Circular 7

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Geological Survey

CIRCULAR 7

INDEX TO MICHIGAN GEOLOGIC THESES

by

E. A. Kirkby

Lansing
1967

STATE OF MICHIGAN
George Romney, Governor

DEPARTMENT OF CONSERVATION
Ralph A. MacMullan, Director

GEOLOGICAL SURVEY DIVISION
Gerald E. Eddy, State Geologist and Chief

COMMISSION OF CONSERVATION
Carl T. Johnson, Chairman, Grand Rapids, 1963-67
Robert C. McLaughlin, Detroit, 1963-68
August Scholle, Royal Oak, 1966
E. M. Laitala, Hancock, 1961-69
Harry H. Whiteley, Rogers City 1961-69
Robert J. Furlong, Executive Assistant & Secretary

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PREFACE

A graduate thesis often represents a student's first attempt at reporting extensively on a specific research problem. The results are seldom published and those unpublished, too often are little known or used.

Nevertheless, many if not most of them are sources of potentially significant information. The purpose of this circular is to compile a handy reference to this field of geologic information.

Most thesis titles pertain to Michigan and surrounding Great Lakes. However, a few titles were included from adjacent states where this information may be useful in interpreting Michigan geology.

The list is organized by author, each thesis assigned a number, cross-referenced to the subject index inside rear cover. The information was gathered primarily by canvassing collegiate geology departments, without whose cooperation this circular would not have been possible. The earliest thesis reported was written in 1895. Revisions are contemplated so any comments or additional data suggested will be appreciated.

Prof. B. John Chronic, University of Colorado, has compiled "Bibliography of Theses in Geology" containing over 11,000 titles. University Microfilms, Ann Arbor, Michigan has been microfilming Ph.D. theses since 1938, listed monthly in "Dissertation Abstracts". Ph.D. theses titles appear in the monthly "Abstracts of North American Geology", U.S. Geological Survey.

Lansing
May, 1967

Edward A. Kirkby, Geologist
Geological Survey Division

Petrography and Petrology (including insoluble residues, petrofabrics, and sediments):

14, 15, 25, 27, 30, 50, 56, 57, 58, 68, 69, 73, 74, 76, 79, 80, 82, 84, 89, 91, 93, 94, 106, 107, 108, 113, 118, 123, 126, 132, 133, 134, 135, 137, 140, 143, 146, 151, 156, 171, 176, 184, 185, 188, 198, 200, 216, 218, 224, 226, 227, 237, 243, 246, 253, 259, 261, 272, 285, 289, 294, 296, 301, 304, 306, 307, 310, 312, 314, 316, 322, 323, 324, 347, 349, 351, 354, 358, 360, 361, 363, 365, 368, 369, 370, 378, 387.

Petroleum Geology:

48, 114, 157, 187, 206, 210, 244, 263, 268, 284, 298, 303, 326, 344, 353, 385.

Physiography (including geomorphology and photogeology):

7, 21, 32, 67, 162, 238, 280.

Precambrian (general):

17, 18, 33, 44, 51, 54, 55, 72, 97, 116, 124, 129, 183, 189, 196, 197, 202, 208, 251, 254, 256, 258, 267, 270, 271, 273, 276, 283, 287, 288, 292, 294, 299, 305, 310, 315, 321, 323, 333, 338, 340, 350, 355, 359, 379.

Stratigraphy:

3, 6, 8, 20, 53, 60, 62, 63, 64, 70, 75, 86, 88, 91, 100, 101, 106, 117, 119, 141, 142, 158, 164, 167, 170, 179, 185, 203, 213, 217, 219, 223, 240, 245, 257, 264, 269, 282, 304, 335, 336, 343, 360, 371, 379.

Structure:

9, 11, 15, 27, 85, 90, 114, 117, 133, 172, 206, 266, 290, 291, 343, 348.

Water Studies:

87, 103, 109, 127, 175, 186, 229, 241, 242, 278, 337, 362, 366, 376.

THESES LISTED BY AUTHOR

1. Anderson, Richard C.
Pebbles and sand lithology of the major Wisconsin glacial lobes: Ph. D., Univ. of Chicago, 1955.

2. Asseez, Laidiyu O.
A chemical and petrographic analysis of Wooden No. 6; Middle Ordovician from Hillsdale County, Michigan: M.S., Mich. State Univ., 1964.

3. Asseez, Laidiyu O.
Stratigraphy and paleogeography of Lower Mississippian sediments of the Michigan basin: Ph. D., Mich. State Univ., 1967.

4. Babcock, Larry L.
The manganese-bearing silicate minerals of Champion mine, Champion, Michigan: M.S., Mich. Tech. Univ., 1966.

5. Baldwin, Donald C.
Late Pleistocene clays of the Sault Ste. Marie area and vicinity; M.S., Univ. of Ill., 1951.

6. Bassett, Charles F.
Stratigraphy and paleontology of the Dundee Limestone of southeastern Michigan: Ph. D., Univ. of Mich., 1933.

7. Beard, Richard C.
A photogeological study of a part of the Arvon area of northeastern Baraga County, Michigan: M.S., Mich. Tech. Univ., 1964.

8. Beauclair, W. A.
Paleontology and stratigraphy of two well cores in Middle Devonian rocks of Clare County, Michigan: M.S., Univ. of Mich., 1951.

9. Beeker, Ralph E.
Chemical variations in Dundee brine and their relation to structure: M.S., Univ. of Mich., 1940.

10. Behrens, E. William
An extension and reinterpretation of a regional magnetometer survey of part of southeastern Michigan: M.S., Univ. of Mich., 1958.

11. Bensinger, Herbert S.
Joint patterns in quarries in southeastern Michigan: M.S., Univ. of Mich., 1961.

12. Bergquist, Stanard G.
Report on marl deposits of Oceana County: M.S., Univ. of Mich., 1927.

13. Bergquist, Stanard G.
The Pleistocene history of the Tahquamenon and Manistique drainage region of the Northern Peninsula of Michigan: Ph. D., Univ. of Mich., 1933.

14. Bernardon, Milo A.
A mechanical and statistical analysis of the Middle Devonian, Rogers City-Dundee formations in Michigan: M. S., Mich. State Univ., 1957.

15. Berner, Paul C.
The petrography and structure of "Bald Knob", Huron Mountains, Michigan: M. S., Wayne State Univ., 1952.

16. Berner, Ruth E.
New species of Favosites from the Niagaran series of Michigan: Ph. D., Univ. of Mich., 1930.

17. Beutner, Edward L.
Intrusive rocks of the Marenisco range, Michigan and Wisconsin: M. S., Northwestern Univ., 1932.

18. Bhatt, Kireet J.
Geology of Mount Bohemia, Michigan: M. S., Mich. Tech. Univ., 1952.

19. Blackwell, Richard J.
The analysis of gravity data over Lake Superior type iron formations: M. S., Mich. State Univ., 1964.

20. Blake, Daniel B.
The stratigraphy of the AuTrain formation at AuTrain Falls and Wagner Falls, Alger County, northern Michigan: M. S., Mich. State Univ., 1962.

21. Bloor, David T.
Geologic planiform maps of the Southern Peninsula of Michigan (text and pl.): M. S., Univ. of Mich., 1960.

22. Bottoms, Kenneth D.
Middle Devonian strata based on a core from Grosse Ile, Michigan: M. S., Univ. of Mich., 1959.

23. Boudouris, James
A lithofacies analysis of the Bass Island and Salina formations in the Michigan basin: M. S., Univ. of Mich., 1955.

24. Brabb, Earl E.
Description of Whittlesey beach sediments, Ann Arbor area, Michigan: M. S., Univ. of Mich., 1952.

25. Bradshaw, B. A.
Petrological comparison of Lake Superior iron formations: Ph. D., Univ. of Toronto, 1956.

26. Brady, John M.
Ore and sedimentation of the Lower Sandstone at the White Pine mine, Michigan: M. S., Mich. Tech. Univ., 1961.

27. Brady, Michael B.
A petrographic and structural study of an area in the Huron Mountains, Michigan: M. S., Wayne State Univ., 1952.

28. Brett, James W.
A vertical magnetic intensity survey of a portion of south-central Michigan: M. S., Mich. State Univ., 1960.

29. Broman, William H.
Geophysical investigation of the Bear Lake area, Houghton County, Michigan: M. S., Dept. of Physics, Mich. Tech. Univ., 1953.

30. Brooke, Gerald L.
Sub-Huronian (Timiskaming) sediments of the Lake Enchantment area, Marquette County, Michigan: M. S., Mich. State Univ., 1951.

31. Brown, Alexander C.
Mineralogy at the top of the cupriferous zone, White Pine mine, Ontonagon Co., Michigan: M. S., Univ. of Mich., 1965.

32. Brown, Robert E.
Bedrock topography, lithology, and glacial drift thickness of Lapeer and St. Clair counties, Michigan: M. S., Mich. State Univ., 1963.

33. Browne, James L.
(and Haynes, C. W.) Geology of the Mount Gratiot area, Keweenaw County, Michigan: M. S., Mich. Tech. Univ., 1956.

34. Bufe, Charles G.
An investigation of the remanent magnetization of the Covington dike: M. S., Dept. of Physics, Mich. Tech. Univ., 1962.

35. Burgess, Curtis W.
Devonian stratigraphy and faunas of two cores from Antrim and Crawford counties, Michigan: M. S., Univ. of Mich., 1950.

36. Burns, James W.
Regional study of the Upper Silurian Salina evaporites in the Michigan basin: M. S., Mich. State Univ., 1962.

37. Bussey, F. R.
Analysis of gravity measurements in the Great Lakes region: M. S., Univ. of Mich., 1949.

38. Buzas, Alfons
The interpretation of the aeromagnetics of southeastern Marquette County, Michigan: M. S., Mich. State Univ., 1960.

39. Calver, James L.
The glacial and post-glacial history of the Platte and Crystal Lake depressions, Benzie County, Michigan: Ph.D., Univ. of Mich., 1942.

40. Campau, Donald E.
The stratigraphic distribution of Ostracoda within the Traverse formation of the Michigan basin: M.S., Mich. State Univ., 1950.

41. Campbell, Robert E.
Geophysical investigation of the Silver Mountain area, Houghton County Michigan: M.S., Dept. of Physics, Mich. Tech. Univ., 1952.

42. Carpenter, Robert H.
Some vein-wall rock relations in the White Pine mine, Ontonagon County, Michigan: M.S., Univ. of Wis., 1962.

43. Carroll, James F.
A resistivity survey of the Saginaw formation in the Lansing, Michigan area: M.S., Mich. State Univ., 1964.

44. Carter, Nicholas C.
Geology of a part of the Republic trough, Marquette, Michigan: M.S., Mich. Tech. Univ., 1962.

45. Chapman, Donald H.
Late-glacial and postglacial history of the Champlain valley: Ph.D., Univ. of Mich., 1931.

46. Chapman, Rodger H.
Seismic depth to ledge studies as related to water problems at Morris mine, Ishpeming, Michigan: M.S., Dept. of Physics, Mich. Tech. Univ., 1952.

47. Chapman, William B.
(and Fitzpatrick, R.C.) Terrestrial tides as determined from deviations of gravity at Ann Arbor, Michigan: M.S., Univ. of Mich., 1950.

48. Chen, Chin
The subsurface geology and oil and gas fields of southeastern Michigan: M.S., Wayne State Univ., 1957.

49. Chrow, James K.
A paleogeologic study of the Michigan basin: M.S., Univ. of Mich., 1958.

50. Chynoweth, Clyde E.
The petrography of some Huronian rocks in Baraga County, Michigan: M.S., Wayne State Univ., 1961.

51. Clark, Lorin D.
Precambrian geology of the Norway Lake area, Dickinson County, Michigan: Ph.D., Univ. of Chicago, 1955.

52. Clements, Donald
Later S phases of the Michigan earthquake of August 9, 1947: M.S., Univ. of Mich., 1952.

53. Coley, Tyrol B.
A study of the stratigraphic distribution and correlation of some Middle Devonian Ostracoda: M.S., Wayne State Univ., 1949.

54. Colwell, Alfred B.
Notes on the geology of the Michigamme River: Mining Engineering Thesis, Mich. Tech. Univ., 1895.

55. Conrad, Malcolm A.
Contact metamorphic effects of three pegmatitic dikes in the Upper Peninsula of Michigan: M.S., Mich. Tech. Univ., 1952.

56. Cook, Charles W.
A petrographic study of the Marshall formation and its relation to the sand of the Michigan series formation: M.S., Univ. of Mich., 1933.

57. Cook, Laurence S.
A quantitative sedimentary analysis of the Michigan basin: M.S., Mich. State Univ., 1956.

58. Cooley, Gerald A.
Insoluble residues of Detroit River and Dundee formations: M.S., Univ. of Mich., 1947.

59. Corliss, Bruce C.
Southeastern Michigan geology, a guidebook for teachers: M.S., Univ. of Mich., 1960.

60. Coupal, Frank E.
Stratigraphy and paleontology of a well core from Sharon Township, Washtenaw County, Michigan: M.S., Univ. of Mich., 1954.

61. Crane, Marilyn J.
A new occurrence of Mississippian Ostracoda in Michigan: M.S., Mich. State Univ., 1955.

62. Crooks, Harold F.
On the lower Paleozoic stratigraphy of the Northern Peninsula of Michigan: M.S., Univ. of Ill., 1918.

63. Crump, Robert M.
Origin of hard iron ores of the Marquette district: Ph.D., Univ. of Wis., 1948.

64. Curren, Robert F.
An investigation of some methods of chemical precipitation in the artificial growth of calcite: M.S., Mich. State Univ., 1953.

65. Dalhlem, Robert D.
Stratigraphy and paleontology of the Hibbard No. 1 well core, Barry County, Michigan: M.S., Univ. of Mich., 1959.

66. Davies, William E.
Stratigraphic significance of crinoidal columns of the Traverse of Michigan: M.S., Mich. State Univ., 1941.

67. Davis, Charles M.
The high plains of Michigan: Ph.D., Dept. of Geography, Univ. of Mich., 1935.

68. Davis, James F.
A petrographic examination of the iron-formation and associated pyroclastic breccias and graywackes of the Negaunee formation, Michigan: Ph.D., Univ. of Wis., 1965.

69. Davis, Richard A., Jr.
Sedimentation in the nearshore environment, southeastern Lake Michigan: Ph.D., Univ. of Ill., 1964.

70. Deiss, Charles F.
A description and stratigraphic correlation of the Fenestallidae from the Devonian of Michigan: Ph.D., Univ. of Mich., 1928.

71. Dellwig, Louis F.
Origin of the Salina salt of Michigan: Ph.D., Univ. of Mich., 1953.

72. DeMarte, Domenic L.
A spectrographic analysis of the dikes of the Gogebic range, Michigan: M.S., Mich. State Univ., 1961.

73. Denning, Reynolds M.
The petrology of the Jacobsville Sandstone, Lake Superior: M.S., Mich. Tech. Univ., 1949.

74. Dewey, David E.
A mechanical and chemical analysis of the Middle Devonian Detroit River group above the Sylvania in the Michigan basin: M.S., Mich. State Univ., 1958.

75. Dibble, E. T.
Stratigraphy and paleontology of a core from Silurian and Devonian strata of Wayne County, Mich.: M.S., Univ. of Mich., 1956.

76. Dice, Bruce B.
A quantitative study of composite Devonian lithofacies in the Michigan basin: M.S., Mich. State Univ., 1955.

77. Din, Min
Microfossils of the Middle and Upper Ordovician formations in deep wells of Alpena, Ogemaw, Bay and Ingham counties of Michigan: M.S., Mich. State Univ., 1950.

78. Dixon, Richard A.
Lithologic study of a Cambro-Ordovician core, Delta County, Michigan: M.S., Mich. State Univ., 1961.

79. Doane, Virginia L.
Petrography of Nonesuch shales, White Pine, Michigan: M.S., Mich. Tech. Univ., 1956.

80. Driscoll, Egbert G., Jr.
An environmental and heavy mineral study of the "Eastern Sandstones" between Marquette and Grand Marais, Michigan: M.S., Univ. of Nebr., 1956.

81. Driscoll, Egbert G., Jr.
Dimyarian lamellibranchs of the Marshall Sandstone of Michigan: Ph.D. Univ. of Mich., 1962.

82. Dryden, Donald A.
Petrology and petrofabrics of the Randville dolomite in the Felch Mountain trough, Dickinson County, Michigan: M.S., Mich. State Univ., 1962.

83. Dymond, James
Survey of the Wisconsin glaciation of lower Michigan: Honor's Thesis, Carleton Coll., 1941.

84. Eddy, Gerald E.
A study of the insoluble residues of the lower Traverse, Bell, and Upper Devonian formations of Michigan: M.S., Univ. of Mich., 1932.

85. Egleston, David L.
Relationship of the magnesium-calcium ratio to the structure of the Reynolds and Winfield oil fields, Montcalm County, Michigan: M.S., Mich. State Univ., 1958.

86. Ehlers, George M.
Stratigraphy of the Niagaran series of the Northern Peninsula of Michigan: Ph.D., Univ. of Mich., 1930.

87. Ehlers, Ralph B.
Municipal ground water supplies in the Southern Peninsula of Michigan, with emphasis on quality: M.S., Mich. State Univ., 1934.

88. Ehman, Donald A.
Stratigraphic analysis of the Detroit River group in the Michigan basin: M.S., Univ. of Mich., 1964.

89. El-Khalidi, Hatem H.
A field and petrographic study of sandstones and conglomerates of the Porcupine Mountains, Ontonagon County, Michigan: M.S., Wayne State Univ., 1952.

90. Elkington, Robert B
Structure of the Michigamme slate along the Huron River, Baraga County, Michigan: M.S., Wayne State Univ., 1952.

91. Engel, Theodore, Jr.
The stratigraphy and petrography of the Holyoke meta-sediments of the Dead River basin, Marquette County, Michigan: M.S., Mich. State Univ., 1954.

92. Enyert, Richard L.
Middle Devonian sandstone of the Michigan basin: Ph.D., Univ. of Mich., 1950.

93. Erickson, Ralph L.
A petrographical investigation of the longitudinal deposition within the Mason esker relative to its origin: M.S., Mich. State Univ., 1948.

94. Espenshade, Edward B., Jr.
An intensive study of the sphericity and roundness of beach and dune sands of the south of Lake Michigan: M.S., Univ. of Chicago, 1932.

95. Evans, Oren F.
The low and ball of the eastern shore of Lake Michigan: Ph.D., Univ. of Mich., 1940.

96. Eveland, Harmon E., Jr.
Topographic expression of geology in the Lake Huron basin: M.S. Univ. of Illinois, 1948.

97. Fackler, William C.
Clastic dikes in the Keweenawan lavas of Lake Superior: M.S., Univ. of Cincinnati, 1940.

98. Farrand, William R.
Former shorelines in western and northern Lake Superior basin: Ph.D., Univ. of Mich., 1960.

99. Faul, Henry
Prismatophyllum in the Traverse group of north central Michigan: M.S., Mich. State Univ., 1942.

100. Fauser, W. B., Jr.
Paleontology and stratigraphy of well cores from Garfield Twp., Newaygo County, Michigan: M.S., Univ. of Mich., 1951.

101. Felber, Bernhard E.
Stratigraphy and diagenesis of Silurian strata of southeastern Michigan: Ph.D., Northwestern Univ., 1964.

102. Fellow, Larry D.
Description of a core from Monroe County, Michigan: M.S., Univ. of Mich., 1957.

103. Firouzian, Assadolah
Hydrological studies of the Saginaw formation in the Lansing, Michigan area: M.S., Mich. State Univ. 1963.

104. Forsythe, James T.
Pre-glacial drainage of central southern Michigan: M.S., Univ. of Mich., 1952.

105. Frantti, Gordon E.
Geophysical investigations in Upper Peninsula of Michigan: M.S., Dept of Physics, Mich. Tech. Univ., 1954.

106. Friend, Joseph E.
Insoluble residues and Silurian stratigraphy of two exploratory tests in Michigan: M.S., Wayne State Univ., 1963.

107. Fritts, Crawford E.
A petrologic study of the Mount Houghton felsite, Keweenaw Peninsula: M.S., Mich. Tech. Univ., 1952.

108. Gacek, Walter F.
Mechanical analyses of sediments from southwest Lake Erie: M.S., Univ. of Mich., 1951.

109. Gallagher, John T.
The ground water resources of the Jackson, Michigan area: M.S., Univ. of Mich., 1956.

110. Garner, Hessle F.
Lower Mississippian orthoconic nautiloid cephalopods of Michigan: M.S., State Univ. of Iowa, 1951.

111. Garner, Hessle F.
Lower Mississippian cephalopods of Michigan, coiled nautiloids and ammonoids: Ph.D., State Univ. of Iowa, 1953.

112. Gibbs, Clifford J.
The influence of sub-surface geology upon the propagation of electromagnetic waves: M.S., Mich. State Univ., 1939.

113. Goodrich, Donald L.
A sedimentary analysis of the Lower Devonian Bois Blanc formation in Michigan: M.S., Mich. State Univ., 1957.

114. Gordon, Kenneth A.
The structural geology of Wayne County and its bearing on possible oil accumulation: M.S., Univ. of Mich., 1935.

115. Grabau, Warren E.
The significance of oriented coral sections: M. S., Mich. State Univ., 1950.

116. Greenman, Norman N.
The origin of the Randville dolomite of Dickinson and Iron Counties, Michigan: Ph. D., Univ. of Chicago, no date.

117. Gustafson, Lewis A.
Structure and stratigraphy of the Traverse group in the Lansing area, Michigan: M. S., Mich. State Univ., 1960.

118. Hagni, Richard D.
Petrology and origin of the Kitchi conglomerate, Marquette County, Michigan: M. S., Mich. State Univ., 1954.

119. Hamberg, Lawrence R.
Paleontology and stratigraphy of two well cores in the Devonian rocks of Bay and Arenac counties in Michigan: M. S., Univ. of Mich., 1953.

120. Hamblin, Wm. Kenneth
The Cambrian sandstone of northern Michigan: Ph. D., Univ. of Mich., 1958.

121. Hamilton, Stanley K.
Copper mineralization in the upper part of the Copper Harbor conglomerate at White Pine, Michigan: M. S., Univ. of Wis., 1965.

122. Hard, Edward W.
Mississippian gas sands of central Michigan area: Ph. D., Univ. of Mich., 1937.

123. Hase, Donald H.
Upper Huronian sedimentation in a portion of the Marquette trough, Michigan: Ph. D., Univ. of Wis., 1955.

124. Hay, R. D.
The geology of Sault Ste. Marie area, Ontario: Ph. D., McGill Univ., 1964.

125. Hedlund, David C.
An algal limestone in the Keweenawan of upper Michigan: M. S., Univ. of Wis., 1953.

126. Hefner, John H.
A rapid method for the correlation of fine-grained sediments with the aid of the spectrograph as applied to the Mississippian-Devonian sequence in Ogemaw County, Michigan: M. S., Mich. State Univ., 1957.

127. Heim, George E., Jr.
The ground water of north Ann Arbor: M. S., Univ. of Mich., 1957.

128. Henderson, Janet
Ostracod fauna of the Bell Shale formation of Michigan: M. S., Univ. of Mich., 1951.

129. Henrickson, Eiler L.
A study of the metamorphism of the Upper Huronian rocks of the western portion of the Marquette district, Northern Peninsula, Michigan: Ph. D., Univ. of Minn., 1956.

130. Henry, William W.
An investigation of sub-surface reef conditions in the Traverse group of Michigan: M. S., Mich. State Univ., 1949.

131. Herndon, Thomas
Niagaran reefs: M. S., Univ. of Mich., 1951.

132. Heyman, Louis
A loess-like silt in Ann Arbor, Michigan: M. S., Univ. of Mich., 1949.

133. Higgins, James W.
Structural petrology of the Pine Creek area, Dickinson County, Michigan: Ph. D., Univ. of Chicago, 1947.

135. Hobbs, Robert A.
The application of roundness and sphericity measurements to subsurface samples of the Marshall formation of western Michigan: M. S., Mich. State Univ., 1949.

136. Hody, Harold M.
Bouguer gravity anomales of southeastern Michigan and the vertical gradient of gravity at Ann Arbor, Michigan: M. S., Univ. of Mich., 1954.

137. Hoffman, George A.
The correlation by petrographic methods of dikes designated as numbers five and six in the Newport mine, Ironwood, Michigan: M. S., Mich. State Univ., 1950.

138. Hofstra, Warren E.
The effects of washing oil well cuttings from rotary and cable tool wells as related to sample losses: M. S., Mich. State Univ., 1949.

139. Holway, William
The origin and occurrence of specular hematite (specularite) in the Lower Huronian of the Marquette district, Michigan: M. S., Mich. State Univ., 1952.

140. Hornstein, Owen M.
A field and petrographic study of some extrusive and sedimentary rocks along the Carp and Little Carp rivers in Ontonagon and Gogebic counties, Michigan: M. S., Mich. State Univ., 1950.

141. Horowitz, Martin
The St. Peter - Glenwood problem in Michigan: M.S., Mich. State Univ., 1961.

142. Horvath, Allan L.
Stratigraphy and paleontology of the Middle Devonian strata penetrated by core H-2A in Wayne County, Michigan: M.S., Univ. of Mich., 1957.

143. Hough, Jack L.
The mechanical composition of the deposits of southern Lake Michigan: M.S., Univ. of Chicago, no date.

144. Huber, N. King
The environmental control of sedimentary iron minerals and its relation to the origin of the Ironwood iron formation: Ph.D., Northwestern Univ., 1956.

145. Hudson, Richard J.
Genesis and depositional history of the Eaton sandstone, Grand Ledge, Michigan: M.S., Mich. State Univ., 1957.

146. Huff, Lyman C.
Sedimentology of an aggrading river; the glacial Chippewa: Ph.D., Univ. of Chicago, 1957.

147. Hultman, John R.
The Cambrian sandstone, Marquette quadrangle, Michigan: M.S., Univ. of Mich., 1953.

148. Humphrey, W. E.
Revision of A. E. Strong's types from the Mississippian Point au Gres limestone at Grand Rapids: M.S., Univ. of Mich., 1940.

149. Hunt, Allen S.
Species of the tabulate coral Trachypore from Middle Devonian Traverse group of Michigan: M.S., Univ. of Mich., 1957.

150. Hunt, Hubert B.
A regional magnetometer survey of the Pinckney area, Michigan: M.S., Univ. of Mich., 1952.

151. Husband, Philip M.
A sedimentary and chemical analysis of the Niagara series in Michigan: M.S., Mich. State Univ., 1958.

152. Hussey, Russell C.
The Richmond formation of Michigan: Ph.D., Univ. of Mich., 1925.

153. Hutchinson, Thomas W.
Upper Devonian and Lower Mississippian pectinoid pelecypods from Michigan, Ohio, Indiana, Iowa , and Missouri: M.S., Univ. of Mich., 1964.

154. Imbrie, John
Protremate brachiopods of the Traverse group "Devonian" of Michigan: Ph.D., Yale Univ., 1951.

155. Irvin, W. C.
The topographic expression of the sub-lucustrine geology of the Lake Superior basin: M.S., Univ. of Ill., 1948.

156. Jackson, Kern C.
A heavy mineral study of the Ajibik and Mesnard quartzites of Marquette County, Michigan: M.S., Mich. Tech. Univ., 1950.

157. Jackson, Robert P.
Dolomitization and structural relations of the Deep River, North Adams, and Pinconning oil fields, Michigan: M.S., Mich. State Univ., 1958.

158. Jacobson, R. C.
Stratigraphy and fauna of two cores penetrating Middle Devonian formations of Missaukee County, Michigan: M.S., Univ. of Mich., 1951.

159. Jewell, William F.
A system of inventory for the shore zones of the Great Lakes: M.S., Mich. State Univ., 1947.

160. Jodry, Richard L.
A rapid method for determining the magnesium/calcium ratios of well samples and its use as an aid in predicting structure and secondary porosity in calcareous formations: M.S., Mich. State Univ., 1954.

161. Johnson, Allan M.
Some chemical and physical-chemical properties of Michigan cherts: M.S., Mich. Tech. Univ., 1966.

162. Johnson, Kenneth G.
An aerial photography study of the Glen Lake-Sleeping Bear Point area, Leelanau County, Michigan: M.S., Mich. State Univ., 1957.

163. Juilland, Jean D.
Mineralization of the Mount Bohemia intrusive, Keweenaw County, Michigan: M.S., Mich. Tech. Univ., 1965.

164. Kauffman, Erle G.
The stratigraphy and paleontology of the Buss-Halb unit no. 1 well core, Freedom Twp., Washtenaw County, Michigan: M.S., Univ. of Mich., 1956.

165. Kavary, Emadeddin
Study of two new species of ostracods of the Middle-Devonian genus Glyptapleura from Michigan and Ohio: M.S., Univ. of Mich., 1959.

166. Keller, Paul H.
Middle Devonian stromatoporoids of northwestern Ohio: M.A., Bowling Green State Univ., 1965.

167. Kelley, Robert W.
Silurian stratigraphy of Cockburn Island, Ontario: M.S., Wayne State Univ., 1949.

168. Kellogg, Richard L.
A geophysical investigation of the hydrogeological characteristics of the Udell Hills area, Manistee County, Michigan: M.S., Mich. State Univ., 1964.

169. Kerman, Charles E.
The application of the radio field intensity methods to mapping Precambrian structures in the Lake Superior region: M.S., Mich. State Univ., 1962.

170. Kersting, Cecil C.
Stratigraphy of the Delray core, Wayne County, Michigan: M.S., Univ. of Mich., 1953.

171. Kick, J. F.
An analysis of the bottom sediments of Lake Erie: M.S., Univ. of Toronto, 1961.

172. Kilbourne, Deane E.
The origin and development of the Howell anticline in Michigan: M.S., Mich. State Univ., 1948.

173. Kilgore, John E.
Ostracods of the families Leperditellidae, Drepanellidae, Glytopleuridae, Kloedenellidae, Bairdiidae, Barychilinidae and Thlipsuridae from the Genshaw formation of Michigan: M.S., Univ. of Mich., 1951.

174. Kinder, Anthony S.
A regional vertical magnetometer survey of Livingston County, Michigan: M.S., Univ. of Mich., 1954.

175. Kirkby, Edward A.
Senescence and extinction of inland lakes in the Lower Peninsula of Michigan: M.S., Dept. of Resource Development, Mich. State Univ., 1967.

176. Kirshke, William H.
A petrographic core analysis of the Lower and Middle Ordovician rocks, Pulaski field, Jackson County, of Michigan: M.S., Mich State Univ., 1962

177. Klasner, John S.
A study of buried bedrock valleys near South Haven, Michigan, by the gravity method: M.S., Mich. State Univ., 1964.

178. Kline, Virginia H.
Revision of Alexander Winchell's types of brachiopods from the Middle Devonian Traverse group of rocks of Michigan: M.S., Univ. of Mich., 1933.

179. Kline, Virginia H.
Stratigraphy and paleontology of the Silica formation of southeastern Michigan: Ph.D., Univ. of Mich., 1935.

180. Kneller, William A.
A geological and economic study of gravel deposits of Washtenaw County and vicinity, Michigan: Ph.D., Univ. of Mich., 1964.

181. Koon, Gerald J.
Some geologic and engineering properties of the Pleistocene clays at Victoria, Ontonagon County, Michigan: M.S., Mich. Tech. Univ., 1965.

182. Kramer, James R.
The spectrochemical analysis of limestone and dolomite: M.S., Univ. of Mich., 1954.

183. Krimmel, Carl P.
The serpentinite of Presque Isle, Marquette County, Michigan: M.S., Northwestern Univ., 1941.

184. Kropschot, Robert E.
A quantitative sedimentary analysis of the Mississippian deposits in the Michigan basin: M.S., Mich. State Univ., 1953.

185. Krushensky, Richard D.
Insoluble residues and stratigraphy of a Trenton-Black River section from the Northville pool, Michigan: M.S., Wayne State Univ., 1957.

186. Ku, Henry F. H.
Groundwater geology of the Augusta Township, Washtenaw County, and vicinity (Michigan): M.S., Univ. of Mich., 1966.

187. Kyle, Douglas H.
Possible source rocks for oil in the Michigan basin: M.S., Univ. of Mich., 1958.

188. LaFountain, Lester J.
A deformed differentiate at Crystal Falls, Michigan: M.S., Univ. of Wis., 1966.

189. Lamey, Carl A.
The intrusive relations and metamorphic effects of the Republic granite: Ph. D., Northwestern Univ., 1933.

190. Lammers, Leo J.
Analysis of the core from drill hole no. 2, Wayne County Airport, Detroit, Michigan: M. S., Univ. of Mich., 1956.

191. Langenbahn, William E.
Amherstburg facies of central Wayne County, Michigan: M. S., Univ. of Mich., 1960.

192. La Point, Ronald S.
A mineralogical study of certain ores from four mines of the Iron River district, Michigan: M. S., Mich. Tech. Univ., 1965.

193. LaRocque, J. Aurele
New genera and species of Mollusca from the Middle Devonian of Michigan and Manotoba: M. S., Univ. of Mich., 1946.

194. LaRocque, J. Aurele
Pre-Traverse Devonian pelecypods of Michigan: Ph. D., Univ. of Mich., 1948.

195. Lawler, Thomas L.
A field study of local magnetic disturbances from glacial drift in Michigan: M. S., Mich. State Univ., 1962.

196. Leedy, Forrest
The Clarksburg intrusives and their significance: M. S., Mich. Tech. Univ., 1930.

197. Lehner, Robert
A study of part of the gneissic complex north of the Felch Mountain district, Michigan: M. S., Ohio State Univ., 1951.

198. LeMone, David V.
The Upper Devonian and Lower Mississippian sediments of the Michigan basin and Bay County, Michigan: Ph. D., Mich. State Univ., 1964.

199. Leney, George W.
Preliminary investigations of rock conductivity and terrestrial heat flow in southeastern Michigan: M. S., Univ. of Mich., 1955.

200. Leonardson, Robert W.
Petrology of the Bergland and Firetower rhyolites and associated rock, Ontonagon County, Michigan: M. S., Mich. Tech. Univ., 1965.

201. Lesperance, Pierre J.
Drill hole no. 8, Wayne County Major Airport, Wayne County, Michigan: M. S., Univ. of Mich., 1957.

202. Lifshin, Arthur
A study of the relationship between the metamorphically recrystallized cherts of the Negaunee iron formation and metamorphic grade: M. S., Mich. State Univ., 1964.

203. Lineback, Jerry A.
Stratigraphy and depositional environment of the New Albany shale (Upper Devonian and Lower Mississippian) in Indiana: Ph. D., Ind. Univ., 1964.

204. Linsley, Robert M.
New gastropods from the Middle Devonian Anderdon limestone of Michigan, Ohio, and Ontario: M. S., Univ. of Mich., 1953.

205. Linsley, Robert M.
Gastropods of the Middle Devonian Anderdon limestone: Ph. D., Univ. of Mich., 1960.

206. Lizotte, Marcel R
Structural and lithological controls on oil and gas producing zones in the Trenton limestone: M. S., Univ. of Mich., 1962.

207. Long, Joseph B.
The paleogeology of central Michigan: M. S., Mich. State Univ., 1952.

208. Long, Richard A.
Origin and petrology of a portion of the southern complex near Palmer, Marquette County, Michigan: M. S., Mich. State Univ., 1959.

209. Longacre, Thomas L.
Geophysical investigation in the Cornell area, Delta County, Michigan: M. S., Dept. of Physics, Mich. Tech. Univ., 1958.

210. Lowden, James E.
A combined geologic and gravity analysis of the Walker field, Michigan: M. S., Mich. State Univ., 1965.

211. Lucas, Peter T.
Environment of Salina salt deposition: M. S., Univ. of Mich., 1954.

212. Lusk, L. Douglas
Genesis of chert in the Middle Devonian Bois Blanc formation, Michigan and Ontario: M. S., Univ. of Mich., 1958.

213. MacIntosh, Albert N.
Stratigraphy of the Negaunee iron formation: M. S., Mich. Tech. Univ., 1929.

214. MacLachlan, Donald B.
Warren shore line in Ontario and in the thumb of Michigan and its deformation: Ph. D., Univ. of Mich., 1939.

215. MacLean, William F.
Post glacial uplift in the Great Lakes region: Ph.D., Univ. of Mich., 1962.

216. McCallum, Marjorie L.
A petrographic investigation of vertical deposition within the Mason esker relative to its origin: M.S., Mich. State Univ., 1949.

217. McCammon, Richard B.
Stratigraphy and paleontology of a core penetrating Upper Silurian and Middle Devonian strata in Wayne County, Michigan: M.S., Univ. of Mich., 1956.

218. McGeary, David F. R.
Size analysis of nearshore sediments, southeastern Lake Michigan: M.S., Univ. of Ill., 1964.

219. McGregor, Duncan J.
Stratigraphic analysis of Upper Devonian and Mississippian rocks in Michigan basin: Ph.D., Univ. of Mich., 1953.

220. McNair, Andrew H., Jr.
Some cryptostomatous Bryozoa from the Traverse group of Michigan: M.A., Montana State Univ., 1933.

221. McNair, Andrew H., Jr.
Cryptostomatous Bryozoa from the Middle Devonian Traverse group of Michigan: Ph.D., Univ. of Mich., 1935.

222. Manley, Thomas R.
The Niagaran rocks of Drummond Island, Michigan and the related rocks of the Michigan basin: Ph.D., Mich. State Univ., 1964.

223. Manulik, A. J.
Stratigraphy and paleontology of the Sun Oil Company, Bradley #4, Newaygo County, Michigan: M.S., Univ. of Mich., 1950.

224. Marschner, Arthur W.
A method for the size analysis of sand on a frequency basis: M.S., Wayne State Univ., 1952.

225. Mason, David
Pyritized microfossils from the Upper Devonian black shale of southwestern Ontario and southern Michigan: Master's, Univ. of Western Ont., 1962.

226. Meek, Benjamin W.
The heavy accessory minerals of the Palms quartz slates of the Penokee-Gogebic range: M.S., Univ. of Wis., 1935.

227. Melhorn, Wilton N.
A quantitative analysis of Silurian sediments in the Michigan basin: M.S., Mich. State Univ., 1951.

228. Melik, James C.
The hingement and contact margin structures of palaeocopid ostracodes from some Middle Devonian formations of Michigan, southwestern Ontario, and western New York: Ph.D., Univ. of Mich., 1963.

229. Mencenberg, Frederick E.
Groundwater geology of the Saginaw group in the Lansing, Michigan area: M.S., Mich. State Univ., 1963.

230. Mengel, Joseph T., Jr.
The relationship of clastic sediments to iron formation in the vicinity of Palmer, Michigan: M.S., Univ. of Wis., 1956.

231. Mengel, Joseph T., Jr.
The cherts of the Lake Superior iron-bearing formations: Ph.D., Univ. of Wis., 1963.

232. Meyer, Howard J.
A combined magnetic and gravity analysis of the Sauble anomaly, Lake County, Michigan: M.S., Mich. State Univ., 1963.

233. Minch, Bernard A.
Geology of the basins of Lake Michigan and Lake Huron: M.A., Univ. of Wis., 1940.

234. Mintz, Leigh W.
The species of the crinoid Dolatocrinus from the Middle Devonian Dock Street clay of Michigan: M.S., Univ. of Mich., 1962.

235. Mitten Hugh T.
Some aspects of differential thermal analysis experiments applied to the Antrim and Bedford-Berea shales from Oakland County, Mich.: M.S., Mich. State Univ., 1957.

236. Monnett, Victor B.
Mississippian Marshall formation of Michigan: Ph.D., Univ. of Mich., 1947.

237. Moore, J. E.
Petrography of Late Wisconsin tills in the northern part of the Southern Peninsula of Michigan: M.S., Univ. of Ill., 1958.

238. Moore, Roger K.
Pre-Pleistocene topography, lithology, and glacial-drift thickness of Livingston and Shiawassee counties, Michigan: M.S., Mich. State Univ., 1959.

239. Morse, M. Louise
Conodonts from the Norwood and Antrim shales of Michigan: Ph.D., Univ. of Mich., 1938.

240. Moser, Frank
The Michigan formation, a study in the use of a computer oriented system in stratigraphic analysis: Ph. D., Univ. of Mich., 1964.

241. Mozola, Andrew J.
A survey of groundwater resources in Oakland County, Michigan: Ph. D., Syracuse Univ., 1953.

242. Musselman, George H.
Groundwater resources of the Ann Arbor area: M. S., Univ. of Mich., 1953.

243. Naegeli, Faith I.
Petrofabrics at the falls of the Sturgeon, Dickinson County, Michigan: M. S., Mich. State Univ., 1959.

244. Newcombe, Robert J. B.
Deposition and structural features of the Michigan synclinal basin: Ph. D., Univ. of Mich., 1931.

245. Newman, Frederick G.
Stratigraphy and paleontology of a core from Silurian and Devonian strata of Wayne County, Michigan: M. S., Univ. of Mich., 1955.

246. Nussmann, David G.
Trace elements in the sediments of Lake Superior: M. S., Univ. of Mich., 1965.

247. Nutter, Neil H.
The use of infra-red spectro-photometric analysis in the correlation of different units within Dundee Limestone, Devonian age, Rogers City, Michigan: M. S., Mich. State Univ., 1958.

248. Nwachukwu, Silas O. O.
The geologic significance of geomagnetic measurements over the Lake Huron basin and adjacent areas: Ph. D., Univ. of Toronto, 1964.

249. O'Connell, James F.
Study of Ordovician rocks from deep wells in the Hillsdale, Northville, and adjacent areas in southeast Michigan: M. S., Mich. State Univ., 1958.

250. Oden, Arlo L.
The occurrence of Mississippian brachiopods in Michigan: M. S., Mich. State Univ., 1952.

251. Oehler, E. T.
Geology of the Black Creek area, Dickinson County, Michigan: M. S., Univ. of Chicago, no date.

252. Oetking, Philip F.
The relation of the lower Paleozoic to the older rocks in the Northern Peninsula of Michigan: Ph. D., Univ. of Wis., 1952.

253. O'Hara, Norbert W.
A statistical and mechanical analysis of the Marshall Sandstone in western Michigan to determine the environmental pattern of the deposit: M. S., Mich. State Univ., 1954.

254. Olmsted, James F.
A study of graphitic slates from northern Michigan: M. S., Mich. State Univ., 1962.

255. Olson, F. C. W.
The currents of western Lake Erie: Ph. D., Ohio State Univ., 1950.

256. Orajaka, Stephen O.
A geological, geochemical and radiometric investigation of the Huron River and part of the Huron Mountain area, Baraga and Marquette counties, Michigan: M. S., Mich. Tech. Univ., 1951.

257. Paige, David S.
A rapid method for the correlation of fine-grained sediments with the aid of the spectrograph as applied to the Mississippian-Devonian sequence in Clare County, Michigan: M. S., Mich. State Univ., 1952.

258. Papadakis, James
Geology of part of the Bete Grise Bay area, Keweenaw Peninsula, Michigan: M. S., Mich. Tech. Univ., 1954.

259. Parker, Dana C.
A petrologic investigation of the Greenstone flow at Tamarack Location, Houghton County, Michigan: M. S., Mich. Tech. Univ., 1959.

260. Patenaude, Robert W.
Results of a regional aeromagnetic survey of part of upper and lower Michigan: M. S., Univ. of Wis., 1962.

261. Patrick, Joseph L.
The effects of Lake Superior shore currents on recent sediments: M. S., Mich. State Univ., 1955.

262. Pauken, Robert J.
Paleoecological study of the Ostracoda of the Silica formation: M.A., Bowling Green State Univ., 1965.

263. Paul, Harriet E.
Geology of the Richfield oil producing zone: M. S., Wayne State Univ., 1956.

264. Pennington, Erwin K.
A stratigraphic study of the Upper Cambrian of the Perry-Wooden No. 1 deep test well, Cass County, Michigan: M. S., Mich. State Univ., 1967.

265. Pepper, James F.
Some features in the occurrence of marl noted during the field season of 1925: M. S., Univ. of Mich., 1925.

266. Phillion, George W.
Fracture pattern analysis of the Keweenaw Peninsula: M. S., Mich. Tech. Univ., 1962.

267. Porturas, Plaza A.
Granitization in the Lake Pelesier area, formerly known as Lake Mary, Marquette County, Michigan: M. S., Mich. Tech. Univ., 1945.

268. Powell, Louise M.
Calcium carbonate/magnesium ratios in the Rogers City and Dundee formations of the Pinconning field: M. S., Univ. of Mich., 1950.

269. Preble, H. Douglas
Paleontology and stratigraphy of a well core from Garfield Township, Newaygo County, Michigan: M. S., Univ. of Mich., 1951.

270. Prinz, William
The geology of a portion of the Quinnesec igneous complex south of Iron Mountain, Michigan: M. S., Ohio State Univ., 1952.

271. Prinz, William
The geology of part of the Menominee district, Michigan and Wisconsin: Ph. D., Yale Univ., 1958.

272. Puffer, John G.
The petrology of a portion of the Mellon gabbro complex and its relationship to the Keweenawan basalts and the Tyler formation: M. S., Mich. State Univ., 1965.

273. Quirke, Terence T., Jr.
A preliminary investigation of the geology of the north Michigamme area of the Marquette range, Michigan: M. S., Univ. of Minn., 1953.

274. Radabaugh, Robert E.
Dundee and Rogers City limestones of the northern part of the Southern Peninsula of Michigan: M. S., Univ. of Mich., 1937.

275. Radabaugh, Robert E.
Middle Devonian Rogers City Limestone and its gastropod fauna: Ph. D., Univ. of Mich., 1942.

276. Raza, Saiyid N.
Part of the geology of Bete Grise Bay area, Keweenaw Peninsula, Michigan: M. S., Mich. Tech. Univ., 1953.

277. Reed, Robert C.
Copper mineralization in Animikie sediments of the eastern Marquette iron range, Michigan: M. S., Mich. State Univ., 1965.

278. Reid, John R., Jr.
Geology of Burt Lake, Cheboygan County, Michigan: M. S., Univ. of Mich., 1957.

279. Reuss, Robert J.
An investigation of the use of seismic methods to track meteorological disturbances over Lake Superior and to locate strain releases taking place in the Houghton-Hancock areas: M. S., Mich. Tech. Univ., 1962.

280. Rhodehamel, Edward C.
An interpretation of the pre-Pleistocene geomorphology of a portion of the Saginaw lowland: M. S., Mich. State Univ., 1951.

281. Riedel, Robert W.
Geophysical investigation of the Sturgeon River - Indian Lake area, Delta and Schoolcraft counties, Michigan: M. S., Univ. of Wis., 1957.

282. Rigg, Charles
Paleontology and stratigraphy of a well penetrating Devonian, Silurian, and Ordovician rocks from Weare Twp., Oceana Co., Michigan: M. S., Univ. of Mich., 1955.

283. Roberts, Ellis
Geology of the Alston district, Houghton and Baraga counties, Michigan: M. S., Cal. Inst. Tech., 1940.

284. Rockwood, D. N.
Oil and gas occurrence in Gratiot County, Michigan: M. A., Univ. of Mich., 1938.

285. Rogers, J. R.
Deep water sediments of northwestern Lake Huron: M. S., Univ. of Ill., 1959.

286. Rose, Hugh
Tidal gravity measurements at Ann Arbor, Michigan: M. S., Univ. of Mich., 1952.

287. Roseboom, Eugene
Geology of part of the granitic complex south of the Felch Mountain range, Michigan: M. S., Ohio State Univ., 1951.

288. Rosenberger, Eric J.
The relationships of Huronian sediments to associated igneous rocks in sections 22 and 23, T47N, R26W, Marquette County, Michigan: M. S., Mich. State Univ., 1961.

289. Ross, A. R.
Pleistocene and recent sediments in western Lake Erie: Ph. D., Univ. of Mich., 1950.

290. Roth, John N.
A gravitational investigation of fracture zones in Devonian rocks in portions of Arenac and Bay counties, Michigan: M.S., Mich. State Univ., 1965.

291. Rowe, Dean E.
An isopachous and structural map study of the Allegan area of southwestern Michigan: M.S., Wayne State Univ., 1951.

292. Rowley, Peter D.
Geological investigation of a portion of the southern complex, Northern Peninsula, Michigan: Honor's Thesis, Carleton Coll., 1964.

293. Rubin, Meyer
A radiocarbon chronology of glacial events during Wisconsin time: Ph.D., Univ. of Chicago, 1956.

294. Sahakian, Armen S.
A petrographic and structural study of a portion of the Palmer gneiss area, Marquette district, Michigan: M.S., Mich. State Univ., 1959.

295. Sander, John E.
An analysis of the Permo-Carboniferous "Red Beds" of Michigan: M.S., Mich. State Univ., 1960.

296. Saunders, Jack M.
Lithology and insoluble residues of a core from the Detroit River group: M.S., Univ. of Mich., 1948.

297. Sawtelle, E. Rossiter, Jr.
The origin of the Berea sandstone: M.S., Mich. State Univ., 1958.

298. Sayegh, Edward F.
A reservoir engineering study of the performance of the Coldwater field, Michigan: M.S., Univ. of Tex., 1963.

299. Schapiro, Norman
The geology of a part of the Quinnesec greenstone complex, Dickinson County, Michigan: M.S., Ohio State Univ., 1952.

300. Scheiern, Milton R.
A study of species of the ostracod genus Dizygopleura from the Middle Devonian Traverse group of Michigan: M.S., Univ. of Mich., 1953.

301. Schmitt, George T.
A petrographic investigation of the relationship of deposition of sediments in a group of eskers related to the Charlotte till plain: M.S., Mich. State Univ., 1949.

302. Servos, Gary G.
A gravitational investigation of Niagaran reefs in southeastern Michigan: Ph.D., Mich. State Univ., 1965.

303. Sharma, Ghanshyan D.
Geology of the Peters field, St. Clair County, Michigan: Ph.D., Univ. of Mich., 1961.

304. Shelden, Francis D.
Stratigraphy and sedimentary petrology of the Silurian formations of central Manitoulin Island, Ontario: M.S., Wayne State Univ., 1961.

305. Sigsby, Robert M.
A study of the pyritic-carbonaceous slate from the Sherwood mine, Iron River, Michigan: M.S., Mich. Tech. Univ., 1960.

306. Simons, Merton E.
Insoluble residues of the Traverse group in the Charlevoix-Petoskey area, Michigan: M.S., Wayne State Univ., 1949.

307. Simons, Merton E.
Insoluble residues of the Devonian Traverse group, Michigan: Ph.D., Univ. of N.C., 1952.

308. Slaughter, Arthur E.
The stratigraphic value of certain cryptostomatous Bryozoa of the Traverse formation, Middle Devonian age of Michigan: M.S., Mich. State Univ., 1950.

309. Sloss, Laurence L.
Devonian rugose corals from the Traverse beds of Michigan: Ph.D., Univ. of Chicago, 1937.

310. Smale, Gordon R.
A field and petrographic study of the Freda formation along the Montreal River, Gogebic County, Michigan: M.S., Mich. State Univ., 1958.

311. Smith, George W.
The Ferron Point and Genshaw formations in Cheboygan and western Presque Isle counties, Michigan: M.S., Mich. State Univ., 1942.

312. Smith, Henry C., Jr.
Sedimentary fabrics in unconsolidated sands: M.S., Mich. State Univ., 1952.

313. Smith, Jane E. I.
Ostracods from the Middle Devonian Traverse group of Emmet and Charlevoix counties of Michigan: Ph.D., Univ. of Mich., 1959.

314. Snodgrass, Donald B.
A study of Lake Michigan bottom sediments: M.S., Univ. of Ill., 1952.

315. Soholt, Donald E.
Metamorphic facies of the Groveland mine, northern Michigan: M. S., Univ. of Minn., 1964.

316. Solberg, Roger A.
Petrology and petrofabrics of the Felch metronite quarry, Dickinson County, Michigan: M. S., Mich. State Univ., 1958.

317. Soronen, George C.
A study of Welleria aftonensis, Warthin, from Gravel Point formation of Michigan: M. S., Univ. of Mich., 1956.

318. Sorrwar, Gholam
Middle Devonian ostracods from the Ferron Point formation, Cheboygan and Presque Isle counties, Michigan: M. S., Mich. State Univ., 1961.

319. Sparling, Dale R.
Occurrence of Prasopora in a core from the Northville area, Michigan: M. S., Wayne State Univ., 1956.

320. Stanley, George M.
Abandoned strands of Isle Royale and northeastern Lake Superior: Ph. D., Univ. of Mich., 1932.

321. Star, Clarence
A paleocurrent study of the Outer Conglomerate along the Montreal River, Gogebic County, Michigan: M. S., Mich. State Univ., 1959.

322. Stearns, Margaret D.
A petrographic study of the Marshall formation and its relation to the sand of the Michigan series formation: Ph. D., Univ. of Mich., 1933.

323. Steder, Robert M.
A field and petrographic study of Millie pit and adjacent area, Dickinson County, Michigan: M. S., Mich. State Univ., 1958.

324. Steiner, Waldon W.
An interpretation of size analyses of a beach sand, Sterling State Park, Monroe County, Michigan: M. S., Wayne State Univ., 1952.

325. Steward, David P.
The surface geology of Wexford County, Michigan: M. S., Mich. State Univ., 1948.

326. Stewart, John R.
Secondary dolomitization in the Northville oil field: M. S., Univ. of Mich., 1957.

327. Sutton, William J.
Geology of the Penokee-Gogebic iron-bearing district: Mining Engineering Thesis, Mich. Tech. Univ., 1898.

328. Swann, David H.
The Favosites alpenensis lineage in the Middle Devonian Traverse group of Michigan: Ph. D., Univ. of Mich., 1940.

329. Swanson, Roy I.
The extent of the Clare dolomite, a marker horizon of Michigan M. S., Mich. State Univ., 1955.

330. Swartz, Daniel H.
The "Red Beds" of Michigan: M. S., Univ. of Mich., 1951.

331. Tabor, Norman R.
Ostracods of the family Hollinidae from the Genshaw formation of Michigan: M. S., Univ. of Mich., 1951.

332. Tague, Glenn C.
The post-glacial geology of the Grand Marais embayment in Berrien County, Michigan: Ph. D., Univ. of Mich., 1942.

333. Tara, Muriel E.
The geology and petrography of Little Presque Isle, Marquette County, Michigan: M. S., Mich. State Univ., 1950.

334. Tarbell, Eleanor
Antrim-Ellsworth-Coldwater shale formations in Michigan: M.A., Library Science, Univ. of Mich., 1945.

335. Tatlock, Derek B.
Stratigraphy and paleontology of a well core through Upper and Middle Silurian strata in Oakland County, Michigan: M.A., Univ. of Mich., 1955.

336. Taylor, Denver W.
Stratigraphy and fauna of Detroit River group: M. S., Univ. of Mich., 1951.

337. Terwilliger, F. Wells
The glacial geology and groundwater resources of Van Buren County, Michigan: M. S., Mich. State Univ., 1952.

338. Thaden, Robert E.
The Porcupine Mountain "Red Rock": M. S., Mich. State Univ., 1950.

339. Tharp, Marie
Subsurface studies of the Detroit River series: M.A., Univ. of Mich., 1945.

340. Theodosis, Steven D.
Metamorphism of the Randville dolomite in the Felch Mountain range, Michigan: M. S., Northwestern Univ., 1948.

341. Thiel, Edward C.
The structural geology of the Lake Superior syncline as revealed by gravity measurements: Ph. D., Univ. of Wis., 1955.

342. Thiruvathukal, John T.
A regional gravity study of basement and crustal structures in the Southern Peninsula of Michigan: M. S., Mich. State Univ., 1963.

343. Thompson, Richard J.
The structure and stratigraphy of a portion of the southern edge of the Dead River basin, Marquette County, Michigan: M. S., Mich. State Univ., 1962.

344. Thompson, Stephen L.
Stratigraphic and structural relationships governing Mississippian gas occurrence in Mecosta County and the Falmouth gas field in Missaukee County, Michigan: M. S., Mich. State Univ., 1963.

345. Tillman, John R.
A study of the Middle Devonian species of the genera Alveolites and Planalveolites from the Traverse group of Michigan: M. S., Univ. of Mich., 1958.

346. Tillman, John R.
Variation in species of Mucrospirifer from Middle Devonian rocks of Michigan, Ontario, and Ohio: Ph. D., Univ. of Mich., 1962.

347. Tinklepaugh, Betty M.
A sedimentary, petrographic and statistical study of certain glacial clays of northern Michigan as an aid in correlation: M. S., Mich. State Univ., 1952.

348. Tinklepaugh, Betty M.
A chemical, statistical and structural analysis of secondary dolomitization in the Rogers City-Dundee formation of the central Michigan basin: Ph. D., Mich. State Univ., 1957.

349. Travis, Patricia Ann
An analysis of Pleistocene sediments in an aquifer recharge area, Kalamazoo, Michigan: Ph. D., Mich. State Univ., 1966.

350. Trow, James W.
The Sturgeon quartzite of the Menominee district, Michigan: Ph. D., Univ. of Chicago, 1948.

351. Tyler, John H.
Petrology, fauna, and paleoecology of the type Four Mile Dam limstone, Alpena County, Michigan: Ph. D., Univ. of Mich., 1963.

352. Uhri, Duane C.
The correlation of Cincinnatian environments by spectrographic analyses of associated fossils: M. S., Mich. State Univ., 1954.

353. Utterback, Donald D.
A study of outcropping bituminous limestones and sandstones with reference to porosity and to the origin and migration of petroleum. Ph. D., Univ. of Ill., 1936.

354. Van Altena, Peter J.
Some Keweenawan sediments of Ontonagon County, Michigan: M. S. Mich. Tech. Univ., 1951.

355. Vehrs, R. A.
On an occurrence of "quartzite" in the southern complex near Palmer, Marquette County, Michigan: M. S., Mich. State Univ., 1959.

356. Verhoeven, Cornelius S.
Possibility of determining restricted reef conditions from the areal distribution of the widely distributed contemporaneous detrital and lagunal facies: M. S., Mich. State Univ., 1948.

357. Vickers, Rollin C.
Origin and occurrence of uranium in northern Michigan: Ph. D., Univ. of Wis., 1957.

358. Villar, James W.
Metamorphic petrology of the Animikie series in the Republic trough area, Marquette County, Michigan: Ph. D., Mich. State Univ., 1965.

359. Waggoner, Thomas D.
A method of differentiating carbonate and silicate facies of the Negaunee iron formation by spectrochemical analysis: M. S., Mich. State Univ., 1967.

360. Walker, John W.
Stratigraphy and insoluble residues of the Inkster Junction core, Wayne County, Michigan: M. S., Univ. of Mich., 1953.

361. Walker, Robert D.
Structural petrology of the Crystal Falls municipal dam, Iron County, Michigan: M. S., Mich. State Univ., 1956.

362. Webb, William M.
The geology of Mullet Lake: M. S., Univ. of Mich., 1964.

363. Weinberg, Edgar L.
Deep water sediments of western Lake Huron: M. S., Univ. of Ill., 1948.

364. Weiss, Martin
Ostracod fauna of the Norway Point formation of Michigan: M. S., Univ. of Mich., 1951.

365. Wellman, Dean C.
Insoluble residues of Dundee and Detroit River (Upper Monroe) formations of central Michigan: M. S., Washington Univ., 1936.

366. Wheeler, Merlin L.
Electric analog model study of the hydrology of the Saginaw formation in the Lansing, Michigan area: M. S., Mich. State Univ., 1967.

367. Whitaker, James T.
Ultrasonic velocity measurements of Precambrian metamorphic rocks and their correlation with field measurements: M. S., Mich. State Univ., 1966.

368. Wild, Robert C.
Sedimentary analysis of the Middle Devonian Sylvania Sandstone in the Michigan basin: M. S., Mich. State Univ., 1958.

369. William F. E.
Recent sedimentation in the western Great Lakes: Thesis, Univ. of Wis., 1910.

370. Wilson, Chester H.
Petrology of the Algomah mine area, Ontonagon County, Michigan: M. S., Mich. State Univ., 1967.

371. Wilson, H. T.
Paleontology and stratigraphy of a well core through Silurian and Ordovician strata in Oakland County, Michigan: M. S., Univ. of Mich., 1955.

372. Wilson, James G.
Geophysical investigations of Perkins area, Michigan: M. S., Dept. of Physics, Mich. Tech. Univ., 1952.

373. Wilson, Lawrence M.
Surficial glacial deposits of the Michigan-Saginaw lobes in the Grand Rapids area, Michigan, a study of relationships: M. S., Mich. State Univ., 1955.

374. Wilson, Richard L.
The Pleistocene vertebrates of Michigan: M. S., Univ. of Mich., 1965.

375. Winchell, Robert E.
Description and mineralogy of some pegmatites in Dickinson County, Michigan: M. S., Mich. Tech. Univ., 1959.

376. Winslow, Donald C.
Laboratory study of lake ice: M. S., Univ. of Mich., 1952.

377. Wold, Richard
Development of a digital recording magnetometer system and its application to the western Lake Superior region: Ph. D., Univ. of Wis., 1966.

378. Wood, Leonard E.
Bottom sediments of Saginaw Bay, Michigan: Ph. D., Mich. State Univ., 1958.

379. Wood, Warren W.
Distribution and stratigraphic position of Late Precambrian diabase dikes in part of northern Michigan: M. S., Mich. State Univ., 1962.

380. Wooten, Marie J.
The Coldwater formation in the area of the type locality: M. S., Wayne State Univ., 1951.

381. Wright, Jean D.
The type species of Spinocyrtia, Fredericks, and two new species of this brachiopod genus from the Middle Devonian Hamilton group, in the Thedford-Arkona region of southwestern Ontario: M. S., Univ. of Mich., 1955.

382. Wuckert, Arthur E.
Bioseries of the ostracode Ponderodictya in the Traverse group of Michigan: M. S., Mich. State Univ., 1950.

383. Wyble, D. O.
A study of the regional gravity of southwestern end of the Iron River district, Iron River, Michigan: M. S., Dept. of Physics, Mich. Tech. Univ., 1950.

384. Yang, Tsun-Yi
Mollusks of the Middle Devonian Traverse group of Michigan: Ph. D., Yale Univ., 1939.

385. Young, Robert T.
Significance of the magnesium/calcium ratio as related to structure in the Stony Lake oil field, Michigan: M. S., Mich. State Univ., 1955.

386. Zaitzeff, James B.
Middle Ordovician Black River ostracods from a well core, Jackson County, Michigan: M. S., Mich. State Univ., 1962.

387. Zinn, Justin
Petrography of the Keweenan lava flows of Michigan: M. S., Mich. Tech. Univ., 1930.

SUBJECT INDEX

Economic Geology:
12, 26, 42, 63, 71, 122, 138, 139, 144, 160, 161, 180, 211, 230, 231, 265, 277, 327, 357.

Geologic Mapping:
21, 32, 238.

Geophysics (including geochemistry):
10, 19, 28, 29, 34, 37, 38, 41, 43, 46, 47, 52, 105, 112, 136, 150, 168, 169, 174, 195, 199, 209, 210, 232, 235, 248, 256, 260, 279, 281, 286, 290, 302, 341, 342, 367, 372, 377, 383.

Glacial Studies (Includes preglacial geomorphology):
5, 13, 24, 32, 39, 45, 83, 98, 104, 177, 180, 181, 214, 215, 238, 280, 293, 320, 325, 332, 337, 347, 349, 373.

Great Lakes:
94, 95, 96, 108, 143, 155, 159, 171, 218, 233, 246, 248, 255, 261, 285, 289, 314, 320, 363, 369, 378.

Guidebooks:
59.

Mesozoic ("Red Beds"):
295, 330.

Mineralogy (including crystallography):
4, 31, 64, 121, 163, 192, 277, 375.

Paleogeology (including paleogeography):
3, 49, 207.

Paleontology (includes invertebrate, vertebrate and paleobotany):
6, 8, 16, 40, 53, 60, 61, 64, 65, 70, 75, 77, 81, 99, 100, 110, 111, 115, 119, 125, 128, 130, 131, 142, 148, 149, 153, 154, 158, 164, 165, 166, 173, 178, 179, 193, 194, 204, 205, 217, 220, 221, 223, 225, 228, 234, 239, 245, 250, 262, 269, 275, 282, 300, 308, 309, 313, 317, 318, 319, 328, 331, 335, 336, 345, 346, 351, 352, 356, 364, 371, 374, 381, 382, 384, 386.

Paleozoic (general):
2, 9, 22, 23, 36, 78, 92, 102, 120, 145, 147, 152, 182, 190, 191, 201, 212, 222, 236, 247, 249, 252, 274, 297, 311, 329, 334, 339, 348, 380.