

## **Bio**

Scott Milner joined the Chemical Engineering faculty at Penn State University in January 2008, where he holds the William H. Joyce Chair. Milner was a research physicist at ExxonMobil Corporate Strategic Research from 1989 to 2008. He received his Ph.D. in theoretical condensed-matter physics from Harvard University in 1986, after which he held postdoctoral positions at Exxon and AT&T Bell Labs before returning to Exxon in 1989. In 1993 Milner was awarded the John H. Dillon Medal of the American Physical Society for work on polymer brushes, copolymer mesophase ordering, and effects of flow on polymer solutions. He is an APS Fellow, served on the Executive Committee of the APS Division of Polymer Physics from 1999-2003, and as division councilor from 2006-2012.

Longstanding interests include polymer brushes, copolymer mesophases, effects of flow on complex fluids, and polymer rheology. Current research areas are polymer entanglement (including the topological origin of the tube, and "seeing" the tube and entanglements in simulations); glassy systems (including glass transitions in dense fluids, and lattice models of jamming); ordering and crystallization (including twist solitons, nucleation in polymers, and flow-induced crystallization); and materials for energy and electronics (including lithium transport in polymer electrolytes, and self-assembly and electronic transport in block copolymer photovoltaics).