

Correction to Monofluoride Bridged, Binuclear Metallacycles of First Row Transition Metals Supported by Third Generation Bis(1-pyrazolyl)methane Ligands: Unusual Magnetic Properties [*Inorganic Chemistry* 2009, 48, 10658–10669 DOI: 10.1021/ic901352p]. Daniel L. Reger,* Elizabeth A. Foley, Russell P. Watson, Perry J. Pellechia, Mark D. Smith, Fernande Grandjean, and Gary J. Long*

Page 10659. The assumption made in this paper that the gelatin capsules used to hold the samples in the SQUID measurements “make a negligible contribution to the overall magnetism” is incorrect for the $3d^9$, strongly antiferromagnetically coupled compound $[\text{Cu}_2(\mu\text{-F})(\mu\text{-}m\text{-}[\text{CH}(\text{pz})_2]_2\text{C}_6\text{H}_4)_2](\text{BF}_4)_3$ (**4**). Analysis of a new data set¹ in which the susceptibility of the sample container was measured independently and the data were corrected appropriately yields the results shown in corrected Figure 8 (p 10666) where, using the Hamiltonian $\mathcal{H} = -2JS_1 \cdot S_2$, the J value (Abstract on p 10658 and pp 10665 and 10668) is calculated as $-181.3(4) \text{ cm}^{-1}$ with a g value² of 2.153(3). The Cu(II) ions in compound **4** are strongly antiferromagnetically coupled, but not to the degree indicated in the original paper. Table 4 (p 10668) is also corrected as shown below.

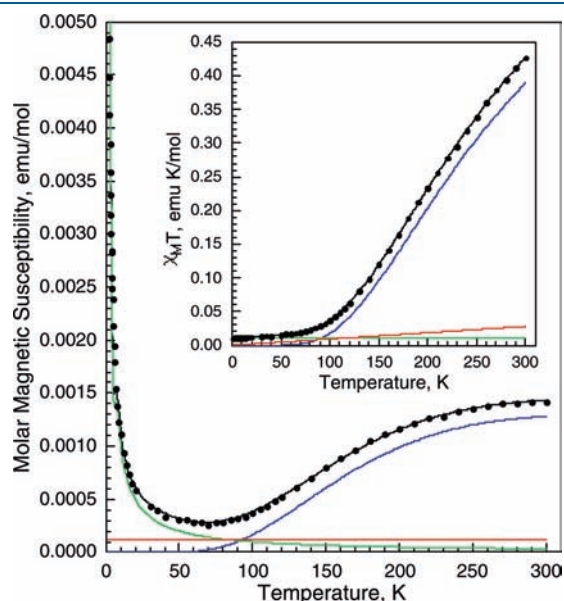


Figure 8. Molar magnetic susceptibility of $4 \cdot 2\text{H}_2\text{O}$ versus temperature. Inset: $\chi_{\text{M}}T$ versus temperature. Black: data points and total fit. Blue: dimer fit with $S_1 = S_2 = 1/2$, $g = 2.153(3)$, and $J = -181.3(4) \text{ cm}^{-1}$. Red: second-order Zeeman contribution, $N\alpha = 0.000093(6) \text{ emu/mol}$. Green: 2.72(4)% of an unknown paramagnetic impurity that is assumed to have $g = 2.00$ and $S = 1/2$.

Table 4. Solid State Magnetic Properties

complex	$J, \text{ cm}^{-1}$	g	$D, \text{ cm}^{-1}$	$E, \text{ cm}^{-1}$
$[\text{Fe}_2(\mu\text{-F})(\mu\text{-L}_m)_2](\text{BF}_4)_3$, 1	$-10.4(2)$	$2.12(2)$ – $2.15(2)$	$-10.2(3)$	$-2.0(5)$
$[\text{Co}_2(\mu\text{-F})(\mu\text{-L}_m)_2](\text{BF}_4)_3$, 2	$-0.67(5)$	$2.45(1)$		$\pm 61(2)$
$[\text{Cu}_2(\mu\text{-F})(\mu\text{-L}_m)_2](\text{BF}_4)_3$, 4	$-181.3(4)$	$2.153(3)$		

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REFERENCES

- (1) The magnetic susceptibility has been remeasured using a MPMS-XL-5 SQUID magnetometer at the Faculty of Chemistry, Wroclaw University, Poland.
- (2) The g value was verified by EPR analysis: Ozarowski, A., unpublished results.

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