

dissolved in 40 mL of a 1:3 (v/v) mixture of water and acetone. The resulting mixture was stirred at room temperature for 24 h and filtered, and a solution of 3.0 g of  $\text{Pr}_4\text{NBr}$  in 30 mL of acetone was added to the resulting filtrate. After a further hour of stirring, the resulting mixture was evaporated to  $\frac{2}{3}$  the original volume and stored at 0 °C for 24 h, after which unreacted starting materials and byproducts were filtered off. The resulting filtrate was again cooled at 0 °C while small ruby red crystals appeared. The product was filtered and washed with water, absolute ethanol, and anhydrous ether. The yield was 60% (mp 149–150 °C dec). Anal. Calcd for  $\text{C}_{17}\text{H}_{38}\text{N}_2\text{NiS}_6\text{W}$ : C, 33.60; H, 6.20; N, 3.54; Ni, 9.50; S, 31.15; Mo, 15.50. Found: C, 33.04; H, 6.20; N, 4.53; Ni, 8.39; S, 29.68; Mo, 14.13.

$(\text{Pr}_4\text{N})\text{Ni}(\text{S}_2\text{CNEt}_2)(\text{WS}_4)$ .  $\text{Ni}(\text{S}_2\text{CNEt}_2)_2$  (0.067 g, 0.189 mmol) was dissolved in 20 mL of acetone, and  $(\text{Pr}_4\text{N})_2\text{Ni}(\text{WS}_4)_2$  (0.200 g, 0.189 mmol) was added to this solution, along with 20 mL of acetonitrile. The resulting red solution became golden brown after being stirred at room temperature for 12 h. The solution was evaporated to half its volume and cooled in a refrigerator for 8 h; a small amount of side product precipitated and was filtered off. Further evaporation of the reaction mixture to a volume of 10 mL resulted in the appearance of crystals upon standing at room temperature overnight. The brown crystals of product were filtered, recrystallized from  $\text{CH}_2\text{Cl}_2$ , and washed successively with water, absolute ethanol, and anhydrous ether. The yield was 70% (mp 172–173 °C dec). Anal. Calcd for  $\text{C}_{17}\text{H}_{38}\text{N}_2\text{NiS}_6\text{W}$ : C, 28.94; H, 5.42; N, 3.97; Ni, 8.32; S, 27.30; W, 26.06. Found: C, 28.83; H, 5.38; N, 3.86; Ni, 7.26; S, 25.43; W, 25.71.

$(\text{Pr}_4\text{N})\text{Pd}(\text{S}_2\text{CNEt}_2)(\text{MoS}_4)$ .  $\text{Pd}(\text{S}_2\text{CNEt}_2)_2$  (0.408 g, 1.01 mmol) was suspended in 50 mL of acetone, and  $(\text{NH}_4)_2\text{MoS}_4$  (0.264 g, 1.01 mmol) was partially dissolved in 40 mL of 1:3 (v/v)  $\text{H}_2\text{O}$ -acetone. The two suspensions were combined and stirred for 12 h at room temperature, and the resulting reaction mixture was evaporated to half its original volume. At this point any unreacted starting materials and some byproducts were removed by filtration. To the filtrate was added dropwise a solution of 2.0 g of  $\text{Pr}_4\text{NBr}$  in 40 mL of acetone,

and the resulting solution was stored overnight at 0 °C. The small amount of solid that had collected was filtered off and discarded, and the filtrate was further evaporated until small red crystals began to appear. The product was filtered and washed with water, ethanol, and ether. The yield was 65% (mp 173–174 °C). Anal. Calcd for  $\text{C}_{17}\text{H}_{38}\text{N}_2\text{PdS}_6\text{Mo}$ : C, 30.69; H, 5.76; N, 4.21; Pd, 15.99; S, 28.91; Mo, 14.42. Found: C, 30.69; H, 5.63; N, 3.99; Pd, 15.24; S, 28.88; Mo, 13.78.

$(\text{Pr}_4\text{N})\text{Pd}(\text{S}_2\text{CNEt}_2)(\text{WS}_4)$ .  $(\text{Pr}_4\text{N})_2\text{Pd}(\text{WS}_4)_2$  (1.00 g, 0.906 mmol) was dissolved in 70 mL of  $\text{CH}_3\text{CN}$ , and a solution of  $\text{Pd}(\text{S}_2\text{CNEt}_2)_2$  (0.365 g, 0.906 mmol) in 30 mL of  $\text{CHCl}_3$  was added dropwise to it. The resulting mixture was heated to reflux for 24 h, evaporated to half its original volume, and stored at 0 °C for 4 days. After this time small red crystals began to appear. The product was collected by filtration, recrystallized from hot  $\text{CH}_3\text{CN}$ , and washed with water, ethanol, and ether. The yield was 65% (mp 184–185 °C). Anal. Calcd for  $\text{C}_{17}\text{H}_{38}\text{N}_2\text{PdS}_6\text{W}$ : C, 27.11; H, 5.08; N, 3.72; Pd, 14.1; S, 25.50; W, 24.41. Found: C, 26.83; H, 4.96; N, 3.68; Pd, 14.3; S, 25.35; W, 24.23.

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**Registry No.**  $(\text{Pr}_4\text{N})_2\text{Ni}(\text{MoOS}_3)_2$ , 77121-85-8;  $(\text{Pr}_4\text{N})_2\text{Ni}(\text{WO}_3)_2$ , 77121-86-9;  $(\text{Pr}_4\text{N})_2\text{Pd}(\text{MoOS}_3)_2$ , 77071-56-8;  $(\text{Pr}_4\text{N})_2\text{Pd}(\text{WO}_3)_2$ , 77071-58-0;  $(\text{Pr}_4\text{N})_2\text{Pt}(\text{MoOS}_3)_2$ , 77071-60-4;  $(\text{Pr}_4\text{N})_2\text{Pt}(\text{WO}_3)_2$ , 77071-62-6;  $(\text{Pr}_4\text{N})\text{Ni}(\text{S}_2\text{CNEt}_2)(\text{MoS}_4)$ , 77071-64-8;  $(\text{Pr}_4\text{N})\text{Ni}(\text{S}_2\text{CNEt}_2)(\text{WS}_4)$ , 77079-67-5;  $(\text{Pr}_4\text{N})\text{Pd}(\text{S}_2\text{CNEt}_2)(\text{MoS}_4)$ , 77079-69-7;  $(\text{Pr}_4\text{N})\text{Pd}(\text{S}_2\text{CNEt}_2)(\text{WS}_4)$ , 77071-66-0;  $(\text{PrN})_2\text{Ni}(\text{WS}_4)_2$ , 73952-50-8;  $(\text{Pr}_4\text{N})_2\text{Pd}(\text{WS}_4)_2$ , 77071-67-1;  $\text{Ni}(\text{S}_2\text{CNEt}_2)_2$ , 14267-17-5;  $\text{Pd}(\text{S}_2\text{CNEt}_2)_2$ , 15170-78-2;  $(\text{Pr}_4\text{N})_2\text{Ni}(\text{MoS}_4)_2$ , 73952-49-5;  $(\text{Pr}_4\text{N})_2\text{Pd}(\text{MoS}_4)_2$ , 73952-52-0;  $\text{Cs}_2\text{MoOS}_3$ , 14348-14-2;  $\text{Cs}_2\text{WOS}_3$ , 14348-13-1;  $\text{K}_2\text{PdCl}_4$ , 10025-98-6;  $\text{K}_2\text{PtCl}_4$ , 10025-99-7;  $(\text{NH}_4)_2\text{MoS}_4$ , 15060-55-6.

## Additions and Corrections

1980, Volume 19

Avi Bino, F. Albert Cotton,\* Pascual Lahuerta, P. Puebla, and R. Usón: *o*-Phenylenebis(dimethylarsine)decarbonyltriiron. Preparation and Structure of a Compound with Two Semibridging Carbonyl Ligands.

Pages 2357–2359. The unit cell constants were incorrectly stated, but all molecular dimensions were calculated from the correct ones and are accurate. The correct cell constants are as follows:  $a = 9.538$  (2) Å,  $b = 11.404$  (2) Å,  $c = 24.070$  (3) Å,  $\beta = 99.84$  (1)°,  $V = 2580$  (1) Å<sup>3</sup>.—F. Albert Cotton

1981, Volume 20

Masato Nishizawa and Peter C. Ford\*: Long-Wavelength Excitation of Hexacyanocobaltate(III),  $\text{Co}(\text{CN})_6^{3-}$ , in Aqueous Solution. Questions Regarding Intersystem-Crossing Efficiencies.

Page 294. An unfortunate error appears in the byline of this paper. The name of the first author should be correctly spelled as follows: Masato Nishizawa—Peter C. Ford.