

monotropic transition

The irreversible transition from a metastable polymorphic form to the stable polymorph.
Example: The transition of metastable CaCO₃ (aragonite-type) to the stable CaCO₃ (calcite-type).

Note:

For liquid crystals the term refers to a liquid crystal to liquid-crystal transition that occurs below the melting point and is revealed by supercooling of the crystal.

Source:

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 586