

THE EQUATION OF STATE FOR A
NONEQUILIBRIUM SOLUTION UNDER
GRAVITY NEAR THE PHASE INTERFACE

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S u m m a r y

Experimental investigations of the kinetics of establishment of the equilibrium gravity effect in a binary methanol-hexane solution are carried out in the neighborhood critical temperature of consolute by using the refractometry technique. The relaxation properties of the system at various heights z are shown to be determined not by a single relaxation time $\tau(z)$ but by a set of relaxation times. Its average value $\overline{\tau(z)}$ decreases when approaching the phase interface. The dynamic equation of state for a nonequilibrium substance under gravity close to the phase interface is proposed on the basis of the obtained experimental data and fluctuation theory of phase transitions.