

Book Review

CATALYTIC HYDROGENATION IN ORGANIC SYNTHESIS - PROCEDURES AND COMMENTARY, M. Freifelder, Wiley-Interscience, New York, 1978, 191 pages, \$18.50.

Morris Freifelder was the hydrogenation specialist with Abbott Laboratories from 1945 to 1967 and is the author of the fine comprehensive reference "Practical Catalytic Hydrogenation - Techniques and Applications" (Wiley, 1971). Drawing on his personal experience directing more than 7500 catalytic reductions, Mr. Freifelder has now produced a shorter, more practically oriented book on this subject.

In fourteen chapters the author reviews the practical aspects of the hydrogenation of the common functional groups as well as hydrogenolysis and reductive alkylation and amination. More than fifty concise experimental procedures (mostly drawn from the author's own work) illustrate the principle reaction types. Extensive notes and commentary accompany each procedure indicating the author's preference with regard to catalyst and detailing the effect of variations in solvent system and other experimental parameters. Each chapter also includes a valuable discussion of conditions for achieving selective hydrogenations in the presence of other reducible functional groups.

It should be noted that a similar treatment of this subject is already available: R.L. Augustine's "Catalytic Hydrogenation - Techniques and Applications in Organic Synthesis" (Marcel Dekker, 1965). Nonetheless, synthetic chemists will find Freifelder's more recent and detailed reference an indispensable aid in planning catalytic hydrogenations.

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