

V- REFERENCES

REFERENCES

1. C.J. Thompson, N.G. Foster, H.J. Coleman, and H.T. Rall, U.S. Bur. Mines, Rep. Invest. 6879 (1966); C.A. 66, 47985 (1967).
2. L. Espagno and B. Poquet, J. Chim. Phys. 59, 509 (1962).
3. W. Carruthers, Nature 176, 790 (1955).
4. W. Carruthers and A.G. Douglas, J. Chem. Soc., 2813 (1959); *ibid*, 278 (1957); *ibid*, 4077 (1964).
5. T. Aczel, K.W. Bartz, H.E. Lumpkin, and F.C. Stehling, Anal. Chem. 34, 1821 (1962).
6. D.P. Montgomery, J. Chem. Eng. Data 8, 432 (1963).
7. E. Kado and K. Kado, Yukagaku 6, 273 (1957; C.A. 55, 4937 (1961).
8. E. Proksch, Oesterr, Chem. -Ztg. 67, 105 (1966); C.A. 64, 19251 (1966).
9. O. Kruber and A. Raeithel, Chem. Ber. 87, 1469 (1954).
10. E. A. Johnson, J. Chem. Soc., 948 (1962).
11. B.J. Mair, Amer. Soc. Testing Mater., Spec. Tech. Publ. 389, 214 (1965); C.A. 64, 15640 (1966).
12. D.J. Mair, Chem. Eng. News. 40 (10), 54 (1962).

13. S. Oshima, K. Fujii, and M. Nakai, Shitsuryo Bunseki
14, 209 (1966); C.A. 69, 60461 (1968).
14. A. Giraud and M.A. Bestougeff, J. Gas Chromatog. 5,
464(1967).
15. V.E. Cates and C.E. Melon, J. Chromatog. 11, 472 (1963).
16. L.H. Klemm, E.P. Antoniadis, G. Capp, E. Chiang, and
E.Y.K. Mak, J. Chromatog. 6, 420 (1961).
17. D. Pape, M. Teppke, and H.W. Prinzler, Conf. Chem.
Process Petrol. Nature Gas, Plenary Lect., 1965,
579 (1968); C.A. 70, 53766 (1969).
18. S.L. Meisel, G.C. Johnson, and H.D. Hartough, J. Am.
Chem. Soc. 72, 1910 (1950).
19. T.J. Wallace and B. Heimlich, Chem. Ind. (London) 45,
1885 (1966).
- 20) C.D. Hurd, R.V. Levitan, and A.R. Macon, J. Am. Chem.
Soc. 84, 4515 (1962).
21. J. Aitken, T. Heeps, and W. Steedman, Fuel 47, 353,
(1968).
22. S.R. Sergienko, V.N. Perchenko, and A.A. Mikhnovskaya,
Khim. Sera Azotorg. Soedin., Soderzh. Neftiyakh
Neft. 3, 353 (1960); C.A. 57, 10982 (1962).

23. J.F. Ford and V.G. Young, Am. Chem. Soc., Div. Petrol. Chem. Preprints 10, C111 - C112 (1965); C.A. 66, 10352 (1967).
24. A. Greco, G. Modena, and P. Todesco, Gaz. Chim. Ital. 90, 671 (1960).
25. E. Baciocchi and L. Mandolini, Ric. Sci. 37, 863 (1967).
26. Ya. B. Chertkov, V.M. Zrelov, and R.D. Obolentsev, Khim. Sera Azotorg. Soedin., Soderzh. Neftiyakh Neft. 3, 461 (1961); C.A. 56, 3723 (1962).
27. G.E. Wiseman and E.S. Gould, J. Am. Chem. Soc. 76, 1706 (1954).
28. G.M. Badger and W.H.F. Sasse, J. Chem. Soc., 3862 (1957).
29. G.M. Badger, N. Kowanko, and W.H. F. Sasse, J. Chem. Soc., 440 (1959).
30. H. Gilman and D.L. Esmay, J. Am. Chem. Soc. 75, 2947 (1953).
31. W. Huckel, S. Gupte, and M. Wartini, Chem. Ber. 99, 1388 (1966).
32. W. Huckel and I. Nabih, Chem. Ber. 89, 2115 (1956).

33. A.J. Birch and D. Nasipuri, Tetrahedron 6, 148 (1959).
34. H.W. Sternberg, C.L. Delle Donne; R.E. Markby, and I.Wender, Fuel 45 469 (1966).
- 35) H.W. Sternberg, C.L. Delle Donne, and I. Wender, Fuel 47, 219 (1968).
36. Stenhouse, Ann. 156, 332 (1870).
37. Burger, Wartman, and Lutz, J. Am. Chem. Soc. 60, 2628 (1938).
38. K. Rabindran and B. D. Tilak, Curr. Sci. 20, 207 (1951).
39. E.B. McCall, British Patent 701, 267 (1953); C.A. 49, 4027 (1955).
40. K. Rabindran and B.D. Tilak, Proc. Indian Acad. Sci., Sect. A 37, 557 (1953).
41. K. Rabindran, A.V. Sunthakar, and B.D. Tilak, Proc. Indian Acad. Sci., Sect. A 36, 411 (1952).
42. J. Ashby, M. Ayad, and O.Meth-Cohn, Chem. Commun., 1251 (1971).
43. R.E. Jones, J. Am. Chem. Soc. 73, 5168 (1951).
44. W. Davies and Q. H. Porter, J. Chem. Soc., 4961 (1957).

45. Q.N. Porter and H.G. Upstill, Tetrahedron Lett. 4, 255 (1972).
46. E.F. Godefroi, U.S. Patent 3, 111, 527 (1963); C.A. 60, 2895 (1964).
47. V.N. Gogte, V.S. Palkar, and B.D. Tilak, Tetrahedron Lett. 6, 30 (1960).
48. A. Lüttringhaus, G. Wagner-V. Saaf, E. Sucker, and G. Borth, Ann. Chem. 557, 46 (1945).
49. R. Gerdil and E.A.C. Lucken, J. Chem. Soc., 5444 (1963).
50. Cullinane and Davies, J. Chem. Soc., 1435 (1936).
51. W.L.F. Armarego and E.E. Turner, J. Chem. Soc., 1665 (1956).
52. E.B. McCall and T.J. Rawlings, British Patent, 1, 016, 373 (1966); C.A. 64, 9697 (1966).
53. P. Cagniant and D. Cagniant, Bull. Soc. Chim. Fr., 336 (1952).
54. R.J. Collins and E.V. Brown, J. Am. Chem. Soc. 79, 1103 (1957).
55. D. Cagniant and G. Kirsch, Compt. Rend. Acad. Sci. Ser. C 72, 948 (1971).

56. A.U. Rahman and O.L. Tombesi, Tetrahedron Lett. 36, 3925 (1968).
57. F. Winternitz, N.J. Antia, M. Tumlivovo, and R. Lachazette, Bull. Soc. Chim. Fr., 1817 (1956).
58. R. Wilputte and R.H. Martin, Bull. Soc. Chim. Belg. 65, 874 (1956).
59. J.D. Loudon, L.B. Young, and A.A. Robertson, J. Chem. Soc., 591 (1964).
60. D. Cagniant, P. Faller, and P. Cagniant, Bull. Soc. Chim. Fr., 2410 (1961).
61. P. Cagniant, D. Cagniant, and M. Mennrath, Bull. Soc. Chim. Fr., 1765 (1964).
62. B. Iddon and R.M. Scowston, Advan. Heterocyc. Chem. 11, 365 (1970).
63. R.B. Mitra and B.D. Tilak, J. Sci. Ind. Res. Sect. B 15, 573 (1956).
64. B.D. Tilak, J. Ind. Chem. Soc. 36 (7), 509 (1959).
65. J. Morgenstern and R. Mayer, J. Prakt. Chem. 34, 116 (1966).
66. E. Campaigne and J. Ashby, J. Heterocycl. Chem., 6, 517 (1969).

67. H. Gilman and G.R. Wilder, J. Org. Chem. 22, 523 (1957).
68. J. Gourier and P. Canonne, Can. J. Chem. 48, 2587 (1970).
69. W.L.F. Armarego and E.E. Turner, J. Chem. Soc. 13 (1957).
70. A. E. Siegrist and H.R. Meyer, Helv. Chim. Acta 52, 1282(1969).
71. R.M. Acheson and D.R. Harrison, J. Chem. Soc., 1764 (1970).
72. R.M. Acheson and D.R. Harrison, Chem. Commun., 724 (1969).
73. R.D. Chambers, J.A. Cunningham, and D.A. Pyke, Tetrahedron 24, 2783 (1968).
74. R.D. Chambers, J. A. Cunningham, and D.J. Spring, J. Chem. Soc. , 1560 (1968).
75. R.D. Chambers, J.A. Cunningham, and D.J. Spring, Tetrahedron 24, 3997 (1968).
76. R.D. Chambers and J.A. Cunningham, British Patent, 1, 180, 743 (1970); C.A. 72, 132501 (1970).
77. R.D. Chambers and D.J. Spring, Tetrahedron 27, 669 (1971).

78. H. Gilman and G.R. Wilder, J. Am. Chem. Soc. 76, 2906 (1954).
79. C.W. Bird, J. Chem. Soc., 1230 (1968).
80. H. Gilman and A.L. Jacoby, J. Org. Chem. 3, 108(1938).
81. N.M. Cullinane, C.G. Davies, and G.I. Davies, J. Chem. Soc., 1435 (1936).
82. R.K. Brown, R.G. Christiansen, and R.B. Sandin, J. Am. Chem. Soc. 70, 1748 (1948).
83. G. Illuminati, J. Nobis, and H. Gilman, J. Am. Chem. Soc. 73, 5887 (1951).
84. H. Gilman, A.L. Jacoby, and H.A. Pacevitz, J. Org. Chem. 3, 120 (1938).
85. H. Gilman and R.K. Ingham, J. Am. Chem. Soc. 75, 3843 (1953).
86. B.D. Tilak, Tetrahedron 2, 76 (1960).
87. E. Sawicki, J. Org. Chem. 19, 608 (1954).
88. H. Gilman and G.R. Wilder, J. Am. Chem. Soc. 77, 3920 (1955).
89. H. Gilman and D.L. Esmay, J. Am. Chem. Soc. 76, 5786 (1954).

90. E. Campaigne, J. Ashby, and L. Hewitt, J. Heterocycl. Chem. 6, 553 (1969).
91. S. Natori, K. Ito, and T. Nakagome, Pharm. Bull., 548 (1957).
92. E.V. Brown and K. Isbrandt, J. Med. Chem. 14, 84 (1971).
93. E. Campaigne, L. Hewitt, and J. Ashby, J. Heterocycl. Chem. 6, 753 (1969).
94. E. Campaigne, L. Hewitt, and J. Ashby, Chem. Commun., 598 (1969).
95. A. Rieche, H. Gross, and E. Hoft, Chem. Ber. 93, 88 (1960).
96. A.H. Fujiwara, B.M. Acton, and L. Goodman, J. Heterocycl. Chem. 5, 853 (1968).
97. B. C. Elmes and J. M. Swan, Aust. J. Chem. 22, 1963 (1969).
98. I.V. Andreeva and M.M. Koton, Zh. Obshch. Khim. 27, 997 (1957); C.A. 52, 4598 (1958).
99. I.V. Andreeva and M.M. Koton, J. Gen. Chem. USSR 27, 1079 (1957); C.A. 53, 5230 (1959).
100. P. Finocchiaro, Boll. Sedute Accad. Gioenia Sci. Natur. Catania 4th Ser. 2 (9), 573 (1969); C.A. 72, 66115 (1970).

101. P. Finocchiaro, Ann. Chim. (Rome) 59, 787 (1969).
102. G. Vasiliu, A. Gioaba, and O. Maior, An. Univ. Bucuresti, Ser. Stiint. Natur. Chim. 15, 33 (1966); C.A. 70, 77686 (1969).
103. D.D. Gverdsiteli and V.P. Litvinov, Soobshch. Akad. Nauk Gruz. SSR. 56, 105 (1969); C.A. 72, 31529 (1970).
104. W. Carruthers and H.N.M. Stewart, J. Chem. Soc., 6221 (1956).
105. F. Passal and W.R. Dotey, U.S. Patent 3, 245, 887 (1966); C.A. 65, 8356 (1966).
106. F. Passal and J.A. Hartman, U.S. Patent 3, 041,255 (1962); C.A. 57, 13544 (1962).
107. F. Passal, British Patent, 1,138, 262 (1968); C.A. 70, 83703 (1969).
108. J. Pollak, M. Heimberg-Krauss, E. Katscher; and O. Lustig, Monatsh. Chem. 55, 358 (1930).
109. R. Baker and C. Eabarn, J. Chem. Soc., 5077 (1961).
110. W.A. Hewett and E. Gipstein, Polym. Lett. 6, 565 (1968).
111. E.B. McCall, A.J. Neale, and T.J. Rawlings, J. Chem. Soc., 4900 (1962).

112. C. Eaborn and J. A. Sperry, J. Chem. Soc., 4921 (1961).
113. R.H. Meen and H. Gilman, J. Org. Chem. 20, 73 (1955).
114. H. Gilman and S. Gray, J. Org. Chem. 23, 1476 (1958).
115. R. Gerdil and E.A.C. Lucken, J. Am. Chem. Soc. 87,
213 (1965).
116. H. Gilman and S.H. Eidt, J. Am. Chem. Soc. 78, 2633
(1956).
117. H. Gilman and D.S. Esam, J. Am. Chem. Soc. 74, 266
(1952).
118. J.W. Morton, Iowa State Coll. J. Sci. 28, 367 (1954);
C.A. 49, 8163 (1955).
119. C.H. Boehringer Sohn., German Patent 1, 215, 709
(1966); C.A. 65, 5489 (1966); Neth. Application
6, 510, 858 (1966); C.A. 65, 17004 (1966).
120. A.M.El-Naggar, F.S.M. Ahmed, A.M. Abd El-Salam and
M. A. El-Gazzar, Egypt. J. Chem. 23(3), 205-
208 (1980).
121. A.M. El-Naggar, F.S.M. Ahmed, A.M. Abd-El-Salam,
M.A.El-Gazzar and T.M. Ibrahim, Egypt. J. Chem.
23 (3), 209-212 (1980).
122. Marme and Meyer, Ber. 18, 1770 (1885).

123. Jaffe and Levy, Ber. 21, 3458 (1888).
124. Barger and Easson, J. Chem. Soc., 2100 (1938).
125. du Vigneaud, McKennis, Jr., Simmonds, Dittmer, and Brown, J. Biol. Chem. 159, 385 (1945).
126. Beerstecher, Jr., and Shive, J. Biol. Chem. 164, 53 (1946).
127. Campaigne, Bourgeois, Garst, McCarthy, Patrick, and Day, J. Am. Chem. Soc. 70, 2611 (1948).
128. Dittmer, J. Am. Chem. Soc. 71, 1205 (1949).
129. Garst, Campaigne, and Day, J. Biol. Chem. 180, 1013 (1949).
130. Kyrides, Meyer, and Zienty, J. Am. Chem. Soc. 69, 2239 (1947).
131. Leonard and Solmssen, J. Am. Chem. Soc. 70, 2064 (1948).
132. Weston, J. Am. Chem. Soc. 69, 980 (1947).
133. Clapp, Clark, Vaughan, English, and Anderson, J. Am. Chem. Soc. 69, 1549 (1947).
134. Lee, Dinwiddie, and Chen, J. Pharmacol. Exptl. Therap., 90, 83 (1947).

135. C.H. Boehringer Sohn (by Hans D. Schroeder, Klaus Thomas, and Dietrich Jerchel). Ger. 1,215, 709 (Cl. C 07f), May 5, 1966, Appl. Aug. 20, 1964; 3 pp; C.A. 65, 5489 (1966).
136. E.C. Miller, J.A. Miller, R.B. Sandin and R.K. Brown, Cancer Research 9, 504 (1949); C.A. 43, 9238 e (1949).
137. Lyle D. Goodhue, and Carolyn E. Tissol, U.S. 2,665, 234; Jan. 5, 1954; C.A. 48, 4757 f (1954).
138. Arthur H. Schlesinger, U.S. 2, 624, 665, Jan. 6, 1953; C.A. 47, 6596 e (1953).
139. R.C. Bushland and W.V. King. U.S. Dept. Agr., Bur. Entomol. Plant. Quarantine E. 585, 15 pp. (Jan. 1943); C.A. 37, 2111 (1943).
140. Helena Rubinstein, Inc. Brit. 916, 562, Jan. 23, 1963; U.S. Appl. Oct. 12, 1959; 5 pp; C.A. 58, 13735 d (1964).
141. M. Brenner and W. Huber, Helv. Chim. Acta, 36, 1109 (1953).
142. D.A. Kidd and F.E. King, Nature, 162, 776 (1948).
143. J.C. Sheehan and V.S. Frank, J. Am. Chem. Soc. 71, 1856 (1949).

144. S. Shankman and Y. Schvo. J. Am. Chem. Soc. 80,
1164 (1958).
145. J.C. Sheehan, D.W. Chapnan and R.W. Roth, J. Am.
Chem. Soc. 74, 3822 (1952).
146. M. Eling, F.H. Minard and S.W. Fox, J. Am. Chem. Soc.,
69, 2466 (1947).
147. W. Grassmann and E. Schutte- Uebbing, Chem. Ber.,
83, 244 (1958).
148. R.A. Turner, J. Am. Chem. Soc., 75, 2388 (1955).
149. C. Berse, R. Baucher and L. Piche, J. Org. Chem., 22,
805 (1957).
150. J.C. Sheehan, M. Goodman and G.P. Hess, J. Am. Chem.
Soc., 78, 1367 (1956).
151. H.C. Beyrman and J.S. Bentekoe, Rec. Trav. Chim.,
81 699 (1962).
152. E. Schroder, Ann. Liebigs (in press).
153. V. du Vigneaud. G. Ressler, J. M. Swan, C.W. Roberts
and P.G. Katsoyannis, J. Am. Chem. Soc. 76,
3115 (1959).
154. D.W. Wolley, J. Biol. Chem., 172, 71 (1948).

155. E. Fischer and W. Lipschitz, Ber. Deut. Chem. Ges.,
48, 360 (1915).
156. V. du Vigneaud and O.K. Behrrens, J. Biol. Chem.,
117, 27 (1937).
157. T. Curtius, J. Prakt. Chem., 70, 57 (1904).
158. K. Hofmann, A. Johl, A. E. Furlenmeier and H.
Koppeler, J. Am. Chem. Soc., 79, 1636 (1957).
159. K. Hofmann, T.A. Thompson, H. Yajima, E.T. Schwartz
and H. Enoye, J. Am. Chem. Soc., 82, 3715
(1960).
160. J. I. Harris and J.S. Fruton, J. Biol. Chem., 191,
143, (1951).
161. H.F. Schott, J.B. Larkin, L.B. Rockland and M.S.
Dunn, J. Org., 12, 490 (1947).
162. Emill Smith, Darreth Spackman, and W.J. Polglase
J. Biol. Chem. 199, 801-17 (1952).
163. R.A. Biossonnas, S. Guttman, P.H. Jaquenoud and
J.P. Weller, Helv. Chem. Acta, 83, 1491 (1955).
164. B.F. Erlanger, H. Sachs and E. Brand, J. Am. Chem.
Soc., 76, 1806 (1954).
165. D.A. Kidd and F.B. King, Nature, 162, 776 (1948).

166. M. Fling, F.N. Minard and S.W. Fox, J. Am. Chem. Soc.,
69, 2466 (1947).
167. E. Fischer, Ber., 40, 489 (1907).
168. M. Fling, F.N. Minard and S.W. Fox, J. Am. Chem. Soc.,
70, 1473 (1948).
169. J.C. Scheehan, D.W. Chapman and R.W. Roth., J. Am. Chem. Soc., 74, 3822 (1952).
170. V. du Vigneaud and O.K. Behrens, J. Biol. Chem., 117,
27, (1937).
171. E.W. Moehesney and W.K. Swan, J. Am. Chem. Soc., 59,
(1937).
172. R.W. Holly and A.D. Holley, J. Am. Chem. Soc. 71,
2129 (1949).
173. Fischer and W. Lipschitz, Ber. Deut. Chem. Ges. 48,
360 (1915).
174. D. Theodoropoulos and L.C. Craigl, J. Org. Chem. 21,
1376 (1956).
175. J.I. Harris and T.S. Work, J. Biochem., 46, 582 (1950).
176. Henry Gilman and John F. Nobis, J. Am. Chem. Soc.
71, 274-6 (1949).

177. Robert K. Brown, : Robert G. Christiansen and Reuben B. Sandin, J. Am. Chem. Soc. 70, 1708-49, (1948).
178. W.M. Cullinane, C.G. Davies, and G.I. Davies, J. Chem. Soc. 1435-7 (1936).
179. Henry Gilman and John F. Nabis, J. Am. Chem. Soc. 67, 1480 (1945).
180. Henry Gilman and Gene R. Wilder, J. Am. Chem. Soc. 76, 2907 (1954).
181. Henry Gilman and Arthur L. Jacoby, J. Org. Chem. 3, 108-124 (1938).
182. Carlson, H.J., Douglas and Bissell; J. Bact., 55, 607 (1948).
183. Vincent, J.G. and H.W. Vincent; Prac. Botl, Biol. Nil. 55, (1944).
184. Epstein, J.A. et al., Lab. Clin. Med. 29, 319 (1944).
185. Irving, G.W., Foraine and Doolittle, Science 102, 9 (1945); J. Bact. 52, 10 (1946).