

## CHAPTER OVERVIEW

### 28: The Chemical Bond in Polyatomic Molecules

The structure in space of polyatomic molecules depends on the stereochemistry of their chemical bonds and can be determined by solving the (approximated) TISEq using the Born—Oppenheimer approximation using a method that uses a linear combination of atomic orbitals to form molecular orbitals (LCAO-MO).

[28.1: The Chemical Bond in the Water Molecule Using a Minimal Basis](#)

[28.2: Hartree-Fock Calculation for Water](#)

[28.3: Shapes and Energies of Molecular Orbitals](#)

---

This page titled [28: The Chemical Bond in Polyatomic Molecules](#) is shared under a [CC BY-SA 4.0](#) license and was authored, remixed, and/or curated by [Roberto Peverati](#).