

$^{85,87}\text{Rb}$, ^{14}N NMR Studies of Successive Phase Transitions and Incommensurate Phase in $\text{R}_2\text{Pb}[\text{Cu}(\text{NO}_2)_6]$ ($\text{R} = \text{NH}_4$, Rb)

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$^{85,87}\text{Rb}$ and ^{14}N NMR spectra and spin-lattice relaxation time (T_1) were measured for $\text{R}_2\text{Pb}[\text{Cu}(\text{NO}_2)_6]$ ($\text{R} = \text{Rb}, \text{NH}_4$). The quadrupole coupling constant (e^2Qq/h), asymmetry parameter (η), and the effective transverse relaxation time (T_2^*) were estimated from the simulation of NMR spectra. The NMR spectra in commensurate phase III can be explained by the superposition of two components corresponding to two inequivalent sites of the R^+ ion. In the incommensurate phase II, e^2Qq/h and T_2^* decreased with increasing temperature, while η was almost temperature independent. T_1 in phase II is found to be determined by the contribution of acoustic phason with multi-soliton limits.

Key words: Phase Transition; Incommensurate Phase; ^{14}N NMR; $^{85,87}\text{Rb}$ NMR