

Bonding In solids, the forces of attraction and repulsion that tend to hold adjacent atoms, molecules or ions at certain distances to maintain a balance between opposing forces are known as bonds, which is the process of binding these molecules together is known as bonds in solids

Types of Bonds

The different types of bonds can be divided into Solids are divided into two categories Primary Bonds and Secondary Bonds

Primary Bonds

The electrostatic forces that keep the atoms of a solid together are known as primary bonds These are also called interatomic bonds.A covalent bond is illustrated schematically in this figure For a thin molecule of carbon a carbon atom has four valence electrons While each of the four hydrogen atoms has one valence electron, each hydrogen atom can acquire a helium electron configuration for its valence electrons when it shares With the carbon atom having one electron, the carbon now has four additional electrons in common From each hydrogen to a total of eight valence electrons and the electronic structure of neon so this is an example of a covalent bond

metallic bond

in this type of bond atoms of the same elements or different elements give up their valence electrons to form an electron gas or electron cloud or let's say a sea of electrons throughout space which are occupied by atoms after they have given up their valence electrons.Elements that form molecules with covalent bonds include those that contain four or more valence electrons, namely carbon–sulfur, phosphorus, and the chlorine and hydrogen families.NaCl is the classical ionic substance in which the sodium atom can assume the electronic structure of neon and in that single positive charge by transferring its triple valence electron to the electron of the chlorine atom.The different types of primary .bonds are ionic bonds, covalent bonds and metallic bonds.The atoms are actually positive ions