

and that a phase is any solid, liquid, or gaseous part of the whole system which possesses homogeneity of composition. For instance, if a system is made up of sand, salt solution, ice, and aqueous vapor, each of these separate parts, in that it is homogeneous, is a phase.

Now the properties of water have the result that more readily than other substances it exists simultaneously and in large quantities in the three phases of solid, liquid, and gas as ice, water, and aqueous vapor. This depends upon the high latent heats of fusion and vaporization, the high freezing point of water, and its vapor tension. Water enhances the complexity of the environment, and is one principal factor in the mobility of the environment as a whole. Further, it makes for stability; other things being equal, the greater the number of phases, the less the tendency to change. Among phases the disperse colloidal type is unique and of very great importance — almost the sole basis, indeed, of great physical complexity — and, as above shown, the peculiar properties of water highly favor the colloidal condition.

The solvent power of water much increases the number of components which may enter into a system of which it is a part; hence the large number of components of sea water,