Inorganic Chemistry

Addition/Correction

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# Correction to Magnetic Mn and Co Complexes with a Large Polycyclic Aromatic Substituted Nitronylnitroxide

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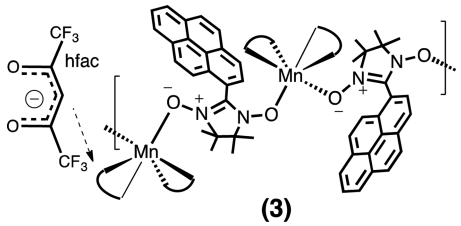
Page 3144. We reported[1] the Mn(II)-to-radical exchange coupling constant of chain coordination compound **3** to be $J = -1100 \pm 150$ cm$^{-1}$.




**(3)**

This value was obtained using literature equations based on Seiden's model[2] that we cited from two different sources.[2,3] However, in reconciling equations from the two sources, we fitted the final data following the version that we have since found to use a misplaced factor of 2, giving an erroneous 4-fold overlarge value for $J$.

$$\chi T = \frac{N\mu_B^2}{3k}\left\{g_{Mn}^2 S_{Mn}^2\left(\frac{S_{Mn}+1}{S_{Mn}} + \frac{2\delta}{1-\delta}\right) - 4g_{Mn}g_R\Lambda S_R S_{Mn}\frac{1}{1-\delta} + g_R^2\left(S_R(S_R+1) + 2\Lambda^2 S_R^2\frac{1}{1-\delta}\right)\right\}$$

$$\gamma = -JS_{Mn}/kT$$

$$a_0 = 4(\gamma^{-1}\sinh\gamma - \gamma^{-2}\cosh\gamma + \gamma^{-2})$$

$$a_1 = 12[(\gamma^{-1} + 12\gamma^{-3})\sinh\gamma - (5\gamma^{-2} + 12\gamma^{-4})\cosh\gamma - \gamma^{-2} + 12\gamma^{-4}]$$

$$b_0 = \gamma^{-1}(\cosh\gamma - 1)$$

$$b_1 = 3[(\gamma^{-1} + 4\gamma^{-3})\cosh\gamma - 4\gamma^{-2}\sinh\gamma + \gamma^{-1} - 4\gamma^{-3}]$$

$$\delta = \frac{a_1}{3a_0}, \quad \Lambda = 2\left(\frac{b_1}{3a_0} + \frac{b_0}{a_0}\right) \tag{1}$$

The now-corrected Mn(II)-to-radical exchange is $J = -275 \pm 38$ cm$^{-1}$, using the chain-type Hamiltonian $H = -J\sum S_i \cdot S_{i+1}$. No conclusions of the paper are changed: the corrected value still reflects strong antiferromagnetic exchange, as originally stated.

## REFERENCES

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(2) Seiden, J. *J. Phys., Lett.* **1983**, *44*, L-947.

(3) Ise, T.; Ishida, T.; Hashizume, D.; Iwasaki, F.; Nogami, T. *Inorg. Chem.* **2003**, *42*, 6106.

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