

Presentation (Fundamental properties of solids)

Group B Wednesday (28-05-2014)

Periodic arrays of atom, Lattice translation vectors, primitive lattice cells, two & three dimensional lattice types

Group C Wednesday (28-05-2014)

Simple crystal structure, NaCl & CsCl structure, Close pack structure, diamond structure

Group D Wednesday (28-05-2014)

Diffraction of waves by crystals, Bragg Law, Reciprocal lattice vector, Laue equation

Group E Monday (02-06-2014)

Atomic packing factor of SC, FCC and BCC structures, Quasicrystals, Brillouin zone

Group F Monday (02-06-2014)

Crystal of Inert gases, Ionic crystals, Covalent crystals, Metals, Hydrogen bonding,

Group G Monday (02-06-2014)

Atomic and Ionic radii, coordination number, Effective nuclear charge, shielding, Ionization energy, Electron affinity, Overall Reactivity, Octet rule, Anion & cation formation, Elastic stress & strains, Elastic compliance and stiffness constant

Group H Wednesday (04-06-2014))

Anion & cation formation, Elastic stress & strains, Elastic compliance and stiffness constant, Phonon heat capacity, Debye model for density of states, Debye T³ law, Einstein model for density of states