

NEWSLETTER



Ir LAU Chun-kit, Ricky

Outstanding Alumni Award 2020



IP Ching Tung



ZHONG Shuya

Guangdong-Hong Kong-Macau Outstanding
Graduates Award in Civil Engineering 2020

Department of Civil and Environmental Engineering



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



DEPARTMENT OF
CIVIL AND ENVIRONMENTAL ENGINEERING
土木及環境工程學系

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Highlights

Global Recognition

Our global rankings signify our success in achieving teaching and research excellence.



Best universities for Civil Engineering
U.S. News & World Report
Best Global Universities Rankings
2021



Civil and Structural Engineering
QS World University Rankings
by Subject 2020



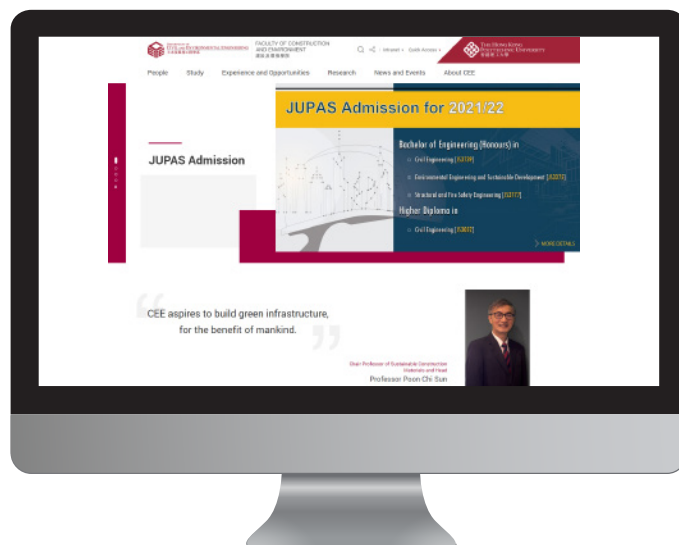
H-index
QS World University Ranking
by Subject 2020
For 8 consecutive years
from 2013 to 2020

Brand New Website

Our brand new website has been launched in Oct 2020.

Please take a look at <https://www.polyu.edu.hk/cee/>
and check out some of the new features below!

Upcoming events	Read More
Sharing and stories from CEEers	Read More
Revisit past seminars and talks	Read More
CEE Graduates and Associates Corner	Read More



Seminars and Activities

Secondary School Outreach

Distance does not stop us from reaching out to secondary schools! The Department organized virtual and physical activities for a number of secondary schools to provide programme admission talk and mini-lectures on civil and environmental engineering in 2020/21. [Read More](#)

- Baptist Wing Lung Secondary School
- Cheung Sha Wan Catholic Secondary School
- Kiangsu-Chekiang College (Shatin)
- Lingnan Hang Yee Memorial Secondary School
- Lok Sin Tong Ku Chiu Man Secondary School
- Queen Elizabeth School Old Students' Association
- Queen's College
- Shatin Pui Ying College
- St Francis Xavier's School, Tsuen Wan
- TWGHS Lui Yun Choy Memorial College
- Valtorta College



PolyU Education Info Day

Prospective students joined our virtual information seminars on 10 Oct 2020 to learn more about the programme curriculum, admission information and career prospects. Current student and graduates' sharing also provided some first-hand experience to the participants. At the end, several interactive Q&A sessions of online admission chat box were held. [Read More](#)



Seminars and Activities (Cont'd)

Chair Professor Series: Online Lectures in Civil and Environmental Engineering

CEE's Chair Professors of different disciplines delivered online lectures related to civil and environmental engineering. With overwhelming enrollment, most of the sessions were full right before the deadlines and each received around 300 participants. If you have missed the following, please refer to [here](#) for a revisit.

Seminar Topic	Date	Speaker
September Series Read More		
A Simple Method for Calculating Consolidation Settlements of Clayey Soils and Introduction to MSc and PhD Programs and Geotechnical Unit	14 Sep 2020	Prof. Jian-Hua Yin Chair Professor of Soil Mechanics
Opportunities and Challenges of Enhancement of Intelligent Transportation Systems (ITS) in Hong Kong	18 Sep 2020	Prof. William Hing-Keung Lam Chair Professor of Civil and Transportation Engineering
October Series Read More		
Air Pollution and Health – A Case Study on PM2.5 and Cell Toxicity	12 Oct 2020	Prof. Xiangdong Li Chair Professor of Environmental Science and Technology
Second-order Direct Analysis of structures	20 Oct 2020	Prof. Siu-Lai Chan Chair Professor of Computational Structural Engineering
Structural Health Monitoring Driven by Big Data and Machine Learning	29 Oct 2020	Prof. Yi-Qing Ni Chair Professor of Smart Structures and Rail Transit
November Series Read More		
Resources Engineering toward Circular Economy From Sciences to Applications	6 Nov 2020	Prof. Chi Sun Poon Head (CEE) & Chair Professor of Sustainable Construction Materials
Air pollution in China: what is the cause and how to control it?	13 Nov 2020	Prof. Tao Wang Chair Professor of Atmospheric Environment



Prof. Siu-Lai Chan



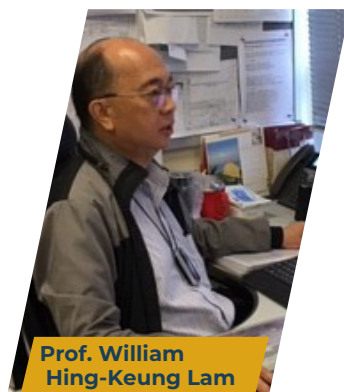
Prof. Yi-Qing Ni



Prof. Chi Sun Poon



Prof. Tao Wang



Prof. William
Hing-Keung Lam



Prof. Xiangdong Li



Prof. Jian-Hua Yin

Seminars and Activities (Cont'd)

Orientation Programme

The Online Departmental Orientation was held on 31 Aug 2020 for the freshmen to meet virtually with our Head of Department and Programme Leaders, know more about the achievements and facilities of the department, as well as other resources available at the University. [Read More](#)



PolyU Summer Programme 2020

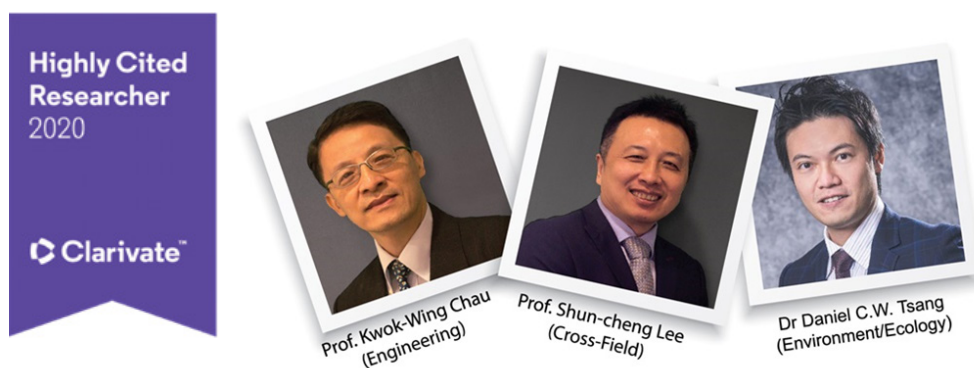
Over 140 secondary students joined our online Summer Programme on 7 Aug 2020. Participants were able to gain an understanding of civil and environmental engineering through mini-lectures and laboratory demonstrations. [Read More](#)



Achievements

Three CEE Scholars Named “Highly Cited Researchers 2020”

Prof. Kwok-Wing Chau (Engineering), Prof. Shun-cheng Lee (Cross-Field) and Dr Daniel C.W. Tsang (Environment/Ecology) were listed as Highly Cited Researcher 2020 by Clarivate. The list identifies researchers who have demonstrated significant and broad influence in their fields through the publication of multiple highly-cited papers that rank in the top 1% by citations for field and year in the Web of Science™. Of the world’s scientists and social scientists, Clarivate™ Highly Cited Researchers are one in 1,000. Congratulations to their achievement! [Read More](#)



Four CEE Researchers Awarded Funding in NSFC/RGC Joint Research Scheme 2020/21

In 2020/21 Exercise of the National Natural Science Foundation of China/Research Grants Council (NSFC/RGC) Joint Research Scheme, the RGC and NSFC have agreed to fund a total of 30 research projects, out of 213 eligible applications, for a total sum of HK\$34.7 million. PolyU submitted 16 full proposals, of which 10 are successful with a total awarded amount of HK\$11.571 million (i.e. 33.35% of total awarded funding) and four of them are from our Department.

This is the best funding results in NSFC/RGC Joint Research Scheme attained by PolyU since the implementation of this funding scheme. PolyU has also attained the largest number of funded projects and grant amount among UGC-funded universities in 2020/21 Exercise. [Read More](#)

Principal Investigator	Project Title	Amount Awarded by RGC (HK\$)
Prof. Hai Guo	Organic Aerosols in Offshore Marine Atmosphere of Eastern and Southern China: Sources, Chemical Ageing, and Climate Consequence	\$1,154,954
Dr Zhen-Yu Yin	Study of Multi-Physics Coupling Mechanism of Deep Sea Pipeline and Soft Marine Organic Deposits Interaction Considering Time and Temperature Effects	\$1,154,954
Prof. Jian-Guo Dai	Research and Development on Waste Ash/Slag-based Artificial Aggregates for Applications in Concrete	\$1,154,954
Prof. Kwok-Fai Chung	Research on Structural Behaviour of Stainless-Clad Bi-Metallic Steel Welded Connections and Joints under Monotonic and Cyclic Actions	\$1,158,329

Achievements (Cont'd)

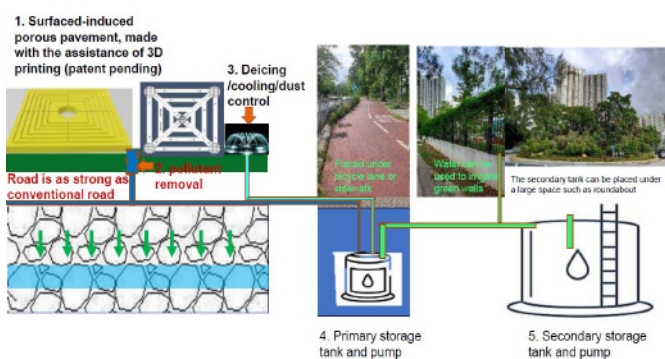
PolyU Researchers' Smart Pavements Won Two Awards at iCAN 2020

PolyU researchers, led by CEE's Prof. Yuhong Wang and Dr Ivan Wang-Hei Ho from the Department of Electronic and Information Engineering, developed "A smart integrated road pavement and drainage system for stormwater storage, de-icing, dust suppression, and cooling". The project, with its innovative designs to change the urban road, aims to make roads more environmentally friendly and to tackle significant challenges brought about by climate change.

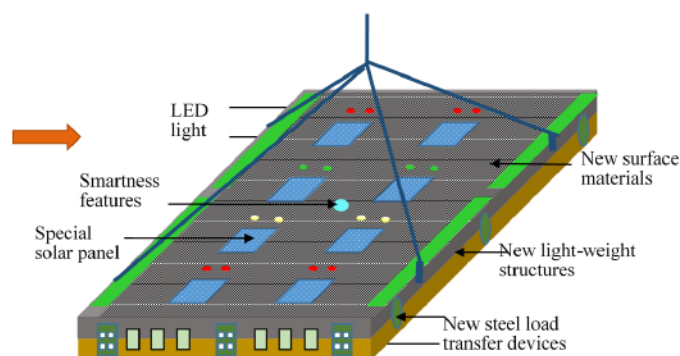
It has won two awards: the Canadian Special Awards and the Organizer's Choice Awards in the International Invention Innovation Competition in Canada (iCAN 2020). [Read More](#)



Prof. Yuhong Wang



A smart integrated road pavement and drainage system



Turn Ordinary Pavements into an Extraordinary Industrialized Product

Dr Peng Wang Received Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW)

Congratulations to Dr Peng Wang, Associate Professor, in receiving PSIPW in the category of alternative water resources! A scientific prize with a focus on innovation, the award was established in 2002 to recognize the efforts made by scientists, inventors, and research organizations around the world that contribute to the sustainable availability of potable water and the alleviation of the escalating global problem of water scarcity.

[Read More](#)

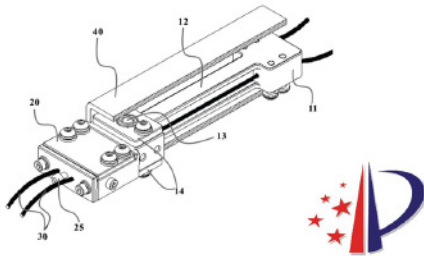


Dr Peng Wang

Achievement (Cont'd)

New Patent Certificate Issued by China National Intellectual Property Administration (CNIPA)

Congratulations to Prof. Yi-Qing Ni, Chair Professor of Smart Structures and Rail Transit, and members of Hong Kong Branch of National Rail Transit Electrification and Automation Engineering Technology Research Center (CNERC-Rail) for receiving a patent certificate issued by CNIPA, together with National Central University and Sheng Wei Science Co. LTD. The new Chinese patent is called “一種光纖布拉格光柵角度傳感器”. [Read More](#)



New patent model called 一種光纖布拉格光柵角度傳感器



Patent Certificate



Prof. Yi-Qing Ni

Honored with Science and Technology Award

Prof. Ni also received the Science and Technology Award, Second Class (科學技術二等獎) granted by the Chinese Society For Vibration Engineering (中國振動工程學會) with the project named “橋梁及建築結構隨機振動智能磁流變控制理論與方法”. [Read More](#)



Award Certificate

Prof. Hai Guo Received FAST Faculty Award 2019/2020

To provide an alternative to disposable face masks during COVID-19, Prof. Hai Guo's team cooperated with a team from the Institute of Textiles and Clothing (ITC) has developed an effective antiviral, washable and reusable face mask, namely PU30. The project won the Faculty of Applied Science & Textiles (FAST) Faculty Awards 2019/20 (Team Award).

[Read More](#)



Prof. Hai Guo

Media Coverage

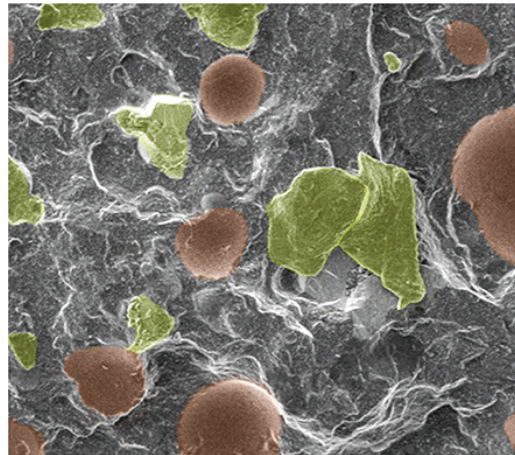
Eco-friendly Smart Coating

A team of researchers based in China and US, including Prof. Jian-Guo Dai, our Associate Head of Department, presented an eco-friendly, low-cost smart coating to keep buildings cooler while consuming zero electricity. It is comprised of conventional building materials, including titanium dioxide nanoparticles, fluorescent microparticles, and glass microspheres that were engineered to reflect most of the sunlight hitting the building, minimizing its heat absorption while simultaneously re-emitting infrared radiation. Their work was published in *Hong Kong Economic Journal* and *Advanced Materials* and recommended by Science Editors' Choice. [Read More](#)

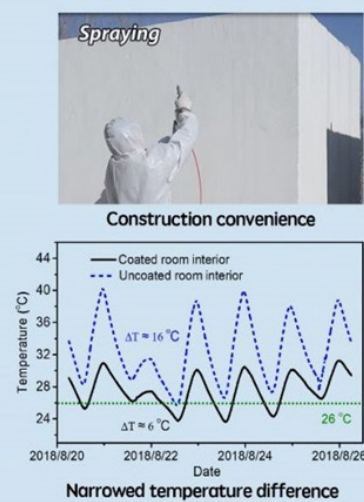
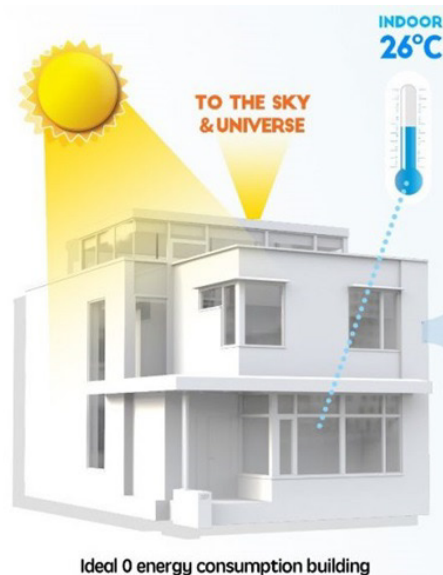
理大土木及環境工程學教授戴建國 研發
「黑科技」 建築物能製冷



Prof. Jian-Guo Dai is one of the leading members who created the eco-friendly smart coating



False-colored scanning electron microscope image of a coating for cooling buildings, containing hollow glass microspheres (red) and fluorescent pigment (green)



A Smart Coating that keeps building cool

Congratulations to Award Winners

Outstanding Alumni Award 2020

Congratulations to Ir LAU Chun-kit, Ricky, JP, in receiving the Outstanding Alumni Award 2020! The award is hosted by our Department and co-sponsored by PolyU CEE Alumni Association, which aims to give public recognition to our outstanding graduates for their accomplishments in their professions and their contributions to the community. Ir LAU is a graduate of BEng in Civil Engineering at PolyU in 1989 and is currently the Director of Civil Engineering and Development Department (CEDD) of HKSAR Government. He has remarkable contribution to the community and his profession by leading his team in CEDD to strive for engineering excellence, in a bid to create a safe, green and sustainable environment for people to live in. [Read More](#)



Ir LAU Chun-kit, Ricky, JP
Director of Civil Engineering and Development
Department of HKSAR Government

Guangdong-Hong Kong-Macau Outstanding Graduates Award in Civil Engineering 2020



Three CEE graduates, namely MA Ho Pan, IP Ching Tung and ZHONG Shuya (from left to right), received "Guangdong-Hong Kong-Macau Outstanding Graduates Award in Civil Engineering" in 2020 issued by the Guangdong Society of Civil Engineering and Architectures. Congratulations to their achievement! [Read More](#)



MA Ho Pan



IP Ching Tung



ZHONG Shuya

Congratulations to Award Winners (Cont'd)

Best Student Presentation Award

Congratulations to two PhD students, Chang HE and Pin ZHANG, for obtaining the "Best Student Presentation Award" during the 24th Annual Conference of HKSTAM 2020 and the 16th Shanghai – Hong Kong Forum on Mechanics and Its Application held on 5 Dec 2020. They are supervised by Dr Zhen-Yu Yin, Associate Professor. [Read More](#)



Pin ZHANG (left), Dr Zhen-Yu Yin (middle), Chang HE (right)

PhD Student Awarded Student Scholarship

A PhD student, Qian Jing, supervised by Dr You Dong, Assistant Professor, was awarded the Student Scholarship during the 7th International Symposium on Reliability and Engineering and Risk Management (ISRERM2020). Only three papers were selected for the scholarship. Congratulations! [Read More](#)



Dr You Dong, Supervisor



Qing Jing



Certificate of Student Scholarship

New Appointments

Prof. Xiangdong Li

**Dean of Faculty of Construction and Environment (FCE)
Chair Professor of Environmental Science and Technology**



Prof. Xiangdong Li, Director of PolyU's Research Institute for Sustainable Urban Development (RISUD) and Ko Jan Ming Professor in Sustainable Urban Development, has been appointed Faculty Dean starting from 1 January 2021. Prof. Li began his academic career at PolyU in 1995. He has a PhD in environmental technology from Imperial College London. His major research interests include regional pollution, urban environmental studies, and remediation of contaminated sites. He has published more than 200 papers in leading international journals, and is an author of 15 highly cited papers (top 1%) in the field of Environment/Ecology in the Web of Science database. He is a past president (2011-2013) of the International Society of Environmental Geochemistry and Health (SEGH), currently an associate editor of *Environmental Science and Technology (ES&T)*, a journal published by the American Chemical Society, and the editorial board member for several other international journals in related fields.

Dr Alessandro Stocchino

Associate Professor

After his PhD in Hydraulic Engineering, Dr Stocchino started his career at the University of Genova, becoming Associate Professor and Head of the MSc program in Environmental Engineering.

He coordinated several European Projects. Environmental topics related to sediment transport, circulation modelling, marine and river pollution are his main research interests.



[Profile](#)



[Profile](#)

Dr Wei Ma

Assistant Professor

Dr Ma obtained his bachelor's degree in Civil Engineering and Mathematics from Tsinghua University and PhD degree in Civil and Environmental Engineering from Carnegie Mellon University.

His research interests include the intersection of machine learning, data mining, and transportation network modelling, with applications for smart and sustainable mobility systems.

New Appointments (Cont'd)

Dr Yancheng Cai

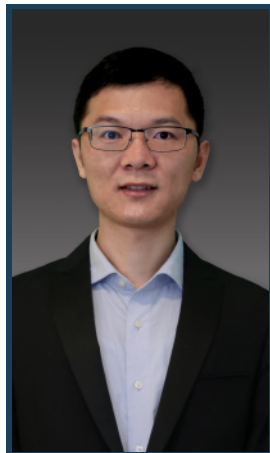
Research Assistant Professor



[Profile](#)

Dr Qianjie Chen

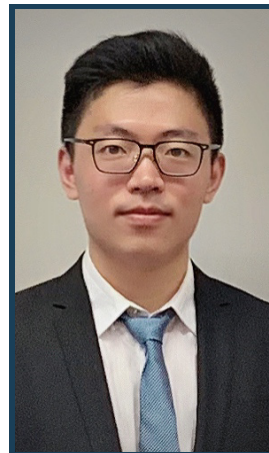
Research Assistant Professor



[Profile](#)

Dr Wen-Bo Chen

Research Assistant Professor



[Profile](#)

Dr Chuanrui Guo

Research Assistant Professor



[Profile](#)

Dr Alireza Keramat

Research Assistant Professor



[Profile](#)

Dr Siwei Liu

Research Assistant Professor



[Profile](#)

Dr Haijie Tong

Research Assistant Professor



[Profile](#)

Dr Youwu Wang

Research Assistant Professor



[Profile](#)

Dr Botong Zheng

Research Assistant Professor



[Profile](#)

Happy Retirements

The hard workdays are over, and the day of relaxing has come. Let's bid a farewell to CEE's long-serving colleagues. Thank you for your contributions in the past decades. Happy Retirements!



Prof. You-lin Xu, Chair Professor of
Structural Engineering
(Served CEE for 25 years)



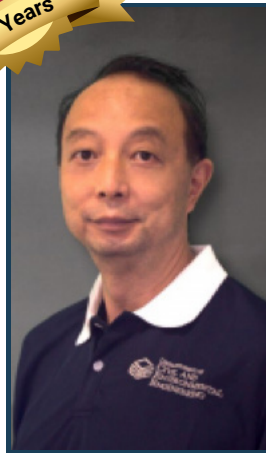
Prof. Kam-Tim Chau, Chair Professor of
Geotechnical Engineering
(Served CEE for 28 years)



Prof. Chi-wai Li,
Professor
(Served CEE for 34 years)



Prof. Onyx Wai,
Professor
(Served CEE for 28 years)



Mr Liu Chi Shing Elton,
Technician
(Served CEE for 27 years)



Mr Wong Chiu Leung,
Office Assistant
(Served CEE for 34 years)

*Congratulations
and
Thank you!*

Sharing from Graduates and Associates

Ir Prof. Philip WK CHUNG, JP

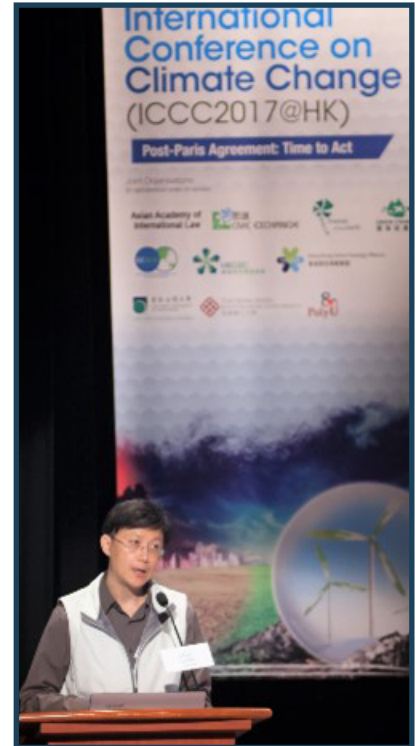
Diploma in Structural Engineering, 1982

Higher Diploma in Structural Engineering, 1984

I graduated from PolyU in 1982 and 1984 and continued my study in civil engineering and geotechnical engineering / engineering seismology in The University of Hong Kong (HKU) and Imperial College, London. I am now the Deputy Head of the Geotechnical Engineering Office (GEO) of the HKSAR Government and an Adjunct Professor in the Department of Earth Sciences of HKU.

In the past 35 years, I have been involved in many engineering projects, such as testing of construction materials, development of local geotechnical standards and climate change related matters. I am very grateful that I could participate in and contribute to the development and implementation of the internationally well-recognized HK Slope Safety System, in particular, the enhancement of community resilience to landslide hazards.

One of my duties is to recruit and train engineering graduates. Over the past years, I have recruited many PolyU graduates and sometimes acted as their Engineering Supervisor under the HKIE Scheme A Training. Many of the professional engineers currently working with me are also from PolyU, such as Grace Tam and Gloria Ip, who both graduated from BEng in Civil Engineering. I was impressed by their energetic and enthusiastic characters, as well as their solid engineering knowledge. I am sure my alma mater will continue her unfailing efforts in educating and nurturing new generation of graduates. Keep it up!



Giving a talk in the International Conference on Climate Change in 2017



Presenting in a lecture on HK Slope Safety System in the United Nation's Global Risk Forum at Davos, Switzerland in 2011

Sharing from Graduates and Associates (Cont'd)

TAM Wing Man Grace
BEng in Civil Engineering, 2014

I started my career in my favourite field of engineering – geotechnical engineering at GEO. After three years of fruitful and rewarding training scheme from GEO, I am now one of the GEO in-house designers under the Landslip Prevention and Mitigation Programme (LPMitP). I was fortunate to be given the opportunity to manage the slope upgrading works, from project implementation to communication with stakeholders. It is a great experience to contribute to one of the most successful and comprehensive risk management systems in the world.

I have met many senior alumni from PolyU in my work, not only within GEO but also across the engineering industry. What I have learnt from them is that no matter how long you have been in the industry, trusting and learning from your teammates are crucial – especially in our field where daily tasks requires safety and professional judgement. Looking back, I am extremely grateful for the opportunities I have had in PolyU, and the support from people I met and worked with. These experiences have helped shape who I am and I look forward to the adventures ahead.



Grace inside an underground cavern during HKIE delegation trip to Switzerland



IP Ching Tung Gloria
BEng in Civil Engineering, 2020

It seems like yesterday when I first stepped into this campus, wandered around and admired buildings paved with the signature red bricks. Cliché as it may sound, I was deeply fascinated by the charisma of civil engineering which magically shaped the world with blooming infrastructures, from skyscrapers piercing the clouds to tunnels creeping underground. I was so blessed to receive numerous opportunities to explore my interests and uncover my potentials. The chance to study in the UK for one semester was invaluable, in which I appreciated the unique indigenous culture from history, humanity and constructions. Also, I was learning from well-established figures in the construction sector through mentorship programme, and came to realize the essential attributes of a leader and the significance of possessing these qualities. These experiences broaden my horizon and ignite my passion for geotechnical engineering with respect to the dynamics of soil behaviours and its substantial contribution in daily life.

I celebrated my graduation in 2020 and embarked on a new journey in GEO. Since then, I had been rotated to different sections, from the Planning Division to the Standard & Testing Division. Currently, I am working on site as an assistant residential engineer. I am beyond grateful for the opportunities and unfailing support from PolyU in the preceding years. I hope to continue supporting this community with my professionalism and passing on the spirit of our alma mater - “to learn and to apply, for the benefit of mankind”, as we secure public safety and promote quality of life.

Sharing from Graduates and Associates (Cont'd)

Au Ho Fo

BSc in Environmental and Occupational Safety and Health (EOSH), 2007

Property Safety Manager, MTR Corporation Limited (MTRC)

I was one of the first batch of EOSH graduates who joined Gammon as a health, safety & environmental trainee upon graduation. After gaining 7-year of hands-on working experience on construction sites, I joined MTRC as a Senior Property Safety Officer in 2014. To foster the safety culture in the industry, I joined The Society of Registered Safety Officers (SRSO) since 2007 and acted as the Executive Committee Member since 2009, and now I have become the Vice President of SRSO. Working in the construction safety sector is never easy, but I am still passionate to promote a safe working environment.

Thanks to my wife, Ady, who supports me through all my ups and downs. As a father of my two little kids and a big brother of EOSH graduate. I wish to further enhance my career profile and demonstrate myself as a good model. Cheers!



Au Ho Fo (Middle)
My EOSH buddies working together in Gammon



Au Ho Fo (2nd from the right)
My work at MTRC



My family – my greatest support

Sharing from Graduates and Associates (Cont'd)

陳雋

第一屆香港理工大學土木及環境工程學系研究學者校友會會長和理事會會長

2001–2004年間，陳雋於CEE（當時稱為Department of Civil & Structural Engineering, CSE）徐幼麟教授課題組先後做Research Assistant 和 Research Associate，主要從事大型工程結構的健康監測研究，系統開展了經驗模分解方法（empirical mode decomposition），是一種非平穩（non-stationary）信號處理及參數識別上的應用研究。他亦和徐教授一起提出了全新的強台風的非平穩風速模型，受到了Ahsan Kareem教授、Yukio Tamura等世界著名風工程專家的肯定和引用，並成功用於香港青馬橋、昂船洲橋監測數據的分析，實質性推動了對台風的非高斯、非平穩性的研究。該部分成果作為四項創新點之一，獲得了2016年度國家自然科學二等獎（The Second Class Prizes of the State Scientific and Technological Progress Award）。



陳雋於2001年在CSE留影



陳雋和學生於2019年的合照

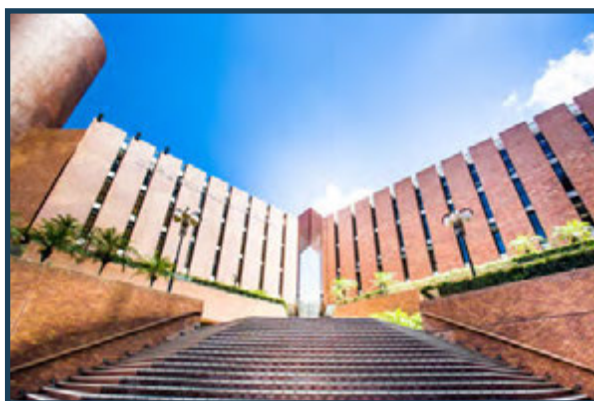
在理大三年的工作經歷對陳雋是彌足珍貴的，對於他學術志趣的形成、學術自信的建立和學術能力的培養幫助極大、影響深遠。理大在圖書文獻資料完整性、學術思想的先進性等方面，優於很多的內地高校。同時，在CEE的每一位教授身上，都存在四個可以辨識的、值得認真學習和尊敬的特質：敬業忘我的工作態度，規範嚴謹的科學作風，追求卓越的創新精神和大氣謙和的人格魅力。陳雋於2004年離開理大後回到同濟大學，充分利用在理大工作期間所獲得的研究經驗和學術聯系，在工程結構的振動舒適度研究方面取得了顯著的成績，連續獲得了1項國家自然科學基金重點項目、4項面上項目的支持，研究成果被國家設計規範採用，並應用於國內跨度最大樓蓋、第一個混凝土張弦梁樓蓋等重大工程中，獲得了上海市優秀學科帶頭人等人才稱號。2020年，陳雋成為第一屆香港理工大學土木及環境工程學系研究學者校友會理事會會長，努力通過CEE-RSAA這一平台，凝聚校友力量，回報PolyU及CEE。

Upcoming Events

Stay tuned for our upcoming events! In view of the unstable situation of COVID-19 pandemic, the status of most of the following is not confirmed yet. More details will be available at our website at


<https://www.polyu.edu.hk/cee/>.


Date & Time	Events	Status
18:30 – 20:00 3 Feb 2021 (Wed)	Joint Seminar with Hong Kong Institution of Engineers (HKIE) Civil Division & Hong Kong Institution of Highways and Transportation	Confirmed Link to register
18:30 – 20:00 23 Feb 2021 (Tue)	Joint Seminar with HKIE Environmental Division	Confirmed Link to register
27-28 Mar 2021 (Sat - Sun)	Virtual 26th Congregation (with 25th Make-up Sessions of FCE)	To be confirmed
10 Apr 2021 (Sat)	Alumni Day	To be confirmed



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 CEE Website



 cee.polyu



 cee.polyu



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Associate Heads of Department

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Ir Prof. Shun-cheng Lee (Partnership)
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