

Additions and Corrections

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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, $[\text{IrX}(\text{CHO})(\text{PMe}_3)(\eta^5\text{-C}_5\text{Me}_5)]$ ($\text{X} = \text{H},^1 \text{C}_6\text{H}_4\text{Me-}4^2$) (Scheme 1). For convenience, comparative IR and NMR data for iridium formyls are presented in Table 1.

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

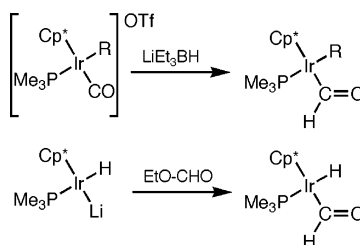


Table 1. Spectroscopic Data^a for Iridium Formyls

complex	IR		NMR	
	ν_{CO}	ν_{CH}	$\delta(\text{CHCO})$ [$^2J_{\text{PH}}$] ($^1J_{\text{HC}}$)	$\delta(\text{HCO})$ [$^3J_{\text{PH}}$]
$[\text{Ir}(\text{CHO})\text{H}(\text{PMe}_3)_4]^+{}^3$	1600	2622	225.4 [10, 5.4] (150)	14.0 [6.5, 4.0] ^b
$[\text{Ir}(\text{CHO})\text{HCl}(\text{PMe}_3)_3]^3$	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]

^a IR data are given in cm^{-1} ; NMR chemical shifts (δ) are given in ppm and coupling constants (J) in Hz. ^b 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.

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