**Classic Papers in Metamorphic Petrology**

Compiled from contributions to the Geo-Metamorphism listserv January 2012

Carmichael, D., 1978, Metamorphic bathozones and bathograds: American Journal of Science, v. 278, no. 6, p. 769-797.

Coleman, R.G., Lee, D.E., Beatty, W.B., and Brannock, W.W., 1965, Eclogites and eclogites: their differences and similarities: Geological Society of American Bulletin, v. 76, no. 5, p 483-508.

Dodson, M.H., 1973, Closure temperature in cooling geochronological and petrological systems: Contributions to Mineralogy and Petrology, v. 40, no. 3, p. 259-274.

England, P.C., and Thompson, A B., 1984, Pressure-temperature-time paths of regional metamorphism: I. Heat transfer during the evolution of regions of thickened continental crust: Journal of Petrology, v. 25, no. 4, p. 894-928.

Ernst, W.G., editor, 1975, Metamorphism and plate tectonics: Stroudsburg, Pennsylvania, Dowden, Hutchinson, and Ross Inc., Benchmark Papers in Geology, 440 p.

Ghent, E.D., 1976, Plagioclase-garnet-Al2SiO5-quartz; a potential geobarometer-geothermometer: American Mineralogist, v. 61, no. 7-8, p. 710-714.

Greenwood, H.J., 1967, The N-dimensional tie-line problem: Geochimica et Cosmochimica Acta, v. 31, no. 4, p. 465-490.

Guidotti, C.V., 1982. A review of chemical and petrographic criteria for defining metamorphic grades and for recognition of discontinous mineral reactions: Examples from metapelites: Rendiconti della Societa Italiana di Mineralogia e Petrologia, v. 38, no. 2, p. 533-542.

Kerrick, D.M., and Jacobs, G.K., 1981, A modified Redlich-Kwong equation for H2O, CO2, and H2O-CO2 mixtures at elevated pressures and temperatures: American Journal of Science, v. 281, no. 6, p. 735-767.

Miyashiro, A., 1961, Evolution of metamorphic belts: Journal of Petrology, v. 2, no. 3, p.

277-311

Spear, F.S., and Selverstone, J., 1983, Quantitative P-T paths from zoned minerals: theory and tectonic applications: Contributions to Mineralogy and Petrology, v. 84., no. 3-4, p. 348-357.

Thompson, A.B., and England, P. C., 1984, Pressure-temperature-time paths of regional metamorphism: II. Their inference and interpretation using mineral assemblages in metamorphic rocks: Journal of Petrology, v. 25, no. 4, p. 929-955.

Thompson, J.B., 1955, The thermodynamic basis for the mineral facies concept: American Journal of Science, v. 253, no. 2, p. 65-103.

Touret, J. (L.R.) (1971) - Le facies granulite en Norvège Méridionale. I: Les associations minéralogiques. Lithos, 4, 239-249. II: Les inclusions fluides. Lithos, 4, 423-436.

Villa, I.M., 1998, Isotopic closure: Terra Nova, v. 10, no. 1, p. 42-47.

**Solid Inclusion Piezothermometry—From John Rosenfeld**

Rosenfeld, J.L., and Chase, A.B., 1961, Pressure and temperature of crystallization from elastic effects around solid inclusions in minerals?: American Journal of Science, v.259, no. 7, p. 519-541.

Rosenfeld, J.L.,1969,Stress effects around quartz inclusions in almandine and the piezothermometry of coexisting aluminum silicates: American Journal of Science, v.267, no. 3, p. 317-351.

Adams, H G., Cohen, L.H., and Rosenfeld, J.L., 1975, Solid inclusion piezothermometry I:  Comparison dilatometry: American Mineralogist, v.60, no.7-8, p. 574-583.

Adams, H.G., Cohen, L.H., and Rosenfeld, J.L., 1975, Solid inclusion piezothermometry II:  Geometric basis, calibration for the association quartz-garnet, and application to some pelitic schists: American Mineralogist, v.60, no.7-8, p. 584-598.

Cohen, L.H. and Rosenfeld, J.H., 1979,Diamond: depth of crystallization inferred from compressed included garnet: Journal of Geology, v.87, no. 3, p. 333-340.

**Tectonometamorphism**

Rosenfeld, J.L., 1968, Garnet rotations due to the major Paleozoic deformations in southeast Vermont *in* Zen, E., White, W.S., Thompson, J.B., and Hadley, J.B., editors,Studies of Appalachian geology: Northern and Maritime: New York, Wiley-Interscience, p. 185-202.

Rosenfeld, J.L, 1970*,* Rotated garnets in metamorphic rocks: Boulder, Colorado, Geological Society of America Special Paper129, 105 p.

**Tectonometamorphic Mineral Kinetics**

Carlson, W.D., and Rosenfeld. J.L., 1981, Optical determination of topotactic aragonite-calcite growth kinetics:  metamorphic implications: Journal of Geology, v.89, no. 5, p. 615-638.

**Preferred Orientation**

Rosenfeld, J.L., 1985, Schistosity,*in* Went, H.R., editor, Preferred orientation in deformed metals and rocks:  An introduction to modern texture analysis: Orlando, Academic Press Inc., p. 441-461.

**Tectonometamorphic Rates**

Christensen, J.N., Rosenfeld, J.L, and DePaolo, D.J., 1989, Rates of tectonometamorphic processes from rubidium and strontium isotopes in garnet: Science, v.244, no. 4911, p. 1465-1469.

Christensen, J.N., Selverstone, J., Rosenfeld, J.L., and Depaolo, D.J., 1994,Correlation of Rb-Sr geochronology of garnet growth histories from different structural levels within the Tauern Window, eastern Alps: Contributions to Mineralogy and Petrology, v. 118, no. 1, p. 1-12.