**Tutorial Sheet**

**Introduction to Materials Science**

**Dr. Ranjit Kumar**

1. Explain the relationship between structure and properties of materials.
2. Classify the materials and mention the salient properties of each type of material.
3. Differentiate between ionic, covalent and metallic bonds.
4. What are biomaterials? Why materials used in bio-medical applications need to be bio-compatible?
5. What are the two important components of a smart material?
6. How many different types of actuators are there and how do they function?
7. What are nanomaterials and what are their unique properties?