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Pressure Effect on Phase Behavior of Weakly Interacting Block Copolymers by using FTIR spectroscopy[1] HYE JEONG KIM, SEUNG BIN KIM, JIN KON KIM, Pohang Univ. of Sci. Tech., YOUNG MEE JUNG, Kangwon National University, YOUNG MEE JEONG COLLABORATION — Hydrostatic pressure effect on the phase transition of polystyrene-block-poly(n-pentyl methacrylate) [PS-b-PnPMA] copolymer was investigated by FTIR spectroscopy. The size of closed-loop consisting of both the lower disordered-to-ordered transition and the upper ordered-to-disordered transition became smaller with increasing pressure. The functional groups belonging to the PnPMA block are much more sensitive to pressure compared with those belonging to the PS block. The sensitivity of the functional groups change with pressure is different from that with temperature.

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Jin Kon Kim
Pohang Univ. of Sci. Tech.

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