

Implementing green infrastructures on slopes

Urbanization has altered the natural environment through various ways, such as increasing impervious surfaces, fragmenting green landscapes, and accelerating habitat loss, consequently leading to losses in natural resource pathways and biodiversity. An innovative technique, referred to as green infrastructures (GIs), has been developed to cope with the adverse impacts of urbanization. They can manage stormwater, recover the water cycle, and provide ecological services.

Cities worldwide have initiated the program of GI implementation, such as the Active, Beautiful, Clean Waters (ABC) program in Singapore and Low Impact Development (LID) in the USA. However, many geophysical factors can affect the performance of GIs, and a steep slope is a major constraint.

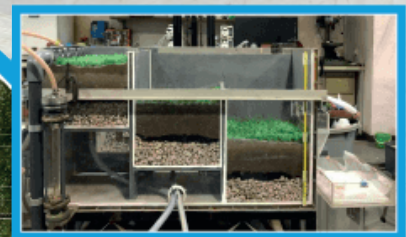
Hong Kong is a coastal city with a hilly to mountainous terrain where 70% of the land has a slope angle greater

than 30°. This terrain feature poses challenges to the implementation of GIs. When the landscape exhibits a steep slope, the fast-incoming flow would reduce travel time and result in low infiltration. In addition, the stormwater infiltrated by the system may increase the soil moisture and raise the groundwater level. As a result, this could affect the pore water pressure of the soil and the stability of the slope.

Recently, HKU researchers (Dr. Ting Fong May Chui and her research group) have revealed the mechanism of rainfall-infiltration-runoff process on slopes and modified the structure of traditional green infrastructures to better suit sloped environments. This modified green infrastructure has demonstrated the effectiveness in runoff retention. HKU researchers are currently establishing criteria for slope selection for GI implementation and searching for design measures of GIs to balance the hydrological performances and the risk of slope instability. Their findings are believed to bring eco-hydrological benefits to mountainous cities.



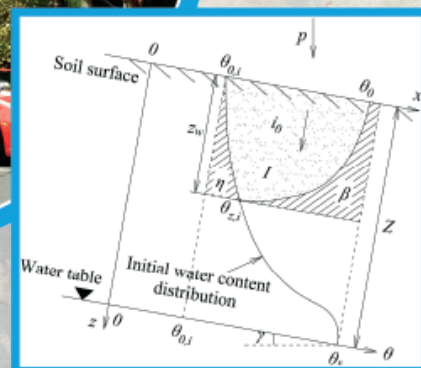
Laboratory Experiment



Numerical Simulation



Infiltration Analysis



Headship

Professor Wei Pan has been appointed as Head of Department of Civil Engineering for three years from July 1, 2023 to June 30, 2026.

Departmental Event

HKU Centre for Innovation in Construction & Infrastructure Development Celebrates 20th Anniversary with “Capacity, Innovation, Smart and Sustainability” Conference

The Centre for Innovation in Construction & Infrastructure Development (CICID) of the University of Hong Kong (HKU) held a conference named “Hong Kong 2050 – A City for the People: Capacity, Innovation, Smart and Sustainability” on December 12, 2022 to celebrate its 20th anniversary.

“CICID has proven to be a major driver in propelling innovation and best practices in the construction industry and an unfailing partner in supporting DEVB and government’s initiatives,” Ms. Bernadette Linn, JP, Secretary for Development of the HKSAR Government said in her Opening Address, adding: “Capacity, Innovation, Smart and Sustainability are the key elements for a brighter tomorrow for Hong Kong.”



From left: Ir Thomas Ho, Ir Ricky Lau, Professor Richard Wong, Ms. Bernadette Linn, Professor C.K. Mak, Mr. James Lee and Professor Wei Pan.

Professor Richard Wong, Provost and Deputy Vice-Chancellor of HKU in the Welcome Speech said: “The Centre has extensively engaged with partners and supporters via the Academia-Government-Industry networks to disseminate research findings that have contributed knowledge to construction engineering and engineering management; and inspired innovative industrial practices and informed policies in a number of areas.”

Ir Ricky Lau, Permanent Secretary for Development (Works) in his Keynote Speech said: “The success of sustainable development of Hong Kong requires joint contribution and commitment from the Government, the universities and the industry. CICID is a best demonstration of “University-Government-Industry” collaboration, a pioneer with a lot of

great researches and contributions in driving innovation and best practices in construction industry.”



Ir Ricky Lau speaking at the conference.

Other prominent overseas and local experts and industry leaders shared their insight. Ir. Thomas Ho, Chairman of Construction Industry Council voiced a timely concern about construction safety and stressed design for safety, roles and responsibility and smart sites. Mr James Lee, Chief Executive Officer of Paul Y. Engineering Group echoed Ir Ricky Lau that fundamental changes in the construction industry is already taking shape when site construction has quickly been replaced by manufacturing processes off site. Professor Makarand Hastak, President of the International Council for Research and Innovation in Building & Construction also delivered the Keynote Speech and shared his expertise on advances in construction excellence and outlook for the construction industry in the future. Mr. Michael Li, Deputy Director of Architectural Services of the HKSAR Government, Ir Dr. Conrad Wong, Vice Chairman of Yau Lee Construction, Professor Jacqueline Glass, Professor of Construction Management at University College London, and Professor C.F. Lee, Chairman of CICID also shared their knowledge regarding construction innovation and infrastructure development.

Professor Wei Pan, Executive Director of CICID delivered a keynote entitled “Innovating for Future Construction in Hong Kong”, and said: “With strong support from and well-established collaboration with government, industry and other local or overseas research institutions, CICID devotes to assisting the construction industry in enhancing productivity and achieving carbon neutrality through smart and modular construction.”



Professor Wei Pan speaking at the conference.

Professor C.K. Mak, Vice Chairman of CICID expressed his gratitude to all present at the conference, especially the strong support by the government, industry partners and other research institutions that will certainly be conducive to the Centre's future development.

CICID (<https://www.civil.hku.hk/cicid/>) was established in 2002. The aim of CICID is to foster continuous improvements and excellence in the construction industry and infrastructure development in particular, through the development of innovative strategies and techniques. CICID targets to be a "Centre of Excellence" for research, discourse and dissemination of innovations in infrastructure, construction management and methodologies, and interdisciplinary research.

Staff Awards/Activities/News

Staff Awards

Professor J. Chen received the Outstanding Research Student Supervisor Award (ORSSA) (Year of Award 2021-2022).

Ir Dr. Clarence Edward Choi is the winner of this year's Young Engineer of the Year Award from the Hong Kong Institution of Engineers. This prestigious award recognizes and honors a young engineer (less than 35 years of age) among all engineering disciplines who has made valuable contributions to the continuous development of Hong Kong through engineering achievements. The award was initiated in 2003 to encourage active participation and contribution of young engineers to the engineering profession and the community, and promote and foster professionalism, dedication, enthusiasm and leadership among young engineers. Dr. Choi received the award on March 17, 2023 at the Convention Hall of the Hong Kong Convention and Exhibition Centre at the 45th Annual Dinner.



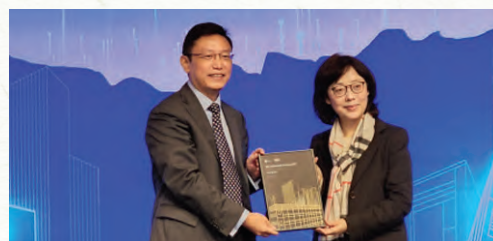
Ir Dr. Clarence Edward Choi has been selected as the recipient of the Oldrich Hungr Award from the International Consortium on Landslides (ICL), which is a partner NGO of UNESCO. The award is named in honor of Professor Oldrich Hungr, a prominent landslide scientist and educator at the University of British Columbia, Canada. Professor Hungr is best known for his practical approach and pioneering contributions to landslide research and science. Professor Hungr served on the Slope Safety Technical Review Board (SSTRB) of Hong Kong for many years to help improve local practice. Professor Hungr was best known for his research work on modelling the mobility

of complex flow-type landslides. Established by the ICL, the Oldrich Hungr Award is given to a young scientist (less than 35 years of age) for their significant research contributions to the field of landslide studies.

Dr. Xiao Li and his collaborator were awarded Construction Industry Council (CIC) Innovation Award (2nd Prize in International Category) on December 13, 2022. This award is a biennial honor given to the best innovations submitted by international and local researchers and practitioners. The innovative project entitled "MiC Adaptive Production Robotics System" has the potential to advance the intelligent and flexible MiC production capacity to speed up the vertical infrastructure (e.g., housing, hospital, energy storage) supply.



Professor Wei Pan, Executive Director of the HKU Centre for Innovation in Construction and Infrastructure Development (CICID) received the Outstanding People (MiC Advocator) Award in the MiC Achievement Ceremony 2022 during the International Conference on MiC (Modular Integrated Construction).



Dr. Lu Peng, a current RGC Postdoc Fellow and a former Ph.D. student in Professor C.Y. Tang's group, received the Li Ka Shing Prize for her PhD thesis work. Li Ka Shing Prize honours outstanding Ph.D./M.Phil. theses on the basis of academic excellence. The Prize is highly competitive and the recipients are the best of our elite students.

Professor C.Y. Tang received the following awards and recognition:

- Outstanding Researcher Award, The University of Hong Kong, 2023
- Clarivate Highly Cited Researcher (Cross-field), 2022
- Who Hup Distinguished Lectureship, National University of Singapore, 2022
- Distinguished Young Membrane Scientist Award, International Congress on Separation and Purification Technology, Elsevier, 2022

- Engineering & Technology in China Leader Award, Research.com, 2022

Dr. Zhe Yang, a current Research Assistant Professor and a former Ph.D. student in Professor C.Y. Tang's group, received the following awards and recognition:

- World's Top 2% Most-cited (the Stanford list), 2022
- NSFC (National Natural Science Foundation of China) Young Scientists Fund (RMB300,000), 2022

Staff Activities

Professor Wei Pan

- delivered a speech entitled "High Productivity Construction – Modular Integrated Construction" in the R&D Forum organized by the Development Bureau of HKSAR Government, November 4, 2022.



- delivered a keynote entitled "Future Building, Future Construction Management" in the CRIOCM 27th International Symposium on Advancement of Construction Management and Real Estate, December 5, 2022.
- delivered a lecture entitled "Module 7 An Overview of the Landscape of MiC" for CIC Master Class on MiC Project Implementation (Project Managers), organized by CIC, January 6, 2023.



- supported by the SPPR funding, Professor Wei Pan and his team organised a workshop with the theme of 'Co-development of MiC Supply Chain in the GBA' in Guangzhou, co-organised by Guang Dong Construction Industry Association, March, 31 2023.



Professor C.Y. Tang

- presented the following keynote/invited talks:
 - Opening speech for the Greater Bay Area (Guangdong–Hong Kong–Macau) Symposium on Separation and Purification Technology, December 13, 2022, International Congress on Separation and Purification Technology (online), Elsevier.
 - "Transport phenomena in thin film composite membranes: the role of substrate and polyamide morphology on separation performance", Keynote Speech, December 10-14, 2022, International Congress on Separation and Purification Technology (online), Elsevier.
 - "Transport phenomena in thin film composite membranes with an interlayer (TFNi)", Keynote Speech, the 11th International Membrane Science and Technology Conference (IMSTEC2022), December 4-8, 2022, Melbourne, Australia.
 - "Synthesis of more permeable and more selective nanofiltration membranes: strategies and perspectives", Bath Global Chair Talk for SynHiSel Program (online webinar), November 29, 2022, Bath University, UK.
 - "Membranes for water, energy, and a more sustainable world", Woh Hup Distinguished Lecture @National University of Singapore, November 16, 2022, Singapore.
- co-authored a paper in Science Advances - a prestigious journal of the Science family: Wen, Y.; Dai, R.; Li, X.; Zhang, X.; Cao, X.; Wu, Z.; Lin, S.*; Tang, C.Y.*; Wang, Z.*, Metal-organic framework enables ultraselective polyamide membrane for desalination and water reuse. *Science Advances* 2022, 8, (10), eabm4149.
- co-authored a paper in Nature Water - a newly launched Nature family journal: Dai, R.; Zhou, H.; Wang, T.; Qiu, Z.; Long, L.; Lin, S.*; Tang, C. Y.*; Wang, Z.*, Nanovehicle assisted monomer shuttling enables highly permeable and selective nanofiltration membrane for water purification. *Nature Water* 2023, in press.

Professor Jun Yang

- delivered a keynote lecture at the 3rd International Conference on Sustainable Development of Construction Engineering, December 14-15, 2022, Shanghai, China. His lecture was entitled "Geotechnical Engineering for Sustainable Development: Some Personal Perspectives".



- was invited to give an Inno Wing Tech Talk, entitled “To See a World in a Grain of Sand: A Geotechnical Researcher’s Perspective”, on November 17, 2022.



Staff News

Dr. Cliff C.Y. Leung joined the Department as lecturer in September 2022. He received his M.Sc. and Ph.D. from the University of Hong Kong. His area of expertise is in viaduct design and construction. During his M.Sc. study, he participated in a project with the Highways Department that involves the development of structural health monitoring system for major crossings in Hong Kong, in which he developed baseline finite element model of Ting Kau Bridge for the project. His doctoral research focuses on experimental and theoretical studies of various behaviour of prestressed concrete and precast concrete viaducts, including ductility and deformability, shear and bending behaviour of in-situ stitches, and progressive collapse.



He joined the Highways and Transportation Infrastructure Division of Atkins China Limited upon completing his Ph.D. study. Over the course of his service, he obtained his professional chartership and involved in various major local and overseas vehicular and railway viaduct projects, including MTRC’s South Island Line (East), Hong Kong Link Road of Hong Kong – Zhuhai – Macau Bridge, Tuen Mun - Chek Lap Kok Link Southern Connection and Jurong Region Line in Singapore. His practical experience includes schematic, preliminary, and detailed design, retrofitting design, viaduct inspection, on-site independent checking, rail-structure interaction analysis, as well as contract and tender preparations. He returned to the academia after departing from Atkins.

Dr. Xiao Li joined the Department of Civil Engineering as an Assistant Professor in December 2022. He received his Ph.D. degree from The Hong Kong Polytechnic University (PolyU) in 2019, B.Eng. degree and M.Eng. degree from Chongqing University in 2013 and 2016 respectively. Before joining HKU, he was a Research Assistant Professor at PolyU (2021-2022), a RGC Postdoctoral Fellowship awardee at HKU (2020-2021), and assistant director at Qianhai Institute for Innovative Research (2019-2020). He was also a visiting



scholar at the University of Cambridge and Curtin University. His research interests mainly focus on construction industrialization and construction informatics. He has led six research projects as PI with funding exceeding HK\$ 5 million and has authored 40+ papers in peer-reviewed academic journals with 2500+ citations (17 first & corresponding authored papers, 4 ESI highly cited, and 4 Most cited papers in Automation in Construction). He is a fellow of the SYLFF Association, a National Registered Construction Engineer (Class 1), a member of CIB and the American Society of Civil Engineers, and guest editors of several leading journals in construction engineering and management. He held several international academic awards, e.g. CIC Innovation Award 2022 (with the project “MiC adaptive production robotics systems”), SYLFF Research Grant Award, Research Abroad Award, CRIOCM Outstanding Paper Award, CIB Sebestyén Future Leaders Award, ASCE Best Paper Award, and CIOB (HK) Outstanding Paper Award. His previous research mainly contributes to the decentralized adaptive work packaging methodology for collaborative planning and control in industrialized construction. Firstly, he investigated graph-based work package generation mechanisms for complex products of industrialized construction. Then, he made a breakthrough in the stochastic optimization method of work package sizing under uncertainties. Finally, he developed a blockchain-enabled smart work packaging system for crowd intelligence in collaborative planning and control.

Dr. J.J. Wang joined the Department of Civil Engineering as Assistant Professor in January 2023. Before joining HKU, he served as a postdoctoral researcher at the University of Houston and JSPS postdoctoral fellow at Kyoto University. Dr. Wang obtained his Ph.D. and B.Eng. from Tsinghua University mentored by Professor Jianguo Nie, who is a member of the Chinese Academy of Engineering. Dr. Wang designed the temporary support system for the New Shougang Bridge, which has the most complicated skewed bridge tower in the world with a skew angle ranging from 31 to 19 degrees and a self-weight of 45,000 tons.



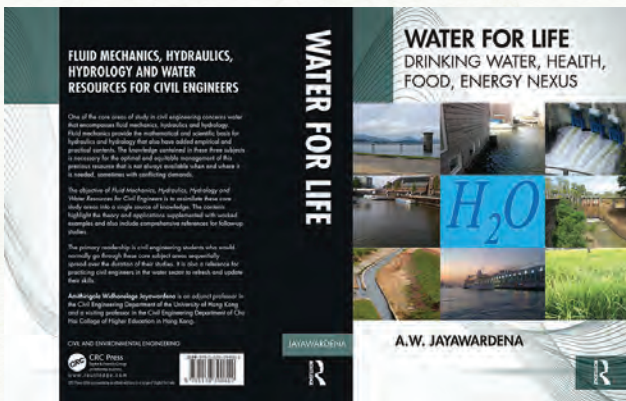
Enthusiastic about infusing deep learning with computational mechanics and structural engineering, Dr. Wang has developed a research background focused on the following topics: (1) Physics-informed machine learning for solving partial differential equations in structural engineering; (2) Data-driven metamodeling and digital twin of engineering structures; (3) Computer vision-based structural health monitoring for real-world structures; (4) Intelligent structural design based on composite structures; (5) Hybrid finite element-AI simulation platform. Future research will combine AI and numerical methods and will push forward the frontier of physics-informed machine learning and develop intelligent civil engineering infrastructure in the near future.

Professor S.C. Wong

- was reappointed as a Member of the Environment and Conservation Fund Committee, and Chairman of its Waste Reduction Projects Vetting Subcommittee, The Government of HKSAR, from October 16, 2022 to October 15, 2024.
- was appointed as a Member of the Pensions Appeal Panel and Appeal Panel on Government's Voluntary Contributions under the Civil Service Provident Fund Scheme, The Government of HKSAR, for three years with effect from November 9, 2022.
- was elected as a Council Member of the Hong Kong Institution of Engineers for two years from 2022-2024.
- was elected as a Council Member of the Chartered Institution of Logistics and Transport in Hong Kong for two years with effect from October 1, 2022.

A new book on Water for Life: Drinking Water, Health, Food, Energy Nexus by Dr. A.W. Jayawardena

This is the third book authored by our Adjunct Professor **A.W. Jayawardena**. Copies of this as well as his previous books "Fluid Mechanics, Hydraulics, Hydrology and Water Resources for Civil Engineers" and "Environmental and Hydrological Systems Modelling" are available at the departmental library with the compliments of the author.



Water is a precious resource essential for all forms of life. It can be thought of as the blood of the earth. Although there is plenty of water to meet the demand for the present population and even for a projected population of about 9 billion, there is significant spatial and temporal variation in the global distribution of this precious resource. As a result, there are water-rich countries and water-poor countries with the latter facing water stress and water scarcity which in extreme situations can lead to water-related conflicts and even 'water-wars'. The World Health Organization (WHO) has identified unsafe drinking water as a major killer in the world. The motivation for writing *Water for Life: Drinking Water, Health, Food, Energy Nexus* is primarily to throw light on the multi-faceted uses and importance of water in life, in particular to highlight the water, health, food, and energy nexus. It is hoped that the contents would help students in

civil engineering, geography, and earth and social sciences to perceive the big picture of water management for all human and biotic populations without causing negative effects on the environment.

Research Grant

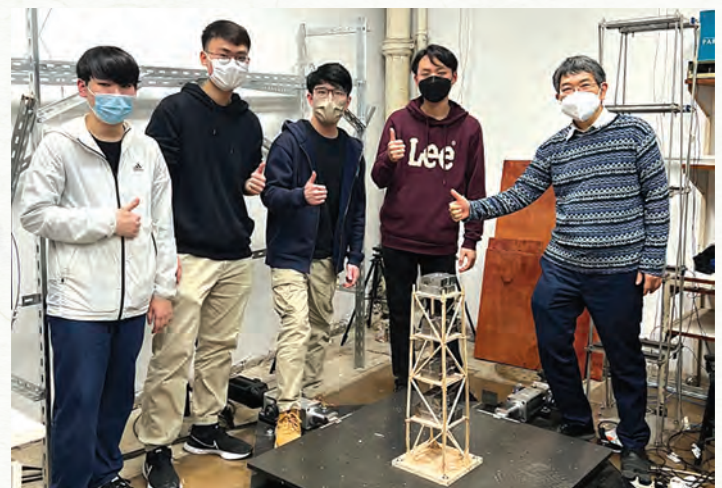
Dr. Sérgio Lourenço has been awarded an Invitational Fellowship for Research in Japan (Short-term) by the Japan Society for the Promotion of Science, with Hokkaido University as host institution. The Fellow is required to participate in discussions, attend seminars, give lectures and engage in joint research.

Student Activities/Awards

Student Activity

The Shaking Table Competition 2023

The Shaking Table Competition 2023, organized by the Department of Civil Engineering and Project Mingde Student Association (PMSA), was held on January 12, 2023. This competition was both educational and entertaining. It aims to encourage students to use their engineering knowledge and creativity to design and build a small-scale physical model. The model would be tested under an earthquake load applied through the shaking table. Each team was given limited materials, mainly balsa wooden sticks and super glue, and time to construct a model according to the pre-announced specifications. They were also required to present their engineering justifications to the judging panel for consideration.



Winning team and our judge, Ir Dr. Ray K.L. Su.

There were 5 teams participating in the competition this year. The winning team is Team C. Members included Wong Chun Tung, Tam Ka Wan, Leung Ka Lun, and Leung Sin Wai. All are year 3 civil engineering students. They designed and built a structure that could withstand both rounds of the earthquake simulation. The winning team received a cash prize of HK\$1000 and a Certificate of Champion.

Congratulations to the winning team and to all participants for their hard work!



Model of Team A.



Model of Team B.



Model of Team C.



Model of Team D.



Model of Team E.

Student Awards

Mr. Louis Brighton (Grad June 2022) was awarded the Merti Prize, Best Final Year Project Award, HKIE Civil Division.



Mr. Louis Brighton, our undergraduate with first class honors from the class of 2022, received the 2023 Fugro Prize from the Geotechnical Division Committee of the Hong Kong Institution of Engineers. Louis presented his from his final year project entitled, "Application of Transient Seepage Analysis for Groundwater Design of Slope". Louis was supervised and encouraged by Dr. Clarence E. Choi to participate in the competition. The Fugro Prize was established and organized with the very generous support of Fugro (Hong Kong) Limited to promote and encourage young geotechnical engineers in Hong Kong to recognize geotechnical, study, research or project work with significant contributions to the advancement of the geotechnical practice. The prize is an annual award for the best paper in geo-data, geotechnical and/or geo-environmental engineering.

Mr. Chan Ho Man (Grad June 2022) was nominated for the AECOM Prize for Best Student of the Year 2022.

Ms. Cheung Hoi Yee (CivE 3 2022-23) was awarded the Chevalier Engineering Scholarship 2022-23.

Ms. Chu Chun Ching (CivE 3 2022-23) was awarded the HKU Engineering Alumni Association Scholarship 2022-2023.

Ms. Chui Cheuk Yu (CivE 3 2022-23) was awarded the Powering a Sustainable Generation Scholarship by CLP 2022-23.

Mr. Kam Chun Yu (CivE 4 2022-23) was awarded the HKIE Geotechnical Division, LPM Contractor Scholarship 2022.

Mr. Daryl Kevin (Grad June 2022) was awarded the Grand Prize, Best Final Year Project Award, HKIE Civil Division.

Mr. Lam Cheuk Yin Bryan (CivE 4 2022-23) and **Mr. Li Chung Wah** (CivE 3 2022-23) were awarded the YS and Christabel Lung Undergraduate Scholarship for Engineering Students (Renewal 22-23).

Mr. Lam Hiu Fai Arthur (Grad June 2022), Final Year Project student of Professor Z.Q. Yue, was nominated for the ASCE-GC Best Final Year Project Award. The Award Presentation Ceremony was held on November 23, 2022 at the Senior Common Room, The University of Hong Kong.



Mr. Lam Hiu Fai Arthur has also been selected by The HKIE Geotechnical Division as the Champion of the AECOM Prize for Best Final-Year Geotechnical Project 2022.

Mr. Lau Tak San (CivE 2 2022-23) was awarded the HKU Engineering Alumni Association Scholarship 2022-2023.

Mr. Law Chi Chung (CivE 2 2022-23) was awarded the Dean's Award for Engineering Students 2022-23.

Mr. Ng Yik Chun Jeremy (2022 Civil Grad), a Final Year Project student of Professor Kaimin Shih, received the Champion of the ICE HKA G&S Emerging Engineers Award 2023 Regional Final on February 4, 2023. This award is to honour the best research paper for Civil Engineering Graduates. He presented his FYP entitled "Environmental Friendly Recycling and Functionalising of Manganese from Spent Alkaline Batteries" for the award. Jeremy may be invited to compete in the Emerging Engineers Award Global Final in the UK for the ultimate cash prize and the prestigious Institution medal upon nomination.



Mr. Qi Rui (Ph.D. student, supervisor Dr Sérgio Lourenço) has been awarded a Sino-British Fellowship Trust Visitorships 2022-2023 to visit the University of Hertfordshire for 1 month in 2023.

Mr. Wong Lok Hang (CivE 2 2022-23) was awarded the Dean's Award for Engineering Students 2022-23 and the YS and Christabel Lung Undergraduate Scholarship for Engineering Students (Renewal 22-23).

Dr. Xin Xing has been awarded the Outstanding Teaching Assistant Award 2021-2022 for an excellent performance in the course CIVL2102 Engineering Geology and Rock Mechanics.

About Project Mingde

Project Mingde was established by the Department of Civil Engineering in 2004. It provides an open platform for nurturing our students to acquire not only hard skills, but also to possess soft skills, such as a sense of social responsibility, by participating in real-world on-going civil engineering projects in remote impoverished regions in China and other Asian countries. We have a slogan "We grow as we build" and that is the core value of Project Mingde. Project Mingde attracts not only Civil Engineering students, but also students from other disciplines and institutions to participate in this meaningful programme. We hope that students would have personal growth through this experiential learning opportunity and participation in various real-life projects; and also education in impoverished localities in China could be provided. For more information about Project Mingde, please visit our official website at <http://www.civil.hku.hk/mingde/>.

Alumni are welcome to join Project Mingde and if you are interested to be part of us, please contact Dr. C.P. Wong at cpwryan@hku.hk (for projects) or Dr. K.H. Law at adalaw@hku.hk (for communications).

Restoration and Expansion of Guigang Duling Primary School

The reinforced concrete frame of the Composite Building had been completed. Our students supervised the construction works using 360 photos for virtual site inspections. The appearance and quality generally met the contract requirements, while several minor refinements were requested by the Project Architect. In the coming months, the remaining tasks including the rainwater collecting and recycling system, the fresh water supply and drainage system, the wooden façade of the Composite Building, and the permanent fencing and retaining walls encompassing the school will be constructed. The completion date of this project was set in late July, and it will be handed over to the School for early childhood education starting from this September.

An on-site inspection of the Composite Building is scheduled in March, which will be our first visit after the pandemic. Project Mingde will continue organizing regular visit trips to monitor the progress and ensure that all remaining tasks will be completed in a timely and professional manner.



The reinforced concrete frame of the Composite Building had been completed.



The wooden façade will be installed and the internal renovation works will commence afterwards.

Establishment of an Aquaponics System in Tai O

In addition to building facilities in remote areas, Project Mingde also cares about our local communities. Project Mingde is currently establishing an aquaponics system in Tai O. This is a community project designed for the elderly to participate in.



**Your gift – of any amount – will make a difference to the students in the
Department of Civil Engineering
"WE GROW AS WE BUILD"**

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Thank you for your gift!

Aquaponics is a closed-loop agricultural system that combines fish and vegetable cultivation. In this system, we use the wastewater produced by the fish farming and convert it into nitrites and nitrates, which will become plant fertilizers, through bacteria. The water is then filtered through the plant roots and returned to the fish farming, forming a closed-loop system that achieves the goal of “no need to change water for fish farming, no need to fertilize for vegetable cultivation”. This system can effectively utilize water and nutrients, reduce water use, fertilizers, and pesticides, and is considered as a sustainable agricultural method. After the farm is established, elderly people living in the community can come to help with planting and feeding the fish. Watching the growth of plants and fish can give them a sense of achievement. At the same time, they can also make friends with other elderly people during the process.

About 30 students went to Tai O in December for a camp with three days and two nights to build planting trays and construct a siphon system. A follow-up trip will be arranged for plant seedlings with the local elderly in March.



Our students were building planting trays and constructing a siphon system.



Group photo with the local residents in Tai O and our students.

Name of students participated in Winter Training Programme (December 28, 2022 - January 13, 2023):

LEE Chung Yau Matthew, LEUNG Ka Lun Alan, MAN Hoi Kei Katie, KI On Yuen Jack, WONG Ka Ho Daniel, WU Quanbing, WONG Chun Tung Tony, CHU Ka Chai Roy, CHAN Chun Heung and TAM Ka Wan Kylo.

News from Alumni

1972 Civil Engineering alumnus Golden Jubilee Reunion Dinner was held on November 26, 2022 in Ming Pavilion of HKU Senior Common Room.

On this occasion, 21 classmates (with some spouses and one son) reunited with their teacher Professor Peter K.K. Lee and senior K.W. Leung to cherish their study together 50 years ago.

They have written over 140 articles and 200,000 words for their collection 《畢業50周年誌慶刊》. A copy is kept in the Department library.



1972 Civil Engineering alumnus Golden Jubilee Reunion dinner.

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