

and the energies of the Cu(II) d orbitals are the lowest of the bivalent ion complexes in the first transition series. So, the overlap between the single-occupied  $3d_{x^2-y^2}$  orbitals and the symmetry-adapted  $\sigma$  orbital of pyrazine is smaller for Fe(II) than for Cu(II) leading to a weaker antiferromagnetic coupling. Although a  $\pi$  pathway involving likely the  $3d_{xz}$  and  $3d_{yz}$  magnetic orbitals of Fe(II) would reinforce the antiferromagnetic coupling in this compound, the existence of ferromagnetic terms<sup>19</sup> for a multielectron center such as Fe(II) counterbalances this additional antiferromagnetic contribution and leads to the above mentioned trend of  $J$  values.

To conclude, the use of slow-diffusion techniques enabled us to grow single crystals of the insoluble polymeric  $[\text{Fe}(\text{pyz})_2(\text{NCS})_2]_n$  compound. Its crystal structure was solved, and its magnetic properties were reinvestigated and compared to the ones

of related systems in the light of available structural data. More efforts should be devoted to obtain single crystals of such nice low-dimensional systems in order to establish useful magneto-structural correlations.

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**Supplementary Material Available:** Tables of crystallographic and structure refinement data (Table S1), thermal parameters (Table S2), and hydrogen coordinates (Tables S3) and a projection of the structure of  $[\text{Fe}(\text{pyz})_2(\text{NCS})_2]_n$  along the diagonal of the  $xy$  plane (Figure S1) (4 pages); a listing of observed and calculated structure factors (Table S4) (3 pages). Ordering information is given on any current masthead page.

## Additions and Corrections

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**Ronald R. Ruminski\* and Jaqueline L. Kiplinger:** Synthesis and Characterization of Cyanoiron(II) Complexes Bound to the Bridging Ligand Tetrakis(2-pyridyl)-1,4-diazine (tpd).

Page 4583. In Table III, the ion  $[\text{Ru}(\text{tpd})_2]^{2+}$  should replace the ion  $[\text{Ru}(\text{tpy})(\text{tpd})]^{2+}$ , and  $H_g$  for  $[\text{Fe}(\text{CN})_3(\text{tpd})]^-$  is at 7.58 ppm.

Page 4584. Beginning at the sixth sentence of the first complete paragraph, the text should read as follows: It is of interest to note that for the  $[\text{Fe}(\text{CN})_3(\text{tpd})]^-$  ion, the  $H_g$  doublet is shifted downfield with respect to the  $H_d$  and  $H_y$  triplets, in contrast with the case for the previously reported  $[(\text{Ru}(\text{tpy}))_2(\text{tpd})]^{4+}$  ion, where  $H_g$  was reported further upfield from the  $H_d$  triplet. The comparative upfield shift observed for  $H_g$  in the bimetallic  $[(\text{Ru}(\text{tpy}))_2(\text{tpd})]^{4+}$  ion is attributed to that proton being held in a strongly shielding position above the plane of the orthogonal tpy ligand. The relative downfield position of  $H_g$  in the bimetallic Fe complex is due to the proton being held coplanar and being in the deshielding region of the adjacent rings. The monometallic complex displays four sets of doublets and four sets of triplets for uncoordinated and coordinated rings. Doublets at 8.82, 8.74, 8.04, and 6.98 ppm are tentatively assigned to  $H_6$ ,  $H_3$ ,  $H_g$ , and  $H_y$ , respectively. As reported for the monometallic ruthenium complex,<sup>23</sup> the uncoordinated pyridine ring presumably rotates out of plane, resulting in an upfield shift of the coordinated  $H_y$  proton. The position of  $H_y$  in  $[\text{Fe}(\text{CN})_3(\text{tpd})]^-$  at 6.98 ppm is consistent with the previous rationale.—Ronald R. Ruminski