

molecular weight determinations (cryoscopic in benzene) show that they are monomers and only slightly dissociated to type I compounds and phosphine at 5°C. Absorption spectra in benzene or 1,2-dichloroethane are very similar to the reflectance spectra and show strong absorption bands in the 500–700 m μ region; this behaviour is characteristic of low-spin 5-co-ordinated complexes.^{4,5} The type II complexes, when boiled in 1-butanol, benzene or hexane, dissociated to type I complexes and phosphine. The dissociation $[\text{NiX}_2(\text{Me}_3\text{P})_3] \rightleftharpoons [\text{NiX}_2(\text{Me}_3\text{P})_2] + \text{Me}_3\text{P}$ is reversible, but evaporation of the boiling solutions gave the type I complex for X = Br and CN. For X = I, only impure products could be obtained. In ethanol, the type II complexes with X = Cl, Br, and I are dissociated to some degree in the manner $[\text{NiX}_2(\text{Me}_3\text{P})_3] \rightleftharpoons [\text{NiX}(\text{Me}_3\text{P})_3]^+ + \text{X}^-$ as shown by the conductivity (20–25 cm² mol⁻¹ ohm⁻¹ for 10⁻³ M solutions at 25°C) and by the fact that addition of lithium perchlorate in ethanol precipitated complexes of type III (Y = ClO₄) for X = Cl and Br.

With X = ClO₄ and NO₃, only compounds of type IV could be obtained. The perchlorate is remarkably stable and could be recrystallized from water. Infrared spectra in KBr suggest that the anions are not coordinated in the solid state; but the conductivity of the nitrate complex in nitrobenzene is lower than expected for bi-univalent electrolytes. Solutions of the nitrate complex in 1,2-dichloroethane become green upon heating, but a tetrahedral type I complex analogous to the ones formed by higher tertiary phosphines¹ has not yet been isolated. The red nitrate complex "(Me₃P)₂Ni(NO₃)₂" prepared by Beg and Clark² is presumably a mixture of Ni(Me₃P)₄(NO₃)₂ and Ni(NO₃)₂. When a great excess of trimethylphosphine is added to ethanolic nickel halide solutions, compounds of type IV apparently also are formed, as shown by a colour change to violet. The fourth phosphine, however, is very loosely bound when X = halogen, and only impure compounds could be isolated.

Experimental details, magnetic measurements and absorption spectra will be published in a future paper in this journal. We also hope to obtain X-ray structure determinations of some of the complexes.

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Corrigendum to "Crystal Structure and Alleged Isomerism of Dithiocyanate-tetrapyridine-iron(II)"*

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Table 9 page 2039 is completely in error. The correct table is as follows:

Table 9. Least squares planes through pyridine molecules. The equation of the planes can be expressed as $Px + Qy + Rz = S$ in direct space.

Ring A	Ring B
$P = -6.7641$	$P = 10.1594$
$Q = -0.1246$	$Q = 6.2620$
$R = -7.8752$	$R = -10.6651$
$S = 7.2774$	$S = -2.9476$

Distances of the atoms from the least squares planes in Å:

Ring A	Ring B
NA -0.005	NB 0.001
CA1 0.003	CB1 -0.001
CA2 0.001	CB2 -0.001
CA3 -0.003	CB3 0.003
CA4 0.001	CB4 -0.003
CA5 0.003	CB5 0.001

The standard deviations of the distances for both rings are 0.005 Å.

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