

Figure 1. ORTEP of drawing of [PtNi(μ-CO)(μ-dppm)<sub>2</sub>Cl<sub>2</sub>] showing 50% probability thermal ellopsoids. For clarity, only phenyl carbons bonded to phosphorus atoms have been included. Selected bond lengths (Å): Pt-Ni, 2.689 (2); Pt-Cl2, 2.374 (5); Pt-C1, 2.03 (1); Pt-P3, 2.306 (4); Pt-P4, 2.323 (4); Ni-Cl1, 2.274 (4); Ni-Cl, 1.77 (2); Ni-P1, 2.207 (4); Ni-P2, 2.209 (4); C1-O1, 1.22 (2). Bond angles (deg): P3-Pt-P4, 172.8 (1); P3-Pt-Cl2, 91.8 (2); P3-Pt-C1, 87.5 (4); P4-Pt-Cl2, 91.3 (2); P4-Pt-C1, 91.6 (4); Cl2-Pt-C1, 161.6 (5); P1-Ni-P2, 146.0 (2); P1-Ni-Cl1, 92.6(2); P1-Ni-C1, 87.1 (5); P2-Ni-Cl1, 105.8 (2); P2-Ni-C1, 90.5 (5); Cl1-Ni-C1, 149.9 (5); Pt-C1-Ni, 89.8 (6); Pt-C1-O1, 125 (1); Ni-C1-O1, 145 (1).

150.1°, respectively. The Pt-Pt distances in  $Pt_2(\mu$ dppm)<sub>2</sub>(\(\mu\)-HgCl<sub>2</sub>)Cl<sub>2</sub> and Pt<sub>2</sub>(\(\mu\)-dppm)<sub>2</sub>Cl<sub>2</sub> are 2.712 and 2.651 Å, respectively.<sup>14</sup> The Pt-Ni distance of 2.689 (2) A therefore implies the presence of metal-metal bonding which would be consistent with 18- and 16-electron counts on Ni(0) and Pt(II), respectively, 15 a formulation which is supported by the fact that 3 in CH<sub>2</sub>Cl<sub>2</sub> reverts to Ni<sub>2</sub>- $(CO)_2(\mu\text{-}CO)(\mu\text{-}dppm)_2$  and  $PtCl_2(dppm)$ . The structure of 3 is quite different from that of the related compound  $Pt_2Cl_2(\mu$ -CO)( $\mu$ -dpam)<sub>2</sub> (dpam = the arsenic analogue of dppm).16

Acknowledgment. We thank the Natural Sciences and Engineering Research Council of Canada, the Senate Research Committee of Lakehead University, and the University of Minnesota-Duluth Computer Center for their generous financial support of this work.

Registry No. 1, 113894-20-5; 2, 32423-72-6; 3, 113894-21-6;  $Ni(CO)_2(PPh_3)_2$ , 13007-90-4;  $Ni_2(CO)_2(\mu$ -CO)( $\mu$ -dppm)<sub>2</sub>, 106251-27-8; PtCl<sub>2</sub>(COD), 12080-32-9; Rh<sub>2</sub>Cl<sub>2</sub>(CO)<sub>4</sub>, 14523-22-9; Mo(C-O)<sub>5</sub>(THF), 53248-43-4; Ni, 7440-02-0; Pt, 7440-06-4.

Supplementary Material Available: Summary of crystal data, data collection parameters, and refinement details and tables of positional and thermal parameters and interatomic distances and bond angles (13 pages), a listing of observed and calculated structure factors for the X-ray structural analysis of NiPtCl<sub>2</sub>(µ- $CO)(\mu$ -dppm)<sub>2</sub> (58 pages). Ordering information is given on any current masthead page.

## Additions and Corrections

Richard G. Ball, Michael R. Burke, and Josef Takats\*: Synthesis and Comparative Study of Iron Triad M- $(CO)_4(\eta^2$ -alkyne) Complexes (M = Fe, Ru, Os; Alkyne = Bis(trimethylsilyl)acetylene). 1987, 6, 1918-1924.

An error occurred in the reported coalescence temperature,  $T_c$ , and the corresponding  $\Delta G^*_{T_c}$  for carbonyl scrambling in Ru(CO)<sub>4</sub>( $\eta^2$ -BTMSA) appearing in Table V. The correct values are  $T_c = -64$  °C and  $\Delta G^*_{Tc} = 9.0$  kcal/mol. As a consequence, the trend in  $\Delta G^*$  for carbonyl scrambling now should be Fe = Ru < Os. Furthermore, although the inverse relationship between  $\Delta G^*$  and  $\Delta \delta$  and  $\Delta \nu_{\rm CC}$ , shown graphically in Figure 4, is still correct, the linear relationship between these properties as the metal is changed is no longer valid. Admittedly the consequences of the error in  $T_c$  are not insignificant; nevertheless, they do not adversely effect the major conclusions of the paper. In particular, the importance of both  $\sigma/\pi$  components of the metal alkyne interaction in this series of compounds is valid. The unexpectedly similar  $\Delta G^*_{T_c}$  for carbonyl scrambling of the Fe and Ru compounds further emphasizes the special behavior of Ru and other second-row transition metals when compared to their first- and

third-row congeners. We regret the error and the attendant changes.

Yan-Lung Shi, Yi-Ci Gao, Qi-Zhen Shi,\* David L. Kershner, and Fred Basolo\*: Oxygen Atom Transfer Reactions to Metal Carbonyls. Kinetics and Mechanism of CO Substitution Reactions of  $M(CO)_6$  (M = Cr, Mo, W) in the Presence of  $(CH_3)_3NO$ . 1987, 6, 1528-1531.

Table V on page 1531 should be corrected as follows.

| compd               | nucleophile            | T, °C | k, M <sup>-1</sup> s <sup>-1</sup> | ref |
|---------------------|------------------------|-------|------------------------------------|-----|
| Cr(CO) <sub>6</sub> | N <sub>3</sub> -       | 30.0  | $9.7 \times 10^{-3}$               | 12  |
|                     | $PhCH_2MgCl$           | 27.0  | 0.053                              | 13b |
| $Mo(CO)_6$          | PhCH <sub>2</sub> MgCl | 27.0  | 0.091                              | 13b |
| W(CO) <sub>6</sub>  | CN-                    | 95.0  | $5.2 \times 10^{-3}$               | 11b |
|                     | PhCH <sub>2</sub> MgCl | 27.0  | 0.108                              | 13b |
|                     | Me <sub>3</sub> NO     | 25.0  | 0.366                              | а   |

In the abstract and the text, PhCH<sub>2</sub>MgCl should replace PhCH<sub>2</sub>MgBr.

<sup>(14)</sup> Sharp, P. R. Inorg. Chem. 1986, 25, 4185. Manojlovic-Muir, Lj.; Muir, K. W.; Solomun, T. Acta Cryst., 1979, B35, 1237.

<sup>(15)</sup> The Fe-Pt bond distance in (OC)<sub>3</sub>Fe( $\mu$ -dppm)( $\mu$ -CO)PtBr<sub>2</sub> is almost identical at 2.647 (4) A. Jacobsen, G. B.; Shaw, B. L.; Thorn-

ton-Pett, M. J. Chem. Soc., Dalton Trans. 1987, 3079.
(16) Brown, M. P.; Keith, A. N.; Manojlovic-Muir, Lj.; Muir, K. W.; Puddephatt, R. J.; Seddon, K. R. Inorg. Chim. Acta 1979, 34, L 223.