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**Self-assembled Patterns of Block Copolymer/Homopolymer Blends** DONG SIK PARK, EROL SANCAKTAR, University of Akron, Poly. Eng. — The addition of homopolymer (A) into an asymmetric triblock copolymer (ABA) increases the periodic orientation normal to substrate, enabling a directed self-assembly of the block copolymers into arrays of highly oriented, high-aspect-ratio cylindrical nanostructure over large areas. The application of the physical properties of block copolymers provides substantial benefits in the nanotechnologies including nanostructured membranes, nanotemplates for nanoparticle synthesis, photonic crystals, and high-density information storage media.

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