

⁵¹V NMR Study on Vanadium(V)- Propylenediaminetetraacetate Complex in Solution

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The solution properties of two isomeric forms of V-PDTA complex(the symmetric α -*cis* and asymmetric β -*cis*) have been studied using multinuclear NMR spectroscopy. The [α -*cis*]/[β -*cis*] ratio was determined by integration of two peaks of ⁵¹V-NMR spectra. The isomerization constant and corresponding thermodynamic parameters were determined under a variable temperature. And the isomerization constant of the aqueous equilibrium mixture was changed by the addition of organic solvents(methanol, formamide, and DMSO).