ERRATUM AND ADDENDUM

Petrogenetic implications of the Fe³⁺ content of muscovite in pelitic schists, by C. V. Guidotti, M. G. Yates, M. D. Dyar, and M. E. Taylor (v. 79, p. 793–795, 1994).

It has been called to the attention of C. V. Guidotti, senior author of Guidotti et al. (1994), that the papers of Hoisch (1989, 1990) were incorrectly cited as having used the ratio Mg/(Mg + Fe_{tot}) for cation-exchange geothermobarometry purposes. In fact, Hoisch (1989) used the ratio Mg/⁽⁶⁾Al, and both papers avoided equilibria involving Fe-components of muscovite. The senior author accepts full responsibility for this unfortunate mistake.

This is an opportune time to alert readers also to the paper of Baldelli et al. (1989), which, although not discussing the effects of Fe^{3+} on the Mg/(Mg + Fe^{2+}) ratio, provides very important, additional insights regarding the significant extent to which Fe^{3+} can replace ^[6]Al, especially in highly phengitic muscovite. They reported a phengitic muscovite from an Al-poor magnetite-bearing specimen that contains 6.59 wt% Fe_2O_3 and only 0.3 wt% FeO. On a 22 O atom formula basis this converts to $0.672Fe^{3+}$ and only $0.034Fe^{2+}$. Hence, the Tschermak exchange (Si = 6.603) is almost wholly in terms of Mg²⁺.

References cited

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