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Additions and Corrections

B. Pfleiderer, K. Albert, E. Bayer, L. van de Ven, J. de Haan,* and C. Cramers: A New Approach to the Silica Gel Surface Characterization of Different Surface Regions by 29Si Magic Angle Spinning NMR Relaxation Parameters and Consequences for Quantification of Silica Gels by NMR.

Page 4194. The following acknowledgment should have appeared: The authors are indebted to M. Hetem and P. Wijnen for stimulating discussions.

ADDITIONS AND CORRECTIONS

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Figure 3. Dependence of mole fractions of complexed species, \((1 - 2P')/P'\), on the inverse cubic ligand concentration, \(1/\left[L/Mol\right]^3\), for a 2:2 ratio of complexing of 12-crown-4/LiCl in methanol-d.

Figure 4. Dependence of log equilibrium constants on the sum of the complexing stoichiometries in 12-crown-4/LiCl solutions.

On the other hand, the y intercept of these plottings was expected to be close to zero for an increased ion/ligand chain; this was observed, providing another piece of evidence for the existence of a multiple degree of but not multistep complex formation. In all of the studies carried out in our laboratory, exactly the same results were observed. It could be concluded that the actual stoichiometry is different than usual, and the parent solvent (e.g., water or methanol) has a reasonable effect, depending on the cyclic ligand size and the conformation. In order to characterize the theory, utility and the practise of this topic, the 12-crown-4/Li+ complex is the most suitable structure. Specificity, several types of stoichiometries of such complexation are clearly displayed in Tables II, III, and IV and Figures 2 and 3. This type of interactions has been predicted before; however, a typical one was observed in the present study.

We should have also mention that, despite the small changes in relaxation time in the encapsulated structure, the log \(K_e\) values change dramatically while \((n + m)\) is increased (see Figure 4 and Table V). It is interesting to note that a linear relationship with the correlation factor of 0.999 was observed between the increased stoichiometry \((m + n = 2, 3, 4, \ldots)\) and log \(K_e\) (therefore free energy) of complex formation, Figure 4.