

## subgroup-supergroup transition

A transition in which the space-group symmetry of the lower symmetry phase is a subgroup of that of the higher symmetry phase. Example: The transition of the low-temperature polymorph of quartz characterized by space-group symmetry  $P3_12$  (trigonal), to the high temperature polymorph of quartz with space-group symmetry,  $P6_22$  (hexagonal). Synonymous with symmetry-breaking transition (note: this term, strictly speaking, is no longer in use).

**Source:**

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 591