17: UV-Vis Spectroscopy

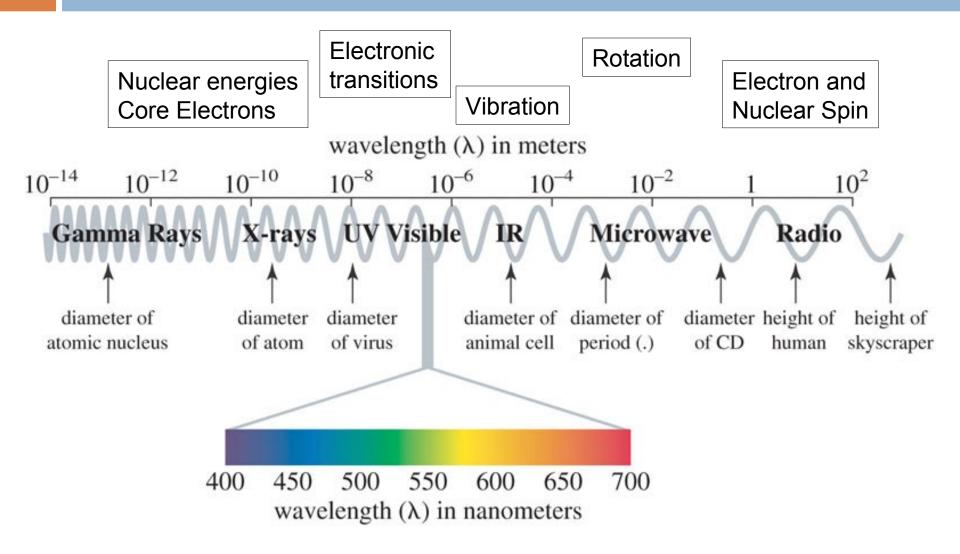
Reading: Ch 9.2-9.6

- General Instrumentation: Detectors
- Absorbing Light
 - A Transmittance, Absorbance, and Beer-Lambert Law
- **UV-Vis Theory**
 - A Electronic energies
 - B Course and fine structure
 - c Frank-Condon Principle
 - Radiative Processes
 - E Singlet and Triplet States
 - Charge Transfer
- Effects on Lambda

Announcements

Pre-lab for Lab 4: UV-Vis is involved and will take time.

Electromagnetic Spectrum



Photomultiplier Tube

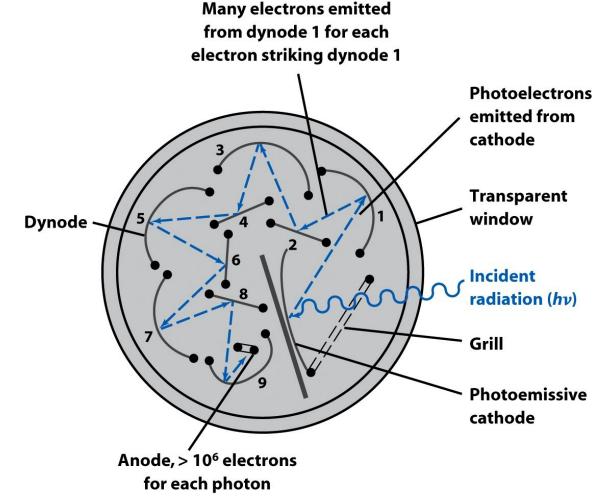
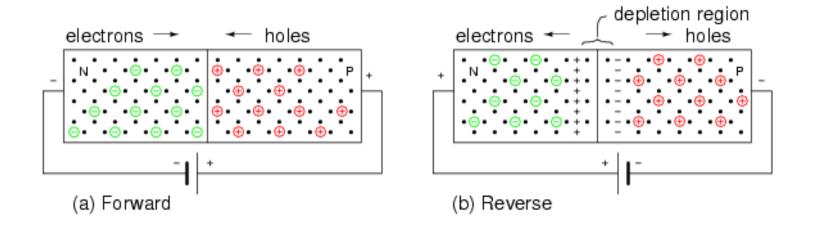


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Photodiodes: p-n Junctions



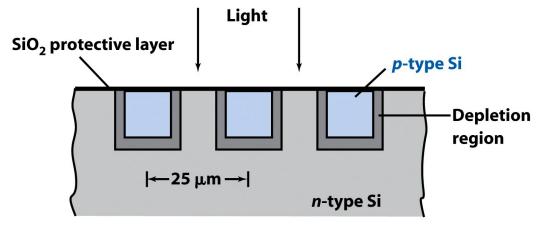


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top figure from http://www.allaboutcircuits.com/vol_3/chpt_2/6.html