J.C.S. Dalton

Corrigendum to:

Correlation of Fe 11 Low-spin Mössbauer Quadrupole Splittings and the 1T_1 Splitting in the Electronic Spectra of Iron(II) Isocyanide Compounds. The Oxidation State of Tin in the Tin Trichloride Ligand 1

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During further studies on Fe^{II} isocyanide compounds, we have found that the labelling of cis- and trans-FeCl₂(ArNC)₄ was incorrectly made during the processing of our previous results. The correct labelling and the new correct assignments to the electronic spectra are given in the Table. The 2:1 trans-cis $\Delta^1 T_1$ splitting is still apparent with this new assignment. However the overall correlation between quadrupole splittings (q.s.) and $\Delta^1 T_1$ is not as satisfactory as was previously reported. The sensitivities of the q.s. and $\Delta^1 T_1$ must be appreciably different to σ and π bonding properties of ligands.

Corrections to Table 1, J.C.S. Dalton, 1972, 1209.

	Peak positions		ΔT_1	⁵⁷ Fe q.s.
Compound cis-FeCl ₂ (ArNC) ₄	Reflectance 21,000 24,200	Assignment ${}^{1}A_{1} {}^{1}E$ ${}^{1}A_{1} {}^{1}A_{2}$	(cm^{-1}) (3200	
trans-FeCl ₂ (ArNC) ₄	17,400 21,700—	${}^{1}A_{1} \xrightarrow{\longrightarrow} {}^{1}A_{2g}$ ${}^{1}A_{1} \xrightarrow{\longrightarrow} {}^{1}E_{g}$	~6000	1.55

Note: In Figure 1, spectrum (a) is due to cis-FeCl₂(ArNC)₄, and spectrum (c), to trans-FeCl₂(ArNC)₄.

¹ J.C.S. Dalton, 1972, 1209.

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