CHAPTER VII.

ASCORBIC ACID.

It is known that waves for ascorbic acid has been reported by Gillam. The wave height-concentration relationship was, however, not satisfactory. Quantitative estimations of ascorbic acid by this method were therefore, associated with large errors.

The recent work of coulometric oxidation of ascorbic acid by controlled potential method has been undertaken with a view to oxidize it with near 100% current efficiency at a platinum gauze anode. The results obtained have already been published in "Analytical Chemistry", a reprint of which forms Appendix 3. It has been found that as the pH of the supporting electrolyte is changed, the optimum potential for coulometric estimation also changes. It has been found that in a short pH interval the variation of optimum potential with pH was linear and conformed to an equation (detailed in the paper referred to). However, the study of this particular aspect is incomplete, as at higher or lower pH values, ascorbic acid undergoes autoxidation rapidly.