

## LECTURE 14 DISTRIBUTION OF MOLECULAR ENERGIES

- I. Maxwell-Boltzmann (MB) Energy Distribution**
  - A. Temperature dependence
  - B. Mass independence
- II. Experimental Verification of an Energy Barrier to a Chemical Reaction and the Role of a MB Energy Distribution**
- III. Frequency of Molecular Collisions**
  - A. Kinetic theory
  - B. Mean free path
- IV. Internal Molecular Motions**
  - A. Vibrational motion
  - B. Rotational motion