

cess known as hydrolytic cleavage, add to this list of chemical characteristics which make for fitness.

These facts appear to indicate that in general chemical behavior, in certain special characteristics as well, and in the magnitude of the quantity of energy rendered available by their chemical changes, the elements carbon, hydrogen, and oxygen are uniquely and most highly fitted to be the stuff of which life is formed and of the environment in which it exists.

Mechanics has taken a place subordinate to chemistry in the present work. Nevertheless, it has been noted that the unique properties of water are the cause of the admirable mobility of that substance and of the whole environment, and therefore of the dynamical processes of geology, meteorology, etc., including soil formation; that it is surface tension which holds water in the soil; that the efficacy of water as a means of dissolving the greatest variety of substances in the greatest amounts, makes possible high osmotic pressures, as well as mobility of all the elements; and there are a host of other considerations which have been discussed above. In all such cases the properties of water have been found to be favorable influences for the wel-