Towards Deflated Polymersomes

CHANGQIAN YU, STEVE GRANICK, University of Illinois at Urbana-Champaign — The mechanical properties of polymersomes made from block copolymers present interesting and useful differences from the conventional vesicles made from lipids. Their limited water permeability and high bending modulus promote spectacular shape transformation upon external stimuli. Here we describe a vivid example of dynamic evolution of polymersomes from spherical towards the deflated state, driven by extreme osmotic shock.