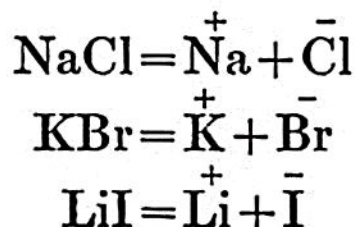


electrical charges has been universally accepted. These so-called ions are the source of nearly all the electrical phenomena of solution, whether in batteries, in the manifestations of animal electricity, or in simple conduction through an aqueous solution. But the more familiar electrochemical processes are by no means the only results of ionization. An infinite number of chemical interactions between dissociated bodies follow inevitably. These changes are not, to be sure, decisive and irreversible, but balanced actions, which, however, vastly increase the variety of substances that exist in water.

Let us consider, for example, a system which has been made by dissolving in water the simple salts sodium chloride, NaCl, potassium bromide, KBr, and lithium iodide, LiI. According to the ionization hypothesis, more than half of the molecules of every one of these salts will at once dissociate into ions as follows: —



These reactions are balanced, and it is confidently believed that the ions are con-