higher-order transition

**Synonym:** smooth transition

A general term used to describe a transition in which the first and second derivatives of the molar Gibbs energy or molar Helmholtz energy (or chemical potential) with respect to temperature and pressure are continuous, but derivatives of some higher order are discontinuous at the transition point. Synonymous with smooth transition.

**Source:**
PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 583