HKUST CIVL Outstanding Alumni Award

Industry Track



Ir Dr. Raymond CHEUNG Wai Man, JP

PhD in Civil Engineering
Head, Geotechnical Engineering Office
The Civil Engineering and Development Department, HKSAR Government

Citation

Ir Dr. Raymond Cheung, JP began his lifelong association with HKUST in 1996 when he embarked on his doctoral studies under the supervision of the late Professor Wilson H. Tang. While pursuing a demanding full-time career, he conducted research in reliability analysis and risk management, developing expertise that would later contribute significantly to the advancement of Hong Kong's slope safety system. His doctoral journey demanded immense dedication, requiring him to balance professional responsibilities with evening classes, research commitments, and frequent travel between work and campus. The experience not only strengthened his technical capabilities but also instilled in him a deep appreciation for lifelong learning, perseverance, and academic excellence.

With more than three decades of professional experience, Ir Dr. Cheung has devoted his career to safeguarding Hong Kong against landslides, one of the city's most significant natural hazards. Since joining the Geotechnical Engineering Office (GEO) of the HKSAR Government in 1996, he has played a pivotal role in formulating geotechnical standards, advancing landslide risk management strategies, and enhancing the resilience of Hong Kong's infrastructure. His work has made lasting contributions to public safety, sustainable development, and climate resilience.

As Head of the Geotechnical Engineering Office, Ir Dr. Cheung leads Hong Kong's geotechnical safety and landslide risk management initiatives. Under his leadership, the GEO has embraced digital transformation and innovative technologies, including Geographic Information Systems, artificial intelligence, machine learning, and digital twin applications, to further strengthen the effectiveness and resilience of Hong Kong's internationally acclaimed slope safety system. His vision and leadership have helped position Hong Kong at the forefront of climate-resilient geotechnical engineering worldwide.

Ir Dr. Cheung's influence extends far beyond professional practice. He has made significant contributions to research, innovation, and knowledge transfer through award-winning publications, technical standards, and scholarly works. Notably, he led the development of *Geoguide 7: Guide to Soil Nail Design and Construction*, a landmark document that has shaped slope upgrading practices across Hong Kong. He also consolidated decades of practical and research experience in his internationally published book, *Soil Nailing: A Practical Guide* (2021), which serves as a valuable reference for students, researchers, and practitioners around the world.

A committed supporter of HKUST, Ir Dr. Cheung has maintained close ties with the University for almost three decades. He has served as a guest lecturer and speaker in the subjects of geotechnical engineering and innovative technology, sharing his expertise and inspiring generations of students. He is also a Co-Investigator of major HKUST-led strategic research initiatives, including the Areas of Excellence project on slope safety and the Theme-based Research Scheme project on digital twin technologies for landslide risk management under extreme storms. Through these collaborations, he continues to bridge academia and practice, translating research excellence into tangible societal benefits.

Internationally, Ir Dr. Cheung is widely respected for his expertise in geotechnical engineering and landslide risk management. Through his service on international committees, editorial boards, and professional networks, he actively promotes global collaboration and knowledge exchange. His contributions have strengthened Hong Kong's reputation as a world leader in slope safety innovation and resilience engineering.

Through visionary leadership, distinguished public service, sustained research engagement, and unwavering support for his alma mater, Ir Dr. Raymond Cheung has made remarkable contributions to the engineering profession and society. His career exemplifies the values of excellence, innovation, resilience, and service, inspiring future generations of engineers to create lasting positive impact for their communities and the world.

The Department of Civil and Environmental Engineering proudly recognizes Ir Dr. Raymond Cheung, JP as the recipient of the HKUST CIVL Outstanding Alumni Award, in recognition of his distinguished leadership in geotechnical engineering, outstanding contributions to landslide risk management, and unwavering commitment to advancing engineering practice, research, education, and public service.