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**Gyroid structure via highly asymmetric ABC and AB blends**  
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KIM, Pohang Univ of Sci Tech — Gyroid structures are very important because of their co-continuous and network structures. However, a block copolymer shows gyroid structures only at 35% volume fraction of one block. In this study, we designed ABC/AB blend system. B (polystyrene (PS)) is the matrix, while A (polyisoprene (PI)) and C (poly(2-vinyl pyridine (P2VP))) are the core part. This blend shows gyroid structures at 20% volume fraction, that is smaller than that observed at diblock copolymer. Morphologies of neat block copolymers and blends were characterized by TEM and small angle X-ray scattering.

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