

Biography

Professor To Ngai has received his B.S. in chemistry at the Chinese University of Hong Kong (CUHK) in 1999. In 2003, he obtained his Ph.D. in chemistry in the same university under the supervision of Professor Chi Wu. He moved to BASF (Ludwigshafen, Germany) in 2003 as the postdoctoral fellow for two years in Dr. Helmut Auweter and Dr. Sven-Holger Behrens's research group. In 2005, he went to Professor Timothy P Lodge's group in the Chemistry Department of the University of Minnesota and joined the Chemistry Department at CUHK in 2006 as a research assistant professor. He has been appointed as an assistant professor in 2008, and early promoted to associate professor in 2012. In 2017, he was promoted to Professor. His research interests center on the physics and chemistry of interfaces through combination of colloid science, polymer chemistry and soft matter physics. We also focus on the developing and applying single-particle force microscopy and microrheology to understand the structures, dynamics and biomolecular interactions of soft materials. Current areas of focus include Interaction forces between solid surfaces adsorbed with polymers or biomolecules, Microrheology of soft materials and living cells, Particle-stabilized emulsions: formation and applications, Interparticle interactions at fluid interfaces and Development of orthopaedic implant biomaterials.