

reactions into which they may enter, while their formation unquestionably does depend upon the intervention of both hydrogen and oxygen. All told, the chemical substances which contain neither carbon, nor hydrogen, nor oxygen make up only a few per cent of known bodies.

It is also clear that an especially large proportion of the most active inorganic compounds contain either hydrogen or oxygen. All acids contain hydrogen; most of them oxygen as well. All bases contain oxygen. Moreover, the most important classes of reactions of inorganic chemistry are probably oxidations and reductions, and the formation of salts from acids and bases. In such processes both oxygen and hydrogen are concerned.

In addition to the oxides and resulting bases and acids, a few other important substances which contain hydrogen or oxygen may be cited: ozone  $O_3$ , hydrogen peroxide  $H_2O_2$ , ammonia  $NH_3$ , hydrazine  $N_2H_4$ , hydroxylamine  $NH_2OH$ , sulphuretted hydrogen  $H_2S$ , hydrochloric acid  $HCl$ , nitrosyl chloride  $NOCl$ , thionyl chloride  $SOCl_2$ , phosgene  $COCl_2$ , phosphine  $PH_3$ , phosphorus oxychloride  $POCl_3$ , arsine  $AsH_3$ . Such compounds, and many other similar ones, are of great importance on