

**WANG Zuankai**  
**Professor, Department of Mechanical Engineering,**  
**The Hong Kong Polytechnic University**

**Biography**

Prof. Zuankai Wang is the Associate Vice President (Research & Innovation) and concurrently Chair Professor of Nature-Inspired Engineering in the Department of Mechanical Engineering at The Hong Kong Polytechnic University (PolyU). Professor Wang received his B.S. degree from Jilin University in 2000, M.S. degree from the Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, in 2003, and Ph.D. degree from Rensselaer Polytechnic Institute in 2008. After one-year postdoctoral training at Columbia University, he joined the City University of Hong Kong (CityU) as Assistant Professor in 2009 and was promoted to Chair Professor in 2021. He was also the Associate Dean of the College of Engineering from 2019 to 2022 and the founding Deputy Director of the Research Centre for Nature-Inspired Engineering from 2021 to 2022 at CityU. He is currently the Executive Editor-in-Chief of Droplet journal (Wiley), and Associate Editor and Advisory Board Member for ten journals.



Professor Wang is a founding member of the Hong Kong Young Academy of Sciences, Fellow of the International Society of Bionic Engineering (ISBE), Croucher Senior Research Fellow (2023), RGC Senior Research Fellow (2022), Highly Cited Researcher (Cross-field) as recognized by Clarivate (2022), and Changjiang Chair Professor as conferred by the Ministry of Education of China (2016). His work has been recognized by the Guinness Book of World Records and two of his inventions have won the International Exhibition of Inventions of Geneva Gold Medal and Gold Medal with Congratulations of Jury, respectively. He has received many other awards including the Green Tech Award (2021), Xplorer Prize (2020), Hall of Fame (Advanced Engineering Materials, 2019), 35th World Cultural Council Special Recognition Award (2018), President's Lectureship (2020, 2018), Outstanding Research Award (Senior, 2017), and President's Award at CityU (2017, 2016). Ph.D. students he supervised have won many prestigious awards including the Grand Prize and First Prize of the Hong Kong University Student Innovation & Entrepreneurship Competition (2022), Hong Kong Young Scientist Award (2015, 2019, 2022), Materials Research Society Graduate Student Gold Award (2016) and Silver Award (2015, 2021), and Hiwin Doctoral Dissertation Award (2016, 2019, 2021).

Professor Wang's research interests lie in bridging nature-inspired innovations with fundamental understanding of surface science towards developing nature-inspired surfaces for scientific challenges and various engineering implementations. Scientifically, he has answered three century-old scientific questions—what's the shortest contact time between solid and liquid, how to steer directional liquid flow, and how to fundamentally inhibit the Leidenfrost effect first discovered in 1756. Technologically, he made important contributions to exploring nature-inspired surfaces for a wide range of applications such as water and energy harvesting, thermal cooling, fluid transport, and flexible electronics.