

solutions in isopropylamine–diethyl ether mixtures. The magnetic susceptibility of Cs₁₈C₆ crystals was measured from 1.7 to 270 K with an SHE Corp. Model VTS Squid susceptometer. The compound is essentially diamagnetic, with only about 1% unpaired spins. Single-crystal EPR spectra show the presence of two overlapping lines. One has $g = 2.0023$ and a line width of ~ 0.75 G, independent of temperature from -135 to $+51$ °C. The other line has a smaller g value (~ 2.0016) and shows g anisotropy upon rotation. It has a line width that broadens from ~ 1.25 G at -135 °C to ~ 3.5 G at $+31$ °C.

The stoichiometry suggests two possibilities for this compound, Cs⁺18C₆e⁻ and Cs⁺(18C₆)₂Cs⁻. The former interpretation is favored for three reasons: (1) Previous optical spectra of 1:1 Cs₁₈C₆ films did not show the characteristic peak of Cs⁻ at ~ 1000 nm^{3,5} but rather a single peak at 1500 nm attributed to trapped electrons.⁵ When crystals of Cs₁₈C₆ were dissolved in methylamine, dry annealed films produced by solvent evaporation also showed only the electride peak at 1500 nm. (2) Crystals of Cs⁺18C₆Na⁻ have been synthesized and analyzed.¹⁰ Therefore, if a ceside were to form, one might expect it to have the stoichiometry Cs⁺18C₆Cs⁻ rather than Cs⁺(18C₆)₂Cs⁻. (3) Polycrystalline samples of Cs₁₈C₆ have dc powder conductivities that vary logarithmically with $1/T$. The band gap over the temperature

range -54 to $+10$ °C is ~ 0.6 eV, thus verifying localization of the electron (or electron pair). This gap appears to be too small for a ceside salt.

These results show that it is possible to prepare stable crystalline samples of stoichiometry Cs₁₈C₆. Although the compound could be a ceside salt (if so, this is the first stable ceside), it is more reasonably described as an electride in which the electrons are trapped in potential wells at ~ 0.6 eV, below the conduction band. Electron spin pairing leads to a diamagnetic ground state. Although the concentration of unpaired spins is high enough to be easily measured, we cannot be certain at this time whether this is an intrinsic bulk property of the pure compound or is the result of defects. Work is in progress to grow better crystals for diffraction studies and to carry out quantitative single-crystal EPR studies.

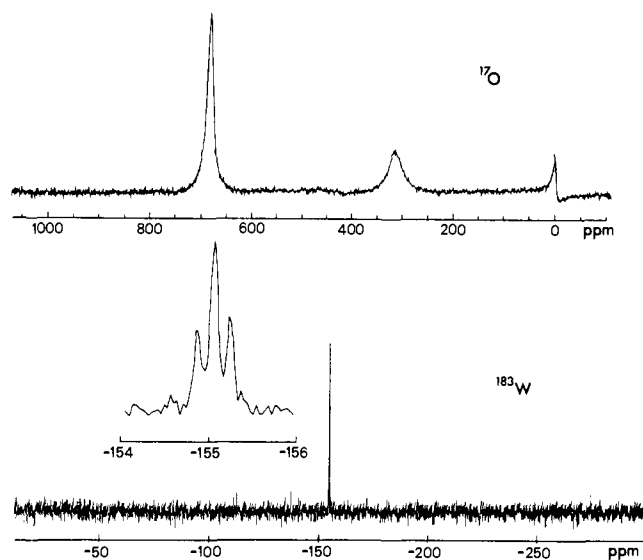
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Registry No. Cs⁺18C₆e⁻, 82065-73-4.

Additions and Corrections

Heteropolytungstobisphosphonates. Cyclopentane-Like Pseudorotation of an Oxometalate Structure [*J. Am. Chem. Soc.* 1981, 103, 7665–7666]. P. R. SETHURAMAN, M. A. LEPARULO, M. T. POPE,* F. ZONNEVILLE, C. BRÉVARD, and J. LEMERLE.

Page 7665: In Figure 2 the line in the ¹⁸³W NMR spectrum was not reproduced. Figure 2 below shows the missing line.



New Multidentate Ligands. X. Chelating Tendencies of *N,N'*-Diglycylethylenediamine-*N'',N''',N''',N''''*-tetraacetic Acid and Ethylenediamine-*N,N'*-di(acetylglycine)-*N,N'*-diacetic Acid [*J. Am. Chem. Soc.* 1970, 92, 4223]. R. J. MOTEKAITIS and A. E. MARTELL.*

It has come to our attention that Figure 3 in this paper was omitted in the final printing process and that the figure that appeared as Figure 3 is a duplicate of Figure 1. Because of this error the results described in our paper have been misinterpreted and our conclusions have been questioned.

EDDAG-DA by the Fe(III) ion to form a very stable Fe(III) chelate compound. This is the first example of the formation

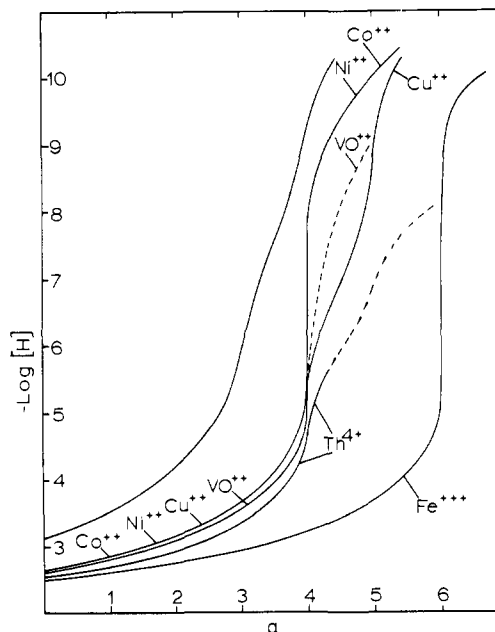


Figure 3. Potentiometric equilibrium curves for 1:1 molar ratios of metal ions to EDDAG-DA: the unlabeled curve represents the titration of pure ligand; broken lines represent precipitation; a = moles of 0.10 M base added per mole of ligand; concentration is 0.0010 M in ligand and metal ion; solution contains 0.10 M KNO₃; $t = 25$ °C.

The correct Figure 3, presented here, provides experimental proof for the displacement of two amide protons from the ligand

