

## **Molecular Shape**

Molecules come in all sizes and shapes. It is very important to know their shapes because the way they behave in nature is determined by their shapes. The nature of the molecule, whether it is a polar or non-polar, critically depends upon the shape as well as the electron shift in bonding. In turn, the nature and the shape influence not only the physical properties but also chemical properties (chemical reactions). Since the shape is so important, how do we determine it?

The shape of any molecule (simple one anyway) is described using the geometrical terminology (geometrical figures). Thus understanding the molecular shape is simply means understanding the molecular geometry. In geometrical terminology, atoms occupy the vertices and the bonding and on-bonding electrons the edges (sides). These edges in geometrical figures have been placed in such a way as to optimize the distance between them. This distance is measured in terms of angle between the edges in geometry or between bond angles in molecular structural concept.