

# There is more in the second edition:

- ★ Heisenberg Uncertainty Principle in Action
- ★ Schrödinger's Cat
- ★ Erasing the ...Past
- ★ The Time-dependence of Mechanical Quantities
- ★ Conservation of Symmetry
- ★ Dirac-Coulomb Model
- ★ Carbon Nanotubes
- ★ Passing the Barrier at Higher Energies
- ★ Harmonic Oscillator as a Reservoir for Phonons
- ★ Hooke Molecules
- ★ Supersymmetry (SUSY) Partners
- ★ Perturbation Theory with Degeneracy
- ★ What Vibrates, what Rotates?
- ★ Understanding the IR Spectrum of HCl
- ★ Dipole-bound Electron
- ★ Thinking of Superconductors
- ★ Why Proteins and DNA Are Photostable
- ★ Molecular Projectile and Molecular Armor
- ★ Model of Prion Disease Propagation
- ★ Deriving Fock Equation for Two Coupled Oscillators
- ★ The Essence of Basis Set Expansions
- ★ The Slater Rules
- ★ Chemical Bond: Difference of Classical and Quantum-mechanical Pictures
- ★ Atomic Terms
- ★ Homonuclear Diatomics
- ★ Minimal Orbital Model versus VSEPR
- ★ Isolobal Analogy
- ★ Checking Size-consistency
- ★ Dynamic Electronic Correlation
- ★ Anticorrelation - Electrons Can Stick Together
- ★ The Nakatsuji Approach
- ★ Electron Localization Function
- ★ Charge Shift Bonding
- ★ The DFT Excited States
- ★ High- and Low-field Seeking Molecules
- ★ The Hydrogen Atom in Electric Field - a Variational Approach
- ★ Rigid and Relaxed Intermolecular Interaction
- ★ Some Peculiarities of the Dipole-Dipole Interaction
- ★ Proteins: Dipole-Internal Field Interaction
- ★ Molecular Surface
- ★ Decisive Forces in Supramolecular Chemistry
- ★ Construction Principles in Supramolecular Chemistry
- ★ Nanoscale: the Basics of Strategy
- ★ The Woodward-Hoffmann Symmetry Rules
- ★ Limit Cycle - a Mathematical Model

- ★ Information and Informed Matter
- ★ Teaching Molecules
- ★ Information Processing by Chemical Waves