American Mineralogist, Volume 66, pages 1092-1094, 1981

Memorial of Philip Moore Orville 1930–1980

BRIAN J. SKINNER

Department of Geology and Geophysics Yale University, New Haven, Connecticut 05520

The day Phil Orville died a little bit of the fun of living was lost to all who knew him. His friends, when they learned this article was to be written, offered their help and memories, and without exception their memories carried the same message—friendship with Phil Orville was an exceptionally rewarding experience. He was an adventurous, fun-loving, open-hearted man whose concerns and efforts on behalf of his friends knew no limits. How typical it was that among the activities of his last day he sent out invitations for a party at which graduate students



and other friends would gather at his home for an evening of high spirits and good humor. He had signalled the mood of the party by adding the footnote, A.B.D.—nything but disco. On the day of the party we gathered instead for a moving memorial service.

When Phil tackled anything, he did it whole heartedly, no holds barred. He started long distance running in 1967, for example, in order to get into shape for field work in the Alps, but soon competitive marathon races became his goal. Tall, lean and full of energy, no one who saw his long strides bearing him through the trails of his beloved East Rock Park in New Haven or along the city streets of a marathon course, could imagine that such vibrant good health could be struck down so suddenly and so unexpectedly. There was, in his paternal lineage, a history of middle-life heart trouble, but no one, least of all he and his family, had any inkling that he would extend that history by suffering a massive and fatal heart attack during his sieep on Wednesday, April 2, 1980.

Philip Moore Orville was born in Ottawa, Illinois, on the 24th of February, 1930, the son of Harold C. and Lorene Moore Orville. Much of his schooling was in California where he attended the Santa Monica High School and later the California Institute of Technology (B.S., 1952). Following Caltech, he spent the academic year 1952–53 as a Fulbright student at the University of Copenhagen prior to entering into graduate studies at Yale University where he earned his M.A. in 1954 and Ph.D. in 1958 with a thesis titled "The composition of some unzoned pegmatites in the Keystone District, South Dakota."

Orville's professional career was directly and increasingly distinguished as his talents and abilities were recognized. During 1956-57, in order to complete the necessary research for his Ph.D. thesis, he was a Predoctoral Fellow at the Carnegie Institution of Washington's Geophysical Laboratory; this was followed by an appointment as Postdoctoral Fellow for the years 1957-60. The years at the Geophysical Lab. were happy and productive ones as he investigated

Bibliography of Philip Moore Orville

- 1958 Feldspar investigations: Carnegie Inst. Washington Yearbook 57, p. 206-209.
- 1959 Feldspars: Carnegie Inst. Washington Yearbook 58, p. 118-121.
- 1960 Alkali feldspar-alkali chloride hydrothermal ion exchange: Carnegie Inst. Washington Yearbook 59, p. 104-108.
- The petrology of several pegmatites in the Keystone District, Black Hills, South Dakota, Geol. Soc. America Bull., v. 71, p. 1467-1490.
- 1962 Alkali metasomatism and feldspars: Norsk geol. tidsskr., v. 42, 2, Halvbind (Feldspar vol.), p. 283-316.
- Comments on the two-feldspar geothermometer: Norsk. geol. tidsskr., v. 42, 2. Halvbind (Feldspar vol.), p. 340-348.
- 1962 Alkali ion exchange between vapor and feldspar phases: Am. Jour. Sci., v. 261, p. 201-237.
- Determination of ΔH of reaction from experimental pressure-temperature curves: Am. Jour. Sci., v. 263, p. 678-684 (with H. J. Greenwood).
- 1967 Unit cell parameters of the microcline-low albite and the sanidine-high albite solid solution series: Am. Mineralogist, v. 52, p. 55-86.
- 1968 (Editor) Guidebook for Field Trips in Connecticut, New England Intercollegiate Geological Conference, Connecticut Geological and Natural History Survey, Guidebook No. 2.
- 1969 A model for metamorphic differentiation origin of thin-layered amphibolites: Am. Jour. Sci., v. 267, p. 64-86.
- The partitioning of cations between coexisting single- and multi-site phases with application to the assemblages: orthopyroxene-clinopyroxene and orthopyroxene-olivine: Geochim. et Cosmochim. Acta, v. 33, p. 205-226 (with J. Grover).
- Partitioning of cations between coexisting single- and multi-site phases:

 A reply with incidental corrections: Geochim. et Cosmochim. Acta,
 v. 34, p. 1361-1364 (with J. Grover).
- Plagioclase cation exchange equilibria with aqueous chloride solution at 700°C and 2000 bars in the presence of quartz: Am. Jour. Sci., v. 272, p. 234-272.
- The "peristerite gap" as an equilibrium between ordered albite and disordered plagioclase solution: Bull. Soc. fr. Mineral. Cristallogr., v. 97, p. 386-392.
- 1974 Plagioclase in margerite-bearing rocks: Am. Jour. Sci., v. 274, p. 31-47 (with Martin Frey).
- 1975 Stability of scapolite in the system Ab-An-NaCl-CaCO₃ at 4 kb and 759°C: Geochim. Cosmochim. Acta, v. 39, p. 1091-1105.
- 1980 Formation of synthetic fluid inclusions in natural quartz. Am. Min., v. 65, p. 1233-1236 (with Kevin L. Shelton).