

understanding of the principles involved. For this reason a relatively short but clear treatment of the subject is certainly worthwhile. "Gegenstrom-Verteilung" can be recommended to anyone for a basic understanding of the subject. Those interested in the more technical aspects can find ample literature references given for further study.

For the over-all objective of the isolation of substances in a pure state when they are found in complicated mixtures, the successive application of different techniques is obviously the most effective. However, when this is not possible and because of some unique property the highest separating power practical by countercurrent distribution is desired, it will become necessary to pay greater attention to details. Such information could be given only in a much longer account. This is primarily concerned with the analytical details which are presented by the numerous fractions at the end of a run.

Now that mechanical equipment for accomplishing quantitative multiple extractions is becoming readily available, the greatest problem of the method will be compounding of suitable systems. Actual experience with a system is the best means of evaluating it. The authors give a considerable number of systems for various classes of solutes but could have devoted more space to this problem. It is to be expected that as time passes many more systems will be reported. That this will be true is indicated by the great increase in the number of different systems successfully used and given in the literature during the past year.

Drs. Rauen and Stamm have written a very worthwhile review of the subject of countercurrent distribution.

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Theoretische Organische Chemie. Edited by WALTER HÜCKEL, Göttingen. Verlag Chemie, G.m.b.H., Weinheim/Bergstr., Germany. 1953. Teil I, 145 pp, DM 10,-. Teil II, 160 pp. DM 10,-, 15 X 22.5 cm.

These books are reprints, without change, of volumes 34 and 35 of the "FIAT Review of German Science," published previously in 1948. Since most, if not all, of the material here reviewed has appeared in the journal literature, the books are comparable with a compilation of selections from back issues of "Annual Reports on the Progress of Chemistry" with, of course, the greatest emphasis laid upon the work of German chemists. The titles of the nine chapters, and their authors, are: in Part I, General Structural Chemistry and Chemical Binding (W. Hückel), Stereochemistry (W. Hückel), Free Carbon-radicals and -biradicals (F. Seel), and Courses of Reactions (W. Hückel); and, in Part II, Association, Dipole Moment and Surface Tension (W. Hückel), Constitution and Physical Properties (W. Hückel), Absorption Spectra (G. Scheibe), Raman Spectra (J. Goubeau), and Mechanism and Kinetics of polymerization Processes (G. V. Schulz).

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