

Book Reviews

Elsevier's encyclopaedia of organic chemistry. (Vol. 13, *Tricyclic compounds*; Series III, *Carboisocyclic compounds*.) E. Josephy and F. Radt. (Eds.) New York-Amsterdam: Elsevier, 1946. Pp. xx + 1265. Single volume, \$104; serial price, \$91; subscription price, \$78.

Volume 13 is the second to appear in this projected compilation in the English language and the second in Series III. In due time, the systematic description of all organic compounds appearing in the scientific literature will have been included. Elsevier has not attempted to cover those compounds described in patents; on the other hand, the well-known Beilstein does refer to the patent literature, although the writer is not informed whether the coverage has been world-wide or limited to German patents.

With the availability of only two volumes of the eventual 20 of Elsevier, a detailed comparison with its counterpart, Beilstein, is not warranted at this time. Of greatest immediate value to the reader may be the description of one or two compounds selected at random and appearing in both Beilstein and Elsevier.

In Elsevier (p. 236):

"9-Chloroanthracene, $C_{14}H_9Cl$, golden-yellow needles (alc.), m. 103° (1876 Perkin), m. 106° , M_a 68.14, M_D 69.39, N_D 72.81, M_v 77.53 (1923a Krollpfeiffer); green in fuming H_2SO_4 , addn. of water causes a brown ppt.—Fmn. Anthracene with 1 mol. of Cl_2 in $CS_2 \rightarrow$ dichloride fusion

\rightarrow 9-chloroanthracene (1876 P.). From anthracene and *tert*-butyl hypochlorite (1931 Clark)."

At the bottom of the page on which this description appears is a notation: "References, pp. 258, 259." By turning to page 258, one finds the references listed under the date of appearance.

In Beilstein (Vol. V, p. 663):

"9-Chlor-anthracen, $C_{14}H_9Cl$. B. Man lässt Chlor auf Anthracen einwirken und schmilzt das hierbei entstehende Anthracendichlorid (Perkin, *Chem. N.*, 34, 145; *BI* [2] 27, 465).—Goldgelbe Nadeln (aus Alkohol). F: 103° . Sehr leicht löslich in Äther, CS_2 , Benzol. Verbindung mit Pikrinsäure s. Syst. No. 523."

In Elsevier (p. 805):

"9,10-Diethylphenanthrene, $C_{18}H_{18}$, m. $105-6^\circ$.—Fmn. From diethylphenanthrene (p. 891) as the dimethyl compd. (1908 Zincke; cf. 1913 Meerwein)."

In Beilstein (Vol. V, Suppl., p. 339):

"9,10-Diäthyl-phenanthren, $-C_{18}H_{18} = \begin{array}{c} C_6H_5 \cdot C \cdot C_2H_5 \\ | \quad | \\ C_6H_4 \cdot C \cdot C_2H_5 \end{array}$. B

Aus 9,10-Diacetylphenanthren durch Reduktion mit Jodwasserstoffsäure und rotem Phosphor (Willgerodt, Albert, *J. pr.* [2] 84, 392). Blättchen (aus Alkohol). F: $90-91^\circ$.

"Als 9,10-Diäthyl-phenanthren (?) wird ein bei $105-106^\circ$ schmelzender Kohlenwasserstoff angesprochen, der bei der Reduktion von 10-oxo-9,9-diäthyl-9,10-dihydrophenanthren mit Jodwasserstoffsäure entsteht (Zincke, Tropp, *A.* 362, 254; vgl. Meerwein, *A.* 396, 249) und einmal bei der Reduktion von 9-Äthyl-9-propionylfluoren mit Natriumamalgam in saurer Lösung erhalten wurde (Meerwein, *A.* 405, 174)."

The formula index appearing in each volume of Elsevier is to be preferred to the name index in each volume of Beilstein, although a complete formula index is indeed available covering all volumes of Beilstein.

This and the previous Volume XIV have merit and are reference works with which all organic research men should be familiar.

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James McKeen Cattell, *man of science*. Vol. I: *Psychological research*; Vol. II: *Addresses and formal papers*. A. T. Poffenberger. (Ed.) Lancaster, Pa.: Science Press, 1947. Vol. I: Pp. 586; Vol. II: Pp. 507. \$10.00.

Here is a unique history of the rise of experimental psychology for the first 50 years. It is an on-the-spot commentary by our most authoritative commentator giving an up-to-date report of progress from year to year. In his capacity as spokesman or public relations man for psychology, Cattell has blazed many new trails and fought many a battle for psychology among the sciences. These volumes will be news for the student of today and will stand as a historical classic.

Volume I is a condensed report of the author's personal achievements as a pioneer experimenter in this field. Emphasis is laid upon the historical background of each problem and a discussion of the significance of the method involved. Volume II is a parallel collection of the author's public addresses giving a chronological account of the emerging new psychology. Prof. Poffenberger, as editor, has shown great skill in the selection and chronological organization. Every word of the text is in Cattell's own words as originally published in journals but so selected as to make interesting and economical reading of the story of the rise of psychology in America. Two brief biographical sketches of the author are appended, one by Prof. R. S. Woodworth and the other by Dr. Lyman Wells.

Since the whole is a condensation of the author's 167 articles listed in the chronological bibliography and since the original articles were written as models of brevity and clarity, the space allotted for this review does not