

A. N. WINCHELL: *Further Studies in the Amphibole Group.* Using the new type formula for amphiboles derived by Warren from x-ray studies, an attempt is made to graph the relations between composition and optic properties in various parts of the amphibole group. The results are satisfactory in the anthophyllite, cummingtonite and tremolite-actinolite series, but no solution has been found for the alkaline amphiboles, and only a partial solution for hornblende. The problem is complicated in the case of hornblende and pargasite by the large number of molecules which are independent variables and by the possibility of optical effects due to oxidation of ferrous iron.

E. P. HENDERSON AND F. L. HESS (Presented by E. P. Henderson): *Fervanite—A New Vanadium Mineral.* Fervanite is a fibrous golden yellow mineral occurring in the vanadium bearing rocks of southwestern Colorado and southeastern Utah. It is a hydrous iron vanadate with a formula $2\text{Fe}_2\text{O}_3 \cdot 2\text{V}_2\text{O}_5 \cdot 5\text{H}_2\text{O}$. Fervanite is found in the cracks in the dark colored oxides of vanadium and also as a thin coating on the sandstones. In all the specimens, so far found, fervanite is closely associated with gypsum.

The last paper was finished at 4:07 P.M. after which Dr. W. J. McCaughey moved that the thanks of the Society be extended to the authorities of the University of Toronto, to the local committee and to Mrs. D. A. Dunlap for their kindness and hospitality. This was seconded by Dr. A. F. Rogers and was unanimously adopted by a rising vote of those present. The Society then adjourned.

During the sessions of the Society, a total of twenty-nine scientific papers were presented, none being read by title. Ninety-five fellows, members and guests were present at the various meetings. The following registered at the meetings:

Adams, F. D.; Agar, W. M.; Allen, V. T.; Alling, H. L.; Bannerman, H. M.; Bascom, F.; Miss; Bayley, W. S.; Beaton, H. S.; Berman, H.; Billings, M. P.; Bowen, N. L.; Branner, G. C.; Brown, L. S.; Bruce, E. L.; Buddington, A. F.; Colburn, B. S.; Colburn, W. B.; Colony, R. J.; Cook, C. W.; Corbett, C. S.; Currier, L. W.; English, G. L.; Ferrier, W. F.; Fettke, C. R.; Foreman, F.; Foyle, E. J.; Foshag, W. F.; Fretz, A. H.; Fuller, R. E.; Furcron, A. S.; Gilluly, J.; Goddard, E. N.; Graham, R.; Graham, W. A. P.; Grawe, O. R.; Gruner, J. W.; Hawley, J. E.; Henderson, E. P.; Holland, S. S.; Howland, A. L.; Huggins, M. L.; Hunt, W. F.; Ichimura, T.; Jensen, D. E.; Jolliffe, F. T.; Kerr, P. F.; Kerr-Lawson, D. E.; Kerr-Lawson, Mrs. D. E.; Kraus, E. H.; Kraus, J. D.; Kunz, G. F.; Landes, K. K.; Landon, R. E.; Lane, A. C.; Larsen, E. S., Jr.; Lewis, J. V.; Lindgren, W.; Longley, C. S.; Lonsdale, J. T.; Martens, J. H. C.; Mathews, E. B.; McCaughey, W. J.; McNairn, W. H.; Mertie, J. B., Jr.; Merwin, H. E.; Miller, B. L.; Miller, V. B.; Moore, E. S.; Morton, J. F.; Osborne, F. F.; Parsons, A. L.; Peck, A. B.; Perkins, E. H.; Phillips, A. H.; Ramsdell, L. S.; Reavey, G. H.; Richarz, S.; Ries, H.; Rogers, A. F.; Ross, C. S.; Sampson, E.; Schairer, J. F.; Schaller, W. T.; Senstius, M. W.; Singewald, Q. D.; Slawson, C. B.; Spence, H. S.; Stow, M. H.; Stadnichenko, T., Miss; Thomson, E.; Tolman, C.; Trainer, D. W., Jr.; Van Horn, F. R.; Walker, T. L.; Winchell, A. N.

LIST OF FORMER OFFICERS AND MEETINGS, WITH DATES

By recommendation of the Council, a complete list of past officers is printed in the proceedings of the annual meeting of the Society.

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- 1924 Austin F. Rogers, Thomas L. Watson, Esper S. Larsen, Arthur L. Parsons
- 1925 Thomas L. Watson, Esper S. Larsen, Arthur L. Parsons, William F. Foshag
- 1926 Esper S. Larsen, Arthur L. Parsons, William F. Foshag, William A. Tarr
- 1927 Arthur L. Parsons, William F. Foshag, William A. Tarr, Alexander N. Winchell
- 1928 William F. Foshag, William A. Tarr, Alexander N. Winchell, Ellis Thomson
- 1929 William A. Tarr, Alexander N. Winchell, Ellis Thomson, Clarence S. Ross
- 1930 Alexander N. Winchell, Ellis Thomson, Clarence S. Ross, Paul F. Kerr

ANNUAL MEETING PLACES

- 1920 Chicago, Illinois
- 1921 Amherst, Massachusetts
- 1922 Ann Arbor, Michigan
- 1923 Washington, D.C.
- 1924 Ithaca, New York
- 1925 New Haven, Connecticut
- 1926 Madison, Wisconsin
- 1927 Cleveland, Ohio
- 1928 New York, New York
- 1929 Washington, D.C.
- 1930 Toronto, Canada

HONORARY LIFE FELLOWS OF THE MINERALOGICAL
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Becke, Friedrich J., University of Vienna, Austria.
Brauns, Reinhard, University of Bonn, Germany.
Brögger, Waldemar C., University of Oslo, Norway.
Friedel, A., University of Strassburg, Strassburg, Alsace, France.
Goldschmidt, Victor, University of Heidelberg, Heidelberg, Germany.
Lacroix, A., Museum of Natural History, Paris, France.
Rinne, Friedrich, Günterstal Freiburg in Baden, Germany.
Spencer, L. J., Natural History Museum, South Kensington, London, S. W. 7,
England.

LIST OF FELLOWS AND MEMBERS OF THE
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(*Indicates Fellow).

*Adams, Elliot Q., Lamp Development Lab., Nela Park, Cleveland, Ohio.
Adams, George I., Dept. of Geology, University of Alabama, Tuscaloosa, Alabama.
Agar, William M., Dept. of Geology, Columbia University, New York City.
Ahlfeld, Friedrich, Marburg A/Lahn, Germany.
Aldridge, Curtece, 307 Elm St., Rome, New York.
Allen, Duncan G., c/o State Highway Dept., Langtry, Texas.
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Allen, Fred M., Box 185, Gastonia, North Carolina.
Allen, Victor T., St. Louis University, 221 N. Grand Blvd., St. Louis, Missouri.
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Amilcar, Mario de Jesus, Institute Superior Tecnico, Lisboa, Portugal.
*Aminoff, Gregori, Riksmuseet, Stockholm 50, Sweden.
Anderson, Charles A., Dept. of Geology and Mineralogy, University of California, Berkeley, California.
Andersen, Olaf, Research Lab., U. S. Steel Corp., Kearny, New Jersey.
Andrews, Gerald, Dept. of Geology, Egyptian University, Cairo, Egypt.
Armstrong, L. K., 704 Peyton Bldg., Spokane, Washington.
Ashby, George E., 265 Washington Ave., Brooklyn, New York.
*Ashcroft, Frederick Noel, 1 Egerton Gardens, South Kensington, S. W. 3, London, England (Life Fellow).
Ayers, Vincent L., Michigan College of Mines and Technology, Houghton, Michigan.
Bailey, E. M., Andover, Maine.
Baker, J. Willard, R. F. D. No. 2, Box 8, Franklin, Massachusetts.
Balke, Claire C., 40 Deere Park Drive South, Highland Park, Illinois.
Ballantine, Robert, 133 Buckingham Rd., Upper Montclair, New Jersey.
Bannerman, H. M., Dartmouth College, Hanover, New Hampshire.

¹ The names and addresses here listed are those on record January 1, 1931. Any omission or correction should be sent to the Secretary, Dr. Frank R. Van Horn, Case School of Applied Science, Cleveland, Ohio.