

(3) and (4) A paper by Mr. David R. Davoll: "A study in the determination of raffinose," and a paper by the same, "Should raffinose be considered as non-sugar in calculating the quotient of purity?" were presented in print. There was no discussion of these papers.

(5) A lecture by Mr. Sachs: "Shall chemical measuring instruments be graduated according to the old Mohr method, or according to the new official method of France and Germany?" A discussion followed this address. Professor Weinstein and Privy Councilor von Buchka stated their opinion to be that a single section should not adopt a resolution in this matter, and declared a return to Mohr's method a step backwards. Mr. François Sachs disputed the latter assertion.

The meeting then adjourned.

F. G. WIECHMANN, *Secretary*.

NOTE.

On the Emulsifying Action of Soap.—Experiments on the emulsifying power of soap solutions have been recently published by H. W. Hillyer.¹ In these it is shown that the effect is due to the lowering of the interfacial tension at the interface oil-soap solution, caused by the non-hydrolyzed soap contained in the aqueous solution. The variation of interfacial tension with the concentration of the soap solution was quantitatively studied by Hillyer by means of a dropping pipette.

It may be remarked, however, that not only have exactly similar conclusions been arrived at previously by me, but they have been obtained by an almost identical method and published in one of the most universally read scientific journals.²

Doubtless my paper must have escaped Mr. Hillyer's notice, for in his second paper he refers to himself as a pioneer. In my experiments, drops of a neutral, fatty oil (or of a neutral hydrocarbon oil) containing a specified amount of free aliphatic acid were allowed to ascend through an alkali solution of known strength. My first experiments (not published) were made by

¹ This Journal, 25, 511, 524 (1903).

² *Ztschr. phys. Chem.*, 31, 42 (1899).

allowing drops of a neutral oil to ascend through an aqueous soap solution, but this method was abandoned in favor of the former one, owing to uncertainty as regards the amount of hydrolysis in the soap solution. If Mr. Hillyer will refer to a recent paper by Krafft,¹ which also seems to have escaped his notice, he will find that a perfectly pure "soap" solution will *not* emulsify a neutral oil. This effect appears to occur only when the soap solution contains an excess of free alkali (or even alkaline chloride). From this it would seem that the lowering of interfacial tension and consequent emulsification are due to the production at the interface of a colloidal layer or membrane.

In conclusion, although Mr. Hillyer's paper forms an interesting contribution to an interesting subject, it is necessary to point out that neither his main conclusion nor the method by which it was obtained, is new.

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NEW BOOKS.

CHEMISTRY OF THE DYE-STUFFS. BY DR. GEORG VON GEORGIEVICS, Professor of Chemical Technology at the Imperial and Royal State Technical School at Bielitz. Translated from the second German edition by CHARLES SALTER. London: Scott, Greenwood & Co.; New York: D. Van Nostrand Co. 1903. vi + 402 pp. Price, \$4.50 net.

This book, originally designed to form a section of a text-book on the "Technology of the Textile Fibers," was afterwards modified into a separate volume, chiefly in order to render it more accessible to chemists interested in the chemistry of dye-stuffs rather than in the dyeing and cloth-printing industries. For this reason, all particulars relating to the application of the dye-stuffs are relegated to the author's companion volume—"Chemical Technology of the Textile Fibres."

The aim of the author has been to provide a text-book presenting to the student, in as lucid and condensed a form as possible, the extremely wide domain of the modern chemistry of the dye-stuffs.

¹ *Ztschr. phys. Chem.*, **35**, 371 (1902).