

Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Lamellar Orientation Inversion under Dynamic Interplay between Simultaneous Crystallization and Phase Separation CHARLES HAN, ICCAS, WEICHAO SHI, None, ICCAS TEAM

— Crystallization dynamics and lamellar orientation may be affected under the dynamic interplay between crystallization and phase separation for a two component system. If phase separation is really weak, lamellae grow in the radial direction within spherulites. However, when strong phase separation intervenes, the lamellae growth could be oriented in the tangential direction in a concentric alternating concentration ring pattern. This lamellar orientation inversion is reflected by a birefringence inversion under optical microscopy and will be illustrated by a study of the PEO/PMMA system.

Charles Han
ICCAS

Date submitted: 20 Oct 2011

Electronic form version 1.4