

allotropic transition

Synonym: allotriomorphic transition

A transition of a pure element, at a defined temperature and pressure, from one crystal structure to another which contains the same atoms but which has different properties. Examples: The transition of graphite to diamond, that of body-centred-cubic iron to face-centred-cubic iron, and the transition of orthorhombic sulfur to monoclinic sulfur. Synonymous with allotriomorphic transition.

Source:

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 579