Orientation of Microdomains of Block Copolymers by Zone casting

CHUANBING TANG, KRZYSZTOF MATYJASZEWSKI, TOMASZ KOWALEWSKI, Carnegie Mellon University — As a “bottom up” method, the self-assembly of block copolymers plays a vital role in the development of soft lithography for the fabrication of microelectronic devices. A variety of methods have been developed toward better and more precise controlled patterns on solid substrates. This presentation will describe a novel solution casting technique, “zone casting”, to induce orientation of cylindrical and lamellar microphase-separated domains of various block copolymers.