

demonstrated that very few elements, probably only silicon, and perhaps boron, can even be imagined in such a rôle. It has, moreover, just been shown that there are many facts leading to the conclusion that only carbon among elements, and carbon itself only in conjunction with hydrogen, has the power to form the skeletons of compounds numerous, complex, and varied like those of organic chemistry. But, apart from this conclusion, it is certain that silicon and boron could not be mobilized like carbon. Quartz,

of any known liquid. The critical temperature of ammonia is abnormally high, and its critical pressure — the more characteristic constant — is higher than that of any other liquid excepting water. Ammonia is an associated liquid, and its dielectric constant, though much below that of water, is still high when compared with that of non-electrolytic solvents. Its boiling-point elevation constant is the lowest of any known liquid, namely 3.4, as compared with 5.2 for water. In its tendency to unite with salts and other compounds, it probably exceeds water, since salts with ammonia of crystallization are perhaps even more numerous recorded in the literature than are salts with water of crystallization. As a solvent for salts it is generally much inferior to water, though some salts, for example the iodides and bromides of mercury, lead, and silver, dissolve very much more abundantly in ammonia than they do in water, and it far surpasses the latter solvent in its ability to dissolve the compounds of carbon. Finally it exhibits conspicuous power as an ionizing solvent, the more dilute ammonia solutions at 33.5° being very much better conductors of electricity than aqueous solutions of the same concentration at 18°."