FIGURE 19.1 Temperature variation of the isotope fractionation factor for oxygen between minerals and water. The relationship is expressed by equations of the form: $1000 \ln \alpha = A(10^6 T^{-2}) + B$, where T is the temperature in degrees Kelvin. The equations for the different minerals are listed in Table 19.1. The relationship between α and T for magnetite and water is strongly nonlinear in this temperature range. (Line A is based on O'Neil and Clayton, 1964, and line B is from Hoefs, 1973. For additional information, see Figure 2 of Taylor, 1974.)