CHEM2310 Introduction to Quantum Chemistry

Course descriptions:

This course introduces the basic principles of quantum theory and their applications to the atomic and molecular systems of interest to chemists. Topics covered include the revision of the historical background on the failures of classical physics, wave mechanics and electronic structure of atoms, chemical bond, spectroscopy, and molecular structure.

Pre-requisite:

CHEM1300 and PHYS1001/1002/1111.

Main Course Outline (for reference only):

- 1. Quantum Theory and Quantum Mechanics
- 2. The Electronic Structure of Atoms
- 3. Molecular Bonding
- 4. Molecular Symmetry
- 5. Molecular Spectroscopy