BLOCK COPOLYMERS

Copolymers close the loop

A century-old puzzle on the apparent contradiction that some materials disorder as they are cooled gains universality following new observations of closed-loop phase behaviour in a block-copolymer system.

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Block copolymers form a particularly interesting class of materials obtained by linking two or more different polymer blocks together. Each block is a sequence of typically around a hundred to a thousand monomers. When only dispersive intermolecular forces