

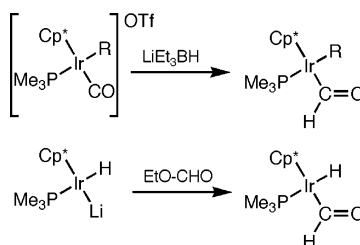
# Additions and Corrections

2005, Volume 24

**Anthony F. Hill,\* Derek A. Tocher, Andrew J. P. White, David J. Williams, and James D. E. T. Wilton-Ely\*:**  
Thiocarbamoyl Complexes of Ruthenium(II), Rhodium(III), and Iridium(III)

Pages 5342–5355. In this paper we reported a rare example of an iridium formyl complex but neglected to draw readers' attention to two earlier examples of isolable iridium formyl complexes reported by Bergman,  $[\text{IrX}(\text{CHO})(\text{PMe}_3)(\eta\text{-C}_5\text{Me}_5)]$  ( $\text{X} = \text{H},^1 \text{C}_6\text{H}_4\text{Me-}4^2$ ) (Scheme 1). For convenience, comparative IR and NMR data for iridium formyls are presented in Table 1.

**Scheme 1. Synthesis of Iridium Formyls**  
( $\text{Cp}^* = \eta^5\text{-C}_5\text{Me}_5$ )<sup>1,2</sup>



**Table 1. Spectroscopic Data<sup>a</sup> for Iridium Formyls**

complex	IR		NMR	
	$\nu_{\text{CO}}$	$\nu_{\text{CH}}$	$\delta(\text{C}_{\text{HCO}})$ [ <sup>2</sup> $J_{\text{PH}}$ ] ( <sup>1</sup> $J_{\text{HC}}$ )	$\delta(\text{H}_{\text{HCO}})$ [ <sup>3</sup> $J_{\text{PH}}$ ]
$[\text{Ir}(\text{CHO})\text{H}(\text{PMe}_3)_4]^{+3}$	1600	2622	225.4 [10, 5.4] (150)	14.0 [6.5, 4.0] <sup>b</sup>
$[\text{Ir}(\text{CHO})\text{HCl}(\text{PMe}_3)_3]^3$	1600	2585		15.0 [8.0]
$[\text{Ir}(\text{CHO})\text{HI}(\text{PMe}_3)_3]^4$	1620, 1600	2580		14.9 [6.8, 4.1]
$[\text{Ir}(\text{CHO})\text{H}(\text{PMe}_3)(\text{C}_5\text{Me}_5)]^1$	1591	2713, 2694	219.2 [11.6]	15.25 [4]
$[\text{Ir}(\text{CHO})(\text{C}_6\text{H}_4\text{Me})(\text{PMe}_3)(\text{C}_5\text{Me}_5)]^2$	1600	2732	231.6 [br]	13.8 [1.7]
$[\text{Ir}(\text{CHO})(\text{SCNMe}_2)\text{Cl}(\text{CO})(\text{PPh}_3)_2]^5$	1618	2720, 2592	215.2 [5.4] (164.2)	14.67 [6.6]

<sup>a</sup> IR data are given in  $\text{cm}^{-1}$ ; NMR chemical shifts ( $\delta$ ) are given in ppm and coupling constants ( $J$ ) in Hz. <sup>b</sup> For phosphorus cis to formyl.

(1) Peterson, T. H.; Golden, J. T.; Bergman, R. G. *Organometallics* **1999**, *18*, 2005.

(2) Alaimo, P. J.; Arndtsen, B. A.; Bergman, R. G. *Organometallics* **2000**, *19*, 2130.

(3) Thorn, D. L. *Organometallics* **1982**, *1*, 197.

(4) Thorn, D. L.; Tulip, T. H. *Organometallics* **1982**, *1*, 1580.

(5) This work.

OM060182R

10.1021/om050182r

Published on Web 03/14/2006