Halogen NQR and the Phase Transition in CH₃Hg-Halide Family

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The temperature dependence of the ³⁵Cl NQR line and its relaxation has been measured from 77 K to room temperature. The known displacive phase transition near 162 K is reflected in the change of the slope of the temperature dependence of the quadrupole line, but not so in the chlorine or proton relaxation. The results are discussed in view of the proposed structural changes and thermal vibrations.

Key words: Methylmercury Chloride; NQR; Crystal Structure; Phase Transition; Thermal Vibrations.