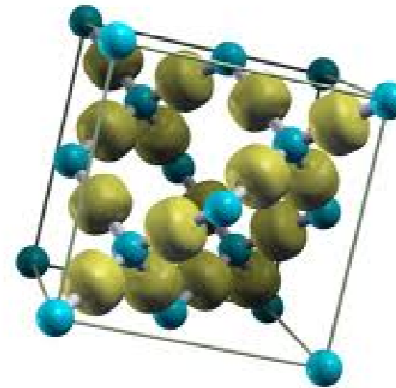
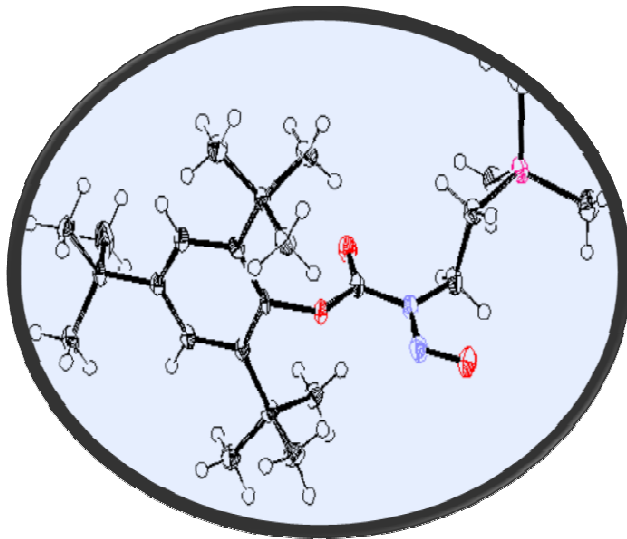
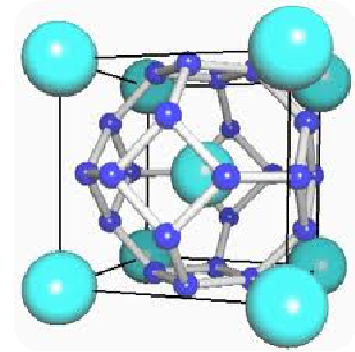


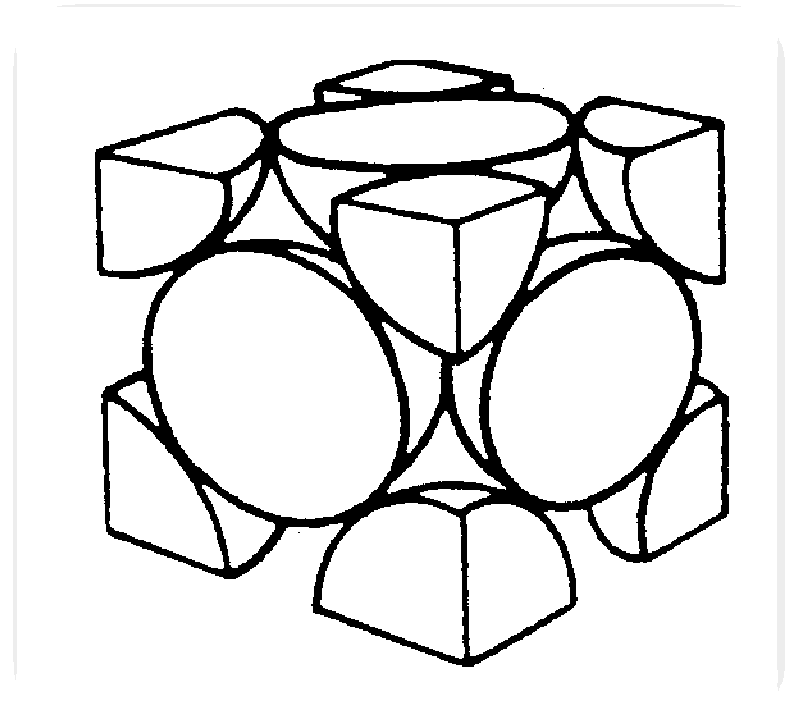
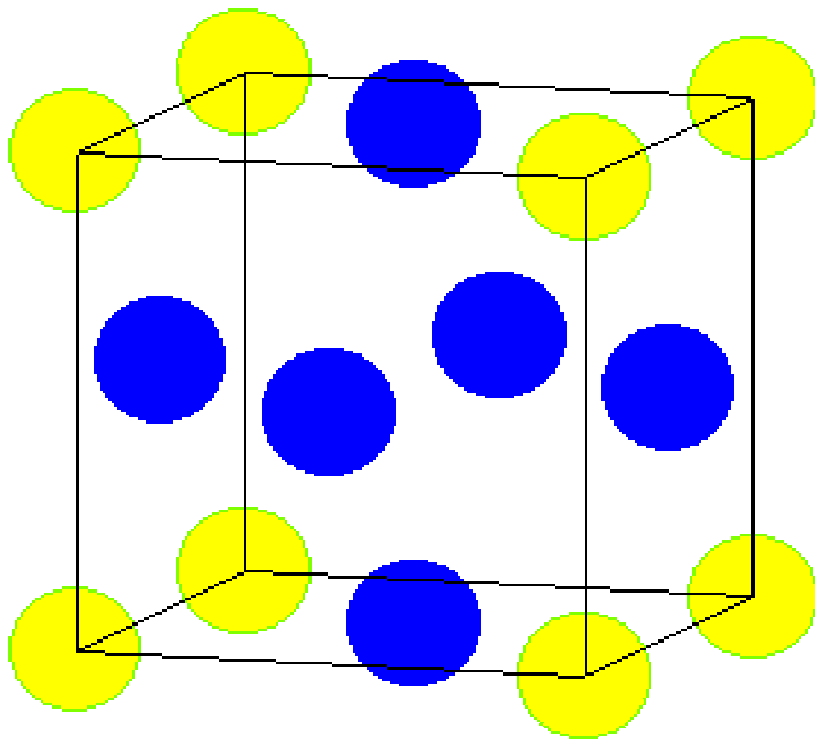
# Crystal Structures

## Lecture No 3

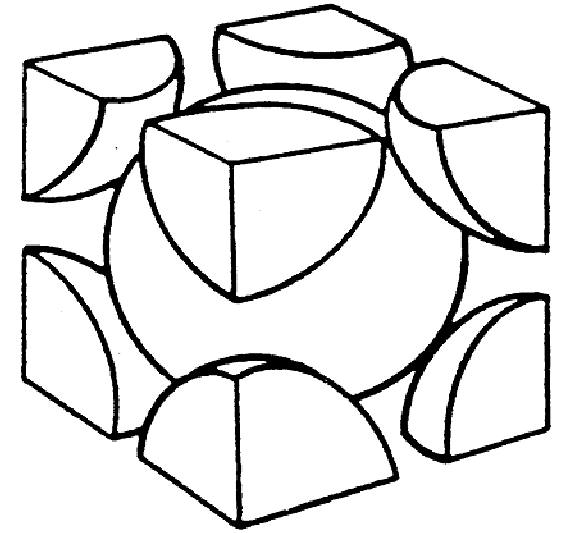
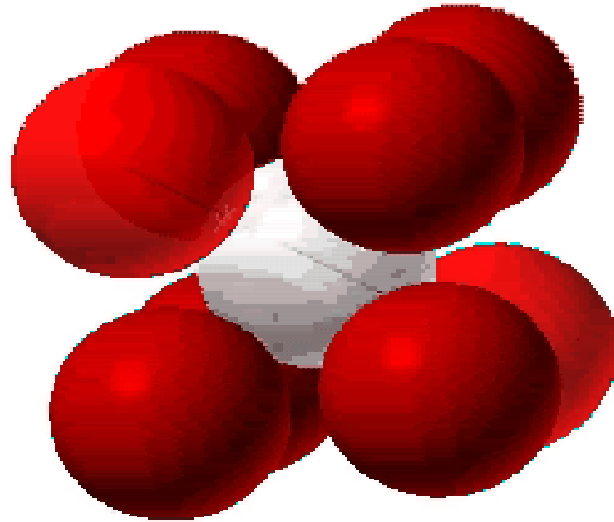
By  
Ms Tayyaba



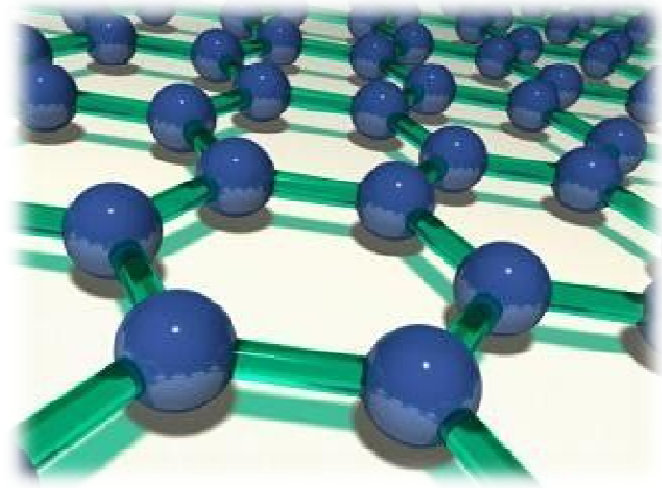
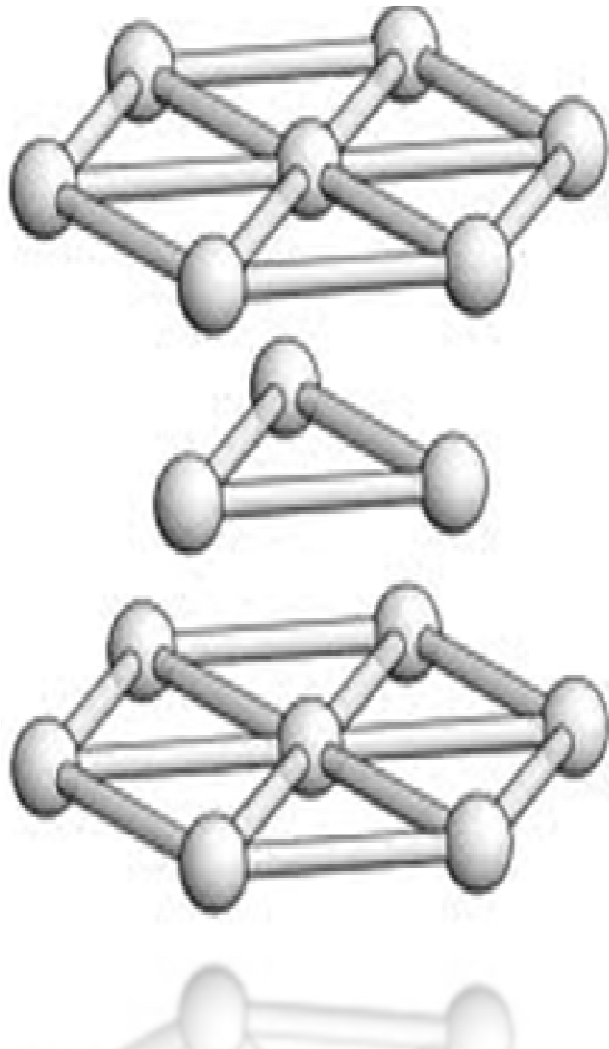
# I. Face-Centered Cubic Crystal Structure (FCC)



## 2. Body-Centered Cubic Crystal Structure (BCC)



### 3. Hexagonal Close- Packed Crystal Structure (HCP)

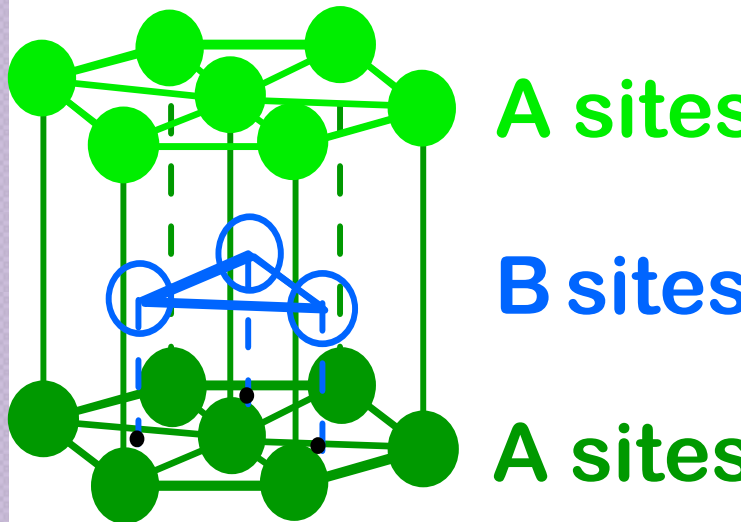


# Closed-Packed Crystal Structures

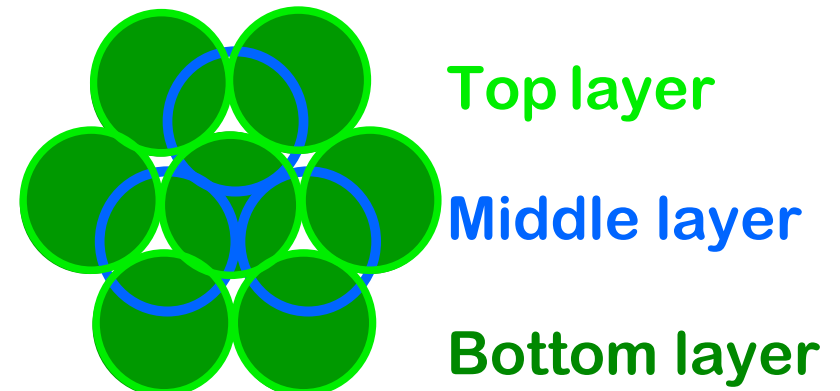
## I. HCP

- **ABAB... Stacking Sequence**

- **3D Projection**

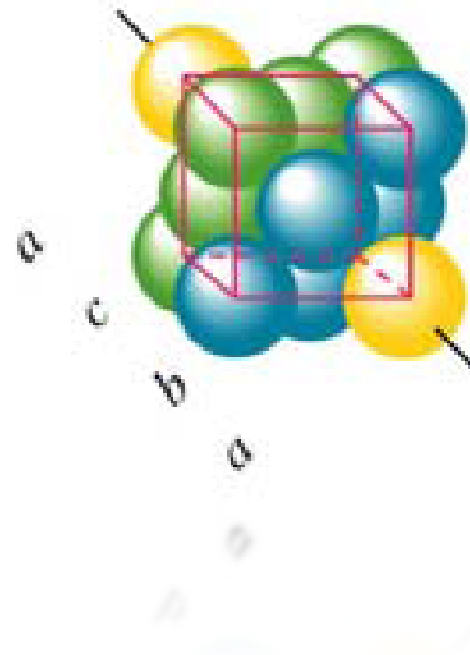
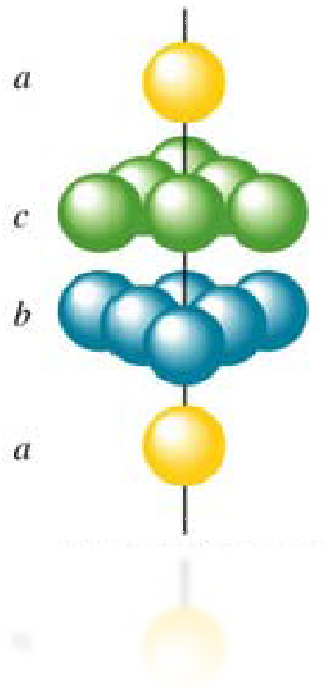


- **2D Projection**

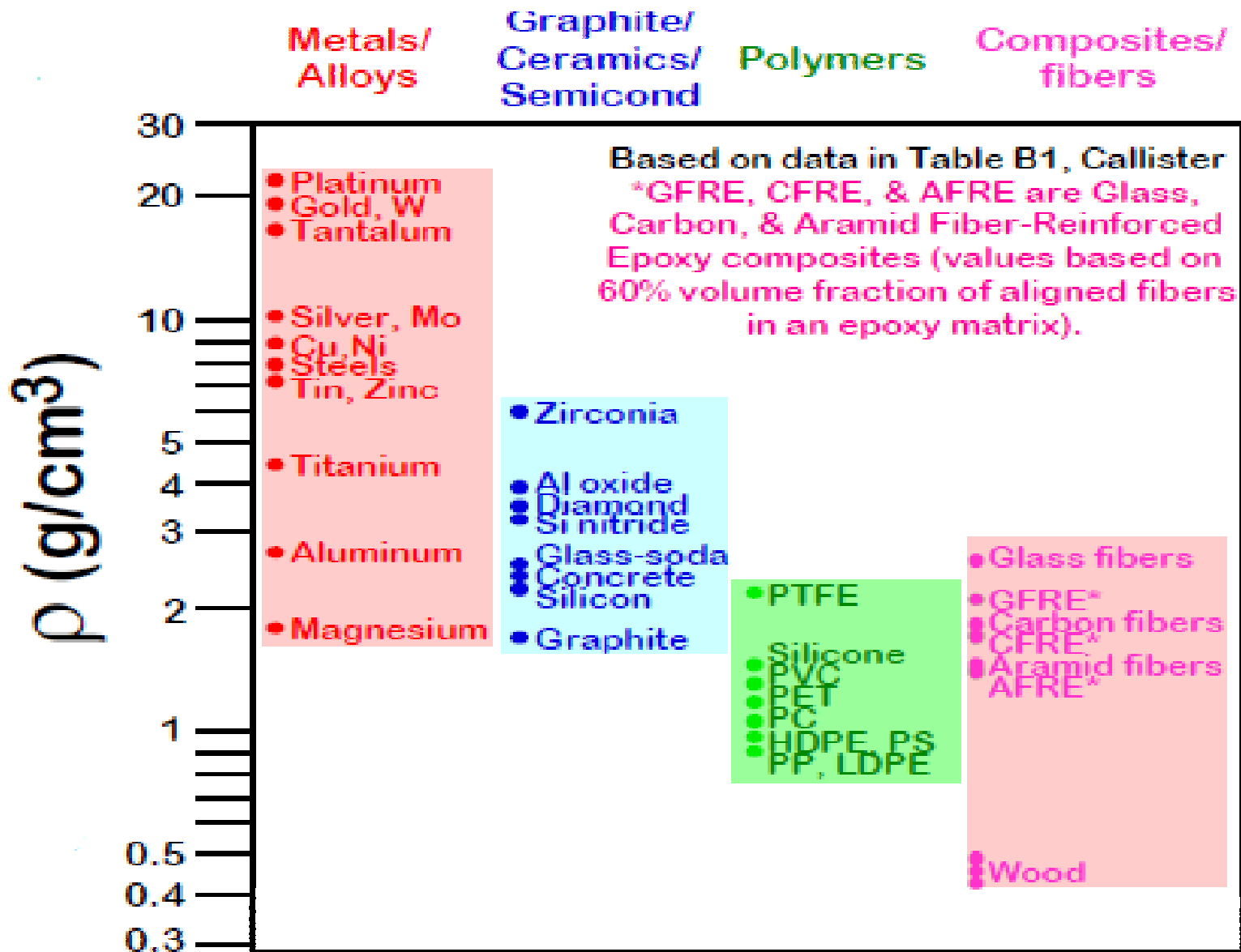


## 2. FCC

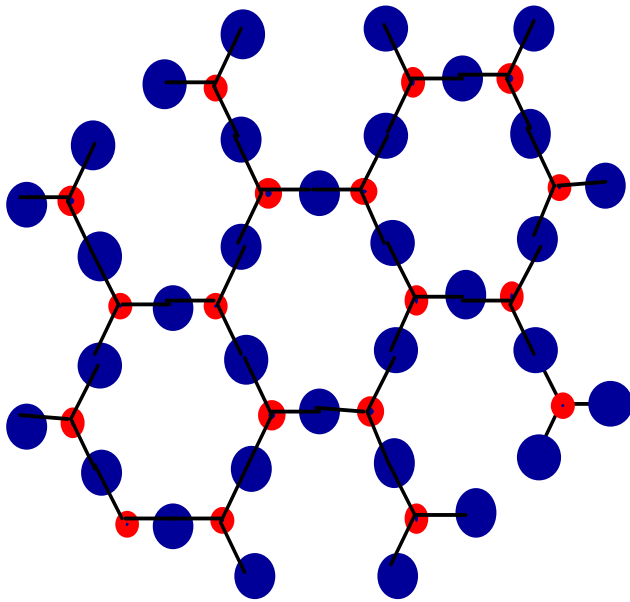
### ABCABC... Stacking Sequence



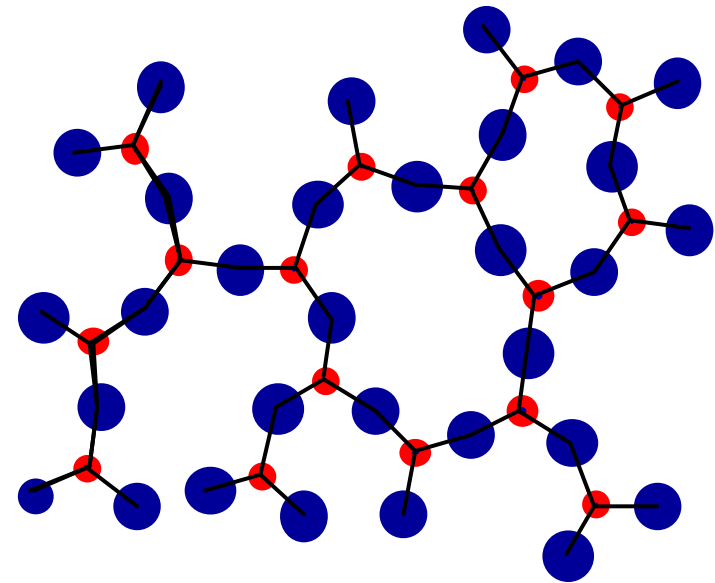
# Densities of Different Materials



# Non- Crystalline Solids



crystalline SiO<sub>2</sub>



Non crystalline SiO<sub>2</sub>

• Si      • Oxygen



# Problems

## I. FCC (APF)

