

# *PUBLICATIONS*

## Alfred (Fred) T. Anderson Jr.

- Anderson, A. T. (1966). "Mineralogy of Labrieville Anorthosite Quebec." American Mineralogist **51**(11-1): 1671-1711.
- Anderson, A. T. (1967). "Dimensions of Oxygen Isotopic Equilibrium Attainment During Prograde Metamorphism." Journal of Geology **75**(3): 323-332.
- Anderson, A. T. (1968). "Oxidation of Lablache Lake Titaniferous Magnetite Deposit Quebec." Journal of Geology **76**(5): 528-547.
- Anderson, A. T. (1968). "Oxygen Fugacity of Alkaline Basalt And Related Magmas Tristan Da Cunha." American Journal of Science **266**(8): 704-727.
- Desborough, G. A., A. T. Anderson and T. L. Wright (1968). "Mineralogy of Sulfides from Certain Hawaiian Basalts." Economic Geology **63**(6): 636-644.
- Anderson, A. T. (1969). Massif-type anorthosite: a widespread Pre-Cambrian igneous rock. Origin of Anorthosite and Related Rocks. Y. W. Isachsen, New York State Museum and Science Service. **Memoir 18**: 47-55.
- Anderson, A. T. and L. P. Greenland (1969). "Phosphorus Fractionation Diagram as a Quantitative Indicator of Crystallization Differentiation of Basaltic Liquids." Geochimica et Cosmochimica Acta **33**(4): 493-505.
- Anderson, A. T. and M. Morin (1969). Two Types of Massif Anorthosite and Their Implications Regarding the Thermal History of the Crust. Origin of Anorthosite and Related Rocks. Y. W. Isachsen, New York State Museum and Science Service. **Memoir 18**: 57-69.
- Anderson, A. T., T. E. Bunch, E. N. Cameron, S. E. Haggerty, F. R. Boyd, L. W. Finger, O. B. James, K. Keil, M. Prinz, P. Randohr and A. El Goresy (1970). "Armalocolite: A New Mineral from the Apollo 11 Samples." Proceedings of the Apollo 11 Lunar Science Conference **1**: 55-63.
- Anderson, A. T., A. V. Crewe, J. R. Goldsmith, P. B. Moore, J. C. Newton, E. J. Olsen, J. V. Smith and P. J. Wyllie (1970). "Petrologic History of Moon Suggested by Petrography, Mineralogy, and Crystallography." Science **167**: 587-590.
- Chao, E. C. T., J. A. Minkin, C. Frondel, C. Klein, J. C. Drake, L. Fuchs, B. Tani, J. V. Smith, A. T. Anderson, P. B. Moore, G. R. Zechman, R. J. Traill, A. G. Plant, J. A. V. Douglas and M. R. Dence (1970). "Pyroxferroite: A New Calcium-Bearing Iron Silicate from Tranquility base." Proceedings of the Apollo 11 Lunar Science Conference **1**: 65-79.

- Smith, J. V., A. T. Anderson, R. C. Newton, E. J. Olsen and P. J. Wyllie (1970). "Petrologic History of the Moon Inferred from Petrography, Mineralogy and Petrogenesis of Apollo 11 Rocks." Proceedings of the Apollo 11 Lunar Science Conference **1**: 897-925.
- Anderson, A. T. (1971). "Alkali-Rich, SiO<sub>2</sub>-Deficient Glasses in High-Alumina Olivine Tholeiite." American Journal of Science **271**(3): 293-303.
- Anderson, A. T. (1971). "Exotic Armalcolite and the Origin of Apollo 11 Ilmenite Basalts." Geochimica et Cosmochimica Acta **35**(9): 969-973.
- Anderson, A. T., R. N. Clayton and T. K. Mayeda (1971). "Oxygen Isotope Thermometry of Mafic Igneous Rocks." Journal of Geology **79**(6): 715-729.
- Anderson, A. T. and Gottfried, D. (1971). "Contrasting Behavior Of P, Ti, And Nb in Differentiated High-Alumina Olivine Tholeiite and a Calc-Alkaline Andesitic Suite." Geological Society of America Bulletin **82**(7): 1929-1942.
- Anderson, A. T. and J. V. Smith (1971). "Nature, Occurrence and Exotic Origin of "Gray Mottled" (Lunar Rock) Basalts in Apollo 12 Soils and Breccias." Apollo 12 Lunar Science Conference Proceedings **1**: 431-438.
- Newton, R. C., A. T. Anderson and J. V. Smith (1971). "Accumulation of olivine in rock 12040 and other basaltic fragments in the light of analysis and syntheses." Proceedings of the Second Lunar Science Conference **1**: 575-582.
- Anderson, A. T., T. F. Braziunas, J. Jacoby and J. V. Smith (1972). "Thermal and Mechanical History of Breccias 14306, 14063, 14270, and 14321." Proceedings of the Third Lunar Science Conference: 819-835.
- Anderson, A. T. and T. L. Wright (1972). "Phenocrysts and Glass Inclusions and their Bearing on Oxidation and Mixing of Basaltic Magmas, Kilauea Volcano, Hawaii." American Mineralogist **57**(1-2): 188-216.
- Anderson, A. T. (1973). "Texture and Mineralogy of Lunar Peridotite, 15445, 10." Journal of Geology **81**(2): 219-226.
- Anderson, A. T. (1974). "Chlorine, Sulfur, and Water in Magmas and Oceans." Geological Society of America Bulletin **85**(9): 1485-1492.
- Anderson, A. T. (1974). "Evidence for a Picritic, Volatile-Rich Magma Beneath Mt Shasta, California." Journal of Petrology **15**(2): 243-267.
- Desai, P. J. and A. T. Anderson (1974). "Nature and Origin of Microphenocrysts in a Basalt." Bulletin Volcanologique **1**: 65-72.
- Muehlenbachs, K., A. T. Anderson and G. E. Sigvaldason (1974). "Low-O-18 Basalts from Iceland." Geochimica et Cosmochimica Acta **38**(4): 577-588.

- Anderson, A. T. (1975). "Some Basaltic and Andesitic Gases." Reviews of Geophysics **13**(1): 37-55.
- Anderson, A. T. (1976). "Magma Mixing - Petrological Process and Volcanological Tool." Journal of Volcanology and Geothermal Research **1**(1): 3-33.
- Janssens, M.-J., H. Palme, J. Hertogen, A. T. Anderson and E. Anders (1978). "Meteoritic Material in Lunar Highland Samples from the Apollo 11 and 12 Sites." Proceedings of the 9th Lunar and Planetary Science Conference: 1537-1550.
- Rose, W. I., A. T. Anderson, L. G. Woodruff and S. B. Bonis (1978). "October 1974 Basaltic Tephra from Fuego Volcano - Description and History of Magma Body." Journal of Volcanology and Geothermal Research **4**(1-2): 3-53.
- Anderson, A. T. (1979). "Water in Some Hypersthenic Magmas." Journal of Geology **87**(5): 509-531.
- Anderson, A. T. (1980). "Credit Where Credit is Due - On Reading, Writing, and Citing." Journal of Volcanology and Geothermal Research **8**(1): 1-1.
- Anderson, A. T. (1980). "Significance of Hornblende in Calc-Alkaline Andesites and Basalts." American Mineralogist **65**(9-10): 837-851.
- Anderson, A. T. (1982). "Parental Basalts in Subduction Zones - Implications for Continental Evolution." Journal of Geophysical Research **87**(NB8): 7047-7060.
- Anderson, A. T., R. Friedman, J. Otto, T. Vander Wood and J. Wyszynski (1982). "The Fractional Crystallization of Plagioclase in the Hat Creek Basalt - Observations and Theory." Journal of Geology **90**(5): 545-558.
- Anderson, A. T. (1983). "Oscillatory Zoning of Plagioclase - Nomarski Interference Contrast Microscopy of Etched Polished Sections." American Mineralogist **68**(1-2): 125-129.
- Harris, D. M. and A. T. Anderson (1983). "Concentrations, Sources, and Losses Of H<sub>2</sub>O, CO<sub>2</sub>, And S in Kilauean Basalt." Geochimica et Cosmochimica Acta **47**(6): 1139-1150.
- Ito, E. and A. T. Anderson (1983). "Submarine Metamorphism of Gabbros from the Mid-Cayman Rise - Petrographic and Mineralogic Constraints on Hydrothermal Processes at Slow-Spreading Ridges." Contributions to Mineralogy and Petrology **82**(4): 371-388.
- Ito, E., D. M. Harris and A. T. Anderson (1983). "Alteration of Oceanic-Crust and Geologic Cycling of Chlorine and Water." Geochimica et Cosmochimica Acta **47**(9): 1613-1624.
- Woodruff, L. G. and A. T. Anderson (1983). "Fracture Vesiculation of Andesitic Magma, Pavlof Area, Alaska." Journal of Geology **91**(3): 323-329.
- Anderson, A. T. (1984). "Igneous Rocks - Barker, D." Journal of Geology **92**(1): 119-120.

- Anderson, A. T. (1984). "Probable Relations Between Plagioclase Zoning and Magma Dynamics, Fuego Volcano, Guatemala." American Mineralogist **69**(7-8): 660-676.
- Anderson, A. T., G. H. Swihart, G. Artioli and C. A. Geiger (1984). "Segregation Vesicles, Gas Filter Pressing, and Igneous Differentiation." Journal of Geology **92**(1): 55-72.
- Harris, D. M. and A. T. Anderson (1984). "Volatiles H<sub>2</sub>O, CO<sub>2</sub>, and Cl in a Subduction Related Basalt." Contributions to Mineralogy and Petrology **87**(2): 120-128.
- Schwindinger, K. R. and A. T. Anderson (1987). "Probable Low-Pressure Intrusion of Gabbro into Serpentinized Peridotite, Northern California." Geological Society of America Bulletin **98**(3): 364-372.
- Sahagian, D. L., A. T. Anderson and B. Ward (1989). "Bubble Coalescence in Basalt Flows - Comparison of a Numerical-Model with Natural Example." Bulletin of Volcanology **52**(1): 49-56.
- Schwindinger, K. R. and A. T. Anderson (1989). "Synneusis of Kilauea Iki Olivines." Contributions to Mineralogy and Petrology **103**(2): 187-198.
- Skirius, C. M., J. W. Peterson and A. T. Anderson (1990). "Homogenizing Rhyolitic Glass Inclusions from the Bishop Tuff." American Mineralogist **75**(11-12): 1381-1398.
- Anderson, A. T. (1991). "Hourglass Inclusions - Theory and Application to the Bishop Rhyolitic Tuff." American Mineralogist **76**(3-4): 530-547.
- Lu, F. Q., A. T. Anderson and A. M. Davis (1992). "Melt Inclusions and Crystal-Liquid Separation in Rhyolitic Magma of the Bishop Tuff." Contributions to Mineralogy and Petrology **110**(1): 113-120.
- Qin, Z. W., F. Q. Lu and A. T. Anderson (1992). "Diffusive Reequilibration of Melt and Fluid Inclusions." American Mineralogist **77**(5-6): 565-576.
- Anderson, A. T. and G. G. Brown (1993). "CO<sub>2</sub> Contents and Formation Pressures of Some Kilauean Melt Inclusions." American Mineralogist **78**(7-8): 794-803.
- Prousevitch, A. A., D. L. Sahagian and A. T. Anderson (1993). "Dynamics of Diffusive Bubble-Growth in Magmas - Isothermal Case." Journal of Geophysical Research-Solid Earth **98**(B12): 22283-22307.
- Johnson, M. C., A. T. Anderson and M. J. Rutherford (1994). Pre-Eruptive Volatile Contents of Magmas. Volatiles in Magmas. M. R. Carroll and J. R. Holloway. **30**: 281-330.
- Sahagian, D. L., A. A. Prousevitch and A. T. Anderson (1994). "Dynamics of Diffusive Bubble-Growth in Magmas - Isothermal Case - Reply." Journal of Geophysical Research-Solid Earth **99**(B9): 17829-17832.
- Anderson, A. T. (1995). "CO<sub>2</sub> and the Eruptibility of Picrite and Komatiite." Lithos **34**(1-3): 19-25.

- Lu, F. Q., A. T. Anderson and A. M. Davis (1995). "Diffusional Gradients at the Crystal/Melt Interface and their Effect on the Composition of Melt Inclusions." Journal of Geology **103**(5): 591-597.
- Wallace, P. J., A. T. Anderson and A. M. Davis (1995). "Quantification of Pre-Eruptive Exsolved Gas Contents in Silicic Magmas." Nature **377**(6550): 612-616.
- Wallace, P. J. and A. T. Anderson (1998). "Effects of Eruption and Lava Drainback on the H<sub>2</sub>O Contents of Basaltic Magmas at Kilauea Volcano." Bulletin of Volcanology **59**(5): 327-344.
- Wallace, P. J., A. T. Anderson and A. M. Davis (1999). "Gradients In H<sub>2</sub>O , CO<sub>2</sub> , And Exsolved Gas in a Large-Volume Silicic Magma System: Interpreting the Record Preserved in Melt Inclusions from the Bishop Tuff." Journal of Geophysical Research-Solid Earth **104**(B9): 20097-20122.
- Anderson, A. T., A. M. Davis and F. Q. Lu (2000). "Evolution of Bishop Tuff Rhyolitic Magma Based on Melt and Magnetite Inclusions and Zoned Phenocrysts." Journal of Petrology **41**(3): 449-473.
- Wallace, P. J., J. Dufek, A. T. Anderson and Y. X. Zhang (2003). "Cooling Rates of Plinian-Fall and Pyroclastic-Flow Deposits in the Bishop Tuff: Inferences from Water Speciation in Quartz-Hosted Glass Inclusions." Bulletin of Volcanology **65**(2-3): 105-123.
- Gualda, G. A. R., D. L. Cook, R. Chopra, L. P. Qin, A. T. Anderson and M. Rivers (2004). "Fragmentation, Nucleation and Migration of Crystals and Bubbles in The Bishop Tuff Rhyolitic Magma." Transactions of the Royal Society of Edinburgh-Earth Sciences **95**: 375-390.
- Liu, Y., A. T. Anderson, C. J. N. Wilson, A. M. Davis and I. M. Steele (2006). "Mixing and Differentiation in the Oruanui Rhyolitic Magma, Taupo, New Zealand: Evidence from Volatiles and Trace Elements in Melt Inclusions." Contributions to Mineralogy and Petrology **151**(1): 71-87.
- Gualda, G. A. R. and A. T. Anderson (2007). "Magnetite Scavenging and the Buoyancy of Bubbles in Magmas. Part 1: Discovery of a Pre-Eruptive Bubble in Bishop Rhyolite." Contributions to Mineralogy and Petrology **153**(6): 733-742.
- Holness, M. B., A. T. Anderson, V. M. Martin, J. Maclennan, E. Passmore and K. Schwindinger (2007). "Textures in Partially Solidified Crystalline Nodules: A Window Into the Pore Structure of Slowly Cooled Mafic Intrusions." Journal of Petrology **48**(7): 1243-1264.
- Liu, Y., A. T. Anderson and C. J. N. Wilson (2007). "Melt Pockets in Phenocrysts and Decompression Rates of Silicic Magmas Before Fragmentation." Journal of Geophysical Research-Solid Earth **112**(B6).
- Gualda, G. A. R., A. S. Pamukcu, M. S. Ghiorso, A. T. Anderson, S. R. Sutton and M. L. Rivers (2012). "Timescales of Quartz Crystallization and the Longevity of the Bishop Giant Magma Body." Plos One **7**(5).
- Pamukcu, A. S., G. A. R. Gualda and A. T. Anderson (2012). "Crystallization Stages of the Bishop Tuff Magma Body Recorded in Crystal Textures in Pumice Clasts." Journal of Petrology **53**(3): 589-609.