

# Quadrupole Coupling in Ammonium Metaperiodate at Low Temperature

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The temperature dependences of the  $^{127}\text{I}$  nuclear quadrupole coupling in  $\text{NH}_4\text{IO}_4$  and in  $\text{ND}_4\text{IO}_4$  are reported. In each salt, the quadrupole coupling decreases to a very small value at low temperatures, and in the case of  $\text{ND}_4\text{IO}_4$  passes through zero and changes sign at 87 K.

*Key words:* NQR; NMR; Temperature Dependence; Isotope Effect.