

Phase behavior of poly(n-isopropylacrylamide)

정상철, 배영찬*
한양대학교 화학공학과
(yabea@hanyang.ac.kr*)

Polymer gels having ionizable groups are known to undergo a discontinuous volume change upon changes in temperature. Nonionic N-isopropylacrylamide gels were found to undergo a volume transition between swollen and collapsed at various temperature. The observation that polymer gel without charge can undergo a first order volume phase transition. The behavior of the gels was interpreted by assuming the free energy of contact between polymer segments was nonlinear function of the solvent.