

BSE NEWSLETTER

Jan 2021

Dear Friends of BSE and PolyU

I wish to thank you for your kind concern for us while we negotiated some of the unforeseen challenges we have all had to face over the previous year because of the global pandemic. We have managed to maintain all our teaching and most of our research activities despite these challenges through the dedication and cooperation of all our staff and students. We hope to be functioning normally as soon as it's safe and practicable. Despite COVID-19, BSE has clocked up many significant achievements that we would like to make you aware of through this newsletter. We would love to hear from you if you would like to know more about any of the items in the newsletter.

I would also like to take this opportunity to wish you a very happy and prosperous new year 2021.



Asif USMANI

Professor and Head of the Department

I. PolyU continues its rise in the QS World University Ranking

In the latest QS World University Rankings 2021, PolyU was ranked **75th**, up from last year's position of 91th, as a result of its outstanding academic and research achievements. In Asia, PolyU was ranked **25th**. The disciplines of Architecture/Built Environment and Engineering (Civil and Structural) ranked **22nd** and **19th** respectively in the latest QS World University Subject Rankings. The expertise of BSE academic staff spans a diverse range of disciplines, including aspects of sustainability; building energy, heating, ventilation and air-conditioning systems; fire and safety engineering; electrical technology; public health; indoor and urban environment engineering; architectural engineering; computer-aided design and facilities management and building informatics.

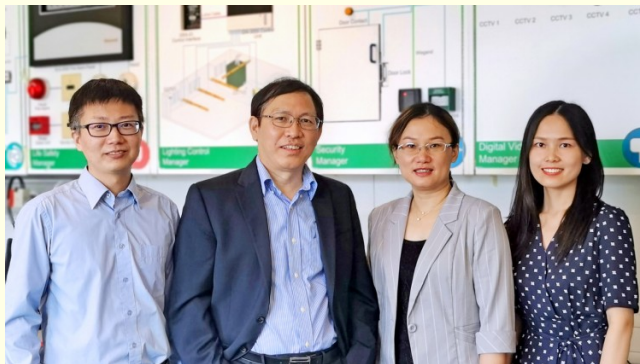
II. Academic Achievements

BSE Scholars scored a double in the 20/21 RGC CRF funding exercise!

The application results for the Collaborative Research Fund (CRF) and One-off CRF Covid-19 & Novel Infectious Diseases (NIR) Research Exercises in 2020/21 was announced by RGC on 6th January 2021. Two proposals from BSE with a total amount of awarded funding of \$10.27 million were supported by RGC (out of a total of 5 awards to PolyU) with details as follows:

Project Coordinator (PC): Prof. WANG Shengwei

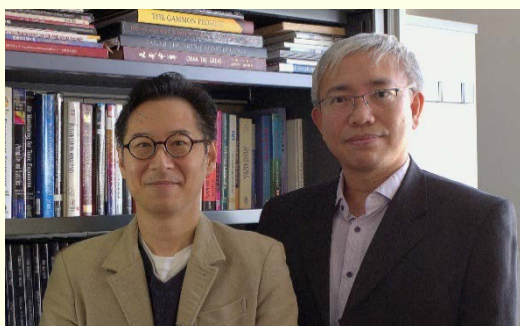
Funding: HK\$5.84 Million



Development of next generation key technologies for smart buildings

Project Coordinator (PC): Dr. Horace MUI Kwok Wai

Funding: HK\$4.43 Million



Effective Ventilation Strategies for Mitigating Infection Risks in Hospitals

New Research Centre for Fire Safety Engineering Established

The new Research Centre for Fire Safety Engineering was established as a key part of Prof. USMANI's strategic plan to revive fire safety engineering research at PolyU. Now, BSE fire group has 6 full-time academic staff and maintains a team of more than 20 PhD students and postdoc fellows. The BSE fire research was enhanced enormously by the recently won RGC TRS project SureFire worth HK\$33 Million that applies AI in fire safety engineering.



Prof. CM MAK Appointed as the Editor of the Prestigious Journal – Building and Environment

The BSE Department is delighted to announce that **Ir Prof. Cheuk Ming MAK**, Professor of BSE, has been promoted from Associate Editor to Editor of the prestigious Elsevier's journal – Building and Environment from 1 Jan 2021. Building and Environment is the top SCI journal in the field of building environment with an impact factor of 4.971 in 2019, publishing top research related to building science, urban physics, and human interaction with the indoor and outdoor built environment.



Prof. Shengwei WANG Appointed as Otto Poon Charitable Foundation Professor in Smart Building



The BSE Department is honoured to announce that **Ir Prof. WANG Shengwei**, Chair Professor of BSE, has been appointed as Otto Poon Charitable Foundation Professor in Smart Building (潘樂陶慈善基金智能建築教授) under the University's Endowed Professorship Scheme commencing on 1 April 2020. PolyU established the Endowed Professorship Scheme in 2012 to honour distinguished scholars for their outstanding academic and research achievements.

Prof. LU Lin's Energy-saving Innovation Supported by ITF

Prof. LU Lin, Professor of BSE, was awarded HK\$1,268,450 from the Innovation and Technology Fund (ITF) for a 2-year trial scheme project entitled "Development and optimization of the novel transparent heat insulation nano-coating and its application on local building glazing facade." Starting in January 2020, the project applies Prof. Lu's novel transparent heat insulation nano-coating for energy-saving at the Government's Electrical and Mechanical Services Department Headquarters in Kowloon Bay.



Dr. HUANG is appointed as Associate Editor of Fire Technology

BSE Assistant Professor, Dr. Xinyan HUANG, is appointed as Associate Editor of the prestigious Springer Nature journal – Fire Technology from 1 June 2020. Dr. HUANG is also awarded the Proulx Early Career Award by International Association of Fire Safety Science (IAFSS).

Fire Technology is the official journal of the National Fire Protection Association (NFPA) and Society of Fire Protection Engineers (SFPE), and the oldest fire research journal, publishing continuously since 1965.



New joint laboratory with Shenzhen Power Supply Bureau

BSE established a low voltage innovation laboratory platform jointly with Shenzhen Power Supply Bureau (深圳供电局). This lab was developed by Prof. Yaping DU and Prof. Mingli CHEN, Professors of BSE, and their team. It is the first laboratory in China that integrates grid systems and building electrical systems, serving as a foundation for the Shenzhen Power Supply Bureau and the China Southern Power Grid, to research and develop its own intelligent and safe power distribution equipment.



New Indoor Air-Ventilation Energy Monitoring System

Dr. Horace MUI Kwok Wai, Associate Head and Associate Professor of BSE, Dr. WONG Ling Tim, Associate Professor of BSE, and members from Department of Mechanical Engineering (ME) and Campus Sustainability Office (CSO), have developed an indoor air-ventilation energy monitoring system for improving indoor air quality (IAQ) while enhancing ventilation energy efficiency. An online press conference was conducted successfully at PolyU on 2 September 2020.



Research team from BSE, ME and CSO

III. News of Personals

Promotions

BSE is pleased that

- **Dr. Fu XIAO** has been promoted to Professor
- **Dr. Minchen WEI** has been promoted to Associate Professor



Staff Departure



Dr. LEE Wai-ling, Associate Professor, had retired in 2020. She served the Department for over 30 years. She is internationally renowned for her work in building environmental performance assessments. Her dedication, commitment and leadership rendered to the Department over such a long- period of service are gratefully acknowledged.

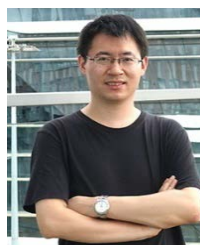


Dr. CHAN Ming Yin served PolyU and BSE for over 25 years and made pivotal contributions to BSE teaching and the development of the Department, even winning the 2013-14 President's award for outstanding performance/achievement in teaching. His concern and dedication to student welfare and the quality of their learning experience was always apparent, a which is a legacy worth emulating. In addition to his service to BSE, MY also served the wider PolyU staff community in his role as PUSA Chair.

Mr. Philip LEE, Assistant Technical Officer worked in BSE for over 17 years and in this time he gained the trust of all BSE colleagues, staff and student users of IT services through his dependability and friendliness. His contribution to BSE is recognized and appreciated by all.

A Warm Welcome to New Staff!

Welcome [Dr. LUO Mingchun](#) joined BSE as a Professor of Practice and [Dr. LI Hangxin](#), [Dr. WU Xiqiang](#), [Dr. YU Qinghua](#), [Dr. SHAN Kui](#) and [Dr. WEN Tao](#) as Research Assistant Professors.



Dr. LUO Mingchun

Dr. LI Hangxin

Dr. WU Xiqiang

Dr. YU Qinghua

Dr. SHAN Kui

Dr. WEN Tao

IV. Students & Alumni Achievements

BSE Student Won Prestigious Scholarship



Miss Siyan WANG, a third-year undergraduate from BSE, has been awarded the President Emeritus Professor Poon Chung-kwong Scholarship 2019/20 of HK\$20,000 for her outstanding academic achievement and active involvement in extra-curricular activities. She participated in an engineering summer programme in Cambridge in 2019 and volunteered to be a group leader for the International Wildlife Conservation Programme at Khorat Zoo in Thailand in 2018. Self-motivated and hard-working, Miss WANG is also the recipient of the Commercial Radio 50th Anniversary Scholarship and a BSE Scholarship for mainland Chinese student.

BSE Students Won Platinum Trophy And Gold Trophy In Inter-Institutional Competition On Facility Management Project Presentation 2020

The Department is pleased to report that our students of the Bachelor of Engineering (Honours) in Building Services Engineering programme, **Miss Erica LAU Sze Wing** and **Mr. Alvis CHOW Tsz Him**, are the Platinum Trophy and Gold Trophy Winners respectively in Inter-Institutional Competition on Facility Management Project Presentation 2020. The Competition was organized by the Hong Kong Chapter of International Facility Management Association (IFMA). Miss LAU was a student of **Dr. Joseph LAI**, Associate Professor and Programme Leader of Master of Science in Facility Management programme, and Mr. CHOW was a student of **Dr. CAO Sunliang**, Assistant Professor. The awards were presented at the IFMA Integrate Conference 2020, which was held on 17 November 2020.



Inter-Institutional Competition on
Facility Management Project Presentation

Platinum Trophy Winner

Sze Wing Erica LAU
The Hong Kong Polytechnic University

Performance Evaluation of Swimming Pools from the User Perspective



Inter-Institutional Competition on
Facility Management Project Presentation

Gold Trophy Winner

Tsz Him, Alvis CHOW
The Hong Kong Polytechnic University

Smart grid: Exchange and Distribution of Electricity Between
Zero Emission MTR Stations and Electrified Trains

BSE's MScFM student awarded IFMA Foundation Scholarship

The Department is pleased to report that our student of the Master of Science in Facility Management (MScFM) programme, **Miss LEUNG Ashley Wing Cheung**, has been awarded the 2020 International Facility Management Association (IFMA) Foundation Scholarship (Hong Kong Chapter). Miss LEUNG was a student of Dr. Joseph LAI, Associate Professor and MScFM Programme Leader. The virtual scholarship presentation was held on 12 Nov 2020.



2020 Hong Kong
Chapter Scholarship

Ashley Leung



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



Result Announcement - Outstanding BSE Alumni Award 2020



The Outstanding BSE Alumni Award recognizes outstanding alumni for their accomplishments in BSE professions and their contributions to the community. 2020 is the 6th round selection. It is our pleasure to announce that **Ir Dr. TSUI Suk Chong, Fiona** (PhD at BSE 2008), has been awarded as the Outstanding BSE Alumnus of 2020. Ir Dr. TSUI is the Chairlady of HKIE Fire Division, Honorary Secretary of HKIE Fire Discipline Advisory Panel and Founding Member of MTR Projects Community of Practice, Women in Engineering to be launched. Ir Dr. TSUI has many years practical experience on both fire engineering and building services engineering, at role of railway client and at role of consultant to apply fire engineering principles and modelling protocols to formulate design solutions for both infrastructure and building projects including unique and special design features.

V. POLYU DONATION MATCHING SCHEME

Over the years, The Hong Kong Polytechnic University (PolyU) has been receiving generous support from donors to maintain and strengthen itself as a prestigious application-oriented university in Asia. To encourage the eligible academic and research units (referred to as “eligible units”) to exercise concerted efforts to solicit donations for the development of the University, a PolyU Donation Matching Scheme (“the Scheme”) is set up for providing matching funds to newly raised external private donations initiated and acquired by the academic and research units.

Giving now: <https://www.polyu.edu.hk/giving/give-now/?sc>

Thanks to support: <https://www.polyu.edu.hk/giving/thanks-to-supporters/>

Contact AADO: <https://www.polyu.edu.hk/giving/contact-aado/>



Student Experience



Research and Innovation



Campus Development