Paper Title

Name

Institution

**Chemical Level of Organizations**

In the human body, a total of six structural organizations are found. First and foremost is the chemical level and after that cell, tissue, organ, system and then comes the organism levels. Among all these levels the chemical organization is the simplest and basic one. It includes the building blocks which are also known as atoms which make life possible. Atoms are closely bonded with each other to make molecules; molecules are important because they perform different functions in the human body. These molecules further bind with each other to form organelles. The organelles are further attached to make the basic functional and structural function of the body.

Atoms themselves are made up of subatomic particles like electron, protons, and neutrons. Protons are basically positively charged, electrons are negatively charged, and neutrons have no charge. Atoms are combined through chemical reactions to form molecules and compounds. Three types of bonds are basically present in an atom which are a covalent bond, ionic bond, and hydrogen bond. A chemical reaction takes place when reactants are combined to form products. In most of the macromolecules like carbohydrates, proteins, and lipids these bonds are present, and these bonds play a major role in their hydrophobicity and hydrophilicity.

Chemical organization of molecules varies, it is simple in case of micro molecules and quite complicated in case of macromolecules. So the properties of atom or any product basically depends on the chemical organization (Dupont, 2004).

References

Dupont, J. (2004). On the solid, liquid and solution structural organization of imidazolium ionic liquids. *Journal of the Brazilian Chemical Society*, *15*(3), 341-350.