

stereochemical non-rigidity

The capability of a molecule to undergo fast and reversible intramolecular isomerization, the energy barrier to which is lower than that allowing for the preparative isolation of the individual isomers at room temperature. It is conventional to assign to the stereochemically non-rigid systems those compounds whose molecules rearrange rapidly enough to influence NMR line shapes at temperatures within the practical range (from $-100\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$) of experimentation. The energy barriers to thus defined rearrangements fall into the range of $5\text{--}20\text{ kcal/mol}$ ($21\text{--}85\text{ kJ/mol}$).

Source:

PAC, 1999, 71, 1919 (*Glossary of terms used in theoretical organic chemistry*) on page 1964