

建設與環境



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Dean's Message

院長的話



Prof. Teng Jin-Guang
Dean of the Faculty
of Construction and
Environment

Time flies! I will have completed my two three-year terms as Dean of the Faculty by the end of June 2013. Indeed, by the time most of you are reading this message, I should have already stepped down from this position. The University's Search Committee for the next Dean has been working hard to find a successor in the near future. Although I was hoping that the next Dean would have been appointed by June 2013 by starting the search early (the search was formally launched in June 2012) to ensure continuity, not everything in life goes as expected or planned. For the short gap between me and the next Dean, we will have a capable Acting Dean looking after the Faculty. The University did invite me to continue until the arrival of the new Dean, but kindly respected my wish to step down on time to concentrate my efforts on the Research Institute for Sustainable Urban Development and my personal research.

I am very pleased to be completing my term at a time when our world ranking in the subject area of "Civil and Structural Engineering" has risen from 50th last year to 16th this year. Furthermore, we achieved a full score for both of the two objective research performance indicators (citations per paper and H-index), making us the number 1 institution in the world based on these indicators. While the Department of Civil and Environmental Engineering (CEE) is the major basis for this achievement, colleagues of the other three departments of the Faculty have no doubt also contributed significantly to this cause.

I certainly understand that any rankings are only as reliable as the methodology adopted. For this reason, we should take any rankings with a grain of salt and treat it as one source of reference in understanding our true performance; our ultimate aim should definitely and always be the pursuance of true excellence in education, research and service so that we are widely recognized as a world-class academic identity in the field of construction and environment. However, this does not mean we should not care about our rankings; quite to the contrary, there are at least two good reasons for us to pay due attention to such rankings.

The first reason is that students who are choosing a place to study do look at rankings, albeit with due skepticism. Rankings may thus affect the intake quality of our programmes. If our intake quality improves continuously, our employer survey score is likely to follow suit, which will improve our reputation and ranking, which will in turn attract better students to choose our programmes of study. We need to make sure we are in such a virtuous cycle and do not enter a vicious cycle. I believe that we have achieved a virtuous cycle in research postgraduate studies, due to our strong research performance. If we examine the statistics of PhD Fellowships awarded by the Hong Kong Research Grants Council (RGC) to the brightest PhD students coming to Hong Kong, this assertion is well supported by evidence: over the past three rounds, our Faculty attracted 27 candidates while the four construction or civil engineering departments in the three sister universities attracted only 16 candidates. We look forward to achieving the same for our undergraduate programmes. At least our BSc Programme in Surveying offered by BRE has achieved this status, with the best student intake in Hong Kong. While this is a daunting task, it is not impossible to achieve if we examine our progress in research. Figures 1 and 2 show the growth of SCI, SSCI and A&HCI papers and Web of Science Citations of the Faculty over the past 20 years: we started from a very modest number in 1994 when the Hong Kong Polytechnic became The Hong Kong Polytechnic University (coincidentally this was also the year when I joined PolyU). There was a 10-year period of rapid growth in publication quantity and then a consolidation period in the past 10 years when we have maintained our quantity but our citations have continued its exponential rise. This is a dramatic change and is the result of the hard work of all colleagues of the Faculty, past and present. In my view, we owe the most for this success to Professor Jan-ming Ko, formerly Head of CEE (October 1992 – June 2000), Dean of the Faculty (July 2000 – June 2005), Associate Vice President (July 2000 – June 2003), and Vice President (July 2003 – June 2010).

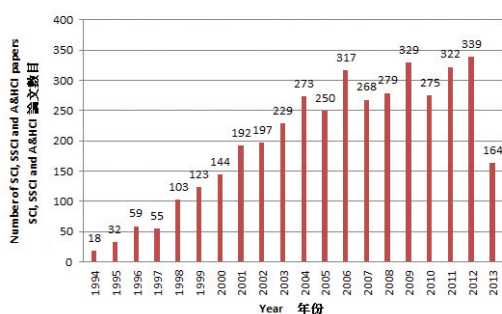


Fig. 1: Number of SCI, SSCI and A&HCI papers of the Faculty over the past 20 years

圖一：本院近二十年SCI、SSCI及A&HCI論文數目的增長情況

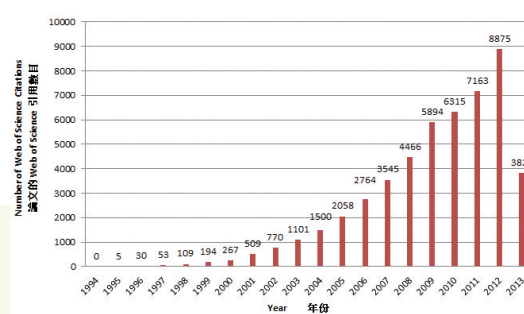


Fig. 2: Number of Web of Science citations of the Faculty over the past 20 years

圖二：本院近二十年SCI論文「網際網路版引用文獻索引資料庫」(Web of Science)顯示的論文引用情況

時光飛逝！到了2013年六月底，我便要完成兩任共六年的院長任期。各位閱讀這篇文章時，我大抵已經離任。大學的遴選委員會已在積極物色繼任人選。為順利交接，校方在2010年六月就啟動了遴選的工作，希望盡早覓得賢才，在今年六月前任命新院長，但世事往往難盡如人意。在下任院長履新之前，學校將任命一位能幹的署理院長暫代其職。承蒙大學邀請我留任至新院長履職，但為了盡早專注於可持續城市發展研究院和個人的科研工作，我表達了如期離任的願望，並得到了校方的尊重。

在快要結束院長任期之際，傳來振奮人心的喜訊。首先，理大在「土木及結構工程」領域的世界排名，從去年的第五十位躍升至今年的第十六位；另外，在兩個衡量科研表現的客觀指標（論文平均引用次數及H-指數）上，理大在該領域均取得滿分，我們亦因此成為根據這兩個指標排序的全球榜首學府。取得如此成就，土木及環境工程學系自然居功至偉，但學院其他三個學系的同事亦功不可沒。

排名可靠與否，很視乎排名的方法。因此，對任何一項排名，我們都應以平常心看待，視之為瞭解自己真正實力的其中一個參考因素。由始至終，我們的根本目標是在教學、科研和服務三方面力臻完美，使理大成為公認的建設及環境領域世界頂級學府。然而，這並非說我們對排名可以不屑一顧；剛好相反，至少有以下兩個原因說明我們需要對排名給予適當的關注。

第一、學生雖然不盡信排名，但選校時不會不考慮院校排名。換言之，學院排名可能影響學生質素。如新生質素持續改善，僱主調查分數相信亦會隨之上升，學院的聲譽和排名因而更上層樓，吸引質素更佳的學生入學。我們必須沿着這樣的良性循環前進，而要極力避免陷入惡性循環。由於科研表現優秀，我相信學院的研究生深造課程已朝這樣的方向發展。大家看看有關香港研究資助局「香港博士研究生獎學金計劃」的統計數據，可知此言非虛！這項計劃是為了鼓勵最優秀的博士生來港修讀博士學位而設的。綜觀過去四輪審批結果，有27位獎學金得主選擇到本院攻讀博士學位；選擇本地三所姊妹大學的四個建築或土木工程學系的則只有16人。希望我們所有本科課程亦會在將來取得同樣的佳績。事實上，由建築及房地產學系開辦的「地產及建設測量學士課程」已達致上述水平，錄取了全港最優秀的學生。任務縱然艱巨，但如細心察看我們的科研進展，這目標絕非空中樓閣。圖一及圖二顯示的是本院近二十年SCI, SSCI及A&HCI論文數目的增長，以及「網際網路版引用文獻索引資料庫」(Web of Science)顯示的論文引用情況。1994年，亦即香港理工學院升格為香港理工大學的一年（巧合的是，我也是該年加入理大），我們由一個很低的數量開始，經歷了整整十年的高速增長期，期間發表的論文數量非常可觀；最近十年則是整固期，在保持論文數量之餘，獲引用的次數持續錄得指數增長。這個巨大的轉變，是學院新舊同事努力耕耘的成果；當中，我認為土木及環境工程學系前系主任高贊明教授（1992年10月-2000年6月）的角色尤其舉足輕重。高教授其後升任本院院長（2000年7月-2005年6月），協理副校長（2000年7月-2003年6月）及副校長（2003年7月-2010年6月）。

第二、我們有責任確保主要大學排名榜均採用恰當的計量方法，公允地反映同事的努力和成績。去年，我們在「土木及結構工程」領域晉身QS世界大學排名榜第五十位，是理大唯一能夠打入全球五十佳學府的學科。國際事務處的同事因此推薦我代表校方，參加2012年六月在布拉格舉行的QS世界大學學科排名會議。會上，我嚴肅地批評了採用論文平均引用次數作為唯一指標來衡量科研表現的方法，力促採用H-指數為學科排名的標準之一。其後，我應邀加入QS的諮詢委員會，有機會進一步解釋採用H-指數的理據。細閱2013年的評估方法後，我發現學科的排名方法有明顯的改進，如加入H-指數衡量科研影響力。這顯示之前的努力並沒白費，亦說明我們必需盡力優化這些排名機制，使之更公平公正。

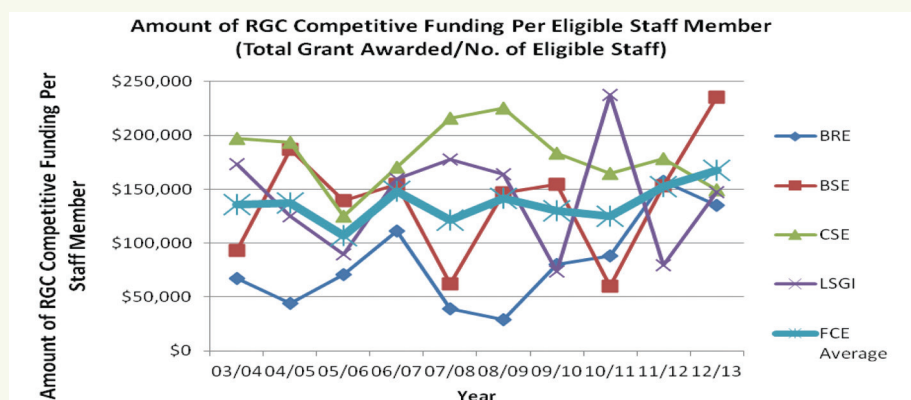


Fig. 3: Comparison of amount of RGC competitive funding per eligible staff member between departments

圖三：學系間每名合資格教員獲研資局批出競爭性撥款的金額比較

Second, we are obliged to ourselves to make sure that the major rankings are properly done so that our efforts and achievements are well recognized. Last year, we were ranked 50th in "Civil and Structural Engineering" by QS and that was the only PolyU subject area in the top 50 of the world. As a result, I was recommended by our colleagues from the International Affairs Office (IAO) to attend the QS World University Rankings by Subject meeting held in June 2012 in Prague. At that meeting, I made a presentation criticizing heavily the approach adopted for ranking research performance (by citations per paper alone) and promoted the use of H-index for use in subject rankings. I was subsequently invited to join their Advisory Board, and had chances to further justify to them the use of the H-index in subject rankings. Having reviewed their 2013 methodology, I am pleased to note that this effort has brought about some positive effects as a number of welcome changes have been made to the subject ranking methodology, including the addition of the H-index as a research impact indicator. This example illustrates the necessity for us to do our part in imparting as much robustness as possible into such rankings.

I promised in my message in the December 2012 issue of this publication that I would offer a summary of the state of the Faculty in this issue. You should have already obtained part of the picture of the Faculty from the discussion above, which is however mainly concerned with our bright spots. We do have room for improvement in several important areas, and they are outlined as challenges for the next Dean.

Figure 3 shows the performance of the Faculty and that of each department in securing GRF (General Research Fund) grants of the RGC over the past 10 years. This figure has previously appeared in the December 2012 issue of this publication. For the 2009/2010 round, the RGC Engineering Panel adopted a much higher quality threshold for funding projects and funded more fully the best projects, which led to a success rate of around 25% instead of around 40% of the previous years for the whole Panel. As a result, the amount of funding per staff member received by the Faculty declined a little in 2009/2010 and declined a little further in 2010/2011. I am pleased to note that our performance as a Faculty has since re-bounced and our funding amount per staff member has now surpassed significantly that received in 2009/2010. The four departments performed at a similar level in the latest round although there were large performance disparities some years ago. I hope that the performance of all four departments will improve together in the years to come. The reason that I have provided these details here is because our success in GRF grants is becoming increasingly more important: by 2020/21, 50% of the R-portion of the block grant allocated to PolyU from the UGC (University Grants Committee) will be mainly determined by our success in GRF grants. A rough estimate is that, by then, if you win a GRF grant of HK\$1 million, you will bring to PolyU's budget of an additional HK\$2 million through the R-portion of the block grant. I foresee more competition in this area from other local universities.

The other 50% of the R-portion of the block grant will be determined by the Research Assessment Exercises (RAE). The next RAE will be conducted in 2014 and colleagues have been working hard preparing for it. Starting new research projects now to improve our RAE performance is probably too late, but I do urge all colleagues to properly document our achievements so that our efforts are duly recognized. In 2008, the Faculty set a threshold for satisfactory performance in research, and it is nice to note that this threshold prepares us well for the 2014 RAE.

I have mentioned earlier our aspirations for improving the intake quality of our students although we already have excellent students. We are advantaged in the sense that the construction industry in Hong Kong will remain booming over the next 10 years, and the mainland offers a huge market for our graduates for decades to come. Nevertheless, no efforts should be spared in improving the attractiveness of our programmes to both students and employers. For our PhD programmes, we admit some of the brightest students in the world, and we should provide them with an education that will equip them to become successful faculty members and industry leaders. Our PhD graduates have done very well in mainland Chinese universities, with many becoming respected professors in leading universities there. The Faculty recently held a research alumni event in Shenzhen which was attended by about 300 of our former research students and staff. In this issue, you will find a report on this event as well as a survey of our PhD graduates who currently hold faculty positions in internationally recognized universities outside China. Unless our PhD graduates are widely sought after as faculty members internationally, right after graduation or after some postdoctoral experience, there will always be some doubt over the true international esteem of our Faculty.

Over the past few years, we have moved substantially forward in establishing shared governance in the University based on a systematic committee structure and improved transparency. I am pleased that the Departmental and Faculty Staffing Committees set up for our Faculty a few years ago have now become part of the formal committee structure of the University. Indeed, a world-class institution needs to be built on a modern and progressive culture

在2012年12月那一期學院院刊，我承諾在今期對學院的情況作一總結。相信各位已從前文略窺一二，但除了這些亮點，學院在幾個重要範疇仍有改進空間，而這正是新院長的工作。

圖三顯示的是本院及各學系最近十年獲研資局「優配研究金計劃」撥款的情況，有關數字在上一期學院院刊已有提及。在2009/2010年度撥款週期，研資局工程學學科小組大幅提高了撥款門檻，質素最好的一批項目獲得較多資助，導致向小組申請撥款的整體成功率從之前幾年的約百分之四十下跌至約百分之二十五。本院科研人員所獲的人均撥款額，在2009/2010及2010/2011年度亦因此稍減。叫人欣喜的是，學院的整體表現其後拾級而上，到了今天，我們所獲的人均撥款已遠超2009/2010年度。數年前，四大學系的表現差距甚大，但在上一輪撥款週期已不相伯仲，希望它們日後再接再厲，同創佳績。詳述這些數據，是因為優配研究金對我們的重要性與日俱增：到了2020/21年度，大學教育資助委員會撥予理大的整體撥款中的半數科研資助，將主要與我們申請優配研究金的結果掛勾。粗略估計，屆時如獲優配研究金計劃資助港幣一百萬元，理大便可從教資會整體撥款的科研部分額外取得港幣二百萬元。我相信各本地大學在這方面的競爭將會加劇。

教資會整體撥款中另外半數科研資助，將由「研究評審工作」的結果決定。下一輪「研究評審工作」將於2014年展開，各同事正忙於準備。開展新項目來改善科研表現，大抵是遲了一點。當務之急反而是妥善報告研究成果，使我們的努力與付出得到肯定。本院在2008年制定了有關科研表現的要求——此舉應使我們能比較從容地應對2014年「研究評審工作」的挑戰。對此，我感到欣慰。

本院學生中，可造之材極多，但一如我以往所言，繼續提升學生素質乃長期目標。香港建造業未來十年仍會繼續興旺，內地市場更是機會處處，好景預計會持續數十年之久。雖然坐享優勢，我們仍需致力提升課程對學生和僱主的吸引力。以哲學博士課程為例，本院錄取的博士生不乏來自世界各地的才俊之士，我們有責任悉心栽培，助他們成為出色的學者或業界翹楚。事實上，很多博士畢業生在內地學界均有出色表現，不少更成為頂級大學裡受人敬重的教授。我們最近在深圳為曾經在本院從事研究工作的校友舉辦了一次活動，反應熱烈，接近三百位舊生和同事出席。今期院刊除有專文報道這項活動外，還刊載了針對現時在港澳及海外知名大學任職的博士生校友的調查結果。惟有我們培育的博士生在畢業或取得若干博士後科研經驗後大量獲各地學府聘用，才能彰顯本院的真正國際地位。

近幾年，由於有了清晰的委員會架構，加上透明度提高，大學在推行共同管治方面大有進展。本院數年前成立的學系及學院人事委員會，現已成為大學正規委員會架構的一部分。事實上，任何世界級學府，都必然建基於與時並進的文化，在妥善保護私隱的前提下，讓同事參與管治和致力提高決策過程的透明度。這也是大學管理高層倡議的政策，我相信日後將有更可觀的進展。

我在上一期院刊中已提及有礙學院發展的一些掣肘，包括(a)基於歷史原因，理大獲分配的政府資助博士生學額較少；(b)缺乏土地興建實驗室及大型設施；以及(c)政府科研撥款不足。由於大學教育資助委員會調整政策，第一項局限已漸有改善。至於餘下兩項，則有待本地高等教育界及有關人士合力解決。

除了上述主要難題，正如我在上一期院刊中所言，尚有其他挑戰有待新院長和校方籌謀。這包括保持在國際學術界的競爭力，在所有課程進一步添加國際元素，持續優化四年制本科課程，因應非本地生急增的新形勢改革碩士組合課程，以及加強具影響力的跨學科研究。身為可持續城市發展研究院院長，我衷心希望為應對最後一項挑戰盡綿薄之力。

以院長身份正式向各位道別前，謹此感謝學院全體同事，尤其是各學系現任/前任系主任和幾位副院長六年來對我的支持和諒解。我們對一些事情的看法也許不盡相同，但彼此均以學院的福祉為重。只要本著這個信念，上下齊心，學院的前景必然一片光明。

我也要感謝所有支持和協助學院發展的同事及各界友好，希望你們日後繼續對學院鼎力襄助。對潘、唐兩位校長、常務副校長陳正豪教授和各位副校長，我更是由衷感銘——有賴他們把可持續城市發展確立為大學的重點發展領域，「可持續城市發展研究院」才得以成立。校董會主席楊敏德女士不但對有關研究深感興趣，更大力支持。感激之情，難以言喻。我懇切期盼研究院能創出一番成績，不負校方厚望。

回顧六年院長任期，由李筱怡女士領導的院務處同事一直對我非常支持，很多時候，當我準備下班回家，她和其他同事仍在埋頭苦幹；私人助理馬瑞英女士文靜細心，助我事事兼顧，準時出席各大小活動；高贊明教授過去幾年一直擔任我的高級顧問，他充滿睿智，對我時加鼓勵，學院的一些正確決策（如成立「可持續城市發展研究院」）均有其影子；安禮信教授的寶貴意見，亦使我獲益良多。安教授雖然榮休多年，但和夫人依然心繫本院，視香港為第二故鄉。我與上任院長博爾文教授也時有通信，知道他雖身在英國，對本院的發展仍非常關心。

說了這麼多，終歸到了正式道別的時刻！雖然卸任院長，但我仍會透過其他渠道與大家聯繫。衷心祝願學院發展蒸蒸日上，各位生活愉快、工作順利！

that places great emphasis on shared governance by colleagues and transparent decision-making processes (as long as personal privacy is duly protected). I am confident that we will continue to make progress in this regard as advocated by the Senior Management of the University.

I have mentioned some constraints on our future development in the previous issue of this publication. These include: (a) the smaller number of government-funded PhD studentships allocated to PolyU due to historical reasons; (b) the lack of space for our laboratories and major facilities, and (c) the inadequacy of government funding for research. The first limitation is being overcome slowly through policy changes implemented by the University Grants Committee, but the other two limitations are challenges that need to be tackled through the collective efforts of many people within and outside the higher education sector of Hong Kong.

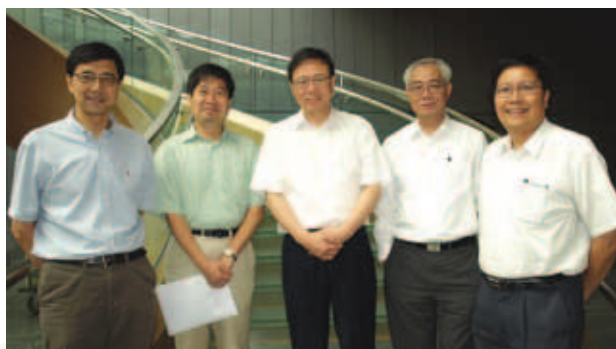
Apart from the major constraints mentioned above, we will face some other challenges in the future as I have outlined in the previous issue; we look to the leadership of the new Dean and the University for a solution. These challenges include maintaining the international competitiveness of our academic positions, further enhancing the international dimension of all our programmes, continuous improvement of our 4-year educational system for undergraduate programs, revamping our MSc programs to cater for rapid increases in the non-local student population, and the strengthening of multi-disciplinary research of major impact. As the Director of the Research Institute for Sustainable Urban Development (RISUD), I hope to contribute to addressing the last of these challenges.

Before I bid a formal farewell to all of you as Dean of the Faculty, I would like to extend my sincere personal thanks to all colleagues in the Faculty, particularly the current/former Heads and Associate Deans, for their understanding and support for me over the past 6 years. You may have different views from me over certain issues, but we all care about the well-being of the Faculty. As long as all members of the Faculty are concerned about the future of the Faculty, we will have a bright future.

I would also like to thank all my colleagues and friends both within and outside the University for their support and contributions to the development of the Faculty. I hope that your goodwill and generosity will continue in the future. In particular, I would like to extend my gratitude to President Poon and President Tong as well as the Senior Management of the University for their support, especially for their commitment to the area of sustainable urban development as a strategic focus area of the University, which led to the eventual establishment of RISUD. Our Council Chairlady, Ms Margie Yang, has taken a special interest in and offers strong encouragement for sustainable urban development research, which is greatly appreciated. I hope that the University's investment in RISUD will bring good returns.

When I look back at my six-year tenure as Dean of the Faculty, I feel deeply grateful to the relentless support from colleagues of the Faculty Office led by Ms Carmen Lee. Many a day, Carmen and other colleagues were still working hard in the office when I left the Faculty office for home. My personal assistant, Ms Joanne Ma, worked hard and quietly to ensure that I attended to every task and appeared when and where I should appear. Prof. J.M. Ko supported me over the last few years as my Senior Advisor; his wisdom and encouragement have often been behind the better initiatives of the Faculty, such as the recent establishment of RISUD. I also benefited greatly from the advice of Prof. Mike Anson; Prof. and Mrs Anson still care greatly about the Faculty and still call Hong Kong their second home many years after Prof. Anson's retirement. I know from my communications with my predecessor, Prof. Andrew Baldwin, who is now in the UK, that he also cares very much about the well-being of the Faculty.

Good-bye from me from the Dean's office for now, but I will remain in touch with many of you via other channels. I wish the Faculty a very bright future, and all of you happiness and success in your future endeavors.



(from left to right) Prof. Geoffrey Shen, Prof. Li Xiangdong, Prof. Teng Jin-Guang, Prof. Ko Jan-Ming, and Prof. Albert Chan



(from left to right) Prof. Ko, Prof. Anson, Prof. Baldwin, and Prof. Teng

Research & Technology Transfer

研究與技術轉移

PolyU's performance in civil engineering ranks among top 20 in the world

In the latest Quacquarelli Symonds (QS) World University Rankings by subject, The Hong Kong Polytechnic University (PolyU) has made a great leap to the 16th place in 2013 from the 50th place in 2012 in the discipline of civil and structural engineering.

More impressively, PolyU tops the world in terms of the two objective research performance indicators – citations per paper and the H-index which measures both the scientific productivity of our researchers and the apparent scientific impact of our research.

Professor Jin-Guang Teng, Dean of the Faculty of Construction and Environment, was pleased to note that PolyU has been ranked among the world's best institutions in the subject area of civil and structural engineering and on par with such as Imperial College, University of California at Berkeley, and the University of Tokyo. He further explained that the subject area is broadly defined by the ranking methodology to include such sub-disciplines as Environmental Engineering and Construction Management. The ranking is therefore a significant recognition for the hard work of colleagues not only in the Department of Civil and Environmental Engineering but also in the entire Faculty.

理大土木工程表現躋身全球二十強

根據按學科表現釐定的最新一輪Quacquarelli Symonds(QS)世界大學排名，香港理工大學(理大)在土木及結構工程領域的位置，從二零一二年的第五十位躍升至二零一三年的第十六位，進展一日千里。

更令人刮目相看的是，理大在兩個客觀的科研表現指標——「論文平均引用次數」及衡量科研人員論文質量及研究影響力的「H-指數」——均位居全球之首。

對於理大在土木及結構工程領域躋身世界前茅，與英國倫敦帝國學院、美國加州大學柏克萊分校、日本東京大學等頂級學府並駕齊驅，建設及環境學院院長滕錦光教授深感欣慰。他指出QS排名採用土木及結構工程的廣義，因此涵蓋環境工程及建築管理等分科。理大今次得此佳績，固然有賴土木及環境工程學系的同事努力耕耘，學院其他學系的同事亦居功不少。

滕教授說：「謹此感謝學院同仁、各界友好，以及大學內外合作夥伴的支持。取得佳績固然可喜，但大家絕不會因此自滿。展望未來，我們會認清本身的長處和不足，全力以赴，希望百尺竿頭、更進一步！」

"I would like to thank all colleagues of the Faculty, as well as friends and colleagues within and outside the university, for this achievement," said Professor Teng. "We will not rest on our laurels; knowing where our strengths and weaknesses lie, we will do our best to further improve our performance in the future," he added.

The Faculty of Construction and Environment at PolyU is the only one of its kind in Hong Kong that is fully devoted to supporting the advancement of construction industry. It is home to 110 academic staff members at Assistant Professor and above levels who work with nearly 400 full-time researchers (including MPhil and PhD students) on a wide range of problems to address some of the major issues facing the society such as building energy efficacy, air quality and solid waste management.

The Faculty's research reputation is evidenced by its success in securing competitive funding from the General Research Fund (formerly known as the Competitive Earmarked Research Grants) of the Hong Kong Research Grants Council (RGC) and attracting the best and brightest PhD students supported by the Hong Kong PhD Fellowship Scheme. The number of grants they won has consistently been around or above 40% of all grants awarded by the Hong Kong Research Grants Council in this category since 1994/95. The four departments of the Faculty have also attracted 27 PhD Fellowship recipients as compared to 16 who have joined the four other civil engineering/construction departments in sister institutions since the launch of the PhD Fellowship Scheme in 2009.

Launched in 2011, the annual QS World University Rankings by Subject is a comprehensive guide to a range of popular subject areas. The rankings series reveals the top 200 universities in the world for 30 individual subjects.

Donation by Dr Yin to promote cross-straits collaboration

A sizable donation of HK\$10 million has been made to the Research Institute for Sustainable Urban Development (RISUD) by Kwong Wah Education Foundation, according to the wishes of Dr Samuel Yin of Ruentex Group. Beginning in 2013, HK\$1 million has been set aside each year for the next 10 years to fulfill the following objectives:

- To strengthen collaboration and exchanges between The Hong Kong Polytechnic University and National Taiwan University, Tsinghua University (Beijing), Tongji University (Shanghai), Sichuan University in the area of sustainable urban development (including civil engineering, environmental engineering, construction technology etc.)
- To form a close-knit network of complementary expertise with the above universities, becoming an Asian hub for education and cutting-edge research in sustainable urban development, particularly in civil engineering research and technology development

理大建設及環境學院是香港獨一無二、以提升建造業水平為己任的大學學院，現有一百一十位助理教授或以上職級的教員，以及接近四百位全職科研人員(包括哲學碩士及哲學博士生)。他們的研究範圍十分廣泛，如建築物節能、空氣質素、固體廢物管理等，更屬社會必須正視的重大議題。

建設及環境學院的科研聲譽卓著，長期獲香港研究資助局的優配研究金計劃(舊稱「角逐研究用途補助金」)資助，又透過「香港博士研究生獎學金計劃」汲納最優秀的人才入學。在建築及相關學科的組別，學院自一九九四至一九九五年度起獲資助的項目宗數，穩佔香港研究資助局批出撥款宗數的四成或以上。「香港博士研究生獎學金計劃」於二零零九年推出以來，本院四大學系已錄取二十七位獎學金得主，選擇其他姊妹院校四個土木工程/建築相關學系的博士生則有十六人。

QS世界大學學科排名榜始創於二零一一年，每年均會在三十個熱門學科評選表現最佳的全球首二百家大學，資料詳盡全面。

尹衍樑博士捐款千萬港元推動兩岸學術合作

可持續城市發展研究院(RISUD)最近喜獲潤泰集團總裁尹衍樑博士，透過其創立的台灣光華教育基金，捐出一千萬港元，用以推動兩岸的學術合作。按照尹博士的意向，基金於2013年起的十年內，每年均會預留一百萬港元資助一系列活動，以達致下述計劃目標：

- 加強香港理工大學和臺灣大學、清華大學(北京)、同濟大學(上海)、四川大學在可持續城市發展領域(包括土木工程、環境工程、建築技術等學科)的交流與合作，共同推動可持續城市發展。
- 透過香港理工大學與上述各大學的共同努力，優勢互補，構成一個緊密聯繫的網絡，打造成為亞洲在可持續城市發展領域，特別是土木工程技術與學術方面的高端研究及教育中心，在國際上發揮先導作用。

- To contribute to society by sharing experiences and exchanging expertise between PolyU and the above universities in enhancing the quality of urban development, achieving breakthroughs in the areas of environmental protection, energy efficiency, earthquake engineering etc.
- To nurture a number of world-class scholars and researchers from the region who will have outstanding knowledge and practical experience to assume important roles in the sustainable development of future cities.

Part of the donation will be used to support 2 PhD students every year who will be jointly supervised by professors from two or more of the five partner universities. An annual workshop for professors and a summer school for postgraduate and senior undergraduate students from these universities will also receive financial support from this donation. Many thanks to Dr Samuel Yen-Liang Yin for his generosity.

- 藉著香港理工大學與上述各大學的專家交流與經驗分享，進一步提升城市建設的結構質量，在環保、節能、抗震等技術方面取得更多突破，為人類社會作出貢獻。
- 為兩岸三地培訓相當數量在土木工程方面具備卓越知識與實戰經驗的世界級學者和科研人員，肩負未來社會在可持續城市發展方面的工作重任。

每年，將招收兩名聯合培養博士生，學生由各夥伴大學招收，與香港理工大學合作培養。另外，部分捐款則會用以舉辦為學者而設的年度工作坊，以及以研究生和高年級本科生為對象的暑期課程。

毫無疑問，不少學者和學生都會因此受惠。謹此再次感謝尹博士的慷慨捐助。

Establishment of a PolyU-HIT Research Centre for Sustainable Water Environment

Background

The Department of Civil and Environmental Engineering (previously known as the Department of Civil and Structural Engineering) at PolyU has had a long history of research collaboration with the School of Municipal and Environmental Engineering at the Harbin Institute of Technology (HIT) in the area of water and wastewater treatment technology since the late 90s.

HIT successfully established a State Key Laboratory of Urban Water Resources and Environment (SKLUWRE) in 2007, while the Research Institute for Sustainable Urban Development (RISUD) was established by PolyU in 2012.

As SKLUWRE and RISUD have extensive mutual interests in research areas relevant to the sustainable development of urban water environment, they both stand to benefit from one another by sharing different strengths of expertise and research disciplines. To enhance inter-disciplinary research and integrate existing research strengths, a joint venture named "PolyU-HIT Research Centre for Sustainable Urban Water Environment" has been recently established after an agreement was formally signed by both institutions for an initial period of 5 years.

Aim and Objectives

This research centre is aimed at promoting research collaboration between SKLUWRE and RISUD by fully utilizing existing resources of their different research strengths and complementary research capabilities of a sizable pool of researchers from both institutes, with the main objectives of:

理大與哈爾濱工業大學成立可持續城市水環境研究中心

背景

在水科技及廢水處理技術方面，理大土木及環境工程學系(前稱土木及結構工程學系)自上世紀九十年代末期，已跟哈爾濱工業大學(哈工大)的市政環境工程學院進行科研合作，歷史悠久。

2007年，「城市水資源與水環境國家重點實驗室」(SKLUWRE)在哈工大成立；而理大亦於2012年設立了「可持續城市發展研究院」(RISUD)。

SKLUWRE與RISUD在可持續發展城市水環境的科研領域上，有很多共同關心的課題。假如薈萃雙方的人才和專長，必然可收互惠互利的效果。為促進跨學科研究和結合科研專長，雙方簽署了首階段為期五年的正式協議，成立「香港理工大學-哈爾濱工業大學可持續城市水環境聯合研究中心」。

目標

成立聯合研究中心，旨在促進SKLUWRE與RISUD的科研合作，善用現有資源，充分發揮彼此專長，薈萃雙方研究人員的力量，取長補短。其主要目標包括

- (1) applying for large research grants from HK and mainland China such as the RGC-NSFC Joint Research Scheme and some national-level research projects such as 973 and 863,
- (2) joint supervision of PhD students and exchange of research staff between the two institutes,
- (3) linking our research collaborations with the top universities and research institutions in the world, and
- (4) eventually establishing a Partner State Key Laboratory in Hong Kong.

Main research areas for collaboration

Three main research areas of mutual interests have been identified below:

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

Organization and management

A management committee has been set up with 6 key members drawn from both institutes as follows:

	HIT	PolyU
Director	Prof. Yujie FENG	Prof. Xiangdong LI
Deputy Director	Prof. Yu TIAN	Prof. Wei CHU
Secretary	Dr Wei QIU	Dr Daniel TSANG

Activities of the collaboration:

- (1) Joint applications for large research grants in Hong Kong and mainland China;
- (2) Joint applications for national-level consultancy projects;
- (3) Joint supervision of PhD students and exchange of research staff (about 3-6 each year);
- (4) Joint organization of international conferences once every 2-3 years and a number of research workshops/forums to be held alternatively in Hong Kong and Harbin.

- (1) 申請香港及內地的大額科研撥款，如「國家自然科學基金委員會及香港研究資助局聯合研究計劃」，以及973、863等國家級科研計劃；
- (2) 聯合監督博士生及交換研究人員；
- (3) 把中心的研究項目與世界頂級大學及科研機構接軌；以及
- (4) 最終在香港成立國家重點實驗室的夥伴實驗室。

主要科研合作領域

雙方同感興趣的三大科研領域包括：

- (1) 開發兼具循環用水、發電及資源再生三大功能的新式廢水處理技術；
- (2) 應用空間遙感科技大範圍監測及模擬區域水污染情況；
- (3) 環境污染物透過界面從空相或地／土相到水相的異質傳輸

架構及管理

聯合研究中心已設立有六位主要成員的管理委員會，雙方各佔三人，名單如下：

	哈爾濱工業大學	香港理工大學
主任	馮玉杰教授	李向東教授
副主任	田禹教授	朱威教授
秘書	邱微博士	曾超華博士

合作內容：

- (1) 聯合申請香港及中國內地的大額研究撥款；
- (2) 聯合申請國家級的顧問項目；
- (3) 聯合監督博士生及交換研究人員（每年三至六人）；
- (4) 每兩至三年聯合籌辦國際會議一次，以及輪流在香港及哈爾濱舉辦科研工作坊／論壇。

HK PhD Fellowships 2013/14

The Faculty of Construction and Environment is pleased that 8¹ incoming postgraduates in the 2013/14 academic year will be supported in their studies by the Hong Kong PhD Fellowship Scheme, which was launched in 2009 by the Research Grants Council to attract talented students without regard to their race or nationality to study for their PhDs in a local tertiary institution. Awarded based on academic merit, the Fellowship provides a monthly stipend of HK\$20,000 (approximately US\$2,600) and an annual travel allowance of HK\$10,000 (approximately US\$1,300). Tuition fees are also waived for the awardees. Below are their names, their proposed research projects, and their supervisors.

2013/14 年度香港博士研究生獎學金計劃

在2013/14學年，將有八¹名「香港博士研究生獎學金計劃」的得獎人入讀建設及環境學院。此計劃由香港研究資助局於2009年推出，旨在吸引全球優才來港修讀博士學位。審批時只考慮學業成績，不問種族或國籍。獎學金得主不但無需繳付學費，還可得到每月港幣二萬元津貼（約二千六百美元）及每年港幣一萬元（約一千三百美元）的會議及研究活動交通津助。有關今次的得獎者名單、其導師及暫定研究專題，請參閱下表。

Department 學系	Name of Awardee 得獎博士生	Name of Supervisor 論文導師	Title of proposed research 暫定研究專題
BRE 建築及房地產	GAO Ran 高然 	Prof. Albert Chan 陳炳泉教授	Relationship between Internationalization and corporate performance of Chinese construction enterprises 中國建築企業國際化與其表現的關係研究
BRE 建築及房地產	GUO Shan 郭珊 	Prof. Geoffrey Shen 沈岐平教授	Low-carbon building: A systems evaluation framework based on multi-scale input-output analysis 低碳建築：建基於多尺度投入－產出分析的系統評估架構
BRE 建築及房地產	MOK Ka Yan 莫嘉欣 	Prof. Geoffrey Shen 沈岐平教授	Analysing stakeholder-organization relationships in mega construction projects: a social network approach 從社會網絡角度分析特大建築項目中持份者與機構的關係
BSE 屋宇設備工程	WU Yan 吳妍 	Prof. J.L. Niu 牛建磊教授	Numerical study on the dynamics of human wake and its influence on indoor contaminant transport and inhaled air quality 人體走動尾流對室內污染物傳輸及吸入空氣質素的影響的數值研究
CEE 土木及環境工程	HU Rongpan 胡榮攀 	Prof. Y.L. Xu 徐幼麟教授	Structural health monitoring for long-span suspension bridge 長跨度懸索橋的結構健康監測
CEE 土木及環境工程	WANG Jiji 王吉吉 	Prof. J.G. Teng 滕錦光教授	Elliptical FRP-confined steel-reinforced concrete columns subjected to eccentric compression 承受偏心壓縮的橢圓形纖維強化塑料圍束鋼筋混凝土柱研究
CEE 土木及環境工程	XIE Xiao Guang 謝曉光 	Prof. J.G. Teng 滕錦光教授	Elliptical FRP tube-confined reinforced concrete columns subjected to seismic loading 承受地震荷載的橢圓形纖維強化塑料管加固混凝土柱研究
LSGI 土地測量及地理資訊	ABBAS Sawaid 	Prof. J. Nichol 李真教授	Agro-pastoral ecosystem dynamics in context of climate variability and grazing practices in upper Indus basin 印度河流域上游農牧生態系統在氣候變化及放牧習慣影響下的動態

¹ One has declined the offer due to a prior acceptance of another scholarship.

¹ 另有一人因已接受另一獎學金而放棄入讀理大。

ITF funds projects of Faculty staff

The Faculty had 4 projects funded by the Innovation and Technology Fund (ITF) in 2012. Below are the details:

本院學者獲「創新及科技基金」資助之科研項目

在2012年度，本院有四個項目獲得政府的「創新及科技基金」資助，詳情如下：

Project Coordinator 項目統籌	Department 學系	Project Title 項目名稱	Amount Awarded 創新及科技基金資助額	Total Project Cost 項目總額 (累計其他資助來源)
Dr Jian-guo Dai 戴建國博士	CEE 土木及環境工程	Development of thin wall panels based on basalt textile reinforced geopolymer for sustainable building construction 基於玄武岩纖維編織網增強地質聚合物的薄型牆板綠色建材製品的開發	\$986,700	\$986,700
Prof. Heng Li 李恆教授	BRE 建築及房地產	Location-based Technologies for Asset Tracking and Risk Management 建基定位技術的資產追蹤及風險管理	\$8,659,385	\$11,244,502
Prof. Kwok-fai Chung 鍾國輝教授	CEE 土木及環境工程	Enhanced durability and mechanical performance of structural steel members using an innovative galvanization process 加強鋼構件鍍層的耐久性及機械性能的創新鍍鋅鋁合金技術	\$845,825	\$1,691,650
Dr Agachai Sumalee Agachai Sumalee 博士	CEE 土木及環境工程	Algorithm for bus arrival time prediction from crowd-source smart phone data 應用眾包智能手機數據的巴士到站時間預測算法	\$165,600	\$391,200

Projects supported by CII-HK/ PolyU Innovation Fund

To support innovative research projects related to the construction process and/ or construction management, the Construction Industry Institute – Hong Kong (CII-HK)/ PolyU Innovation Fund was set up in 2009 with a HK\$ 4 million donation from CII-HK and a matching amount from PolyU. For 2013, it is supporting, wholly or in part, the following 6 projects:

- 1. Project Title:** Framework for quantifying the Transaction Costs (TCs) of the Green Building (GB) project delivery: A case of Hong Kong Real Estate Development Process (REDP)
- Investigators:** Prof. Edwin CHAN, BRE
Dr Lennon CHOY, BRE
Prof. Ghani KHALID (Universiti Teknologi Malaysia, Overseas Collaborator)
- Amount Awarded:** \$300,000.

The research project aims to develop a framework for quantifying TCs of GB and confirm the typology and chronology of transaction costs (TCs) incurred in the real estate development process (REDP) of green building delivery in Hong Kong. The prototype framework from this proposed research has the potential of leading to a bigger scale of comparative research with our collaborating research institutions of Universiti Teknologi Malaysia (UTM), Malaysia and Institut Teknologi Bandung, Indonesia.

六科研項目獲香港建造業研究學會 一理大創新基金撥款

為了鼓勵學者開展與建築流程及工程管理有關的創新研究，香港建造業研究學會與理大各出資港幣四百萬元，於2009年合作成立創新基金。在2013年，有六個項目獲基金資助全部或部分經費，現分述如下：

- 1. 項目名稱：** 環保建築項目的交易成本(TCs)量化框架：香港房地產發展過程(REDP)案例研究
- 研究員：** 陳漢雲教授 (建築及房地產學系)
蔡鴻達博士 (建築及房地產學系)
Ghani KHALID教授 (馬來西亞科技大學、海外合作夥伴)
- 資助額：** \$300,000.

這項研究旨在制定一套用以量化環保建築交易成本的框架，以及確定在香港發展環保建築的過程裡所涉及的交易成本類型及出現先後。得出的框架原型，或會用於與馬來西亞科技大學及印尼萬隆科技學院合作進行較大型的比較研究。

- 2. Project Title:** Strengthening of reinforced concrete columns by high performance ferrocement using dry-spraying technology
- Investigator:** Dr Eddie LAM, CEE
- Amount Awarded:** \$300,000.

The objective of this study is to develop a method of strengthening square reinforced concrete columns by high performance ferrocement ("HPF") using dry spraying technology. There are two components of the objectives. First, establish a confinement theory on strengthening square (and rectangular) reinforced concrete columns by HPF. Second, develop a method to apply HPF in replacement of the concrete cover using dry spraying technology. To achieve the Objectives, experimental studies, data analysis and desk top studies will be carried out by (a) conducting loading tests on full-scale square columns to ascertain the load carrying capacities of the existing columns; (b) designing HPF with high tensile strength and conduct direct tensile tests on HPF specimens implemented using dry spraying technology; (c) conducting loading tests on full-scale square columns strengthened by HPF using dry spraying technology and (d) developing design procedure and guidelines on selecting the appropriate HPF to meet the structural demand.

- 3. Project Title:** The Impact of Construction-induced Ground Borne Vibration and Noise to Sensitive Structures and Facilities
- Investigators:** Dr Songye ZHU, CEE
Prof. KF CHUNG, CEE
Dr Yong XIA, CEE
- Amount Awarded:** \$300,000.

The objectives of the project are (a) to quantify vibration source strength for a variety of construction methods through on-site vibration monitoring; (b) to establish semi-empirical propagation models for ground-borne vibration and noise with consideration of frequency-dependent attenuation and probability distributions; (c) to simulate vibration levels of generic buildings and underground pipelines induced by construction activities with consideration of plan distance, vibration source depth, soil conditions, soil-structure interactions, non-uniform ground excitations; (d) to assess the impact of various construction activities with regard to three limit states: structural safety, human feeling and sensitive facilities and (e) to evaluate the effectiveness of various vibration mitigation measures in protecting sensitive equipment.

- 4. Project Title:** Recycling Timber and Bamboo Construction Waste into Activated Carbons and Wood-Plastic Composites
- Investigators:** Dr Daniel TSANG, CEE
Prof. Chi-Sun POON, CEE
- Amount Awarded:** \$300,000.

The overarching goal of this project is to transform the non-inert construction waste materials (timber/bamboo waste, in particular) into useful resources for environmental and construction utilization in Hong Kong. To ensure there will be a measurable success of the project, specific objectives at different stages are suggested as follows: (a) Identify operational challenges and critical success factors for timber/bamboo waste recycling; (b) Evaluate the economic, environmental, and sustainable implications of timber/bamboo waste management options; (c) Develop the optimal conditions for converting timber/bamboo waste into activated carbons for environmental applications and (d) Determine the best mixture compositions for producing recycled wood-plastic composites for construction applications.

- 2. 項目名稱:** 利用複合砂漿鋼筋網結合乾噴技術加固鋼筋混凝土柱
- 研究員:** 林少書博士 (土木及環境工程學系)
- 資助額:** \$300,000.

這項目旨在研發一個利用複合砂漿鋼筋網結合乾噴技術強化鋼筋混凝土柱的方法。研究有兩組目標：1) 確立複合砂漿鋼筋網強化矩形鋼筋混凝土柱的理論；2) 研發利用乾噴技術及複合砂漿鋼筋網取代混凝土保護層的方法。為達致上述目標，研究員會進行實驗、數據分析及參考文獻，(a) 對原尺寸方柱進行負載測試，以確定負載能力；(b) 設計具高拉力的複合砂漿鋼筋網，並對使用乾噴技術製做的複合砂漿鋼筋網樣本進行拉力測試；(c) 對使用複合砂漿鋼筋網結合乾噴技術強化的原尺寸方柱進行負載測試；以及 (d) 就如何選擇合適複合砂漿鋼筋網配合結構要求撰寫設計指引。

- 3. 項目名稱:** 建築施工引致的地面振動及噪音對敏感結構及設施的影響
- 研究員:** 朱松曄博士 (土木及環境工程學系)
鍾國輝教授 (土木及環境工程學系)
夏勇博士 (土木及環境工程學系)
- 資助額:** \$300,000.

這項研究的目標包括 (a) 通過實地監測振動，量化各種施工方法所造成的振源強度；(b) 建立地傳振動及噪音半經驗傳播模型，同時考慮與頻率相關的衰減以及概率分佈情況；(c) 通過考慮平面距離、振源深度、土壤特性、土壤與結構的相互作用，以及不一致地面運動等因素，模擬建築工程對一般樓宇及地底管線所造成的振動；(d) 從結構安全、人體感覺及敏感設施這三項結構極限狀態，評估各類建築施工過程所造成的影響；以及 (e) 評估用以保護敏感設施的各種減振隔振措施的成效。

- 4. 項目名稱:** 把建築廢料中的木材及竹材轉化為活性碳及木膠複合物
- 研究員:** 曾超華博士 (土木及環境工程學系)
潘智生教授 (土木及環境工程學系)
- 資助額:** \$300,000.

這項目旨在把仍有生命的建築廢料 (特別是廢棄的木材及竹材) 轉化為有用資源，在香港作建設環境及工程之用。為確保能切實評估研究成效，項目在不同階段各有特定目標：(a) 辨識回收木材/竹材廢料的實質困難和成功條件；(b) 從經濟效益、環保及持續性三方面評估各個木材/竹材廢料管理方案；(c) 就轉化木材/竹材廢料為活性碳作建設環境之用擬訂理想方案；以及 (d) 就生產建築用再造木膠複合物訂定最佳成份混合比例。

5. Project Title: Development of a novel solar heat-reflective insulation material based on hollow glass micro-balloon cores with hierarchical porous rutile TiO₂ coating

Investigators: Prof. Hongxing YANG, BSE
Dr Lin LU, BSE
Dr Yuanhao WANG, BSE
Dr Hai WANG, BSE

Amount Awarded: \$399,400.

The main aims and objectives of this project are to develop a novel SHR1 based on HGT for the construction industry and to demonstrate the technical feasibility of manufacturing the novel paints using processes compatible with volume production. The objectives are summarized as follows: (a) To develop a novel synthesis strategy of the highly crystalline rutile type HOT by using hydrothermal reaction method combined with the rotary evaporation method and sol-gel method. (b) To produce a series of the SHRI prototype products based on solar heat-reflective insulation materials that have the reflectivity of at least 95%. (c) To gain an in-depth understanding of the growth mechanism of highly crystalline TiO₂ hierarchical nanostructure by combining the characterization of X-ray diffraction (XRD), field emission scanning electron microscopy (FESEM), transmission electron microscopy (TEM) and other characterization technology, such as Raman spectroscopy and Fourier transform infrared (FTIR). (d) To study the relationship between the heat reflectance and heat insulation of the developed rutile HOT composites and different TiO₂ film thickness via the UV-Vis-NIR reflectivity and FTIR. (e) To analyze and evaluate the effects of reflected heat and infrared reflectance by establishing a mathematical model of interface between the TiO₂ and hollow glass micro-balloons. (f) To use the information above to identify the key process parameters impacting on production performance in both heat insulation and heat reflectance. (g) To develop an instrument for measuring these Parameter.

6. Project Title: Development of an innovatively anchored stone cladding system for building construction

Investigators: Dr Jian-Guo DAI, CEE
Dr Zhen LENG, CEE

Amount Awarded: \$500,000.

The proposed project aims to establish an innovatively anchored stone cladding system for building construction, in which the stone panel acts as the permanent formwork of concrete, while the dovetail grooves made in the inner side of the stone panel facilitate mechanical connection between the stone panel and the hardened concrete. Hereafter the connection is termed as "the stone-to-concrete connection" for brevity. The focus of this research project is the strength and durability of the connection, which is the key to the success of the cladding construction technology to be established. The specific objectives of the project are as follows: (a) To design and optimize the geometry of dovetail grooves to realise a reliable self-locking connection between stone panels and concrete; (b) To investigate the durability of the stone-to-concrete connection subject to water immersion and freeze and thaw action; (c) To demonstrate the robustness of the optimized stone-to-concrete connection under tension and shear through full-scale tests; (d) To investigate the performance of reinforced concrete (RC) walls decorated with the new stone cladding system subjected to wind and seismic loading through full-scale tests; (e) To form construction guidelines for the innovatively anchored stone cladding system.

This is the final round of competition for the CII-HK/PolyU Innovation Fund, which will distribute a total of HK\$2,099,400 for the 6 projects above. Keep up the good work!

5. 項目名稱: 研發以塗上多孔金紅石二氧化鈦塗層的中空玻璃微珠為基礎的新式太陽能反射隔熱物料

研究員: 楊洪興教授 (屋宇設備工程學系)
呂琳博士 (屋宇設備工程學系)
汪遠昊博士 (屋宇設備工程學系)
王海博士 (屋宇設備工程學系)

資助額: \$399,400.

這項目的主要目的和目標，是為建造業研發一種以中空玻璃微珠為基礎的新式太陽能反射隔熱物料，以及證明大規模生產這種新式塗層的技術可行性。研究的具體目標如下：(a) 利用水熱法、旋轉濃縮/脫水法及溶膠凝膠法，研發多結晶金紅石型中空玻璃微珠的新合成方法；(b) 使用反射比最少達95%的物料生產一系列太陽能反射隔熱產品原型；(c) 綜合X射線繞射儀(XRD)、場發射掃描式電子顯微鏡(FESEM)、穿透式電子顯微鏡(TEM)、拉曼光譜儀及傅立葉轉換光譜儀(FTIR)所顯示的特性，深入了解多結晶二氧化鈦納米結構的晶粒成長過程；(d) 通過紫外光/可見光反射分析儀(UV-Vis-NIR)及傅立葉轉換光譜儀，研究金紅石中空玻璃微珠合成物及不同二氧化鈦薄膜厚度的熱反射比與隔熱關係；(e) 建立二氧化鈦與中空玻璃微珠的界面數學模型，藉以分析及評估反射熱能及紅外線反射係數的影響；(f) 利用上述資料辨識對隔熱及熱反射績效有影響的生產過程主要參數；(g) 研發用以量度上述參數的儀器。

6. 項目名稱: 研發用於建築工程的新式錨定石材牆面系統

研究員: 戴建國博士 (土木及環境工程學系)
冷真博士 (土木及環境工程學系)

資助額: \$500,000.

這項目旨在研發一種用於建築工程的新式錨定石材牆面，當中的石材板會用作混凝土的永久模板，石材板內側的燕尾槽則有助以力學原理接合石材板和變硬的混凝土(以下簡稱「石-混凝土接合界面」)。由於石-混凝土接合界面的強度與持久性是決定前述牆面建築技術成功與否的關鍵，故研究會以此為重點，其具體目標如下：(a) 設計及優化燕尾槽的線條，使石材板與混凝土能穩固地自行接合；(b) 測試石-混凝土接合界面在水淹和霜凍情況下的持久性；(c) 透過全尺寸拉張力測試檢視石-混凝土接合界面的強度；(d) 透過全尺寸測試檢視使用新式石材牆面的鋼筋混凝土牆在風荷載及地震荷載方面的表現；(e) 制定使用新式錨定石材牆面的施工指引。

這是創新基金最後一輪發放資助，上述六個項目合共獲撥款港幣二百零九萬九千四百元。

FCE Postdoctoral Fellowship Scheme 2012/13

To attract outstanding PhD graduates for world-class research, the Faculty of Construction and Environment recently launched a Postdoctoral Fellowship Scheme where candidates can apply to work on projects led by our academics. In its inaugural year, 5 projects have been selected for matching funding in 2012/13. Below are their details:

2012/13 年度「博士後研究獎學金計劃」

為鼓勵出色的博士畢業生從事達國際水平的高端研究，建設及環境學院特於2011/12年度推出「博士後研究獎學金計劃」，使申請者有機會在本院學者指導下進行專題研究。所需經費則由學院及有關學系等額分攤。在新學年裡，院方共接納了五宗申請，詳情如下：

Dept 學系	Principal Investigator 首席研究員	Co-Investigator(s) 研究員	PDF Candidate 博士後申請人	Project Title 研究專題	Decision and Amount of Matching Funding 資助安排
BRE 建築及房地產	Prof. Albert CHAN 陳炳泉教授	Dr Esther CHEUNG (HKU) 張泳沁博士 (香港大學) Dr Binqing ZHAI (Xian JITU) 翟斌慶博士 (西安交通大學)	Dr Irene WONG 王安蘭博士 	Evaluating the Economic, Social, and Cultural Impacts of Revitalizing Industrial Buildings in Hong Kong 評估《活化工廠大廈計劃》對香港經濟、社會、文化之影響	Supported BRE: \$157,500 FCE: \$157,500 資助金額 學系: \$157,500 學院: \$157,500
BSE 屋宇設備工程	Prof. J.L. NIU 牛建磊教授	Dr Fu XIAO (BSE) 肖賦博士 (屋宇設備工程學系)	Dr Shuo ZHANG 張朔博士 	Development of Advanced Thermal Energy Storage Technologies 先進熱能儲存技術的開發	Supported BSE: \$157,500 FCE: \$157,500 資助金額 學系: \$157,500 學院: \$157,500
CEE 土木及環境工程	Prof. Tao WANG 王韜教授	Prof. Scot T. MARTIN (SEAS) Scot T. MARTIN 教授 (哈佛大學工程及應用科學學院) Dr H. GUO (CEE) 郭海博士 (土木及環境工程學系)	Dr Zhe WANG 王哲博士 	Heterogeneous Production of Atmospheric Secondary Aerosol in Subtropical Hong Kong 亞熱帶香港大氣中二次氣溶膠的非均相生成過程	Supported CEE: \$157,500 FCE: \$157,500 資助金額 學系: \$157,500 學院: \$157,500
CEE 土木及環境工程	Prof. Y.L. XU 徐幼麟教授	N.A. 不適用	Dr Jia HE 賀佳博士 	Structural Health Monitoring and Damage Detection of Building Structures Subjected to Multiple Hazards Effects 受多重災害影響的建築物結構的健康監測及損傷檢測	Supported CEE: \$126,000 FCE: \$126,000 資助金額 學系: \$126,000 學院: \$126,000
CEE 土木及環境工程	Prof. X.D. LI 李向東教授	N.A. 不適用	Dr Junjun ZHANG 張君君博士 	Mercury Isotope Fractionation by Biological Transport in Aquatic Systems 水生生物中汞同位素分餾及環境意義	Supported CEE: \$163,500 FCE: \$163,500 資助金額 學系: \$163,500 學院: \$163,500

Congratulations to them all.

Applications for the Postdoctoral Fellowship Scheme are accepted all year round. Candidates must demonstrate a good track record in research and have received their PhD degrees within the last three years.

「博士後研究獎學金計劃」全年均接受申請。候選人必須有良好的研究往績，並於取得博士學位後三年內提出申請。

One-year Top-up Studentship Scheme benefits 10 postgraduates

The Faculty of Construction and Environment established the One-year Top-up Studentship Scheme in 2010 to encourage colleagues to admit strong PhD students using their external research grants. Between May 2012 and Feb. 2013, we have supported the following students, who are either in their first year of studies or will be beginning their studies later this year. Below are their names and their supervisors.

「博士生一年制補助獎學金計劃」再添十人受惠

建設及環境學院於2010年設立「博士生一年制補助獎學金計劃」，鼓勵同事善用校外研究撥款錄取優秀的博士生。在2012年五月至2013年二月，一共有十位同學受惠，部分人已開始首年課程，餘者亦會在本年稍後時間開課。詳情可參閱下表。

Name of Applicant 申請人		Degree 修讀學位	Dept 學系	Supervisor 導師	Status 詳情
Mr Ho Cheuk Yei 何卓爾		PhD 哲學博士	BSE 屋宇設備工程	Prof. SK Tang 鄧兆強教授	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Jia Jie 賈捷		PhD 哲學博士	BSE 屋宇設備工程	Dr Wai Ling Lee 李慧玲博士	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Ms Liu Jing 劉靜		PhD 哲學博士	BSE 屋宇設備工程	Prof. Wan-ki Chow 周允基教授	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Tang Yijia 唐奕家		PhD 哲學博士	BSE 屋宇設備工程	Prof. SK Tang 鄧兆強教授	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Xue Peng 薛鵬		PhD 哲學博士	BSE 屋宇設備工程	Prof. CM Mak 麥卓明教授	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr He Wenyu 賀文宇		PhD 哲學博士	CEE 土木及環境工程	Dr Songye Zhu 朱松曄博士	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Ni Pinghe 倪萍禾		PhD 哲學博士	CEE 土木及環境工程	Dr Yong Xia 夏勇博士	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Zeng Junjie 曾俊杰		PhD 哲學博士	CEE 土木及環境工程	Prof. Jin-Guang Teng 滕錦光教授	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Chen Biyan 陳必焰		PhD 哲學博士	LSGI 土地測量及地理資訊	Dr George Liu 劉志趙博士	Supported and allocated \$93,850 from FCE 獲學院批出 \$93,850
Mr Ye Lei 葉磊		PhD 哲學博士	LSGI 土地測量及地理資訊	Dr Bo Wu 吳波博士	Conditional offer and allocated \$93,850 from FCE 獲學院有條件資助、款額為 \$93,850

Fire safety a top concern of BSE researchers

Scholars at the Research Centre for Fire Engineering recently disseminated their findings from a HK\$1.2 million project that began in 2009. Led by Prof. Chow Wan Ki, Head of the Department of Building Services Engineering, they demonstrated the phenomenon of an "internal fire swirl" that is formed when the flow of air at the scene of a fire accelerates, which could be deadly in tall buildings. Together with the presence of interior walls, drafts of rising hot flames create conditions that facilitate the formation of "tornadoes," causing the fire to spread upwards three to four times more quickly. Funded by the Research Grants Council, the study aims to understand the characteristic effects of an internal fire swirl, and to find effective means to control it, which Prof. Chow hopes his team will be able to accomplish in the next two years. Their findings are expected to greatly upgrade fire safety in vertical shafts like elevator shafts and stairwells.

The Research Centre for Fire Engineering also conducts research on fire safety with respect to supertall buildings, subway stations built deep underground, long tunnels, large buildings, and green buildings. It has collaborated with universities in places like Harbin and Chengdu, besides jointly establishing a Research Centre for Fire Safety and Technology for Large Buildings with the University of Science and Technology of China in Hefei. Prof. Chow added they have been fortunate to have participated in evaluating fire safety design of monuments like the Bird's Nest and the Water Cube in Beijing for the Olympics since 2003. "With the rapid development of cities in the mainland, space and resources have become available for putting theory into practice, making our research more relevant to the real world."

With more than 30 years of research experience in fire engineering, Prof. Chow believes that standardizing the fire safety of supertall buildings is a future direction for researchers in this part of the world. Even though Hong Kong has high-rises that are over 300 metres, like the 118-storey International Commerce Centre and the 88-storey International Finance Centre, there are no special rules and guidelines on fire safety for these supertall buildings. More comprehensive measures for improvement in this regard still await further research.

Industry adopts findings of Construction Safety Research Group

A recent publication by the Construction Industry Council has established guidelines to improve site safety for working in hot weather, which include the provision of rest periods that is based to a large extent on the findings of a heat stress study by the Construction Safety Research Group headed by Prof. Albert Chan, Associate Dean of the Faculty of Construction and Environment. According to the research, the productivity of construction workers can be enhanced by appropriate rest periods during the hot summer months from May to September. Details of the findings have been published in a paper entitled "Optimizing work-rest schedule for construction rebar workers in hot and humid environment" in *Building and Environment*, an international journal of building science and its applications. Congratulations to Prof. Chan and his research team, whose meaningful work has implications beyond the ivory tower.

屋宇設備工程研究人員關注消防安全



理大消防工程研究中心最近公佈了一項始於2009年、耗資港幣一百二十萬元研究的結果。領導研究的屋宇設備工程學系系主任周允基教授表示，如火場位處高樓，當空氣加速流動，就可能造成致命的「室內火旋風」現象。若肇事地點建有內牆，上升熱焰所造成的氣流較易形成「火龍捲」，令火勢較平常快三至四倍向上蔓延。這個項目是由香港研究資助局撥款，旨在探討內火旋渦的特性、影響和有效控制方法。周教授期望其團隊能在未來兩年完成目標，屆時便可望大大改善升降機井、樓梯井等豎井式通道的消防安全。

消防工程研究中心的研究對象還包括摩天大樓、深層的地鐵車站、特長隧道、超高層樓宇及綠色建築。它與哈爾濱、成都等地的大學均有合作，除了夥同合肥的中國科學技術大學成立「大空間建築火災安全與技術研究中心」，更於2003年起，應邀協助政府當局批審鳥巢、水立方等北京奧運場館的消防安全設計。周教授說：「內地城市發展迅速，為團隊提供了實踐理論的場地和資源，使我們的科研工作更貼近現實世界的需要。」

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周允基教授研究消防安全逾三十年。他認為統一和規範超高樓宇的消防標準，乃未來的研究趨勢。香港雖擁有超過三百公尺高的摩天大樓，像樓高一百一十八層的環球貿易廣場及八十八層高的國際金融中心，但並無特別的消防守則和指引。因此，科研人員仍需加強這方面的研究，以制訂較全面的改善措施。

業界採納建築安全研究小組建議

為改善工人在炎熱天氣下的工地安全，建造業議會最近發佈了一套指引，建議給予工人合理時間休息。這項建議主要是參考本院轄下建築安全研究小組一項中暑研究的發現。該小組由建設及環境學院副院長陳炳泉教授領導。研究結果顯示在五月至九月的盛夏，讓建築工人適當地休息，可以提升他們的生產力。上述發現詳載於題為「理想規劃紮鐵工人在酷暑環境的工作及休息安排」的論文，並已在國際知名的建築科學及應用期刊《建築與環境》發表。陳教授和組員的研究成果獲業界採用，證明他們成功走出象牙塔，真正做到勵學利民。

Findings of RGC project published

The Construction Safety Research Group of the Research Institute for Sustainable Urban Development has recently completed a Research Grants Council funded project on "Safety Climate and its Impacts on Safety Performance of Repair, Maintenance, Minor Alteration and Addition (RMAA) Works".

Based on an analysis of 119 RMAA fatalities that happened between January 2000 and October 2011, falling from height was found to be the leading cause of deaths of workers conducting RMAA works in Hong Kong. Young bamboo scaffolders were particularly susceptible to fatal falls. More proper training for erecting bamboo truss-out scaffolds under different circumstances of RMAA works is recommended for them. Details of the study have recently been published in a paper in the journal *Safety Science*. Findings of the research were highly valued by the Task Force on Work Safety of Repair, Maintenance, Alterations and Additions (RMAA) Sites, one of the working groups appointed by the Construction Industry Council to promote RMAA works safety. Congratulations to the authors, Prof. Albert Chan and Dr Carol Hon, both of the Department of Building and Real Estate.

研資局資助項目公佈研究結果

可持續城市發展研究院屬下的建築安全研究小組，最近完成了一項獲研資局撥款的研究，主題是「安全氣候及其對維修、保養及小型改建/加建工程安全績效的影響。」

研究人員分析了上述工程在2000年一月至2011年十月間的一百一十九宗致命事故，發現「從高處墜下」是導致工人死亡的頭號原因，年輕的搭棚工人尤其高危。因此，研究報告建議為工人提供較多因應不同情況搭建竹棚的訓練。研究結果除已在《安全科學》期刊發表論文，還獲得建造業議會屬下的「維修、保養、改建及加建工地之工作安全專責小組」高度重視。上述論文是由建築及房地產學系的陳炳泉教授及韓嘉紅博士撰寫。恭喜兩位！

CEE academic delivers lecture at HK Science Museum

On the afternoon of 8 December 2012, Dr Lam Ka-se of the Department of Civil and Environmental Engineering gave a public lecture in Cantonese on regional air pollution in Hong Kong and the Pearl River Delta area. Supported by the Research Grants Council, his lecture at the Hong Kong Science Museum is part of a series to inform the public about scientific issues. In particular, he summarized the research and developments related to the air quality problems in the region in the last two decades, drawing from basic scientific research to understand and address them. The important role that government policies in Hong Kong and the Pearl River Delta region have played in controlling emissions was discussed. It is expected that roadside air quality will improve but the problems of smog and photochemical smog will deteriorate.



土木及環境工程學系學者於香港科學館講解空氣污染問題

2012年十二月八日下午，土木及環境工程學系的林嘉仕博士應邀於香港科學館主持一個粵語講座，講解香港及珠三角地區的空氣污染問題。該活動獲研資局贊助，是以公眾為對象的科普講座之一，旨在增進市民對科學的認知。林博士特別提到近二十年針對區內空氣質素的研究及改善措施，如何透過基礎科學研究了解和應付有關問題，又分析香港及珠三角地區的政府政策對控制廢氣排放有何重要影響。他預計路邊空氣質素雖可改善，但煙霧、尤其是光化學煙霧的問題卻會惡化。

BRE academics led technical seminar for contractors

On the morning of 1 December 2012, Dr Andy Wong and Dr Daniel Chan from the Department of Building and Real Estate led a technical seminar on the latest version of the New Engineering Contract (NEC) that facilitates the implementation of sound project management principles and practices. Delivered at the invitation of the Technical Committee of the Hong Kong Federation of Electrical and Mechanical Contractors (HKFEMC), they shared their expertise with an audience of more than 120, including some senior government officials and representatives from the member organizations of HKFEMC. In particular, Dr Wong outlined

- (1) the rationale for this new contract,
- (2) its core clauses, optional clauses, and components,
- (3) the roles and duties of various contracting parties, and
- (4) compared its crucial provisions with the common standard forms of contracts in Hong Kong.

Following his presentation, Dr Chan highlighted

- (1) the research findings on the benefits, difficulties, and factors for success in such contract/target cost contract,
- (2) the management and assessment of their risks,
- (3) case studies of relevant projects in Hong Kong and the U.K., and
- (4) trends in their future development.

Their seminar was well received by all who attended.

建築及房地產學系學者應邀為機電工程商技術研討會擔任主講

建築及房地產學系的王金殿博士及陳煒明博士應香港機電工程商聯會技術委員會的邀請，於2012年十二月一日為一個有關新一代工程合約的研討會擔任主講，與一百二十多位參加者分享心得，當中不乏政府高級官員及聯會會員公司的代表。新一代工程合約體現了良好的項目管理原則和措施。王博士的演講內容分為四部分，即

- (1) 新工程合約的原理；
- (2) 合約的核心條文、自選條文及格式章節；
- (3) 協約各方的角色及責任；以及
- (4) 新工程合約重要條款與香港通用標準合約的比較。

緊接主講的陳煒明博士亦提出了四個重點：

- (1) 有關新工程合約／目標成本合約優點、缺點和成功要素的研究結果；
- (2) 這類合約的風險管理及評估；
- (3) 香港及英國的工程案例研究；以及
- (4) 新工程合約的發展趨勢。

出席者均感獲益良多。



CEE academics invited to serve on committees of environmental research projects

To strengthen collaboration and exchange between scientists in China and an integrated Land Ecosystem --- Atmosphere Processes Study (iLEAPS) project under the International Geosphere-Biosphere Programme (IGBP), a Chinese committee based on the China Working Group of 2006 was recently formed. After many discussions and nominations from related groups, about 10 senior scientists were invited to serve on the China Advisory Committee, and around 30 outstanding young scientists were selected as members of the first China Committee. As the only representatives from Hong Kong, Prof. Tao Wang and Dr Hai Guo, both of the Department of Civil and Environmental Engineering, had the honor to be part of the China Advisory Committee and China Committee respectively. In addition, Prof. Wang is also a member of the International Scientific Steering Committee and a vice chair of the China Committee for International Global Atmospheric Chemistry, another core project of IGBP. Their appointments are testimony to their strong scholarly reputation and expertise. Congratulations to them both.

土木及環境工程學者獲邀擔任環境研究項目委員會委員

為加強中國科學家與該學術團體之間的交流和合作，以2006年成立的iLEAPS中國工作組為基礎中國科學家于2012年底向iLEAPS科學指導委員會提出了成立iLEAPS中國委員會(作為該委員會近期成立的若干區域分支之一)的計畫並獲得批准。經主要相關單位、領域科學家及部分IGBP-CN委員會成員的協商和提名，中國科學家們組建了由10餘名國內相關領域資深科學家及相關學術團體負責人擔任諮詢與顧問委員會，同時邀請由國內相關單位不同領域30餘名有學術影響的傑出中青年科學家組成的首屆委員會。作為香港地區的唯一代表，土木及環境工程學系的王韜教授及郭海博士分別擔任iLEAPS中國諮詢與顧問委員會成員及中國委員會成員。王韜教授還在此前應邀擔任IGBP另一核心子計劃——IGAC (International Global Atmospheric Chemistry)科學指導委員會委員及IGAC中國委員會副主席。此任命無疑是對兩位學者在其學術和專業知識的肯定。恭喜兩位。



Awards & Achievements

優秀學者 成績斐然

Head of BSE elected Fellow of HKAES

The Faculty of Construction and Environment takes great pride in the recent election of Prof. Chow Wan-ki, Head of the Department of Building Services Engineering, to the Fellowship of the Hong Kong Academy of Engineering Sciences (HKAES), an organization dedicated to the advancement of the science, art, and practice of engineering for the benefit of society. Since its establishment in 1994, its membership has included such distinguished personalities as Prof. Sir Charles Kao, the winner of the 2009 Nobel Prize in Physics, the Hon. Sir S.Y. Chung, a visionary who led the founding of the HKAES, Prof. Timothy Tong, President of PolyU, and Prof. Ko Jan-ming. Fellows are elected annually by their peers for their exceptional achievements and are expected to provide expert advice to the government, industry, and the community when needed. Inasmuch as one can be known by the company that one keeps, Prof. Chow is certainly in excellent standing. Congratulations to Prof. Chow for this high honor.

屋宇設備工程學系系主任當選香港工程科學院院士



屋宇設備工程學系系主任周允基教授最近當選香港工程科學院院士，建設及環境學院同仁實在與有榮焉！香港工程科學院成立於1994年，以促進本地工程科學的專業及實務發展為宗旨，不少成員皆為社會及科學界中聲名顯赫的人物，包括2009年諾貝爾物理學獎得主高錕教授、對創辦香港

工程科學院居功至偉的鍾士元爵士、理大校長唐偉章教授，以及高贊明教授。院士是由學院會員每年投票選出，當選者均有卓越成就，會在需要時以專家身份向政府、業界和社會提供意見。古語有云：「物以類聚，人以群分」。周教授能與一眾科研菁英比肩，成就之高，聲名之佳，自不待言。謹此代表本院同仁恭賀周教授獲此殊榮！

Faculty Awards for Outstanding Performance

On the afternoon of 14 December 2012, a presentation ceremony for the winners of the President's Awards and Faculty/School Awards was held at the Jockey Club Auditorium of the Hong Kong Polytechnic University. 5 academics and 1 non-academic staff from the Faculty of Construction and Environment were honored with Faculty Awards. For his excellent teaching, Dr Joseph Lai from the Department of Building Services Engineering was singled out for an individual award. Team teaching was also rewarded. The team who taught the subject "Construction Materials" enhanced students' understanding with an online platform and animated videos. It was led by Prof. C. S. Poon of the Department of Civil and Environmental Engineering. Team members included Mr Wong King Hee, Dr Kou Shicong, and Ir Dr Wallace Wai Lok Lai of the Department of Land Surveying and Geo-Informatics.

In the category for research, Dr Agachai Sumalee of the Department of Civil and Environmental Engineering was honoured for his prolific research and his scholarly activities worldwide.

Congratulations to all the above winners.

LSGI academic receives Early Career Award 2012/13

As part of its Early Career Scheme, the Hong Kong Research Grants Council (RGC) rewards promising scholars in the early stages of their careers. This year, 19 scholars from local universities were honoured at a dinner on 12 December 2012 for their outstanding achievements. Among them was Dr George Zhizhao Liu, an Assistant Professor from the Department of Land Surveying and Geo-Informatics. The project that led to his award was entitled "Innovative Real-Time Cycle Slip Detection and Rectification for High Precision GPS Positioning" and proposed an innovative algorithm for processing Global Positioning Systems (GPS)/Global Navigation Satellite Systems (GNSS) to enhance the precision and reliability of GPS/GNSS solutions. Since GPS/GNSS have become the dominant technologies for precise Positioning, Navigation, Velocity and Timing (PNavT), they have been successfully used in solving many scientific and engineering problems such as earthquake monitoring, structure health monitoring, atmospheric water vapor observation, space weather ionosphere studies, aircraft navigation and precision landing, human and logistics navigation and tracking, among others. In addition, millions of consumers routinely use smart phones with GPS/GNSS and in-car navigation systems. Many applications demand GPS solutions with very high precision (millimeter level) and reliability. For instance, a probability of 99.99999% meeting the specified precision and reliability is often required in aircraft landing applications. However, the occurrence of cycle slips in GPS/GNSS precise carrier phase measurements has been constantly threatening the reliability and precision of GPS/GNSS solutions.

學院特設傑出表現／成就獎

理大在2012年十二月十四日下午於校園內的賽馬會綜藝館舉行頒獎典禮，嘉許多位獲得「校長特設卓越表現／成就獎」及「學院特設傑出表現／成就獎」的教職員。今年，共有五位教員及一位職員獲建設及環境學院表揚。教學方面，個人獎得主是屋宇設備工程學系的黎鴻傑博士；團隊獎則由任教「建築物料」一科，而幫助學生理解如何善用網上平台和動畫短片的老師獲得，當中包括組長潘智生教授(土木及環境工程學系)、成員寇世聰博士(土木及環境工程學系)、賴緯樂博士工程師(土地測量及資訊學系)及王景禧先生(土木及環境工程學系)。

另外，土木及環境工程學系的Agachai Sumalee博士，亦因積極參與科研及其他國際性學術活動獲得嘉許。

謹此衷心祝賀各位得獎者！

土地測量及地理資訊學系學者榮獲2012/13「傑出青年學者獎」

香港研究資助局為加強對新進學者在學術生涯初段的支援，培養優秀科研人才，於2011年推出了「傑出青年學者計劃」，首年即吸引逾三百人申請。此計劃設有「傑出青年學者獎」，首屆得獎人已經揭曉，並在2012年十二月十二日的晚宴上接受殊榮。他們共有十九人，全是本地大學的學者，當中包括土地測量及地理資訊學系助理教授劉志趙博士。在題為「以創新方法實時探測及修正高精度全球定位系統的整周跳變」的研究裡，劉博士提出了一套為處理全球定位系統(GPS)／全球導航衛星系統(GNSS)數據而設計的全新演算方法，使根據這些GPS/GNSS數據而得出的結果更趨精確和可靠。近年，全球定位系統與全球導航衛星系統已廣泛用於進行高精度的定位、導航、計速和授時(PNavT)工作，解決了不少科學和工程難題，諸如地震監測、結構健康監測、大氣水蒸氣觀測、太空天氣與電離層研究、飛機導航與精密進場及著陸引導，以及人流與物流導航和追蹤。數以千萬計消費者每天使用的智能電話，都配備全球定位系統與全球導航衛星系統；不少車輛亦內置導航系統。許多應用要求全球定位系統／全球導航衛星系統必須提供極為精確(以毫米計)和可靠的PNavT結果。舉例說，飛機著陸時，定位的精準度往往須達到99.99999%的高水平。然而，全球定位系統／全球導航衛星系統的載波相位數據常有整周跳變的情況，降低了結果的可靠性和精確程度。劉博士提出使用電離層總電子含量變化率(TECR)(一種以往經常被忽略的物理信息)，來探測和修正全球

By proposing the use of ionospheric total electron contents rate (TECR), a type of physical information often ignored in the past, to detect and rectify cycle slips in GPS/GNSS measurements, Dr Liu ensures the precision and reliability of GPS/GNSS PNAVt solutions. Kudos to Dr Liu for his award, which was highly competitive. Of the 334 applicants for it in its first year, only 5.7% were successful.

定位系統／全球導航衛星系統數據中因整周跳變而出現的誤差，將大大提高有關定位、導航、計速和授時結果的精確度和可靠性。是此計劃共有334位學者申請，競爭激烈，得獎率為百分之五點七。劉博士獲此項榮譽，恭喜恭喜！



Dr Liu (right) receiving his award
劉博士(右)接受他的獎項

LSGI academic received the 2013 CSNC Excellent Paper Award

At the 2013 China Satellite Navigation Conference (CSNC) held on May 15-17 in Wuhan, Dr George Zhizhao Liu from the Department of Land Surveying & Geo-Informatics (LSGI) received an Excellent Paper Award for his paper "The First PPP-based GPS Water Vapor Real-Time Monitoring System in Pearl-River-Delta Region, China." Co-authored with Research Associate Dr Min Li, the paper presents their research findings of developing the first atmospheric water vapor real-time monitoring system for the Pearl-River-Delta (PRD) region using the latest Global Positioning System (GPS) Precise Point Positioning (PPP) technique. Based on their technique, the amount of water vapor in the atmosphere over the PRD region can now be quickly and accurately computed from GPS satellite signals. Since April 2012, PolyU researchers have been supplying their atmospheric water vapor data to meteorological agencies around the PRD region to support their daily services and research, including the Hong Kong Observatory, Macao Meteorological and Geophysical Bureau, the Guangdong Meteorological Bureau and the Shenzhen Meteorological Bureau. In its first year, the Excellent Paper Award was given to only nine recipients out of 629 paper submissions. Congratulations to Dr Liu for winning such a competitive award. His research was supported by the General Research Fund (GRF) of the Hong Kong Research Grants Council (RGC).



土地測量及地理資訊學系學者獲 2013 中國衛星導航學術年會「優秀論文獎」

2013中國衛星導航學術年會已於五月十五至十七日在武漢舉行。土地測量及地理資訊學系的劉志趙博士，在會上憑《基於GPS精密單點定位的中國珠江三角洲地區的水蒸氣實時監測》一文勇奪「優秀論文獎」。這篇得獎論文是由劉博士與副研究員李敏博士合著，講述應用最新GPS精密單點技術為珠三角地區研發首個大氣層水蒸氣實時監測系統的成果。使用這套技術後，便可根據GPS衛星信號每天24小時不斷實時計算出珠三角地區大氣層的水蒸氣含量，既快且準。自2012年四月起，理大研究人員一直為香港天文台、澳門地球物理暨氣象局、廣東省氣象局及深圳市氣象局實時提供關於大氣層水蒸氣的數據，支援這些珠三角地區的氣象機構提供日常氣象服務及進行研究。今年是年會首次頒發「優秀論文獎」；在提交給大會的六百二十九份文章中，只有九份得此榮譽，可見競爭非常激烈。另外，這項研究也是香港研究資助局優配研究金計劃的資助項目。

恭喜劉博士！

BSE academic receives merit award from HKIE

To showcase the contributions of engineering to society and recognize the innovations of engineers, the Hong Kong Institution of Engineers (HKIE) held an Engineering Week 2013 during 20-28 April 2013, where the work of Ir Prof. Yang Hong Xing and his team, Dr Lu Lin and Mr Chen Jian, were honored with a Certificate of Merit in the Technology category.

Their inline hydroelectric generating system for urban water pipelines works in confined conditions and was deployed in 2011 by the Water Supplies Department.

The 11-strong panel of judges included the President of the HKIE, Ir Prof. Choy Kin Kuen, and representatives of various government and professional organizations, including the Development Bureau, the Construction Industry Council, and the Hong Kong Green Building Council. Congratulations to Prof. Yang and his research group for the innovation.



屋宇設備工程學系學者獲香港工程師學會頒發優異獎狀

為彰顯工程學對社會的貢獻、鼓勵工程師推陳出新，香港工程師學會於2013年四月二十至二十八日舉辦了名為「工程週」的一連串活動，而由楊洪興教授聯同呂琳博士及陳建先生合力開發的「管內水力發電系統」，就在科技組別獲頒優異獎狀！由於這個系統十分適合鋪設在狹小空間的市區水管，早在2011年已獲香港水務署採用。

獎項評審團由十一位成員組成，除了學會會長蔡健權教授工程師，還有發展局、建造業議會、香港綠色建築議會等政府部門及專業組織的代表。謹此祝賀楊教授和有關同事。

CEE academic rewarded with top honors at international expo for inventions

At the 41st International Exhibition of Inventions of Geneva on 10 -14 April 2013, Prof. Ni Yiqing and his team have garnered a Grand Prize and a Gold Medal for their Intelligent Ship-bridge Anti-collision Surveillance System, which was developed with funding provided by the Research Grants Council of the University Grants Committee and the Transport Bureau of Zhejiang Province in China.

The innovative system functions as a 'black box' for bridges to provide a full record of ship activities near the bridge area and impact to the bridge structure. Incorporating Automatic Identification System (AIS) and smart vision-based monitoring technology into the security of a bridge, this system can actively monitor vessel traffic, evaluate the route of ship movements and send out warning signals to the ships likely to collide with the bridge. Novel piezoelectric sensors are embedded in the bridge as well to enable a new technique for direct measurement of the impact force and post-collision damage evaluation.

The result of a collaborative venture from 2010 to 2013 by PolyU's Department of Civil and Environmental Engineering, the Intelligent Structural Health Monitoring R&D Centre of PolyU's Shenzhen Research Institute, and the Zhejiang Provincial Transport Bureau, the system can be put to good use in sea-crossing and river-crossing bridge structures. Congratulations to Prof. Ni and his team!

土木及環境工程學系學者奪國際發明展特別大獎及金獎

在2013年四月十四日至十四日於瑞士日內瓦舉行的第四十一屆國際發明展中，由倪一清教授領導的團隊，憑「橋樑防船撞智能監控系統」勇奪特別大獎及金獎兩項殊榮。

該系統由香港研究資助局及浙江省政府交通廳撥款研發。新發明仿如橋樑的「黑盒」，可全面記錄附近水面的船舶活動及其對橋樑結構的影響。它應用了自動識別系統(AIS)及智能視頻監測技術，可以主動偵察航運交通，評估船舶的移動途徑，向有撞橋危險的船隻發出警報。安裝在橋內的新式壓電感測器，可以直接量度船舶的撞擊力，評估對橋樑造成的損傷。

上述系統是由土木及環境工程學系、理大深圳產學研基地智能結構健康監測研發中心，聯同浙江省政府交通廳於2010至2013年合作研發，歷數年之努力完成，適用於跨海及跨河橋樑。恭喜倪教授和他的團隊成員！



PTeC's Outstanding Professional Services Awards 2012

On 20 February 2013, 20 awards were presented to various departments and faculty members of PolyU for their distinguished consultancy services and achievements in knowledge transfer. Amongst the winners was Prof. Li Heng of the Department of Building and Real Estate, who was honored as the Highest Growth Consultant in terms of i) the absolute growth in income earned and ii) the percentage of growth compared to the previous financial year. The other individual meriting an award in the same category was Dr Lee Wai-ling of the Department of Building Services Engineering. Prof. Li was also rewarded with a merit award as the most active consultant, accumulating the second highest earnings between July 2011 and June 2012.

Departmental Awards went to the Department of Civil and Environmental Engineering (CEE) for being the most active department. It also won a merit award for having the maximum staff participation. The winner for that category was the Department of Land Surveying and Geo-Informatics (LSGI). Congratulations to all the winners!



Dr Lee Wai-ling (left) receiving her award
李慧玲博士 (左) 接受她的獎項

理大科技及顧問有限公司2012年度「傑出專業服務獎頒獎典禮」

理大科技及顧問有限公司於2013年二月二十日舉辦頒獎典禮，嘉許提供卓越顧問及知識轉移服務的二十組學系/部門和教職員。「最高增長顧問」獎得主為建築及房地產學系的李恆教授。無論以實質收入增長或相對上財政年度的增長率計算，李教授同樣稱冠。另一位在同一組別贏得個人獎項的同事，是屋宇設備工程學系的李慧玲博士。除了成為「最高增長顧問」，李恆教授在2011年7月至2012年6月，是第二位賺取最多累積收入的同事，因此同時獲頒「最活躍顧問」優異獎。

群體獎項方面，土木及環境工程學系榮膺「最活躍學系」；而「最多員工參與」優異獎及大獎，則分別由該系與土地測量及地理資訊學系奪得。謹此恭賀各位同事，並願大家百尺竿頭、更進一步！



CEE Dept. receiving its award
土木及環境工程學系的教職員



Prof. Li Heng (left) receiving his award
李恆教授 (左) 接受他的獎項



LSGI Dept. receiving its award
土地測量及地理資訊學系的教職員

New book by BRE scholars demystifies Public Private Partnerships

If you have been wondering how public private partnerships work in international construction, you're in luck. A new textbook by Prof. Albert Chan, Associate Dean of the Faculty of Construction and Environment, and his former PhD student, Dr Esther Cheung, has provided an in-depth examination of the principles for such partnerships, critical perspectives of industry practitioners, as well as innovative case studies.

Organized into three parts for easy reference, the book will be published in August 2013 by Routledge. Its publication is funded by the Hong Kong Institute of Surveyors, which has sponsored the writing of textbooks that are relevant to local practice for the surveying profession and students. *Public Private Partnerships in International Construction: Learning from case studies* is certainly a book that has lived up to its expectations. Congratulations to the authors!

建築及房地產學系學者新作揭開公私合營項目神秘面紗



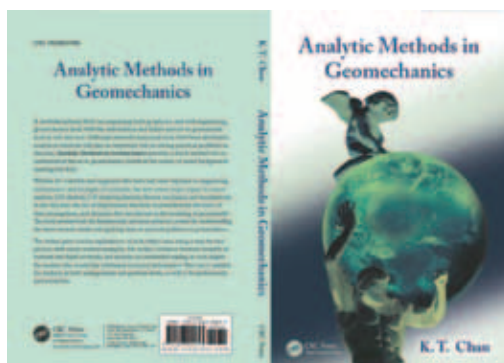
如希望瞭解國際大型公私合營建築項目的運作模式，你必然會對建設及環境學院副院長陳炳泉教授的新作大感興趣！這本由陳教授聯同其得意門生張泳沁博士編寫的教科書，深入探討了這類合營項目的運作原理，除了有業內人士從不同角度分析，更附有最新的案例研究。

新書取名《國際建築界的公私合營模式：案例剖析》，

將於2013年八月由Routledge出版社出版，為了方便查閱，分為三個部分。值得一提的是，這本書是由香港測量師學會資助出版。事實上，該會長期均有資助學者編寫適合本地測量業從業員及學生使用的教科書。此書內容充實，面世後相信定必不負眾望！

CEE Prof. debuts new book on Geomechanics

Prof. Chau Kam Tim is off to an auspicious start in 2013 with the publication of his book by CRC Press (of Taylor & Francis Group). Titled *Analytic Methods in Geomechanics*, the book covers tensor analysis, elasticity complex variable methods, 3-D elasticity, plasticity, fracture mechanics, viscoelasticity, poroelasticity, dynamics and wave propagations in geomaterials. Part of the book is suitable for undergraduate and graduate courses, whereas more advanced topics can also serve as reference for researchers.



The book has received excellent reviews from professors around the world, including Prof. Jim R. Rice of Harvard University, who praised its "breadth of scope, rigor, and wonderful level of detail." Prof. Fusao Oka of Kyoto University calls it "a great contribution to society," and Prof. Joe W. Walsh of the Massachusetts Institute of Technology said he would make use of it. Congratulations to Prof. Chau for his noteworthy achievement.

周錦添教授岩土力學新作面世

一年伊始，周錦添教授便傳來喜訊——其新作《岩土力學分析法》已由Taylor & Francis集團屬下的CRC Press出版。此書談論的專題包括張量分析、彈性的複雜變量方法、三維彈性、可塑性、斷裂力學、黏彈性、孔彈性、力學及岩土物料的波傳播，部分內容可作本科及深造課程教材，較深奧的章節則適合科研人員參考。

新書出版不久，已得到國際學者的廣泛好評。哈佛大學Jim R. Rice教授稱讚周教授的著作「涵蓋範圍廣泛、立論嚴謹、資料齊備」；京都大學岡二三生教授認為它「對社會貢獻極大」；麻省理工學院Joe W. Walsh教授則表示會使用該書。能獲得這些極具份量的同儕齊聲讚好，自非僥倖！周教授乃實至名歸。

CEE academics contribute to design standards

Dr Yong Xia and Prof. You-Lin Xu from the Department of Civil and Environmental Engineering have the recent honor of contributing to the writing of *Design Standard for Structural Health Monitoring Systems* [CECS 333: 2012], the first ever text on standards in the field of structural health monitoring in China.

Coordinated by Prof. Hong-Nan Li of the Dalian University of Technology, the important project is co-authored by leading scholars from seven academic and industrial institutions of China, including The Hong Kong Polytechnic University. The final draft has been approved by the China Association for Engineering Construction Standardization and implemented since 1st March 2013.

Organized into seven chapters, the standards cover topics related to sensor selection and placement, data acquisition and processing, data transmission, data storage and management, and structural condition identification and assessment. Congratulations to Dr Xia and Prof. Xu for their significant work, which will no doubt enhance the safety of structures all over China.

PolyU academic serves as reviewer for Swedish Research Council

In the first ever appointment of an academic from Hong Kong to serve on Formas, a Swedish governmental agency that supports basic and applied research on the environment, agricultural sciences, and spatial planning, Prof. Albert Chan of the Faculty of Construction and Environment has been invited to serve as a review panel member for one year from March 2013.

There are currently eight research panels of Formas, with a total of about 150 panel members, who are chosen by a rigorous peer review system. Congratulations to Prof. Chan, who had a chance to visit Stockholm in May 2013 as part of his official engagement.

BRE academic sought after by government bodies

Prof. Eddie Hui of the Department of Building and Real Estate has recently been appointed to serve on the Vocational Training Council Real Estate Services Training Board for two years from 1 April 2013 and the Urban Renewal Authority Board as a non-executive director for three years from 1 May 2013. He will bring his expertise to bear on the work of these government bodies. Congratulations to Prof. Hui for these noteworthy appointments.

土木及環境工程學系學者參與起草結構健康監測系統設計標準

中國內地最近公佈了首套針對結構健康監測的行業標準——《結構健康監測系統設計標準》(CECS 333: 2012)。本院土木及環境工程學系的夏勇博士和徐幼麟教授參與了該標準的編製。

這項意義重大的工作是由大連理工大學的李宏男教授統籌，集合包括理大的七所中國高院及工業界的多位頂尖學者合力完成。該標準經中國工程建設標準化協會組織審查，日前已批准發佈，並於2013年三月一日起施行。

《結構健康監測系統設計標準》包含七個章節，涵蓋的專題包括傳感器的選擇和佈置、數據採集和處理、數據傳輸、數據儲存和管理，以及結構狀態識別及健康評估方法。該標準對於土木工程結構健康監測系統的標準化建設和發展具有主要的推動作用。

陳炳泉教授出任瑞典研究資助局評審小組成員



建設及環境學院副院長陳炳泉教授最近應瑞典研究資助局邀請，於2013年三月起擔任該局其中一個專家評審小組的成員，為期一年，開香港學者的先河。

瑞典研究資助局屬政府組織，職責是支援有關環境、農業科學及空間規劃的基礎及應用研究，現設八個評審小組，合共約有一百五十位專家成員，全部均通過嚴謹的同業評審機制選出。陳教授曾於本年五月前往斯德哥爾摩，進行學術訪問之旅。

許智文教授接連獲委公職

建築及房地產學系的許智文教授近月獲政府委以兩項重要公職：首先是於2013年四月一日起出任職業訓練局房地產服務業訓練委員會委員，任期兩年；第二項任命就是從五月一日起擔任市區重建局非執行董事，為期三年。許教授將以其專業知識和經驗服務這兩個機構。恭喜、恭喜！

Staff News

職員消息

FCE Summer Attachment Scheme 2012/13

5 academics from the Faculty of Construction and Environment had the opportunity to conduct research at overseas institutions as part of the Summer Attachment Scheme, which was launched last year to encourage academic staff to engage in worldwide collaborative research. Below are the names of the globe-trotters who have been jointly supported by FCE and their respective departments in their research endeavours.

We wish all of them a successful and fulfilling summer.

建設及環境學院教員暑期交流計劃 2012/13

為鼓勵教員參與國際性研究，建設及環境學院去年推出教員暑期交流計劃，由學院及學系聯合資助同事到海外學府/機構進行研究。今年暑假，有五位學者參與。以下是他們的資料和有關安排。

恭喜各位入選同事！對他們來說，這個暑假相信必定十分充實和難忘。

Applicant (Dept) 申請人(學系)	Hosting institution(s) 接待學府	Funding allocated 學系及學院的撥款金額	Attachment period 交流期
Dr LEE Henry Po-Heng (CEE) 李伯亨博士(土木及環境工程學系)	Cornell University 康奈爾大學	CEE 學系: \$32,117.7 FCE 學院: \$32,117.7	15 June-15 Aug 2013
Dr DAI Jian-Guo (CEE) 戴建國博士(土木及環境工程學系)	The University of Tokyo 東京大學	CEE 學系: \$27,684.5 FCE 學院: \$27,684.5	30 June-16 Aug 2013
Dr GUO Hai (CEE) 郭海博士(土木及環境工程學系)	The University of Western Australia 西澳洲大學	CEE 學系: \$32,026 FCE 學院: \$32,026	15 July-31 Aug 2013
Dr WANG Yuhong (CEE) 王予紅博士(土木及環境工程學系)	North Carolina State University 北卡羅來納州州立大學	CEE 學系: \$12,817.8 FCE 學院: \$12,817.8	14 July-13 Aug 2013
Dr LAI Wai Lok (LSGI) 賴緯樂博士(土地測量及地理資訊學系)	Federal Institute of Materials Research and Testing (BAM) 德國聯邦物料測試及研究所(BAM)	CEE 學系: \$15,498.2 FCE 學院: \$15,498.2	7 June-9 July 2013

New Academic Staff

Dr Andy YF Leung has joined the Department of Civil and Environmental Engineering in April 2013 as an Assistant Professor. His research interests include soil-structure interactions, optimisations of pile groups and piled raft systems, and their applications in foundation reuse. He also has research experience in the application of optical fibre strain sensors based on Brillouin Optical Time Domain Reflectometry (BOTDR).

Dr Leung received his undergraduate education at The University of Hong Kong, after which he obtained a Master of Science degree from the University of California at Berkeley in 2005 and a PhD from the University of Cambridge in 2011.

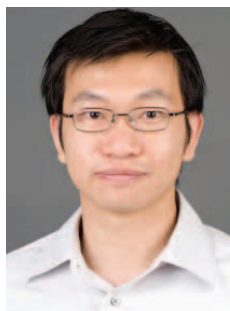
He has practised geotechnical engineering both in Hong Kong and the United States. Prior to the Hong Kong Polytechnic University, Dr Leung was a project engineer at AECOM Asia Co. Ltd, and was involved in large-scale civil engineering projects in various countries, including the United States, United Kingdom, India, Kuwait, etc. Locally, he participated in the construction of the West Kowloon Terminus of the Guangzhou-Shenzhen-Hong Kong Express Rail Link, and has conducted various studies for the Geotechnical Engineering Office of the Civil Engineering and Development Department.

Another new colleague, Dr Leu Shao Yuan, also joined the Department of Civil and Environmental Engineering as an Assistant Professor on 17 June 2013. His research interests are in biomass-to-biofuels processes, biological systems, and environmental water quality control. Prior to his appointment at PolyU, he served as a Postdoctoral Fellow at the Forest Products Laboratory (FPL) of the United States Department of Agriculture from 2011 to 2013. His research there was on converting forest residues into biofuels and useful by-products.

Dr Leu obtained his Bachelor's and Master's Degrees from the Forestry Department of National Taiwan University. He received his PhD in Wastewater Engineering from the Civil and Environmental Engineering Department of the University of California at Los Angeles (UCLA) in 2009. He then worked as a Postdoctoral Fellow there until 2011.

Dr Leu qualified for his Professional Engineer (P.E.) license in California through his work experience at the Los Angeles Regional Water Quality Control Board from 2009 to 2010. He was also a lecturer at the University of California at Riverside in the spring of 2010 and a guest lecturer at UCLA in 2011.

新教職員



Dr Andy Leung
梁日暉博士

梁日暉博士於2013年四月起出任土木及環境工程學系助理教授。其研究領域包括土壤與結構的互動關係、群樁與樁筏系統優化及在重用地基的應用等等。另外，他亦曾參與布里淵光時域反射 (BOTDR) 光纖應變感測器的應用研究。

梁博士畢業於香港大學，後出國深造，分別於2005年及2011年取得加州大學柏克萊分校理學碩士及劍橋大學哲學博士學位，在香港及美國均有岩土工程工作經驗。加入理大前，他在AECOM亞洲有限公司任職項目工程師，參與的大型土木工程遍及美國、英國、印度、科威特等國；本地方面，亦曾參與建造廣深港高速鐵路的西九龍總站，並為土木工程拓展署屬下的土力工程處進行了多項研究。



Dr Leu Shao Yuan
呂紹元博士

呂紹元博士於2013年六月十七日加入理大，並出任土木及環境工程學系助理教授，其主要研究領域為生物質轉化生物燃料之製程、生物系統、以及環境水質控制。呂博士於2011至2013年間於美國聯邦農業部所轄之林產研究所擔任博士後研究員，其研究課題為轉化森林殘留物以產生生物燃料及有益副產品。

呂博士是台大森林學系的學士與碩士，2009年自美國加州大學洛杉磯分校土木及環境工程學系取得污水工程領域之博士學位，其後並留校從事博士後研究至2011年。2009至2010年間呂博士曾於洛杉磯水質控制局服務，其後並經由此工作經驗取得加州環工技師執照。同時，呂博士亦曾於2010年春季至加州大學河濱分校擔任講師，並於2011年出任加州大學洛杉磯分校之客席講師。

BRE academic in charge of Executive Development Programme in Shopping Mall Management

To meet the needs of executives in managing the city's growing mall complexes, a new postgraduate programme in Shopping Mall Management has been jointly developed by PolyU's Institute of Advanced Executive Education and the Link Management Limited (LML), a major employer of professionals in retail space management. The signing ceremony on the afternoon of 12 December 2012 was attended by Prof. Judy Tsui, PolyU's Vice President for International and Executive Education, Prof. Eddie Hui of the Department of Building and Real Estate (BRE), and George Hongchoy, CEO of LML, who is pleased to have partnered with PolyU in the launch of this development programme for working professionals.

Launched in January 2013, the programme consists of eight subjects that can be completed in 2 years of part-time study on Saturdays. Prof. Geoffrey Shen, Associate Dean of the Faculty of Construction and Environment, is the programme coordinator and Prof. Hui is responsible for the overall quality of the programme, which combines classroom learning with real life applications. The integration of theory and practice is especially appealing to LML, which is investing nearly HK\$3,800,000 to support 70 of its employees in professional development by means of this innovative programme. Taught by industry practitioners as well as academics from BRE and the School of Accounting and Finance, students will sharpen their skills in corporate finance, managerial accounting, and real estate valuation.

建築及房地產學系教授統籌全新「商場管理行政文憑課程」

近年，大型商場在香港越見普遍。有見及此，理大高級管理深造學院與領匯管理有限公司攜手策劃了全新的「商場管理行政文憑課程」，並於2012年十二月十二日下午舉行簽約儀式。出席者包括理大副校長(國際事務及行政教育)徐林倩麗教授、建築及房地產學系的許智文教授，以及領匯行政總裁王國龍先生。領匯在香港管理大量商場，僱用不少這方面的專才。王先生十分高興今次能與理大合作，為在職管理人員提供深造機會。



此課程採用兼讀制，於2013年一月開課，包含八個科目，逢星期六上課，可於兩年內完成。由於課程強調理論與實踐並重，因此十分切合領匯的需要，當中七十名學員均為領匯職員，而領匯為這些員工支付的學費亦接近三百八十萬港元。導師方面，既有業內人士，亦有建築及房地產學系和會計及金融學院的學者，並由許智文教授負責課程的整體質素。沈岐平教授就課程發展定下方針。學員可望藉此增進有關企業財務、管理會計及房地產估價等專業知識。

BRE Lecturer featured in video series for good teaching practices

With the growing number of old structures and new building projects in Hong Kong, the challenge of developing professionals with a strong sense of social responsibility has never been more pressing in the construction industry. Dr Sandy Tang, a Lecturer in the Department of Building and Real Estate and coordinator of the BSc (Hons) programme in Surveying, recently shared her wisdom on how to nurture graduates with a commitment to serve society in a 12-minute video produced by the Educational Development Centre of PolyU. In addition to traditional lectures to inspire her students to be concerned about the current issues around them, she would invite experts to share their ideas and experience in the Integrated Project course that she teaches. There would also be debates on interesting topics in tutorials, such as whether to demolish unauthorized structures, reinstitute the home ownership scheme etc., as well as open-ended quiz questions to provide opportunities for students to reflect and engage in critical thinking. Her teaching methods have been well received by her students, whose awareness of multiple perspectives has increased as a result. They learnt to start thinking as ethical professionals, providing practical solutions to difficult problems. Many thanks to Dr Tang for sowing the seeds of social responsibility in our budding professionals.

建築及房地產學系講師在優秀教學展示系列中分享教學方法

面對香港新建築工程和舊區重建項目不斷增加，建造業必須培養大量富有使命感、勇於對社會負責的專業人才。有見及此，建築及房地產學系講師鄧麗儀博士應邀理大教學發展中心，在最近的優秀教學短片展示系列中分享怎樣在教授專業知識的同時培養學生對社會的責任感。鄧博士現為地產建設測量學(榮譽)理學士課程主任，她執教的「綜合習作」科，除了上課時引導學生關心社會，也不時邀請資深的業界人士分享經驗和心得。此外，她喜歡選擇與城市發展相關的有趣議題如「應否復建居屋」及「拆除僭建」等，在導修課讓同學進行分組辯論；並以不同類型的問題，使同學有機會發展獨立思考能力，鍛鍊逆向思維。其教學方法深得學生欣賞，因為他們從中意識到必須從多角度分析事物，而身為負責任的專業人士，應該因應不同難題找出可行的解決方案。毫無疑問，鄧博士今天播下的種子，他日必能造福社會。



Student News

學生消息

2012 Outstanding Student Awards

On the afternoon of 29 January 2013, four students from each of the departments of the Faculty were honored as outstanding students in an award ceremony at the Chiang Chen Studio Theatre. Ranked top of their respective classes, they were Chen Mengpei of the Department of Building and Real Estate, Chan Sze Hang of the Department of Building Services Engineering, Xia Tian of the Department of Civil and Environmental Engineering, and Lai Sze Wing of the Department of Land Surveying and Geo-Informatics. Following are their profiles:

A final year student in the BSc (Hons) programme in Building Engineering and Management, Chen Mengpei has made the most of her university experience by participating actively in extra-curricular activities. From debating in the World Universities Championships to working as a summer intern at Swire & Sons (HK) Ltd. to serving as a student representative at international conferences, she has developed leadership qualities that made her stand out from her peers. She has also maintained an impressive academic record, which led to an opportunity to study as an exchange student at Loughborough University in the U.K. for one semester in 2012. Her hard work and determination to succeed won her a scholarship from the International Student Ambassador Scheme for 2012/13. She was also chosen as the outstanding student of the Faculty of Construction and Environment in 2012.

2012 年度卓越學生獎

2013年一月二十九日下午，校園內的蔣震劇院舉行了2012年「卓越學生獎」頒獎典禮，本院四大學系各有一位同學獲得嘉許。四人分別為建築及房地產學系的陳夢培、屋宇設備工程學系的陳思恒、土木及環境工程學系的夏天，以及土地測量及地理資訊學系的黎詩穎，全是在班中成績稱冠的優秀學生。現簡介如下：

陳夢培是建築工程及管理學(榮譽)理學士課程的畢業班學生。她積極參與課外活動，曾參加世界大學辯論錦標賽、到太古集團當暑期見習生，以及以學生代表身份出席國際會議，逐步培養出出類拔萃的領導才能。學業方面，小妮子亦毫不遜色，曾於2012年遠赴英國拉夫堡大學參加交換生計劃，逗留一個學期。她性格堅毅，勤力用功，除了贏得2012/13年度「國際學生大使計劃」獎學金，亦獲選為建設及環境學院2012年度「最卓越學生」。



Aspiring to be a building services engineer, Chan Sze Hang began her studies in a higher diploma programme before continuing in one leading to a degree. She believes it is important to focus on the present and never give up your dreams for a better future. With her positive attitude and enthusiasm, she has inspired others to follow in her footsteps. She would like to help more students after she graduates this year by returning to campus to share her experiences with them.

夢想成為屋宇設備工程師的陳思恒是從高級文憑起步，其後才憑優異成績繼續修讀學位課程。她認同把握當下的重要，但卻從不放棄理想。其熱誠與積極的處事態度，使不少人感到鼓舞，紛紛以她為榜樣。今年畢業後，陳同學希望回母校與師弟妹分享經驗，鼓勵他們為理想奮進。



As idealistic as he is pragmatic, Xia Tian has majored in Environment and Sustainable Development to help people in China live a healthier and more sustainable life. He hopes to do this by improving the air quality in Chinese cities and is aware that he needs further studies to make a difference in dealing with the challenging problem of air pollution. An exchange student at the University of Leeds in the fall of 2011, he has learnt to tolerate and appreciate different cultures. For him, an outstanding student must be noble, have a broad perspective as well as leadership skills.

從夏天身上，你不難同時感受到理想主義和實用主義的色彩。他主修環境與可持續發展，目標是使中國人民享有較健康的永續生活。他希望改善內地城市的空氣質素，並意識到要處理這個棘手問題，就必需充實自己，增廣見聞。他曾於2011年秋天到英國利茲大學當交換生，學會如何包容和欣賞不同文化。他認為「卓越學生」必須人品高尚、目光遠大，並具領導才能。



Last, but not least, Lai Sze Wing believes self-discipline and good time management skills are essential for an outstanding student to maintain a balance between work and life. Her most memorable experience at PolyU has been the week-long survey camp in the summer of her first year, when she learnt to work in a team and developed her leadership skills. It is evident from the experiences of these exemplary students that being successful at university is not just about excelling academically. Congratulations to them all for achieving so much in a few short years, and here's to a bright future for them.

榮膺土地測量及地理資訊學系「卓越學生」的黎詩穎認為，自律和懂得善用時間是成為「卓越學生」的基本條件，因為這樣才能平衡學習和其他生活。說到在理大最難忘的經歷，莫過於一年級暑假時長達一週的測量營。她就是從中體會到團隊精神的重要，並藉這次機會培養領導才能。從以上幾位優秀學生的經驗可見，僅僅學業成績優異，實在稱不上圓滿的大學生活。能在短短幾年間取得如此成就，筆者衷心為他們感到高興，並祝願各人鵬程萬里。



Scholarship students graduate with distinction

Three postgraduates who received entry scholarships in 2010/11 have recently completed their studies with flying colors. They are Miss Chu Kin Yee, Jenny, Miss Leung Yuk Shan, and Miss Cheng Wai Ching. The first two graduated with a MSc in Construction and Real Estate, while the last one graduated with a MSc in Project Management. Below are some of their thoughts on studying at PolyU:

新生獎學金得主以優異成績畢業

三位在2010/11年度獲得碩士組合課程新生獎學金的同學，最近均以優異成績完成學業！她們分別是修讀建築及房地產學理學碩士的朱健兒及梁玉珊，以及修讀項目管理理學碩士的鄭緯青。三人對理大的學習生活有以下感受：

	<p>Chu Kin Yee, MSc (CRE) 朱健兒， 建築及房地產學理學碩士</p> 	<p>Leung Yuk Shan, MSc (CRE) 梁玉珊， 建築及房地產學理學碩士</p> 	<p>Cheng Wai Ching, MSc (PM) 鄭緯青， 項目管理理學碩士</p> 
<p>Most memorable experience at PolyU 在理大最難忘的經歷</p>	<p>The Professional Workshop and Project gave me quite a lot of satisfaction because I had to plan, conduct research, prepare a report, powerpoint and present the project all by myself. 為了完成專業工作坊和專題習作，我需要策劃和進行研究、撰寫報告和作口頭匯報。一切都是自己獨力完成！滿足感不言而喻。</p>	<p>Working in collaboration with my classmates on group projects where we share our ideas, thoughts and working experience. We went on site visit, conducted surveys and held meetings. We made friendships that lasted far beyond our university life. 最難忘是與同學合作完成專題習作。過程中，我們交流了意念、想法和工作經驗，並要實地考察、測量和開會。畢業後，大家的友誼仍會延續下去。</p>	<p>Working with my teammates on the project in Development Finance and Investment was particularly memorable, though it was tough to work during the day and study an entirely new field at night and on weekends. 最叫我難忘的是與同學合作完成「發展項目融資及投資」這一科的專題習作。平日上班，晚上和週末上課，接觸的又是全新事物！這樣的學習生活雖然艱苦，但很有得著。</p>
<p>Advice for other students 對學弟妹的忠告</p>	<p>Enjoy the school-life at PolyU! 好好享受校園生活！</p>	<p>Working and studying at the same time may be hard but rewarding. You may keep abreast of the latest industry information and develop networks with other students. Enjoy and try to make the most from your study. 兼顧工作和進修雖然不易，但收穫卻大。你可以一邊緊貼業內資訊，一邊認識新的同學，擴闊人脈網絡。好好享受校園生活，千萬不要錯過！</p>	<p>Please enjoy your time at PolyU and grasp every opportunity to learn and explore project management. 細味校園生活，把握學習機會，發掘項目管理的精微之處。</p>
<p>Future plans 計劃</p>	<p>I've been working in property management for more than 8 years. I believe I will continue to develop my career in this field. 從事物業管理已超過八年，會繼續在這個專業努力。</p>	<p>Further explore my areas of interest and work values, and pursue professional qualifications for personal and career advancement. 希望深思自己的志趣和工作信念；會考取專業資格，藉此提升個人水平和發展事業。</p>	<p>I hope to apply what I learnt on the job and prove myself a capable project manager when the opportunity comes. 希望學以致用，有機會證明自己是稱職的項目經理。</p>

Bursaries from HKHSA benefit 5 FCE students

五位優異生獲香港房屋協會頒發獎學金

To encourage students to pursue housing-related studies, recognize their contribution to the housing-related industry, as well as support students with outstanding academic performance and financial needs, the Hong Kong Housing Society Awards (HKHSA) were launched in 2006. This year, 5 bursaries worth HK\$5,000 each have been awarded to PolyU. The following FCE students were honored in a ceremony at the Hong Kong Convention and Exhibition Center on 26 January 2013. Congratulations to all of them.



為了鼓勵年輕人修讀與房屋有關的課程，肯定他們對行業的貢獻，以及支持學業成績優異及需要財政援助的學生，香港房屋協會特於2006年設立獎助學金計劃。在2012/13年度的得獎人中，理大佔了五人，全數均為建設及環境學院學生。頒獎禮已於2013年一月二十六日假香港會議展覽中心舉行，下述每位得獎同學均獲得港幣五千元。

Name of Student 學生姓名	Course/Year 就讀課程／年級
Mr KWAN Tsz Him 關子謙	BSc (Hons) Surveying, Year 2 地產建設測量學(榮譽)理學士課程二年級
Miss LAM Lam 林琳	BSc (Hons) Surveying, Year 3 地產建設測量學(榮譽)理學士課程三年級
Miss NIMAGA Mariam Gahousson 溫凱欣	BSc (Hons) Surveying, Year 2 地產建設測量學(榮譽)理學士課程二年級
Miss LEE Nga In 李雅妍	BSc (Hons) Building Services Engineering, Year 3 屋宇設備工程學(榮譽)工學士課程三年級
Mr TO Ki Kwan 堵奇群	BSc (Hons) Environment and Sustainable Development, Year 3 環境與可持續發展(榮譽)理學士課程三年級

In addition, Miss Lam of the Department of Building and Real Estate was invited to give a speech at the ceremony sharing her insight for achieving success. As a winner of the bursary from HKHSA for the second consecutive year, she attributed her success to her positive and proactive attitude in facing challenges. Not one to give up easily, she has faith that perseverance will overcome any obstacles that may be in her way. She plans to work in the construction industry after graduation.

當日，建築及房地產學系的林琳同學應邀在席上致辭，分享成功心得。談到連續第二年獲得房協獎學金，她認為與自己迎難而上的積極態度有關。林同學絕非輕言放棄之人，深信毅力必能克服困阻，並已計劃畢業後投身建造行業。

Double awards at international conference for final year BRE student

At the 5th International Surveying Conference for Undergraduates in Selangor, Malaysia on 19-20 April 2013, a final year student in Surveying from the Department of Building and Real Estate, Poon Hei Lam, was honored with the Best Paper Award and the Best Presenter Award for his empirical study of the impact of revitalizing old industrial buildings on property prices, focusing on the case of Hong Kong. Jointly organized by the Royal Institution of Chartered Surveyors (RICS) Malaysia, the Royal Institution of Surveyors Malaysia (RISM) and the Association of Authorized Land Surveyors Malaysia (AALSM), the conference had as its theme "Empowering Young Surveyors – Technologies of Tomorrow." Mr Poon Hei Lam competed against more than 25 submissions by other students to win. Congratulations to Mr Poon and his supervisor, Dr Wadu M. Jayantha.



建築及房地產學系畢業班同學國際會議勇奪兩獎

第五屆國際測量學大學生會議已於2013年四月十九至二十日於馬來西亞雪蘭莪州舉行。在建築及房地產學系修讀地產建設測量學最後一年課程的潘希林同學，憑著細緻分析活化香港舊工廈對物業價格的影響，在逾二十五份參賽作品中脫穎而出，同時贏得「最佳論文」及「最佳演講者」兩個獎項。該活動由英國特許測量師學會馬來西亞分會、馬來西亞皇家測量師學會及馬來西亞認可土地測量師協會聯合主辦，主題為「年輕棟樑、明日力量」。謹此衷心祝賀潘同學及其論文導師Wadu M. Jayantha博士。

New subject on High Speed Rail & Planning

A new elective subject with 3 credits, CE501 High Speed Rail (HSR) and Planning, has been offered for the first time to seniors and postgraduates for the 2012/13 Summer Term.

Scheduled for three consecutive weekends from mid-June 2013, the subject provides an integrated approach that covers both the engineering and non-engineering aspects of HSR planning by introducing students to HSR passenger transport systems, including station and route selection, capital cost estimation, operation and maintenance costs estimation, ridership forecasting, economic analysis, project implementation and financing, environmental impact analysis, and project management and reporting. The curriculum is based on an advanced, graduate-level class at the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign and was co-taught by Prof. Tsung-Chung Kao and Dr M. Rapik Saat, both of whom also teach there currently.

Similar versions of the subject were offered to industry practitioners and graduate engineers in 2011 and 2012. They have proved very popular for purposes of continuing professional development.

新選修科目《高速鐵路與規劃》簡介

在2012/13學年暑假，本院將首度開辦名為《CE501：高速鐵路與規劃》的選修科目，供本科畢業班同學及研究生報讀。

這個全新科目於六月中起連續三個週末上課，內容豐富，其內容將包括從車站選址、路線評估選、建設總成本估算、營運及保養成本估算、乘載量預估、總體經濟效益分析、項目執行方式及其融資、環境影響評估，以至規劃項目的管理，一一分析規劃高鐵客運系統所涉及的課題，讓學生從理論及實務兩個角度透視高鐵規劃的種種。其授課內容是以美國伊利諾大學香檳分校高速鐵路學程為藍本，而現時於該校任教該學程的高聰忠教授及M. Rapik Saat博士將專程來港授課。修畢可取得三個學分。

在2011及2012年，本院曾為業內人士及見習工程師開辦類似的高鐵課程，極受在職進修者歡迎。

Indonesia Service Learning Project 2012

At the Award Presentation Ceremony for Outstanding Service-Learning Projects on 21 February 2013, 4 students from the Department of Land Surveying and Geo-Informatics (LSGI) were honored along with 16 students from other PolyU departments for their participation in a self-initiated project that won a Gold Award. Co-organized by LSGI, the Office of Service Learning, Duta Wacana Christian University of

「同行共建在日惹」服務學習項目勇奪金獎

在2013年二月二十一日舉行的「傑出服務學習項目頒獎禮」上，四位土地測量及地理資訊學系的同學憑一個在印尼的服務項目勇奪金獎。同場獲得嘉許的還有十六位理大其他學系的學生。除了土地測量及地理資訊學系，參與該獲獎項目的單位還包括理大服務學習事務處、印尼杜塔卡瓦納基督教大學，以及澳洲國立大學；而項目的主旨，就是希望同學在協助弱勢社群的過程中，培養出對社會的責任感和服務精神。

Indonesia, and the Australian National University, the project aims to nurture a sense of social responsibility in students by having them serve those who are less privileged. Students from the organizing institutions stayed in the homes of the villagers of Yogyakarta, 100 km south of Semarang on the Island of Java, for nearly a month from 18 June to 12 July in 2012. Their mission was to help develop Yogyakarta into a tourist attraction and to enhance the quality of life for the residents. The nature of services provided by the students ranged from health care to map production to education to water supply to economics.

Not only did students learn about Indonesian culture and customs, they also had a chance to apply their knowledge of Geomatics. One of the LSGI students, Michael WONG Man Kong, said they helped local villagers to recognize land boundaries in the field from many technical drawings. Another student, Abi WAI On Yi, said they finished a map that integrated most of the records of the land lots. Both of them valued their experience of serving in a foreign country.

Mr Joseph Lam, one of the project advisers and an Instructor in LSGI, stated that the success of the service-learning experience was largely due to its meaningful theme, inspirational exchanges, and hard work. It allowed students to discover their own limitations as they applied what they have learnt. They became more motivated to solve problems as a result.

Other service-learning subjects offered by the Faculty of Construction and Environment include "Indoor Environment for Serving the Elderly" from the Department of Building Services Engineering, "Housing for the Community" and "Social Justice in Private Housing Redevelopment," both from the Department of Building and Real Estate.

FCE student bridging hearts and minds in rural China

A second year student in the BEng programme in Civil Engineering has made good practical use of what she has learnt at PolyU to make it easier for kids in rural China to get to school. Hody Ngai overcame her initial ambivalence about language barriers and cultural differences to volunteer in a building improvement project organized by Wu Zhi Qiao (Bridge to China) Charitable Foundation in the summer of 2012. Her perspectives on mainlanders have completely changed since then. She found the villagers she met in Datan village in Gansu very genuine and sincere. They would openly share interesting stories from their children's daily lives at school with her, even showing her photos from their children's wedding. Their hospitality left such a deep impression on her that she participated in another project to repair a bridge earlier this year, this time in Ping Bang village in Guizhou. When time came for her to say goodbye after completing the project, she did so reluctantly. The bonds she created with the villagers were difficult to sever, particularly for one 10-year-old village kid, with whom she moved stones together for several days and who could not refrain from crying.

The work Hody has done in China's rural areas has been very meaningful. If there were more students like her to dedicate time and hard labor on worthy community projects, the world would surely become a better place for all.

從2012年六月十八至七月十二日的差不多一個月裡，同學需要住進印尼日惹(爪哇島三寶壟市以南一百公里)的鄉郊村落，期望透過學習地方智慧，提出增加當地對旅客吸引力的建議，從而改善村民的生活質素。為了達成目標，他們提供了各式各樣的服務，涉及健康護理、地圖製作、教育、供水、經濟發展等範疇。

同學除了體驗印尼的文化和風俗，還能一展所學。其中一位參加者黃敏罡指出，他們協助當地人從大量地籍圖中分辨田地的地界，使土地可以充分使用；另一位同學韋安怡則表示，眾人合力完成了一幅包含大部分地段紀錄的完整地圖，以供農民易於閱讀。兩人均視服務異國社群為難得的學習經驗。

項目其中一位顧問、土地測量及地理資訊學系的導師林安華指出，是次「服務學習」之所以成功，除了學生投入地學習及服務，主要是因為項目的主題極富意義，參加者有機會深入地交流；而同學實踐理論時，可以從中認識及面對自己的局限與不足，敢於迎難而上。



建設及環境學院學生為內地鄉村送暖

2012年暑假，土木工程工學士課程二年級生魏凱怡參加了由無止橋慈善基金主辦的甘肅村莊發展計劃，學以致用，助當地小孩達到上學的心願。語言和文化上的差異，起初確曾令她猶豫，但小妮子最終一一克服障礙，對內地人民亦從此徹底改觀。在凱怡到訪的甘肅大灘村，居民個性誠懇率真，主動與她分享孩子的上學趣事，又拿子女的結婚照片給她觀看。小妮子為村民的熱情好客感動，因此在今年初又遠赴貴州平塘村，參與當地的修橋計劃。經過多日相處，她與村民已建立情誼，到了工程完成的別離時候，不捨之情，油然而生，其中一個與她連日一起搬運石頭的十歲孩子，更忍不住哭了出來！

凱怡在內地偏遠地區的工作意義重大。假如有多些同學願意像她一般身體力行，積極參與各類社區服務計劃，世界必然更加美好。





Alumni News

校友消息

Sustainable Urban Development Forum cum Research Alumni Reunion

The FCE Sustainable Urban Development Forum cum Research Alumni Reunion was held at the Ritz-Carlton in Shenzhen on 20 April 2013. Organized by the Faculty of Construction and Environment (FCE) and supported by the Research Institute for Sustainable Urban Development (RISUD), the forum aimed to nurture multi-disciplinary collaboration among PolyU's alumni, strengthening the connections and friendships amongst them. Over 300 alumni, staff, and friends of the Faculty attended the event.

Themed "Opportunities and Challenges of Sustainable Urban Development", the event was kicked off with opening remarks by Prof. Jin-Guang Teng, Dean of FCE and Director of RISUD. The Head of the Department (HoD) of Building and Real Estate (BRE), Prof. Geoffrey Shen; HoD of Land Surveying and Geo-informatics (LSGI), Prof. XL Ding; Acting Head of the Department (Ag HoD) of Building Services Engineering (BSE), Prof. Niu Jianlei; and Ag HoD of Civil and Environmental Engineering (CEE), Prof. Poon Chi-sun, introduced the research achievements of the respective departments. Dr Bai Honghai, CEO of PolyU's Shenzhen Base, also introduced the research developments of his organization.

可持續城市發展論壇暨建設及環境學院校友聚會

由建設及環境學院主辦、可持續城市發展研究院協辦的「可持續城市發展論壇暨建設及環境學院校友聚會」，已於2013年4月20日假深圳星河麗思卡爾頓酒店舉行。是項活動旨在鼓勵理大校友跨學科合作，加強聯繫，增進友誼。出席的校友、教職員和友好超過三百人。

論壇以「可持續城鎮化：機遇及挑戰」為題。本院兼可持續城市發展研究院院長滕錦光教授致開幕辭後，建築及房地產學系系主任沈岐平教授、土地測量及地理資訊學系系主任丁曉利教授、屋宇設備工程學系署理系主任牛建磊教授，以及土木及環境工程學系署理系主任潘智生教授分別上台，向來賓介紹所屬學系的科研成果。理大產學研基地總裁白洪海博士亦講述了基地的科研近況。

這次活動邀得中國科學院三位院士擔任主題講者，分別為武漢大學測繪遙感信息工程國家重點實驗室的李德仁教授、中國科學院生態環境研究中心的江桂斌教授，以及東南大學的孫偉教授。緊接主題演講的是由李向東教授（論壇其中一位聯席主席）主持的討論環節，參與者除



Three prominent Academicians delivered keynote speeches at the event. They included Prof. Deren Li from the Laboratory for Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS) of Wuhan University; Prof. Jiang Guibin from the Research Center for Eco-Environmental Sciences of the Chinese Academy of Sciences; and Prof. Sun Wei from Southeast University. It was then followed by a forum chaired by Prof. Xiang-dong Li, one of the Co-chairs of the event. Joining the forum were Academicians Prof. Jiang and Prof. Sun, as well as four distinguished alumni, namely, Prof. Li Qingquan, President of Shenzhen University and alumnus of LSGI; Prof. Wu Yuzhe, Professor & Associate Head of the Department of Land Management at Zhejiang University and alumnus of BRE; Prof. Xu Xinhua, Professor at Huazhong University of Science & Technology and alumnus of BSE; and Prof. Xue Suduo, Professor at the College of Architecture and Civil Engineering at the Beijing University of Technology and alumnus of CEE.

Speaking at the banquet after the forum, Prof. Jin-Guang Teng introduced the research achievements of the Faculty, highlighting the opportunities and challenges of sustainable urban development in Hong Kong. Prof. Albert Chan, another Co-Chair of the event, thanked the contributions and leadership provided by Prof. Teng over the years, and wished him every success in his new position as the Director of RISUD. Prof. Chan also thanked the Organizing Committee of the event, particularly PolyU's Shenzhen Base for its support.

Those in attendance enjoyed themselves immensely. They were entertained by a bingo game and a lucky draw during the banquet.

Photos of the event are available at: http://www.polyu.edu.hk/risud/download/fce_reu_2013_photos/

了前述的江、孫兩位教授，還有本院四位傑出校友——深圳大學校長李清泉教授(土地測量及地理資訊學系校友)、浙江大學土地管理系副系主任吳宇哲教授(建築及房地產學系校友)、華中科技大學徐新華教授(屋宇設備工程學系校友)，以及北京工業大學建築工程學院薛素鐸教授(土木及環境工程學系校友)。

在論壇後舉行的晚宴中，滕錦光教授向各人介紹建設及環境學院的各項科研成果，並重點指出在香港推動可持續城市發展所帶來的機遇和挑戰。論壇另一聯席主席陳炳泉教授則借這個機會感謝滕教授多年來領導學院所作的貢獻，並祝他轉任可持續城市發展研究院院長後工作順利。陳教授接著向論壇組織委員會的工作人員致意，並特別感謝理大產學研基地的同事。

除了嚴肅的報告和演講，晚宴也有輕鬆的一面。在「賓果」遊戲和幸運抽獎帶動下，各人暫時忘記工作，共度了一個愉快的週末晚上。

觀看有關照片，可登入以下網址：

http://www.polyu.edu.hk/risud/download/fce_reu_2013_photos/



FCE Alumni teaching outside of China

The Faculty of Construction and Environment takes pride in the achievements of all its PhD graduates, many of whom have started academic careers in universities all over the world, including Australia, Bangladesh, Canada, Ghana, Malaysia, Thailand, the UK, and the US. Following is a list of some of their details.

Surname 姓	First Name 名		Current Post 現職	University 大學
Chen 陳	Zhen 震		Lecturer in Facilities Management 設施管理講師	Heriot-Watt University, U.K. 赫瑞瓦特大學，英國
Cheng 鄭	Wai-Lun Eddie 偉倫		Assistant Professor 助理教授	The Hong Kong Institute of Education, P.R. China 香港教育學院，中國
Chung 鍾	Shan Shan 姍姍		Assistant Professor 助理教授	Hong Kong Baptist University, P.R. China 香港浸會大學，中國
Dai 戴	Fei 飛		Assistant Professor 助理教授	West Virginia University, U.S.A. 西弗吉尼亞大學，美國
Fernando	Dilum		Lecturer 講師	University of Queensland, Australia 澳大利亞昆士蘭大學，澳大利亞
Forkuo	Eric Kwabena		Senior Lecturer 高級講師	Kwame Nkrumah University of Science and Technology, Kumasi, Ghana 恩克魯瑪科技大學，庫馬西，加納
Lau 劉	Siu Kit 兆傑		Assistant Professor 助理教授	University of Nebraska - Lincoln, U.S.A. 內布拉斯加大學 - 林肯，美國

建設及環境學院校友海外學府春風化雨

建設及環境學院的博士畢業生人才輩出，不少均獲大學聘任，朝學者之路進發。這些優秀校友遍布世界各地，如澳洲、孟加拉、加拿大、加納、馬來西亞、泰國、英國及美國。以下是部分校友的近況：

Department 學系	Graduation Year (Year of PhD Awarded) 畢業年份(授予博 士生的年份)	Title of Thesis 論文題目	Graduated from which Department 畢業學系	Chief Supervisor 主導師	Co- Supervisor(s) 副導師
School of the Built Environment 建築環境學院	2003	An Integrated Analytical Approach to Environmental Management in Construction	BRE 建築及房地產 學系	Prof. Heng Li 李恒教授	Prof. Conrad Wong 黃天祥教授 (external)
Department of Social Sciences 社會科學系	2001	A Practical Model for Construction Partnering	BRE 建築及房地產 學系	Prof. Heng Li 李恒教授	-
Department of Biology 生物系	1996	Policy & Economic Considerations on waste minimization and recycling in Hong Kong	CEE 土木及環境工 程學系	Prof. Chi- Sun Poon 潘智生教授	Prof. Lok-sang Ho (external) 何樂生教授
Department of Civil and Environmental Engineering 土木與環境工程系	2010	Applied Photogrammetry for 3D Modeling, Quantity Surveying, and Augmented Reality in Construction	CEE 土木及環境工 程學系	Dr Ming Lu 鹿明博士	Prof. Wu Chen 陳武教授
School of Civil Engineering 土木工程學院	2010	Bond Behaviour and Debonding Failures in CFRP-Strengthened Steel Members	CEE 土木及環境工 程學系	Prof. Jin- Guang Teng 滕錦光教授	Prof. Xiao- Ling Zhao (external), Dr Tao Yu 余濤博士
Department of Geomatic Engineering 基礎地理信息工程系	2005	Automatic Fusion of Photogrammetric Imagery and Laser Scanner Point Clouds	LSGI 土地測量及地 理資訊學系	Dr Bruce King	Prof. Christopher Gold (external)
School of Architectural Engineering and Construction 建築工程與建築學院	2003	Active control of sound transmission into enclosure through a panel	BSE 屋宇設備工程 學系	Prof. Shiu- Keung Tang 鄧兆強教授	Prof. Ming- Cho So 蘇銘祖教授

Surname 姓	First Name 名		Current Post 現職	University 大學
Liao 廖	Zaiyi 再毅		Professor 教授	Ryerson University, Canada 瑞爾森大學，加拿大
Lu 呂	Wei-sheng Wilson 偉生		Assistant Professor 助理教授	The University of Hong Kong, P.R. China 香港大學，中國
Lu	Jerry (Lu Chi Kin)		Lecturer 講師	Queensland University of Technology, Australia 昆士蘭理工大學，澳大利亞
Luathep	Paramet		Lecturer 講師	Prince of Songkla University, Thailand 宋卡王子大學，泰國
Ma 馬	Zhenjun 貞俊		Lecturer 講師	University of Wollongong, Australia 臥龍崗大學，澳大利亞
Mostafa	Anirban		Associate Professor 副教授	Khulna University, Bangladesh 庫爾納大學，孟加拉國
Quach 郭	Wai-Meng Stephen 偉明		Associate Professor 副教授	University of Macau, P.R. China 澳門大學，中國
Sarker	Latifur Rahman		Senior Lecturer/ Assistant Professor 高級講師/助理教授	Universiti Teknologi Malaysia, Malaysia 馬來西亞工藝大學，馬來西亞

	Department 學系	Graduation Year (Year of PhD Awarded) 畢業年份(授予博 士生的年份)	Title of Thesis 論文題目	Graduated from which Department 畢業學系	Chief Supervisor 主導師	Co- Supervisor(s) 副導師
	Department of Architectural Science 建築系	2001	Predicting Energy Demand of Residential Buildings in China	BSE 屋宇設備工程 學系	Prof. Jian- Lei Niu 牛建磊教授	Prof. John Burnett, Prof. Hong-xing Yang 楊洪興教授
	Department of Real Estate and Construction 房地產及建設系	2006	A system for assessing and communicating contractors' competitiveness	BRE 建築及房地產 學系	Prof. Li-Yin Shen 申立銀教授	Dr Michael Yam 任志浩博士
	School of Civil Engineering and Built Environment 土木工程和建築環境學院	2005	Numerical simulation for structural steel member or framed structure at elevated temperatures	CEE 土木及環境工 程學系	Prof. Siu-Lai Chan 陳紹禮教授	-
	Department of Civil Engineering 土木工程系	2011	Stochastic Transport Network Model and Optimization for Reliability and Vulnerability Analysis	CEE 土木及環境工 程學系	Dr Agachai Sumalee	Prof. William Lam 林興強教授
	Faculty of Engineering 工程學院	2008	Global Optimization and System- based Control for Building Air- conditioning Systems	BSE 屋宇設備工程 學系	Prof. Sheng- Wei Wang 王盛衛教授	Prof. Arthur DEXTER (External), Prof. CAO Jiannong 曹建農教授
	Department of Architecture 建築系	2008	Rental Housing Provision Based on Affordability of the Lower End Populace: The Case of Hong Kong	BRE 建築及房地產 學系	Prof. Francis Wong 黃君華教授	Prof. Eddie Hui 許智文教授
	Department of Civil and Environmental Engineering 土木與環境工程系	2005	Residual Stresses in Cold-Formed Steel Sections and Their Effect on Column Behaviour	CEE 土木及環境工 程學系	Prof. Jin- Guang Teng 滕錦光教授	Prof. Kwok-Fai Chung 鍾國輝教授
	Department of Remote Sensing 遙感系	2010	Estimation of Forest Biomass Using Remote Sensing	LSGI 土地測量及地 理資訊學系	Prof. Janet Nichol	-

Surname 姓	First Name 名		Current Post 現職	University 大學
Shaker	Ahmed		Assistant Professor 助理教授	Ryerson University, Canada 瑞爾森大學，加拿大
Shen 沈	Xuesong 雪松		Lecturer 講師	University of New South Wales, Australia 新南威爾士大學，澳大利亞
Xia 夏	Bo (Paul) 波		Lecturer 講師	Queensland University of Technology, Australia 昆士蘭理工大學，澳大利亞
Yang 楊	Rebecca 靜		Lecturer 講師	Deakin University, Australia 迪肯大學，澳大利亞
Yeung 楊	Fai Yip, John 輝葉		Lecturer I 講師 I	Hong Kong Baptist University, P.R. China 香港浸會大學，中國
Yu 余	Tao 濤		Lecturer 講師	University of Wollongong, Australia 臥龍崗大學，澳大利亞
Zhang 張	Xiaoling 曉玲		Assistant Professor 助理教授	City University of Hong Kong, P.R. China 香港城市大學，中國
Zhou 周	Wan-Huan Hannah 萬歡		Assistant Professor 助理教授	University of Macau, P.R. China 澳門大學，中國

	Department 學系	Graduation Year (Year of PhD Awarded) 畢業年份(授予博 士生的年份)	Title of Thesis 論文題目	Graduated from which Department 畢業學系	Chief Supervisor 主導師	Co- Supervisor(s) 副導師
	Department of Civil Engineering 土木工程系	2004	Point- and line-based transformation models for high resolution satellite image rectification	LSGI 土地測量及地 理資訊學系	Prof. John Shi 史文中教授	-
	School of Civil and Environmental Engineering 土木與環境工程學院	2010	Surveying-Computing Integrated Approach to Tracking a Tunnel Boring Machine during Microtunneling	CEE 土木及環境工 程學系	Dr Ming Lu 鹿明博士	Prof. Wu Chen 陳武教授
	School of Civil Engineering and Built Environment 土木工程和建築環境學院	2010	The Selection of Design- build Operational Variations in the Peoples' Republic of China Using Delphi Method and Fuzzy Set Theory	BRE 建築及房地產 學系	Prof. Albert Chan 陳炳泉教授	Dr Daniel Chan, Dr Linda Fan 陳煒明博士， 范黃志寧博士
	School of Architecture and Built Environment 建築與建築環境學院	2010	A Framework for Stakeholder Management in Construction Projects	BRE 建築及房地產 學系	Prof. Geoffrey Shen 沈岐平教授	Dr Christabel Ho 何曼芳博士
	Division of Business, College of International Education, School of Continuing Education 商業部，國際教育學院， 繼續教育學院	2007	Developing a Partnering Performance Index (PPI) for Construction Projects - A Fuzzy Set Theory Approach	BRE 建築及房地產 學系	Prof. Albert Chan 陳炳泉教授	Dr Daniel Chan 陳煒明博士
	School of Civil, Mining and Environmental Engineering 土木工程，採礦與環境工 程學院	2007	Structural Behaviour of Hybrid FRP- Concrete-Steel Double-Skin Tubular Columns	CEE 土木及環境工 程學系	Dr Yuk-Lung Wong 黃玉龍博士	Prof. Jin- Guang Teng, Dr Eddie Lam, Prof. Shin- Lin Dong (external) 滕錦光教授， 林少書博士
	Department of Public Policy 公共政策系	2010	Competitiveness for real estate developers : a China study	BRE 建築及房地產 學系	Prof. Li-Yin Shen 申立銀教授	Dr Linda Fan 范黃志寧博士
	Department of Civil and Environmental Engineering 土木與環境工程系	2008	Experimental and Theoretical Study on Pullout Resistance of Grouted Soil Nails	CEE 土木及環境工 程學系	Prof. Jian- Hua Yin 殷建華教授	

PolyU confers University Fellowship on Ir Tsui and Mr Kong

The latest crop of University Fellows was honoured in a conferment ceremony at the Jockey Club Auditorium on 30 January 2013. It included Ir Tsui Tack-kong, a recipient of the 2011 Outstanding PolyU Alumni Award, and Mr Kong Qingping, Chairman of China Overseas Land and Investment Limited. Both have made significant contributions to the University and the community. The former is a Founding Member and Member of the Board of Directors of the PolyU Development Foundation, playing an active role in various PolyU fund-raising events. The latter has a wealth of experience in the field of construction engineering and real estate development. As an Adjunct Professor to PolyU's Department of Building and Real Estate, Mr Kong was invited to give a public lecture at PolyU entitled "Real Estate Market in China, Present and Future." Congratulations to both of them.

崔德剛工程師及孔慶平教授榮任理大院士

2013年一月三十日，理大於賽馬會綜藝館舉行了最新一屆大學院士頒授儀式，獲此榮譽的傑出人士中，包括2011年「理大傑出校友」崔德剛工程師及中國海外發展有限公司主席孔慶平教授。無論對大學或香港社會，兩位皆建樹良多。崔德剛工程師是理大發展基金創會會員兼董事局成員，積極參與母校的籌款活動；孔慶平教授則在建築工程及房地產界擁有豐富經驗，現任建築及房地產學系兼任教授，曾應邀為理大主持公開演講，題目為「中國房地產市場現狀與發展趨勢及中國房地產開發企業競爭力」。恭喜兩位。



Mr Kong Qingping



Ir Tsui Tack-kong

Ir Prof. Johnny Fan recognized as outstanding PolyU alumnus

Accolades for Ir Prof. Johnny Fan have followed one after another. Since receiving the 2012 Outstanding Alumni Award from the Departments of Building and Real Estate as well as Civil and Environmental Engineering, he was also selected as one of PolyU's Outstanding Alumni, who were all honored in an award ceremony on 18 April 2013.

Jointly organized by PolyU and the Federation of PolyU Alumni Associations since late 1996, this biennial award aims to recognize the accomplishments and contributions made by former students of PolyU and its predecessors. Ir Prof. Johnny Fan has certainly distinguished himself with an impressive record of serving the community and giving back to society since graduating from the former Hong Kong Technical College in 1972 with a Higher Diploma in Structural Engineering. With foresight and a pioneering spirit, he launched the first precast concrete façade factory and set up the first steel pipe factory in Hong Kong. Currently the Director of WMKY Architects & Engineers, he is credited for introducing a number of new technologies to the Hong Kong construction market, including the Daido concrete piling system from Japan and YTONG blocks and panels from Germany.

樊紹基教授工程師當選理大傑出校友



繼榮譽建築及房地產學系與土木及環境工程學系2012年傑出校友，樊紹基教授工程師最近再添殊榮——他於2013年四月十八日的頒獎禮上領取「傑出理大校友」獎項。

兩年一度的「傑出理大校友」選舉始於1996年底，由理大與理大校友會聯合會合辦，旨在公開表揚理大（及其前身）畢業生的

成就和貢獻。樊紹基教授工程師1972年在理大前身——香港工業專門學院取得結構工程學高級文憑，至今四十餘載，從個人成就到回饋社會，表現有目共睹。他目光如炬，敢於創新，不僅成立了香港第一家預製混凝土外牆及鋼鐵導管製造公司，也為香港建造界引進了多項新技術，在香港設廠生產日本的混凝土管樁系統，以及德國的輕重量混凝土防火磚和隔牆板。

With an illustrious career spanning over 40 years, he has accumulated a wealth of experience, which he drew upon in his service to many professional organizations. His commitment to the growth of his alma mater earned him a University Fellowship from PolyU in 2009. Congratulations to Ir Prof. Johnny Fan for another well deserved honor.

樊教授現任雲麥郭楊建築工程顧問有限公司董事，服務不少業界機構。他十分關心和支持母校的發展，早於2009年已獲得大學院士榮銜，今次再獲殊榮，絕對實至名歸。

Celebration Dinner for Outstanding BRE Alumni

On 13 December 2012, a dinner in honor of the 2012 Outstanding BRE Alumni was held at the banquet hall of the PolyU Student Halls. Besides the award winners, Ir Prof. Johnny Fan Siu Kay and Ir Prof. Peter Mok Kwok Woo, Prof. Timothy Tong, President of PolyU, and Prof. Jin-Guang Teng, Dean of the Faculty of Construction and Environment, were also there to celebrate. The winners were selected based on their achievements and contributions to the community as well as the built environment. The panel of 5 judges included Ir Prof. Fred Ng, the Chairman of the Panel, the Panel members, Prof. Chan Ka Kui, JP, Prof. Kenneth Pang, SBS, Prof. Geoffrey Shen, Head of the Department of Building and Real Estate (BRE) and Ir Tsui Tack Kong.

友好同賀建築及房地產學系傑出校友

2012年十二月十三日，一眾友好齊集理大學生宿舍一樓宴會廳，為榮獲2012年建築及房地產學系傑出校友榮譽的樊紹基教授工程師及莫國和教授工程師舉辦慶祝晚宴，理大校長唐偉章教授及本院院長滕錦光教授亦有出席。獎項評審團包括主席吳世豪教授工程師、成員陳家駒太平紳士、彭贊榮教授、崔德剛工程師及建築及房地產學系系主任沈岐平教授。得獎者除了本身成就非凡，對社會和建築環境亦有重大建樹。





Events 活動剪影

RISUD's Inauguration Ceremony

On the afternoon of 14 June 2013, the Research Institute for Sustainable Urban Development (RISUD) had its Inauguration Ceremony at the Chiang Chen Studio Theatre on the campus of PolyU. After welcoming remarks by Prof. Timothy Tong, President of PolyU, speeches were delivered by the two guests of honour, Dr Qiu Baoxing, Vice Minister of the Ministry of Housing and Urban-Rural Development of China, and the Hon. Wong Kam-sing, JP, Secretary for the Environment of the Hong Kong Special Administrative Region. Officiating guests at the ceremony included Ir Wai Chi Sing, JP, Permanent Secretary for Development (Works); Ir Chew Tai Chong, Projects Director at MTR Corp. Ltd.; Ir Chan Kin Sek, Raymond, Senior Vice President of the Hong Kong Institution of Engineers; Mr Wilson Kwong, Board Director of the Business Environment Council, and Mr K.L. Lam, Chairman of The Conservancy Association. Representing different sectors of society, they were invited onstage to express their respective expectations for RISUD, which combined to spell out its acronym. This cued the unveiling of its vision by the guests of honour, President Tong, Dr Andrew Chan, JP, Chairman of the International Advisory Committee of RISUD, Prof. Jin-Guang Teng, Director of RISUD and Prof. Xiang-Dong Li, Associate Director of RISUD and the five officiating guests, who were cheered on by those in attendance. Ms Marjorie Yang, Council Chairlady, subsequently

可持續城市發展研究院成立典禮

二零一三年六月十四日下午，可持續城市發展研究院於校園內的蔣震劇院舉行成立典禮。理大校長唐偉章教授致歡迎辭後，兩位主禮嘉賓——中國住房和城鄉建設部副部長仇保興博士及香港特別行政區政府環境局局長黃錦星太平紳士——先後發表演說。其他揭幕嘉賓則包括發展局常任秘書長（工務）韋志成工程師、港鐵公司工程總監周大滄工程師、香港工程師學會高級副會長陳健碩工程師、商界環保協會董事鄭永銓先生，以及長春社主席林乾禮先生。這些嘉賓來自社會各界，當日均應邀上台細述對研究院的期望。在兩位主禮嘉賓、唐校長、研究院國際諮詢委員會主席陳嘉正博士以及五位揭幕嘉賓的陪同下，研究院院長滕錦光教授及副院長李向東教授，向在坐人士展示了「可持續城市發展研究院」的願景：「開發及推廣能達致可持續高密度城市發展的技術和策略，並在此領域執世界牛耳」。理大校董會主席楊敏德女士雖未能親身出席，但亦有透過錄像表達對研究所的祝願。

儀式後滕教授便向在座的一眾嘉賓介紹研究院的背景和科研項目。典禮結束後，該院隨即在同日舉辦研討會，並邀得仇保興博士、德國氣候服務中心總監Guy Brasseur教授，以及加州大學柏克萊分校土木及環境工程學系的Khalid M. Mosalam教授擔任專題演講嘉賓。



shared her best wishes for the research institute via video.

Following the unveiling of its vision, Prof. Teng introduced RISUD to the crowd of audience. A seminar after the ceremony wrapped up the day's activities, which was led by Dr Qiu Baoxing, Prof. Guy Brasseur, Director of the Climate Service Center in Germany, and Prof. Khalid M. Mosalam from the Department of Civil and Environmental Engineering at the University of California at Berkeley. They provoked stimulating discussions, which continued the next day in 5 different workshops on various topics. More than 50 speakers who are leading experts in their respective fields participated in these workshops, which were attended by over 300 local researchers and practitioners. Below are further details of the workshops.

台下踴躍回應，當中不乏引人深思的討論。翌日五個專題工作坊的氣氛更是熾熱，逾五十位專家講者先後發言，參與的本地科研工作者和業界人士多達300人。下表是有關工作坊的一些資料。



Convenor/Co-Convenor 召集人/聯席召集人	Topic of Workshop 工作坊主題
Prof. C. S. Poon 潘智生教授	Sustainable Waste Management: Recycling of Waste 持續的廢物管理：廢物的回收再造
Prof. S. W. Wang/Prof. Hong-Xing Yang 王盛衛教授/楊洪興教授	Building Energy Efficiency 建築物能源效益
Prof. T. Wang 王韜教授	Regional Air Quality: Linking Science to Policy 區域空氣質量：連繫科學與政策
Prof. J. G. Teng/ Dr J.G. Dai 滕錦光教授/戴建國博士	Life-cycle Performance of Concrete Structures 混凝土結構的全壽命性能
Prof. Geoffrey Shen 沈岐平教授	Sustainable Urban Renewal in High-Density Cities 高密度城市的可持續市區更新

It is expected more events of this nature will facilitate discussions on future research directions and dissemination of the latest advances in the field of sustainable urban development.

我們相信類似性質的活動將有助訂定可持續城市發展的研究方向，以及發布這方面的最新信息和進展。

1st International Conference on Performance-based and Life-cycle Structural Engineering

On 5-7 December 2012, an international conference on Performance-based and Life-cycle Structural Engineering (PLSE) was held at the Regal Kowloon Hotel. Co-organized by the Faculty of Construction and Environment (FCE) and the Research Institute for Sustainable Urban Development (RISUD), the conference is hopefully the first in a series on these areas of structural engineering, which have been gaining gradual acceptance in practice. Developing technologies to monitor the safety of structures throughout their life cycles is the ultimate aim of the conference, which attracted almost 300 people from 25 countries, with about one quarter of them from China.



The opening ceremony was officiated by Ms Marjorie Mun-tak Yang, Council Chairman of PolyU, and Prof. Jin-Guang Teng, Dean of FCE and Director of RISUD. In her welcome address, Ms Yang spoke of FCE's dynamic history in shaping the transformation of Hong Kong into a bustling metropolis. She pointed out the unique role that Hong Kong has in leading the sustainable development of mainland China as well as the remarkable fit between the conference theme and the strategic focus of PolyU on urban sustainability. Praising the goal for a sustainable urban infrastructure as a noble and necessary one, she enthused about the establishment of RISUD earlier this year and its aspirations for becoming a world leader in this field.

The conference included 9 keynote lectures, 35 invited presentations, 11 mini-symposia and 13 parallel sessions on specialized topics. Below are details of the keynote speakers and their lecture topics.

Name 講者	Affiliation 院校	Topic 講題
Prof. Nick Buenfeld Nick Buenfeld 教授	Dept. of Civil and Environmental Engineering Imperial College London United Kingdom 英國倫敦帝國學院土木及環境工程系	Challenges in understanding and predicting the deterioration of concrete structures 了解及預測混凝土結構劣化情況的困難
Prof. Oral Buyukozturk Oral Buyukozturk 教授	Dept. of Civil and Environmental Engineering Massachusetts Institute of Technology United States 美國麻省理工學院土木及環境工程系	Deterioration and performance modeling of epoxy-concrete interfaces in structures 結構內環氧混凝土介面的劣化及表現建模

第一屆基於性能的全壽命結構工程國際會議

由建設及環境學院及可持續城市發展研究院聯袂主辦的第一屆「績效為本及生命週期結構工程國際會議」，已於2012年十二月五至七日假富豪九龍酒店舉行。該會議的內容針對結構工程的最新科研及實務趨勢，吸引了二十五個國家、約三百名人士參與，席上發表的論文多達約二百四十篇。



會議由理大校董會主席楊敏德女士，以及建設及環境學院兼可持續城市發展研究院院長滕錦光教授主持揭幕儀式。楊女士致歡迎辭時，特別提到本院對香港蛻變為國際大都會的貢獻。她認為香港對協助內地發展永續城市發揮了與別不同的作用，而這次會議的主題，恰恰體現了理大對可持續城市發展的高度重視。城市基建必須具備「可持續」的特性，這是崇高的目標，也是大勢所趨。理大在去年初創立「可持續城市發展研究院」，並矢志成為這方面的國際權威，她為此深感高興。

今次會議規模龐大，堪稱菁英雲集，除邀得九位著名學者發表主題演講，還有三十五位人士應邀作簡報，並包括十一場小型研討會，以及十三個分組專題討論環節。下表詳列了主題講者名單及其講題。

Name 講者	Affiliation 院校	Topic 講題
Prof. Gregory G. Deierlein Gregory G. Deierlein 教授	Dept. of Civil and Environmental Engineering Stanford University United States 美國史丹福大學土木及環境工程系	Performance-based earthquake engineering and innovations for seismically resilient buildings and communities 績效為本的地震工程學及抗震建築物和社區的新發展
Prof. Filip C. Filippou Filip C. Filippou 教授	Dept. of Civil and Environmental Engineering University of California, Berkeley United States 美國加州大學柏克萊分校土木及環境工程系	Developments in nonlinear analysis for life-cycle structural engineering 生命週期導向結構工程非線性分析的發展
Prof. Dan Frangopol Dan Frangopol 教授	Dept. of Civil and Environmental Engineering Lehigh University United States 美國理海大學土木及環境工程系	Probabilistic life-cycle management of civil and marine infrastructures: emphasis on fatigue and corrosion 土木及海洋基建的或然性生命週期管理：疲勞及侵蝕
Prof. Koichi Maekawa 前川宏一教授	Dept. of Civil Engineering The University of Tokyo Japan 日本東京大學土木工程系	Multi-scale and multi-chemo-mechanistic approach to the life-cycle performance assessment of structural concrete 構造用混凝土的多尺度及多化學／機械學模式生命週期績效評估
Prof. Jin-Ping Ou 歐進萍教授	School of Civil Engineering Dalian University of Technology China 中國大連理工大學土木工程學院	Some advances and challenging issues of the life-cycle performance monitoring, evaluation and design of infrastructure 基建生命週期績效監測、評估及設計的一些進展及難題
Prof. Frieder Seible Frieder Seible 教授	Jacobs School of Engineering University of California, San Diego United States 美國加州大學聖地牙哥分校雅各工程學院	Assessment of the structural performance of our physical infrastructure under extreme loads 評估硬件基建結構在極端負荷下的表現
Prof. Surendra P. Shah Surendra P. Shah 教授	Dept. of Civil and Environmental Engineering Northwestern University United States 美國西北大學土木及環境工程學系	Application of nanotechnology for sustainable infrastructure materials 納米科技在可持續基建物料的應用

With the financial support of half a dozen leading organizations, such as the Croucher Foundation, Sun Hung Kai Properties Limited, Chun Wo Development Holdings Limited, Gammon Construction Limited, Paul Y. Engineering Group Limited, and Vantage International (Holdings) Limited, the conference was a great success in bringing together industry practitioners and engineering scholars for the exchange of ideas related to these important topics. The presentation of nearly 240 papers was well received by those in attendance. Numerous discussions were generated. New friendships were made and old acquaintances renewed.

贊助今次盛事的大型企業／機構包括裘槎基金會、新鴻基地產集團、俊和發展集團、金門建築有限公司、保華建業集團，以及盈信控股有限公司。會議為業界與工程學者提供了交流切磋的空間，與會者對席上發表的約二百四十份論文反應良好，各人均踴躍討論，無不感到獲益良多。



The 5th International Symposium on Transportation Network Reliability (INSTR2012)

On 18-19 December 2012, the 5th International Symposium on Transportation Network Reliability (INSTR2012) was successfully held at the InterContinental Grand Stanford in Hong Kong. The Symposium was jointly organized by PolyU's Department of Civil and Environmental Engineering (CEE) and the Hong Kong Society for Transportation Studies (HKSTS), with financial sponsorship from The Croucher Foundation and the Faculty of Construction and Environment (FCE). In addition, the Chartered Institute of Logistics and Transport in Hong Kong (CILTHK) and the civil division of the Hong Kong Institution of Engineers (HKIE) served as the non-financial sponsors of the Symposium.

The INSTR series is the premier gathering for the world's leading researchers and professionals interested in transportation network reliability. As the most prestigious and important symposium series for state-of-the-art discussions on both recent research and future directions in this increasingly important field of research, it embraces a range of topics pertaining to transportation reliability, from user perception of unreliability, the valuation and economics of reliability, network reliability modeling and transportation network robustness to travel behavior and vehicle routing under uncertainty, risk evaluation and management of transportation networks.

With excellent track records in the field, the INSTR prides itself on the extremely high quality of its proceedings (see www.INSTR.org). Previous symposia typically had around 50 papers presented in plenary and/or parallel sessions. Over 60 papers were selected for presentation at the 5th INSTR Symposium, following a rigorous two-tier peer review process. For further details of the Symposium, see www.INSTR2012.org.

In total, over 100 participants attended the INSTR2012 Symposium, including PhD students, engineers and professors from about 18 countries around the world. The speakers at the Symposium exchanged innovative ideas on various aspects of analysis and design for improving transportation network reliability. The organizers would like to convey their sincere thanks to all the speakers, particularly the keynote speakers, Ir Prof. T.F. Leung, Assistant Commissioner for Transport/Technical Service of the Government of Hong Kong SAR, and Prof. Michael A.P. Taylor from the University of South Australia.

第五屆交通網絡可靠性國際研討會 (INSTR2012)

於2012年十二月十八至十九日假香港海景嘉福酒店舉行的第五屆交通網絡可靠性國際研討會已圓滿結束。該活動由理大土木及環境工程學系連同香港交通研究學會主辦，除獲得裘槎基金會及本院贊助，香港運輸物流學會及香港工程師學會土木分部亦有提供非財政支援。

每年，上述研討會都吸引全球不少對交通網絡可靠性感興趣的頂級科研工作者和業內人士參加，權威性與重要性毋庸置疑。事實上，有關交通網絡可靠性的研究在近年越來越受到重視，與會者都把握這個機會，討論最新的科研成果和日後的發展方向，涵蓋的專題十分廣泛，包括使用者對不可靠性的觀感；可靠性評估及經濟效益；交通網絡可靠性及穩健性的建模；不確定情況下的交通行為及車輛路線；以及交通網絡的風險評估和管理。

多年來，這項學術活動都以論文質素卓越見稱（可瀏覽 www.INSTR.org）。以前幾屆會議為例，在大會及／或分組會議發表的論文約有五十篇；今屆會議雖採用嚴格的兩級同儕評審制度，但獲選在會上發表的論文仍然超過六十篇。如對研討會詳情感興趣，可登入其正式網站，網址為 www.INSTR2012.org。

今屆逾百位參加者中，有來自十八個國家的博士生、工程師和學者。講者就如何改善交通網絡的可靠性交換了意見。主辦單位衷心感謝所有講者，尤其是兩位主題演講嘉賓——香港政府運輸署助理署長（技術服務）梁德輝教授工程師，以及南澳洲大學的 Michael A.P. Taylor 教授。



2013 Global Leadership Forum for Construction Engineering and Management Programs

On 11 and 12 May 2013, about 20 leading academics from around the globe converged on the campus of PolyU for the 2013 Global Leadership Forum for Construction Engineering and Management Programs (GLF-CEM), which was established two years ago to facilitate the exchange of ideas and collaborative research in this field. After two annual meetings at Purdue University, it was PolyU's turn to host this international event, and the local organizing committee chaired by Prof. Geoffrey Shen, Associate Dean of the Faculty of Construction and Environment (FCE) and Head of the Department of Building and Real Estate, delivered a programme that was very well received by all the delegates and observers who were in attendance. With a focus on the challenge of setting the research agenda for the CEM community, the forum had three interrelated sessions: (1) long-term fundamental and scientific research questions to be answered by the CEM community as a whole; (2) issues and topics in CEM for the next decade, and (3) how multi-disciplinary research collaborations can address the key issues faced by the CEM community. The forum also included an opening speech by Prof. Jin-Guang Teng, Dean of FCE, and a keynote presentation via video conference by Prof. Rodney Culver Hill of Texas A&M University. Many thanks go to the members of the organizing committee for their hard work in making this a successful event. The committee consisted of Zuhaili M. Ramly as the secretary, and Shanshan Bu, Chris Jingke Hong, Chen Lu, Sean Yi Peng, Dr Maggie L.Y.N. Tang, Hao Wang, Zhao Yuan, and Helen Wei Zheng as members.

2013 建築工程及管理全球領袖論壇

2013年五月十一及十二日，約二十位來自世界各地的一流學者雲集理大校園，參加「2013 建築工程及管理全球領袖論壇」。這項活動於兩年前首辦，旨在促進有關領域的學術交流和科研合作。首兩屆論壇均於普渡大學舉行，今年交由理大接棒，並由建設及環境學院副院長兼建築及房地產學系系主任沈岐平教授出任籌委會主席。籌委會的安排獲與會代表和觀察員一致好評。論壇聚焦於為建築工程管理擬定研究優次，共設三個互相關連的討論環節：(1) 建築工程管理界須回應的長遠基礎及科學研究問題；(2) 建築工程管理未來十年的焦點及議題；以及(3) 如何透過跨學科研究解決建築工程管理界面對的主要難題。除了上述專題討論，建設及環境學院院長滕錦光教授亦親臨揭幕禮致辭，美國德州農工大學的 Rodney Culver Hill 教授則透過視像會議發表主題演講。論壇得以圓滿舉行，實有賴工作人員全力以赴，包括擔任籌委會秘書的 Zuhaili M. Ramly，以及成員卜杉杉、洪競科、盧晨、彭毅、唐李雅寧博士、王昊、原釗及鄭微。



HK Institute of Real Estate Administrators visits FCE

On the afternoon of 11 January 2013, about 30 visitors from the Hong Kong Institute of Real Estate Administrators were introduced to the Faculty of Construction and Environment and the Research Institute for Sustainable Urban Development. After opening remarks by the Acting Dean, Prof. Geoffrey Shen, presentations of our research innovations were made by Dr Huang Ting of the Department of Building and Real Estate, Prof. Poon Chi Sun of the Department of Civil and Environmental Engineering, Prof. Yang Hong-xing, and Dr Linda Xiao, both of the Department of Building Services Engineering. They each talked about research advances in their respective fields in terms of their applications to the construction industry. For example, Dr Xiao showed how the diagnosis, commissioning, and optimization of a building's life-cycle could enhance its energy efficiency; Prof. Yang shared the latest research and development of renewable energy applications in an urban environment; Prof. Poon talked about the use of eco-blocks in construction to reduce pollution, while Dr Huang discussed the advantages of a proactive construction management system. The visitors also had a chance to tour the laboratories of the Department of Building Services Engineering before leaving the campus of PolyU.



PolyU Info Day for Taught Postgraduate Programmes

The PolyU Info Day for Taught Postgraduate Programmes was successfully held on Saturday 19 January 2013. This is an annual event at the Hong Kong Polytechnic University for prospective applicants to familiarize themselves with the taught postgraduate programmes available at the University.

The event was kick started by Prof. Edwin Chan, Associate Head of the Department of Building and Real Estate, who is also the coordinator of the MSc/PgD in Construction Law and Dispute Resolution. He introduced the Postgraduate Scheme during the Overview Session on behalf of the Scheme Chairman.

Following the Overview Session, break-out sessions for our eleven taught postgraduate programmes, including a new MSc/PgD in High Performance

香港地產行政師學會代表團到訪建設及環境學院

2013年一月十一日下午，香港地產行政師學會一行約三十人到訪本院及新成立的可持續城市發展研究院。署理院長沈岐平教授致歡迎辭後，便由四位同事——建築及房地產學系的黃霆博士、土木及環境工程學系的潘智生教授，以及屋宇設備工程學系的楊洪興教授和肖賦博士——向來賓介紹其專長範疇的研究進展，以及這些成果在建造業的應用情況。舉例說，肖博士講解了如何通過生命週期診斷、效驗和優化的來提高建築節能效益；楊教授介紹了在城市里利用太陽能的技術和他的研究成果；潘教授解釋怎樣利用環保磚減少污染；黃博士則講述主控式建築管理系統的優點。活動結束前，來賓還參觀了屋宇設備工程學系的實驗室。



授課式深造課程教育資訊日

理大2013-14年度的授課式深造課程教育資訊日已於2013年一月十九日(星期六)圓滿舉行。這項活動每年舉辦一次，旨在向有意報讀有關課程的申請人介紹最新資訊。

當日，本院是由建築及房地產學系副系主任陳漢雲教授主持啟動儀式。陳教授除了擔任「建築法及爭議解決學理學碩士／深造文憑」的課程主任，也在概覽座談中代表本院介紹了「碩士學位組合課程」的資料。

概覽座談完畢後，便由負責的同事分頭介紹建設及環境學院十一項授課式深造課程，當中包括新辦的「高效能建築理學碩士學位／深造文憑課程」。高效能建築物對環境造成的碳足印(全球效應)最少，但卻最能提升建築物各

Buildings (HPB), were conducted at various venues. The HPB programme provides an opportunity for students to broaden their knowledge of assessment of High Performance Buildings, which impose minimal impacts on global carbon footprints (global impacts) and provide optimized building systems performance for their owners (building impacts), as well as the best indoor environment for the health and well-being for their occupants.

The break-out sessions gave prospective applicants an excellent opportunity to obtain more in-depth information and to chat with award coordinators for a better understanding of programme requirements. More than 90 people attended the Overview Session and nearly 270 turned out for the break-out sessions, a record high for our Faculty.

Entry Scholarships are available for outstanding students. For details, please visit <http://www.polyu.edu.hk/fce/postgrad-scheme>. Applications for the 2013-14 admission can be submitted via www.polyu.edu.hk/study.



個系統的效益(建築效應)，營造最理想的室內環境，促進使用者的身心健康。入讀該課程的同學，可望增進這方面的專業知識。

上述分課程進行的簡介會，為有意報名的同學提供了詳細資料，並讓他們有機會與課程主任詳談，多了解入學要求。今年，逾九十人參加了概覽座談、約二百七十人出席課程簡介會，乃歷年新高。

本院設有新生獎學金，鼓勵成績和表現卓越的學生繼續進修。查閱詳情，可瀏覽<http://www.polyu.edu.hk/fce/postgrad-scheme>。申請人亦可在網上遞交入學申請，網址是www.polyu.edu.hk/study。



LSGI reaches out to community in basketball game

If you think our academic staff is only to be found in their offices and laboratories, think again. On 14 December 2012, a basketball court in the sports complex on campus was brimming with action. The two teams that were engaged in a basketball game represented the Department of Land Surveying and Geo-Informatics (LSGI) and the Mass Transit Railway Corporation (MTRC) respectively. Though they were playing for different sides, the members of the two teams were not strangers to one another. That's because some of the members of the MTRC team used to be LSGI students. Mr Jason Law, a land surveyor at MTRC, was pleased to be back on his old stomping ground since graduating in 2000. Another alumna was Ms Bessie Liu, an assistant land surveyor who graduated in 2007. Not only did she enjoy organizing and watching the game, she also had a chance to catch up with Prof. Ding, head of the department, on the bleachers. The LSGI team included Dr Charles Wong and Ir Dr Wallace Lai, both assistant professors of LSGI. They were glad to burn some calories on that occasion, which brought different generations together for some exercise. Even though LSGI was the winning team, both sides had fun with the game and looked forward to more events like that in the future.

土地測量及地理資訊學系教職員籃球隊友誼賽技壓港鐵代表隊

要是你認為本院教職員終日只懂在辦公室和實驗室埋頭苦幹，那就大錯特錯了！2012年十二月十四日，校園體育館的籃球場便爆發了一場大戰——土地測量及地理資訊學系教職員隊與港鐵代表隊正面交鋒。雖然在球場上各為其主，但港鐵隊部分隊員實為該系校友，故彼此並不陌生。任職港鐵土地測量師的羅文豪先生是2000年的畢業生，對有機會重返母校籃球場十分雀躍；另一位在2007年畢業的校友廖佩茜小姐，則現職港鐵助理土地測量師。她很高興能籌辦和觀賞今次比賽，並有機會與系主任丁曉利教授在觀眾席上閒聊。不同年代的教職員和校友藉今次活動濟濟一堂。代表學系出戰的兩位助理教授——黃文聲博士及賴緯樂博士工程師更笑說要借球賽「燃燒脂肪」！比賽最終由學系隊勝出，但雙方均樂在其中，期望日後再舉辦類似的聯誼活動。



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



Prof. Robert F. Sawyer, Class of 1935 Professor of Energy Emeritus at the University of California at Berkeley, gave a distinguished lecture titled "The Science and Politics of California Air Pollution." (6 December 2012)



Dr Jin Wen, Associate Professor at the Department of Civil, Architectural and Environmental Engineering at Drexel University, gave a public lecture titled "Research and Applications of Building Energy Modeling, Diagnosis, and Occupant Behavior." (11 December 2012)

Prof. Changrong Xia, Professor in the Department of Materials Science and Engineering at the University of Science and Technology of China, gave a public lecture titled "Nanostructured Electrodes for Solid Oxide Fuel Cells." (31 January 2013)



Dr Zhong Tao, Associate Professor at the Institute for Infrastructure Engineering at the University of Western Sydney in Australia, gave a public lecture titled "Behaviour of Concrete-filled Stainless Steel Tubular Columns at Ambient and Elevated Temperatures." (4 February 2013)



Prof. Per Anker Jensen, Professor at the Technical University of Denmark and Head of Centre for Facilities Management — Realdania Research (CFM), gave a public lecture titled "The Added Value of Facilities Management: Models for Mapping and Concepts for Managing." (25 February 2013)



Dr Richard Nielsen, Chairman of the Department of Civil Engineering at the University of Idaho, gave a public lecture titled "Structural Engineering at the University of Idaho: Bridges and Buildings." (12 March 2013)

Prof. Frederic Andre Skoczylas, Professor at Ecole Centrale de Lille of Lille University, gave a public lecture titled "From Relative Gas Permeability Experiments to In-situ Measurements." (3 April 2013)



Dr Helen X. H. Bao, Lecturer in the Department of Land Economy at the University of Cambridge, gave a public lecture titled "Judgmental Bias in Housing Decisions." (9 April 2013)





Prof. Donald Blake, Professor of Chemistry at the University of California at Irvine, gave a distinguished lecture titled "Long-Term Trends in Global Concentrations of Atmospheric Methane and Ethane." (23 April 2013)



Prof. Antonio Nanni, Professor and Chair of the Department of Civil, Architectural & Environmental Engineering at the University of Miami, gave a public lecture titled "Extending the Life of Concrete Structures: Institutional Activities and Innovative Technologies." (2 May 2013)

Prof. Jerry Schnoor, Allen S. Henry Chair in Engineering and Co-Director of the Center for Global and Regional Environmental Research at the University of Iowa, gave a distinguished lecture titled "Water Sustainability in a Changing World." (22 May 2013)



Dr Kevin Huang, Associate Professor in the Department of Mechanical Engineering at the University of South Carolina, gave a public lecture titled "Solid Oxide Fuel Cells for Advanced Energy Storage." (23 May 2013)



Dr Sami Rizkalla, Distinguished Professor of Civil Engineering and Construction at North Carolina State University, gave a public lecture titled "FRP for Sustainable Precast Concrete Structures." (31 May 2013)

Invitation for Programme Admissions 2013/14

Master of Science (MSc)/Postgraduate Diploma (PgD)

Building Services Engineering
Civil Engineering
Construction and Real Estate
Construction Law and Dispute Resolution
Environmental Management and Engineering
Facility Management
Fire and Safety Engineering
Geomatics (Geographic Information Systems)
Geomatics (Surveying)
High Performance Buildings
International Real Estate (Zhejiang)
Project Management
Sustainable Urban Development

理學碩士 / 深造文憑

屋宇設備工程學
土木工程學
建築及房地產學
建築法及爭議解決學
環境管理及工程學
設施管理
消防及安全工程學
測繪及地理資訊學 (地理資訊)
測繪及地理資訊學 (測量)
高效能建築
國際房地產
項目管理
可持續城市發展學

Department

BSE
CSE
BRE
BRE
CSE
BSE
BSE
LSGI
LSGI
BSE
BRE
BRE
FCE

Bachelor's Degree

Broad Discipline of Construction and Environment
Building Engineering and Management
Building Services Engineering
Civil Engineering
Environment and Sustainable Development
Geomatics (Geo-Information Technology)
Geomatics (Land Surveying)
Geomatics (Utility Management and Surveying)
Property Management
Surveying

學士學位

建設及環境廣泛學科
建築工程及管理學
屋宇設備工程學
土木工程學
環境與可持續發展學
測繪及地理資訊學 (地理資訊科技)
測繪及地理資訊學 (土地測量)
測繪及地理資訊學 (管線設施測繪與管理)
物業管理學
地產及建設測量學

Department

FCE
BRE
BSE
CEE
CEE
LSGI
LSGI
LSGI
BRE
BRE

Higher Diploma

Building Services Engineering
Building Technology and Management (Engineering)
Building Technology and Management (Surveying)
Civil Engineering
Geomatics

高級文憑

屋宇設備工程學
建築科技及管理學 (工程)
建築科技及管理學 (測量)
土木工程學
測繪及地理資訊學

Department

BSE
BRE
BRE
CEE
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：

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

2766-5807/5808/7770
www.bre.polyu.edu.hk

Department of Building Services Engineering (BSE)
屋宇設備工程學系

3400-3597 www.bse.
polyu.edu.hk

Faculty of Construction and Environment (FCE)
建設及環境學系

2766-5038 / 2766-5039
www.polyu.edu.hk/fce

Department of Civil and Environmental Engineering (CEE)
土木及環境工程學系

2766-6052 www.cee.
polyu.edu.hk

Department of Land Surveying and Geo-Informatics (LSGI)
土地測量及地理資訊學系

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

Programme Entrance Requirements 課程入學要求

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

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

Enquiries on Application and Admission 查詢申請及入學

Admission Office
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：

asadmptg@polyu.edu.hk	Master's/ Postgraduate Diploma programmes 理學碩士及深造文憑課程
asadmft@polyu.edu.hk	Full-time Bachelor's degree & sub-degree programmes – local applicants 全日制學士學位及非學位課程 — 本地申請人
asnlocal@polyu.edu.hk	Full-time Bachelor's degree & sub-degree programmes – non-local applicants 全日制學士學位及非學位課程 — 非本地申請人
asadmpt@polyu.edu.hk	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

Summer School for Outstanding Postgraduate and Senior Undergraduate Students

Duration : 30 July to 8 August 2013

Location : The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China

Website : http://www.polyu.edu.hk/fce/events/FCE&RI_SS/

FCE Congregation and Prize Presentation Ceremony

Date : 12-13 November 2013

Venue : Jockey Club Auditorium,
The Hong Kong Polytechnic University

12th International Conference on Sustainable Energy Technologies (SET2013)

Date : 26-29 August 2013

Venue : Chiang Chen Studio Theatre,
The Hong Kong Polytechnic University

Website : <http://www.polyu.edu.hk/risud/set2013/>

The 6th International Conference on Structural Health Monitoring of Intelligent Infrastructure (SHMII-6)

Date : 9-11 December 2013

Time : InterContinental Grand Stanford Hong Kong

Website : <http://www.cee.polyu.edu.hk/shmii-6/home.html>

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The Hong Kong Polytechnic University
WHERE INNOVATION MEETS APPLICATION

歡迎投稿，所有稿件請交

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