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THE NUCLEAR MAGNETIC RESONANCE SPECTRUM OF LIQUID VCl₄

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Authors

Pratt, David W.
Myers, Rollie J.

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David W. Pratt and Rollie J. Myers

August, 1968

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Submitted to the Journal of Chemical
Physics as a Note

UCRL-18517
Preprint

UNIVERSITY OF CALIFORNIA

Lawrence Radiation Laboratory
Berkeley, California

AEC Contract No. W-7405-eng-48

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 David W. Pratt^{*} and Rollie J. Myers

Department of Chemistry of the
University of California and the
Inorganic Materials Research Division of the
Lawrence Radiation Laboratory,
Berkeley, California 94720

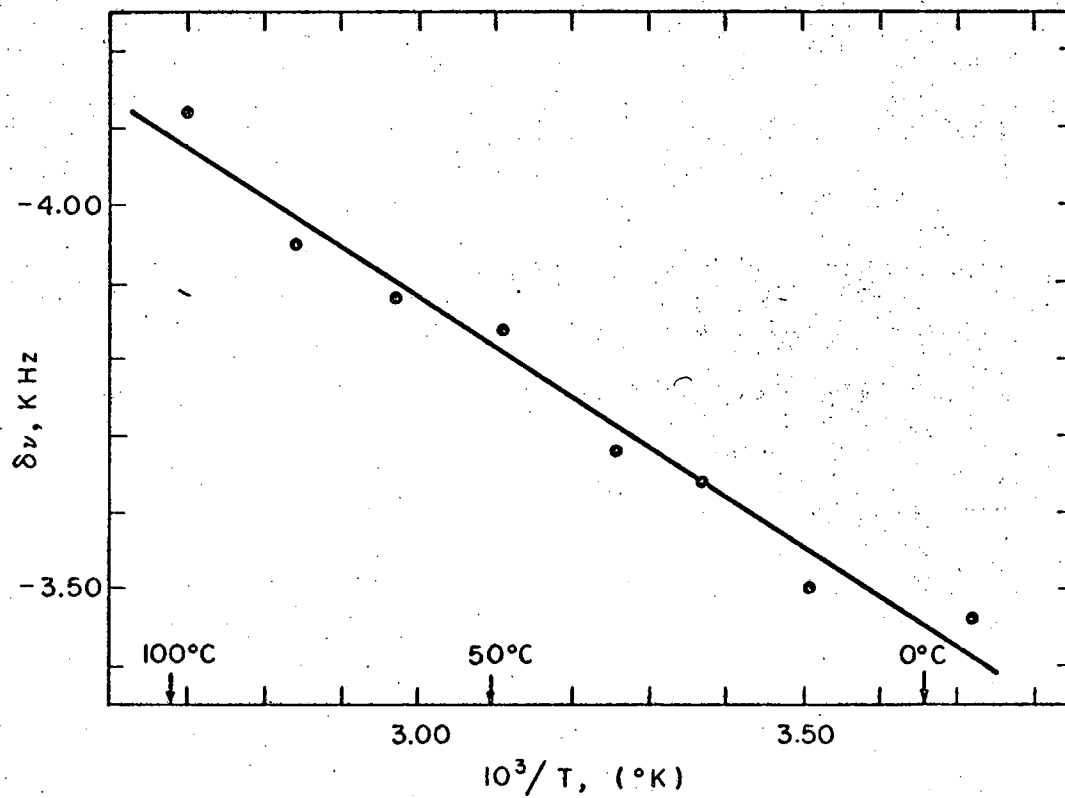
As part of a general investigation of the magnetic resonance properties of VCl_4 , we have measured the NMR spectrum of the liquid. While VCl_4 is paramagnetic,¹ there was good reason to believe that it had the proper correlation times² to give it an observable NMR spectrum. In particular, the electronic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

* Present address: Department of Chemistry, University of Pittsburgh, Pittsburgh, Pennsylvania.

The help of Professor R. E. Connick and Dr. R. S. Marianelli is gratefully acknowledged. This work was supported by the United States Atomic Energy Commission.

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XBL673-2353

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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