

Overview - Crystal Physics

1. Define : crystal, lattice, basis, unit cell, crystal translational vectors, lattice constants, symmetry and bravais lattice
2. Types of unit cell - primitive and non primitive
3. Seven crystal systems with their characteristic specifications
4. Crystal planes and Miller Indices (hkl)
5. Interplanar spacing (d_{hkl}) in crystals and its mathematical expression in terms of Miller Indices (hkl)
6. Bragg's Law for diffraction of X rays using crystals and Bragg's Spectrometer
7. How to use Bragg's law in study of crystals (crystallography) - Laue's Method, Rotating Crystal Method and Powder Method.