

124 SYNOPSES OF LABORATORY COURSES

cordant. Prove that the number of c.c. divided by 100 gives per cent. P_2O_5 .

Earthy and Alkaline Phosphates.—Boil about 60 c.c. of sample A after adding a few drops of conc. sod. hydrate (thus precipitating the earthy phosphates); filter; take 50 c.c. of the filtrate, neutralise with acetic acid, and determine the phosphates as above with the uranium solution. This value is the alkaline phosphates. The difference between this and the previous determination gives the earthy phosphates.

Save all of the uranium residues. Put the mixture from the titration into the vessel on the centre table.

III. *Sulphur compounds in Urine.*—(A.) *Total Sulphates* (Folin).—Place 25 c.c. of urine in a 250 c.c. Erlenmeyer flask, add 20 c.c. of hydrochloric acid (1 volume of concentrated HCl to 4 volumes of water), and boil gently for twenty minutes, covering the mouth of the flask with a small watch-glass. Cool the flask under the tap, and dilute to about 150 c.c. with water. Add 10 c.c. of 5 per cent. barium chloride solution, slowly, drop by drop, to the cold solution, which must not be stirred or shaken during the addition, nor for at least one hour after. Then shake well.

In the meantime heat a crucible, cool it in desiccator, and weigh.

Filter contents of flask through 9 cm. ashless filter after greasing lip of flask and decanting with use of rod; do not fill the filter paper more than three-fourths full each time. Decant the clear supernatant liquid