

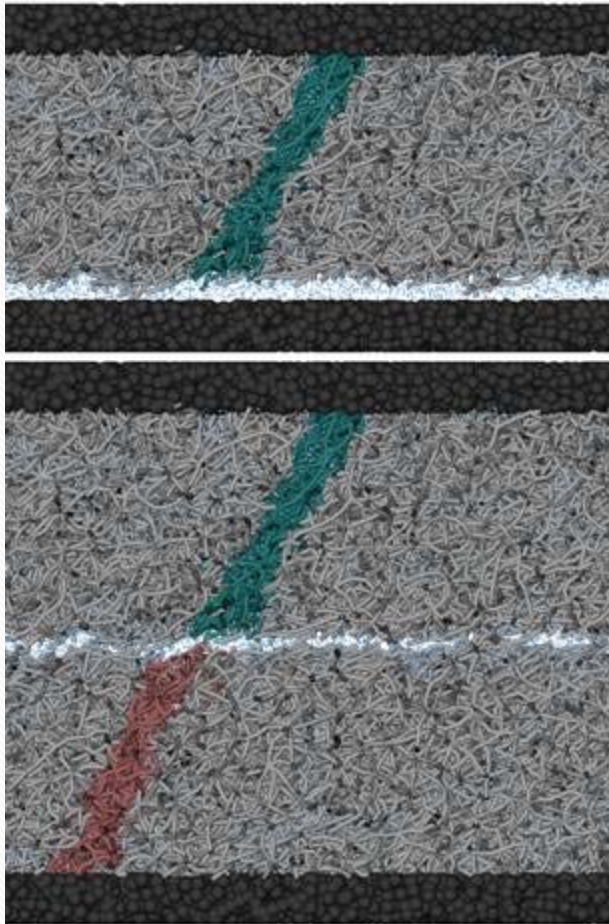


# Using Soft Polymers to Regulate Friction Between Sliding Surfaces - PRF# 48911 - DNI 6

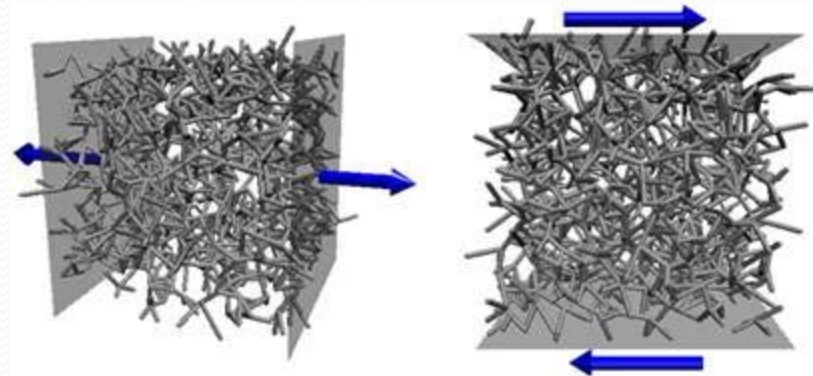


Alexander Alexeev

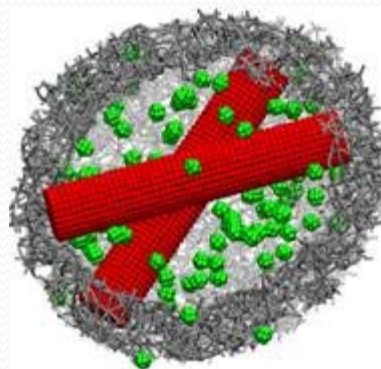
Woodruff School of Mechanical Engineering, Georgia Institute of Technology



We examine friction forces between sliding surfaces coated with soft polymer gels



We probe how permeability and diffusion change due to gel mechanical deformations typical for sliding surfaces



We study how nanoparticles and other solutes can be locally and controllably released from responsive microgel capsules