

AM-87-358

Memorial of Orville Frank Tuttle June 25, 1916-Dec. 13, 1983

Luth

To be deposited: Bibliography

American Mineralogist, 72, 9-10, 1020-1022

Bibliography of O. F. Tuttle

1. Tuttle, O. F. Heavy Minerals of the Ordovician-Silurian Boundary in Central Pennsylvania. Proc. Penna. Acad. Sci., 14, 55-59 (1940).
2. Ingerson, Earl and Tuttle, O. F. A Graph for Determining Angle and Direction of Pitch of Lineations in the Field. Am. Mineral., 28, 209-210 (1943).
3. Tuttle, O. F. Orientation of Ilmenite and Andesine from the St. Urbain Quebec Titaniferous Iron-ore Deposit. Trans. Am. Geoph. Union, Pt. 1, 280 (1943).
4. Ingerson, Earl and Tuttle, O. F. Relations of Lamellae and Crystallography of Quartz and Fabric Directions in Some Deformed Rocks. Trans. Am. Geoph. Union, 26, 95-106 (1945).
5. Tuttle, O. F. and Twenhofel, W. S. Effect of Temperature on Lineage Structure in Some Synthetic Crystals. Am. Mineral., 31, 569-573 (1946).
6. Tuttle, O. F. and Egli, P. H. The Preparation of Mixed Thallium Bromideiodide for Infra-red Transmission. J. Chem. Phys., 14, 571 (1946).
7. Ingerson, Earl and Tuttle, O. F. Artificial Willemite Needles, Am. J. Sci., 245, 313-319 (1947).
8. Ingerson, Earl, Morey, G. W. and Tuttle, O. F. The System $K_2O-ZnO-SiO_2$, $ZnO-B_2O_3-SiO_2$ and $Zn_2SiO_4-Zn_2GeO_4$. Am. J. Sci., 246, 31-40 (1948).
9. Tuttle, O. F. and Bowen, N. L. Serpentine and Talc Equilibria. Presented at Internatl. Geol. Congress, London (1948).
10. Tuttle, O. F. and Friedman, I. I. Liquid Immiscibility in the System $H_2O-Na_2O-SiO_2$. Jour. Am. Chem. Soc., 70, 919-927 (1948).
11. Tuttle, O. F. A New Hydrothermal Quenching Apparatus. Am. J. Sci., 246, 628-635 (1948).
12. Bowen, N. L. and Tuttle, O. F. The System $MgO-SiO_2-H_2O$. Bull. G.S.A., 60, 439-460 (1949).
13. Tuttle, O. F. Variable Inversion Temperature of Quartz as a Possible Geologic Thermometer. Am. Mineral., 34, 723-730 (1949).
14. Tuttle, O. F. Two Pressure Vessels for Silicate-Water Studies. G.S.A. Bull., 60, 1727-1729 (1949).
15. Tuttle, O. F. Structural Petrology of Planes of Liquid Inclusions. Jour. Geol., 57, 331-356 (1949).

16. Bowen, N. L. and Tuttle, O. F. The System $\text{NaAlSi}_3\text{O}_8$ - KAlSi_3O_8 - H_2O .
Jour. Geol., 58, 489-511 (1950).
17. Tuttle, O. F. Preparation of Oriented Thin-Sections. Jour. Geol.,
58, 73-75 (1950).
18. Tuttle, O. F. and Bowen, N. L. High Temperature Albite and Contiguous
Feldspars. Jour. Geol., 58, 572-583 (1950).
19. Tuttle, O. F. Studies in Feldspar Equilibria at the Geophysical
Laboratory, Washington. Min. Mag., 215, 757-758 (1951).
20. Tuttle, O. F. Origin of the Contrasting Mineralogy of Extrusive and
Plutonic Salic Rocks. Jour. Geol., 60, 107-124 (1952).
21. Keith, M. L. and Tuttle, O. F. Significance of Variation in the High-
Low Inversion of Quartz. Am. J. Sci., Bowen Vol., 203-280
(1952).
22. Davis, G. L. and Tuttle, O. F. Two New Crystalline Phases of the
Anorthite Composition, $\text{CaO-Al}_2\text{O}_3$ - 2SiO_2 . Am. J. Sci., Bowen Vol.
107-114 (1952).
23. Tuttle, O. F. and Keith, M. L. The Granite Problem: Evidence from
the Quartz and Feldspar of a Tertiary Granite. Geol. Mag., 41,
61-72 (1954).
24. Tuttle, O. F. Optical Studies on Alkali Feldspars. Am. J. Sci.,
Bowen Vol., 553-567 (1952).
25. Tuttle, O. F. Origin of the Contrasting Mineralogy of Extrusive and
Plutonic Salic Rocks: A Reply. Jour. Geol. 61, No. 3, (1953).
26. Tuttle, O. F. Origin of Granite, Scient. Amer., 192, No. 4, (1955).
27. Tuttle, O. F. and England, J. L. Preliminary Report on the System
 SiO_2 - H_2O . Bull. G.S.A., 66, 149-152 (1955).
28. Harker, R. I. and Tuttle, O. F. Studies in the System CaO-MgO-CO_2 :
Part I, The Thermal Dissociation of Calcite, Dolomite and
Magnesite. Am. J. Sci., 253, 209-224 (1955).
29. Harker, R. I. and Tuttle, O. F. Studies in the System CaO-MgO-CO_2 :
Part II, Limits of Solid Solution Along the Binary Join CaCO_3 -
 MgCO_3 . Am. J. Sci., 253, 274-282 (1955).
30. Roy, R. and Tuttle, O. F. Investigations Under Hydrothermal
Conditions. Physics and Chemistry of the Earth, I, Chapter 6,
Pergammon Press (1955).

31. Harker, R. I. and Tuttle, O. F. Experimental Data on the P_{CO_2} -T Curved for the Reaction: Calcite + Quartz = Wollastonite + Carbon Dioxide, *Am. J. Sci.*, 254, 239-256 (1956).
32. Tuttle, O. F. and Harker, R. I. The Synthesis of Spurrite and the Reaction Wollastonite + Calcite = Spurrite + Carbon Dioxide. *Am. J. Sci.*, 255, 226-234. (1957).
33. Harker, R. I. and Tuttle, O. F. The Lower Limit of Stability of Akermanite ($Ca_2MgSi_2O_7$). *Am. J. Sci.*, 254, 468-478 (1956).
34. Tuttle, O. F. L'origine et la Classification des Granites a la Lumiere des Etudes Experimentales Dans le Systeme $NaAlSi_3O_8$ - $KAlSi_3O_8$ - SiO_2 - K_2O . *Colleq. Internatl. de Petrographie*, Nancy, France, 299-308 (1956).
35. Tuttle, O. F. Degre Geothermique et Magmas Granitiques. *Collog. Internatl. de Petrographie*, Nancy, France, 87-103 (1956).
36. Smith, J. V. and Tuttle, O. F. Nepheline-Kalsilite System: I, X-Ray Data for the Crystalline Phases. *Am. J. Sci.*, 255, 282-305 (1957).
37. Tuttle, O. F. and Smith, J. V. Nepheline-Kalsilite System: II, Phase Relations. *Am. J. Sci.*, 256, 571-589 (1958).
38. Tuttle, O. F. and Bowen, N. L. Origin of Granite in the Light of Experimental Studies in the System $NaAlSi_3O_8$ - $KAlSi_3O_8$ - SiO_2 - H_2O , *G.S.A. Memoir 74* (1958).
39. Wyllie, P. J. and Tuttle, O. F. Note on synthetic Carbonatite Magma, *Nature*, 183, 770 (March 1959).
40. Wyllie, P. J. and Tuttle, O. F. Melting of Calcite in the Presence of Water. *Amer. Mineral.*, 44, 453-459 (March-April 1959).
41. Wyllie, P. J. and Tuttle, O. F. Melting of Portlandite in the System CaO - H_2O . *Jour. Amer. Ceramics Soc.*, 42, 448-449 (September 1959).
42. Wyllie, P. J. and Tuttle, O. F. The System CaO - CO_2 - H_2O and the Origin of Carbonatites. *Jour. Petrology*, 1, 1-46 (February 1960).
43. Wyllie, P. J. and Tuttle, O. F. Experimental Investigation of Silicate Systems Containing Two Volatile Components: I, Geometrical Considerations. *Amer. J. Sci.*, 258, 498-517 (1960).
44. Wyllie, P. J. and Tuttle, O. F. Experimental Investigation of Silicate System Containing Two Volatile Components: II, The Effects of NH_3 and HF , in Addition to H_2O on the Melting Temperature of Albite and Granite. *Am. J. Sci.*, 259, 128-143 (1961).

45. Wyllie, P. J. and Tuttle, O. F. Low Temperature Liquids in the System $\text{CaO-CO}_2\text{-H}_2\text{O}$: A Discussion. *Academy Science USSR Geochemistry* 5, 455-459 (1960).
46. Thornton, C. P. and Tuttle, O. F. Chemistry of the Igneous Rocks: I, Differentiation Index. *Am. J. Sci.* 258, 664-684 (1960).
47. Wyllie, P. J. and Tuttle, O. F. Hydrothermal Melting of Shales. *Geol. Magazine*, 48, 56-66 (1961).
48. Tuttle, O. F. and Bowen, N. L. Some Laboratory Experiments Bearing on the Origin of Granite. *Congreso Geologico Internacional XX Seccion XI-A Petrologia y Mineralogia* pp. 347-364 (1959).
49. Wyllie, P. J. and Tuttle, O. F. Experimental Verification for the Magmatic Origin of Carbonatites. *International Geological Congress, XXI Session, Norden, Pt. XIII*, 310-318 (1960).
50. Tuttle, O. F. Residual Solutions Formed by Crystallization of Hydrous Granitic Magmas. *Korzinski Volume, USSR Acad. Sci.*, 644-653 (1961).
51. Wyllie, P. J. and Tuttle, O. F. Melting in the Earth's Crust. *International Geological Congress, XXI Session, Norden*, 227-235 (1960).
52. Walter, L. S., Wyllie, P. J. and Tuttle, O. F. The System $\text{MgO-CO}_2\text{-H}_2\text{O}$ at High Pressures and Temperatures. *Jour. of Petrology* 3, No. 1 (1962).
53. Gittins, J. and Tuttle, O. F. The System $\text{CaF}_2\text{-Ca(OH)}_2\text{-CaCO}_3$. *Amer. Jour. Sci.*, 262, 66-75 (1964).
54. Jahns, R. H. and Tuttle, O. F. Layered Pegmatite-Aplite Intrusives. *Miner. Soc., Amer. Special Paper* 1, 78-92 (1963).
55. Wyllie, P. J. and Tuttle, O. F. Carbonatitic Lavas. *Nature*, 194, 1269 (1962).
56. Harker, R. I., Roy, D. M. and Tuttle, O. F. Melting Phenomena in the System $\text{CaO-SiO}_2\text{-H}_2\text{O}$: I, The Join $\text{Ca}_2\text{SiO}_4\text{-Ca(OH)}_2$. *Amer. Cer. Soc.*, 45 (1962).
57. Datta, R. K., Roy, D. M., Faile, S. P. and Tuttle, O. F. Glass Formation in Carbonate Systems. *Jour. Amer. Cer. Society*, 47(3) 153 (1964).
58. Luth, W. C., R. H. Jahns, and O. F. Tuttle. The "Granite" System to 10,000 Bars $\text{P}_{\text{H}_2\text{O}}$. *Trans. Am. Geophys. Union*, 44, 118. (1963)
59. Tuttle, O. F., W. C. Luth, and R. H. Jahns. The Hypersolvus Granite-Granophyre-Rhyolite Association. *Trans. Am. Geophys. Union*, 45, 124 (1964).

60. Luth, W. C., R. H. Jahns, and O. F. Tuttle . The Granite System at Pressures of 4 to 10 Kilobars. *Jour. Geophys. Res.*, 69, 759-773. (1964)
61. Luth, W. C., and Tuttle, O. F. Externally Heated Cold-Seal Pressure Vessels for Use to 10,000 bars and 750°C. *Amer. Mineralogist*, 48, 1401-1403 (1963).
62. Wyllie, P. J. and Tuttle, O. F. The Quenching Technique in Non-Quenchable Systems: A Discussion Concerning the Alleged Thermal Decomposition of Portlandite at High Pressures. *Amer. Jour. Sci.*, 261, 983-988 (1963).
63. Luth, W. C. Jahns, R. H. and Tuttle, O. F. The Granite System at Pressures of 4 to 10 Kilobars. *Jour. of Geophysical Research*, 69, 759-773 (1964).
64. Wyllie, P. J. and Tuttle, O. F. Experimental Investigation of Silicate Systems Containing Two Volatile Components. Part III. The Effects of SO_3 , P_2O_5 , HCl , and Li_2O , in Addition to H_2O , on the Melting Temperatures of Albite and Granite. *Amer. Jour. Sci.*, Vol. 262, p. 930-939 (1964).
65. Luth, W. C., and O. F. Tuttle. The Effects of Excess Al_2O_3 and Excess Alkali Silicate on the Alkali Feldspar Solvus. *Trans. Am. Geophys. Union*, 46, 179 (1965).
66. Scarfe, C. M., W. C. Luth, and O. F. Tuttle. An Experimental Study Bearing on the Absence of Leucite in Plutonic Rocks. *Ann. Meeting Geol. Soc. Amer* (1965).
67. Peters, T. J., W. C. Luth and O. F. Tuttle. The Melting of Analcite Solid Solutions in the system NaAlSiO_4 - $\text{NaAlSi}_3\text{O}_8$ - H_2O (1965).
68. Thornton, C. P. and Tuttle, O. F. The Crystallization Index as a Parameter of Igneous Differentiation in Binary Variation Diagrams: A Discussion *Am. Jour. Sci.* V 263, 227-279 (1965).
69. Scarfe, C. M., Luth, W. C., and Tuttle, O. F. An Experimental Study Bearing on the Absence of Leucite in Plutonic Rocks, *Am. M. V* 51, p. 726-735 (1966).
70. Peters, T. J., Luth, W. C. and Tuttle, O. F. The Melting of Analcite Solid Solutions in the System $\text{NaAlSi}_3\text{O}_8$ - NaAlSiO_4 - H_2O , *Am. Min.* V 51, p. 736-753 (1966).
71. Luth, W. C. and Tuttle, O. F. The Alkali Feldspar Solvus in the System Na_2O - K_2O - Al_2O_3 - SiO_2 - H_2O , *Am. M V* 51, p 1359-1373 (1966).
72. Tuttle, O. F. and Gittins, Introduction p. xi-xix, *Carbonatites*, (John Wiley and Sons, 1966).
73. Tuttle, O. F. and Gittins, *Carbonatites* edited by Tuttle and Gittins, (John Wiley and Sons, 1966).

74. Scarfe, C. M., W. C. Luth, and O. F. Tuttle. An Experimental Study Bearing on the Absence of Leucite in Plutonic Rocks. *Am. Mineral.*, 51, 726-735 (1966).
75. Peters, T. J., W. C. Luth, and O. F. Tuttle. The Melting of Analcite Solid Solutions in the System $\text{NaAlSi}_4\text{O}_{10}-\text{NaAlSi}_3\text{O}_8-\text{H}_2\text{O}$. *Am. Mineral.*, 51, 736-753 (1966).
76. Luth, W.C., and O. F. Tuttle. The Alkali Feldspar Solvus in the System $\text{Na}_2\text{O}-\text{K}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$. *Am. Mineral.*, 51, 1359-1373 (1966).
77. Luth, W. C., and O. F. Tuttle. The Hydrous Vapor phase in Equilibrium with Granite and Granite Magmas. *Trans. Am. Geophys. Union*, 48, 245 (1967).
78. Luth, W. C., and O. F. Tuttle. The Hydrous Vapor Phase in Equilibrium with Granite and Granite Magmas. *Geol. Soc. Amer. Mem.* 115 (Poldervaart Vol.) 513-548 (1969).