

## diffusional transition

A transition that requires the rearrangement of atoms, ions or molecules in a manner that cannot be accomplished by a cooperative atomic displacement; it may require the movement of atoms, ions or molecules over distances significantly larger than a unit cell. Example: The transition of graphite (hexagonal sheets of three-coordinated carbon atoms) to diamond (infinite three-dimensional framework of four-coordinated carbon atoms) at high temperature and pressure.

**Source:**

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 581