

polymorphic transition

A *reversible transition* of a solid crystalline phase at a certain temperature and pressure (the *inversion point*) to another phase of the same chemical composition with a different crystal structure.

Note:

In a *liquid-crystal transition*, this term refers to phase changes in the *smectic state* or columnar discotic state.

Examples:

1. The transitions of SiO₂ (quartz-type) at 1143 K to SiO₂ (tridymite-type), and at 1743 K to SiO₂ (cristobalite-type).
2. The transition of β-AgI (wurtzite-type structure) to α-AgI (body-centred-cubic structure) at 418 K.

Synonymous with enantiotropic transition.

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