COMMUNICATIONS TO THE EDITOR

COAGULATION OF FERRIC OXIDE HYDROSOLS

Sir:

In a recent communication [THIS JOURNAL, **52**, 4170 (1930)] N. R. Dhar suggests that "the results of Judd and Sorum [THIS JOURNAL, **52**, 2598 (1930)] are not in agreement with previous work and need confirmation." The "previous work" referred to is that of Dhar and his collaborators, particularly that reported by Dhar and Gore [*J. Indian Chem. Soc.*, **6**, 31 (1929)], in which the conclusion is drawn that "even highly purified sols of ferric hydroxide containing very small amounts of chloride ion follow the general rule that the greater the concentration of the sol the greater is the amount of electrolyte necessary for coagulation irrespective of the valency of the coagulating ion."

If the two papers in question are compared it will be obvious that Dhar's own results, when properly analyzed, fall in line with the very conclusion with which he seems to take issue. Figure 4, page 2601, in the paper by Sorum and Judd represents graphically the influence of the addition of ferric chloride on flocculation values. If the increase in chloride content, as represented by millimoles of ferric chloride added per liter, is greater than 0.0095 g. per liter, the sol behaves as did Dhar's, *i. e.*, the flocculation value with sodium chloride increases with increased sol concentration. It is only when the added chloride is less than 0.0095 g. per liter that the sol follows the Burton–Bishop rule. An examination of Dhar's results will show that in no case is the chloride content of the purified sol anywhere nearly as low as that represented by the above figure. The best figure is 0.0936 g. per liter, ten times the critical value represented in Figure 4 cited above. As such it would seem that Dhar's criticism is not very well founded.

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DERIVATIVES OF OPTICALLY ACTIVE TRIARYLCARBINOLS AND THEIR HALOCHROMIC SALTS

Sir:

In a recent article published in the *Proceedings of the National Academy of Sciences* [**16**, 215 (1930)], I described a method for preparing an optically active triarylcarbinol in the form of its thioglycolic acid derivative. *l*-Phenylbiphenyl-α-naphthylmethylthioglycolic acid, $(C_6H_5C_6H_4)(C_{10}H_7)(C_6H_5)C—SCH_2COOH$ (hereafter designated as A), has the following specific rotation in carbon tetrachloride, $[\alpha]_D^{20}$ −13.63°. Experiments with this substance show that it forms halochromic salts. Concentrated