

vironment, other no less important physical properties exist. Such especially are those characteristics of liquid water which in no small measure determine the nature of the resulting physico-chemical systems when other substances, whether soluble or insoluble, crystalline or colloidal, are brought into contact with it; I mean the solvent power, the dielectric constant, together with the related ionizing power, and the surface tension.

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WATER AS A SOLVENT

As a solvent there is literally nothing to compare with water. In truth its qualifications are on this point so unique and obvious that nobody seems to have taken the trouble to gather together the evidence, and, accordingly, beyond the bare assertion, a brief statement of the facts is not easy.¹ In the first place the solubility in water of acids, bases, and salts, the most familiar classes of inorganic substances, is almost universal.

¹ Nearly the whole science of chemistry has been built around water and aqueous solutions. A reference to any text-book will at once reveal the truth of this statement. At first sight such a condition appears to be a matter of chance, but, as one becomes more familiar with the true character of the science, realization of a rational justification for the historical fact steadily grows.