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Surface chemistry

Jsc XII

Surface chemistry deals with phenomena that occur at the surfaces or interfaces. The interface or surface is represented by separating the bulk phases by a hyphen or a slash. For example, the interface between a solid and a gas may be represented by solid-gas or solid/gas. Due to complete miscibility, there is no interface between the gases. The bulk phases that we come across in surface chemistry may be pure compounds or solutions. The interface is normally a few molecules thick but its area depends on the size of the particles of bulk phases. Many important phenomena, noticeable amongst these being corrosion, electrode processes, heterogeneous catalysis,

By Dr Kaushendra Kumar

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pressure at normal temperature is often referred to as volatile. The pressure exhibited by vapor present above a liquid surface is known as vapor pressure. As the temperature of a liquid increases, the kinetic energy of its molecules also increases. As the kinetic energy of molecules increases, the number of molecules transitioning into a vapor also increases, therefore increasing the vapor pressure.

Kumar

finds many applications in industry,
• analytical work and daily life situations

To accomplish Surface Studies meticulously, it becomes imperative to have a really Clean Surface.

In this unit, you will be studying some important features of Surface Chemistry such as adsorption, Catalysis and colloids including emulsions and gels etc.

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Vapor pressure Part 1(1)

vapor pressure lowering is a colligative property of solution. The vapor pressure of a pure solvent is greater than the vapor pressure of a solution containing a non-volatile liquid. This lowered vapor pressure leads to boiling point elevation.

vapor pressure or equilibrium vapor pressure is defined as the pressure exerted by a vapor in thermodynamic equilibrium with its condensed phases (solid or liquid) at a given temperature in a closed system.

The equilibrium vapor pressure is an indication of a liquid's evaporation rate. It relates to the tendency of particles to escape from the liquid. A substance with a high vapor