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THE NUCLEAR MAGNETIC RESONANCE SPECTRUM OF LIQUID VC_{14}

David W. Pratt and Rollie J. Myers

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THE NUCLEAR MAGNETIC RESONANCE SPECTRUM OF LIQUID VC1_4

David W. Pratt and Rollie J. Myers

August, 1968

The Nuclear Magnetic Resonance Spectrum of Liquid VCl_4

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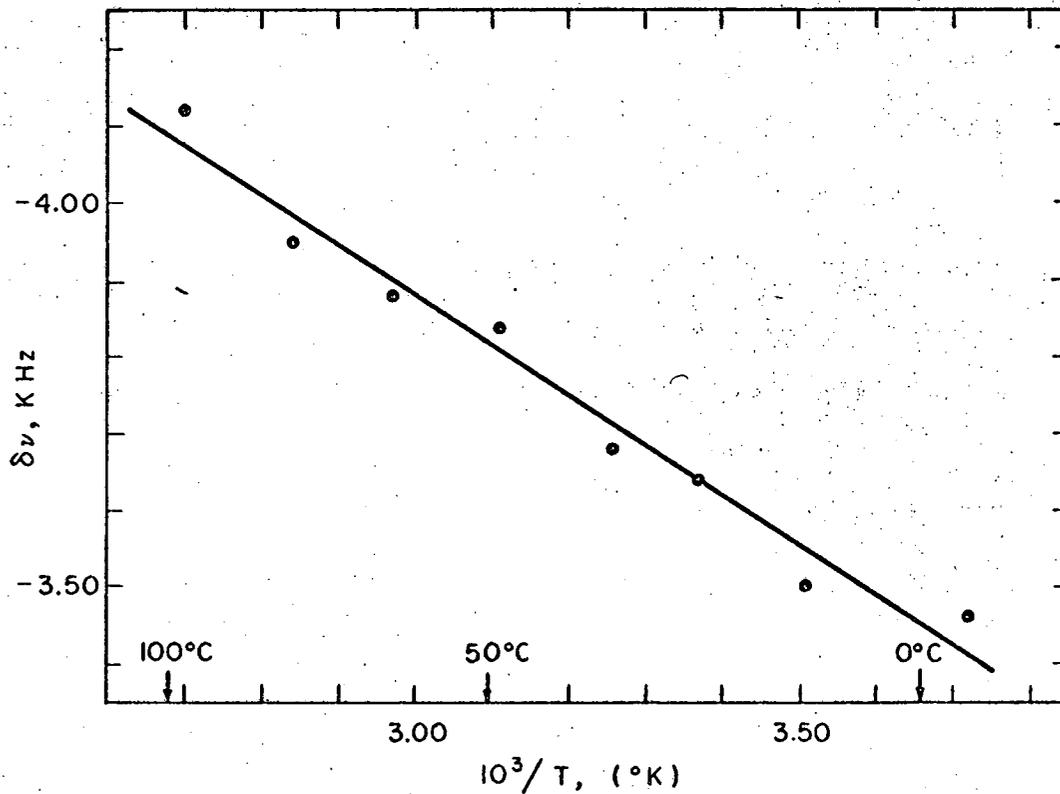
As part of a general investigation of the magnetic resonance properties of VCl_4 , we have measured the NMR spectrum of the liquid. While VCl_4 is paramagnetic,¹ there was good reason to believe that it had the proper correlation times² to give it an observable NMR spectrum. In particular, the electronic spin-lattice relaxation time was presumed to be less than 10^{-9} sec since no EPR spectrum can be observed above about $50^\circ K$.^{3,4,5}

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Figure 1. A plot of the ^{35}Cl NMR frequency shift of VCl_4 with respect to aqueous Cl^- . The straight line represents a least squares fit to the data.

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