

and purified by chemical processes. Each of these men will tell you his department is indebted to chemistry for what he has accomplished in the past and that in it lies his hope for the future. And now about the future. Medical science by her own efforts and by the contributions of sister sciences has been wonderfully developed and enriched, within the past century, and especially during the last decade. One might well ask has not the limit been reached, and if not, in what direction may we look for further development. We believe the possibilities of the future are unlimited, the foundations are now laid for results far greater than those in the century past, the lines of advance are already extending. Van Helmont more than a century ago made the remarkable assertion that "life is a process of fermentation," and to-day medical science and its allies are earnestly studying the phenomena of life from this standpoint. Eminent authorities tell us that the prevention, the diagnosis and the treatment of disease will in the future be based upon investigation of the nature and action of enzymes and their products. The subject is not new. The study of fermentation began far back in the remote ages of antiquity, the term being first used in connection with alcoholic fermentation and for many ages the fermentation of alcohol, putrefaction and the leavening of bread were the only fermentation processes known. More recently we have learned that the ferment unit, termed an enzyme, is inseparably associated with every living organism and that it initiates every change, physiological or pathological, that takes place in the processes of life. The searchlight of physical chemistry recently turned upon this subject has revealed for our investigation heights and depths and lengths and breadths, of which, it never entered into the mind of the scientist to conceive. As a result the physiologist is to-day busy revising his knowledge of the phenomena of life in its relations to these enzymes. The pathological processes are being traced back to the original cell whence function begins to deviate from the normal, through the action of enzymes or their products. The bacteriologist no longer wastes his energies in identifying and classifying microbes but with the aid of pathology and pharmacology he is endeavoring to find out the nature and action of the ferments and toxins they produce. Physical