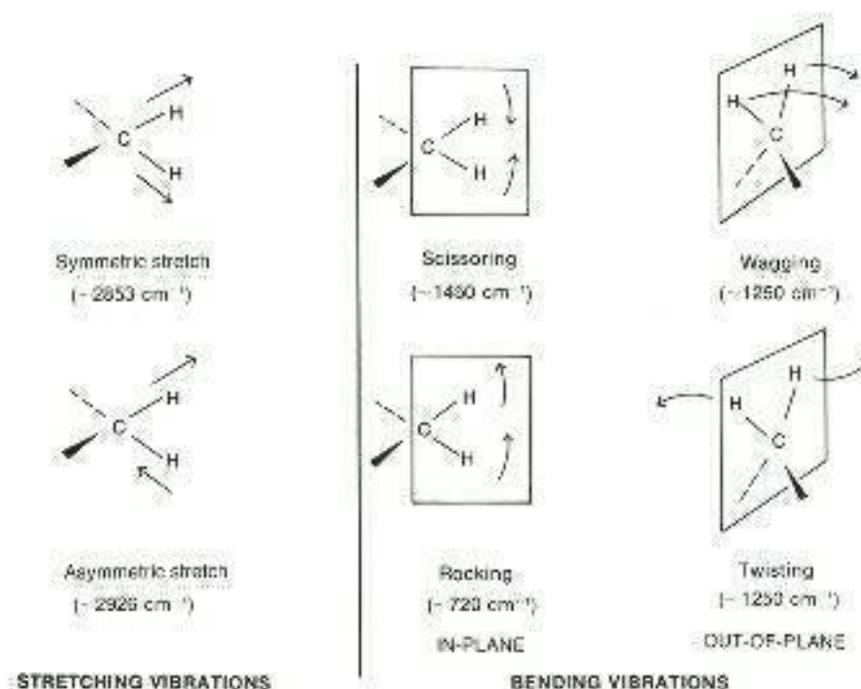


The two primary modes of vibration are stretching and bending

Stretching modes are typically of higher energy than bending modes

Stretching modes are often divided into two a symmetric and asymmetric stretch; the asymmetric stretch is usually of higher energy



CH<sub>2</sub> bending modes at 1465 cm<sup>-1</sup>

In case of cyclohexanol CH<sub>2</sub> group shows sharp medium bending mode of vibration. Cyclohexanol is a cyclic system; it shows a bending sharp medium band at 1454 cm<sup>-1</sup>. In simple alkane bending at 1465 cm<sup>-1</sup> but in cyclic strain system frequency of band decreases; it shows at 1454 cm<sup>-1</sup>.

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