

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Polymer Crystallization at Liquid-Liquid Interface CHRISTOPHER LI, WENDA WANG, HAO QI, ZIYIN HUANG, Drexel University — Curved space is incommensurate with typical ordered structures with three-dimensional translational symmetry. However, upon assembly, soft matter, including colloids, amphiphiles, and block copolymers, often form structures depicting curved surface/interface. On the other hand, twisted and curved crystals are often observed in crystalline polymers. Various mechanisms have been proposed for these non-flat crystalline morphologies. In this presentation, we will discuss the recent development of crystallization at flat and curved liquid/liquid (L/L) interface. We show that structure, morphology and chain folding behaviors are strongly affected by L/L interfacial energy and polymer chain ends. Polymer crystallization behavior at L/L interface will be compared with solution and bulk crystallization.

Christopher Li
Drexel University

Date submitted: 14 Nov 2013

Electronic form version 1.4