"Molecular and Colloidal Interactions in Water"

Wednesday April 8, 2020 3:00 pm Wu and Chen Auditorium Levine Hall

Reception to Follow



Nicholas L. Abbott Tisch University Professor Chemical and Biomolecular Engineering Cornell University

Abstract

Life occurs in water, and water-mediated interactions between molecules and interfaces are central to biological assembly processes. Synthetic materials as common as shampoo rely on water-mediated interactions. This presentation will describe experiments that highlight our lack of understanding of interactions in water. This lack of understanding presents the opportunity to formulate a refined set of design rules for self-assembly of engineered functional materials in water.

Bio

Nicholas L. Abbott received a Bachelor of Engineering (Chemical Engineering) from the University of Adelaide, Australia in 1985, and a Ph.D. in Chemical Engineering from the Massachusetts Institute of Technology in 1991. He was a postdoctoral fellow in the chemistry department of Harvard University from 1991-1993. His initial academic appointment was at the University of California-Davis. He moved to the Department of Chemical and Biological Engineering at the University of Wisconsin-Madison in 1998 and served as chairman of the department (2009 to 2012), and Director of the Wisconsin Materials Research Science and Engineering Center (2012 to 2018). In 2018, he joined Cornell University as the Tisch University Professor in the School of Chemical and Biomolecular Engineering. His research accomplishments relate to colloids, interfaces and soft materials, and have been acknowledged by the ACS Award in Colloid and Surface Chemistry and the Alpha Chi Sigma Award of AIChE. He is a member of the US National Academy of Engineering, an elected Fellow of the AAAS and APS, and serves as Co-Editor-in-Chief of *Current Opinion in Colloid and Interface Science*.

2020 John A. Quinn Distinguished Lecture

