CHAPTER OVERVIEW

13: Molecular Rotation and Vibration

Treating the full internal nuclear-motion dynamics of a polyatomic molecule is complicated. It is conventional to examine the rotational movement of a hypothetical "rigid" molecule as well as the vibrational motion of a non-rotating molecule, and to then treat the rotation-vibration couplings using perturbation theory.

13.1: Rotational Motions of Rigid Molecules

13.2: Vibrational Motion Within the Harmonic Approximation

13.3: Anharmonicity
