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THERMODYNAMIC AND PHASE BEHAVIOUR OF FLUIDS EMBEDDED WITH NANOSTRUCTURED MATERIALS

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SUMMARY: The effect of nanoparticles on the critical point shift for classical fluids embedded with nanostructured materials (fullerenes and carbon nanotubes) is examined. The systems toluene + carbon nanotubes (fullerene) are studied to estimate the critical point shift of pure component. Global phase diagrams of two-component fluids with nanoparticles are analyzed.