled "Characterization and Modeling of Infiltrated Solid Oxide Fuel Cell Cathode." (31 October 2014)



**Prof. Zhilin Li**, Chair Professor of PolyU's Department of Land Surveying and Geo-Informatics, gave a Chair Professor inaugural lecture entitled "From Paper Maps to Google Earth: Scientific Advancement and Roles in Human Knowledge Representation." (21 November 2014)



## Invitation for Programme Admissions 2015/16

<b>Master of Science (MSc)/Postgraduate Diploma (PgD)</b>	<b>理學碩士 / 深造文憑</b>	<b>Department</b>
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 (Zhejiang)	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
<b>Bachelor's Degree</b>	<b>學士學位</b>	<b>Department</b>
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
Environment and Sustainable Development	環境與可持續發展學	CEE
Geomatics (Geo-Information Technology)	測繪及地理資訊學 ( 地理資訊科技 )	LSGI
Geomatics (Land Surveying)	測繪及地理資訊學 ( 土地測量 )	LSGI
Geomatics (Utility Management and Surveying)	測繪及地理資訊學 ( 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
<b>Higher Diploma</b>	<b>高級文憑</b>	<b>Department</b>
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
Building Technology and Management (Surveying)	建築科技及管理學 ( 測量 )	BRE
Civil Engineering	土木工程學	CEE
Geomatics	測繪及地理資訊學	LSGI

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：

<b>Department of Building and Real Estate (BRE)</b> 建築及房地產學系	<b>Department of Building Services Engineering (BSE)</b> 屋宇設備工程學系	<b>Faculty of Construction and Environment (FCE)</b> 建設及環境學院	<b>Department of Civil and Environmental Engineering (CEE)</b> 土木及環境工程學系	<b>Department of Land Surveying and Geo-Informatics (LSGI)</b> 土地測量及地理資訊學系
2766-5807/5808/7770 <a href="http://www.bre.polyu.edu.hk">www.bre.polyu.edu.hk</a>	3400-3597 <a href="http://www.bse.polyu.edu.hk">www.bse.polyu.edu.hk</a>	3400 8496 <a href="http://www.polyu.edu.hk/fce">www.polyu.edu.hk/fce</a>	2766-6052 <a href="http://www.cee.polyu.edu.hk">www.cee.polyu.edu.hk</a>	2766-5968 <a href="http://www.lsgi.polyu.edu.hk">www.lsgi.polyu.edu.hk</a>

## Master's Degree/ Postgraduate Diploma Programmes 碩士及深造文憑課程

**Local and non-local applicants** 本地與非本地申請人：

28 November 2014 — 27 February 2015

Application closing dates vary between programmes and may be extended.

For details, please visit [www.polyu.edu.hk/study](http://www.polyu.edu.hk/study)

各課程之截止報名日期有別並可能延長，詳情請參閱 [www.polyu.edu.hk/study](http://www.polyu.edu.hk/study)

## Full-time Bachelor's Degree and Sub-Degree Programmes 全日制學士學位及非學位課程

**Local applicants** 本地申請人：

16 December 2014 — 5 February 2015

**Non-local applicants** 非本地申請人：

10 October 2014 — 16 January 2015

**Students applying on the basis of current year Joint Entrance Examination (JEE) results** 內地應屆高考生：

5 January — 7 June 2015

\* application periods are tentative

報名日期：暫定

### 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](http://www.polyu.edu.hk/study).

請於 Study@PolyU 查閱最新資料，網址為 [www.polyu.edu.hk/study](http://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

#### Email 電郵：

<a href="mailto:asadmpg@polyu.edu.hk">asadmpg@polyu.edu.hk</a>	Master's/ Postgraduate Diploma programmes 理學碩士及深造文憑課程
<a href="mailto:asadmft@polyu.edu.hk">asadmft@polyu.edu.hk</a>	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
<a href="mailto:asnlocal@polyu.edu.hk">asnlocal@polyu.edu.hk</a>	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
<a href="mailto:asadmpt@polyu.edu.hk">asadmpt@polyu.edu.hk</a>	Part-time Bachelor's degree & sub-degree programmes 兼讀制學士學位及非學位課程

## Forthcoming Events 最新消息

### 2nd International Conference on Sustainable Urbanization

**Date:** 7-9 January 2015

**Venue:** The Hong Kong Polytechnic University

**Website:** <http://www.polyu.edu.hk/risud/ICSU2015/index.html>

### Engineering Mechanics Institute (EMI) International Conference 2015

**Date:** 7-9 January 2015

**Venue:** The Hong Kong Polytechnic University

**Website:** <http://www.cse.polyu.edu.hk/~ktchau/emi2015-hk/emi2015hk.html>

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