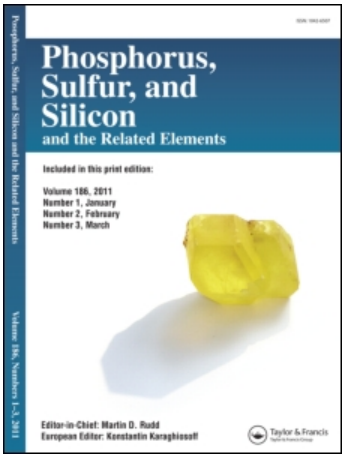

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Metallo(alkyl)chlorophosphanes $Cp(CO)_3$ M-P(R)CI (M=Mo, W; R=Me, Ph, tBu, C_5Me_5) - Novel Sources for Phosphinidenes

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Metallo(alkyl)chlorophosphanes $Cp(CO)_3$ M-P(R)Cl (M = Mo, W; R = Me, Ph, tBu, C_5Me_5) - Novel Sources for Phosphinidenes

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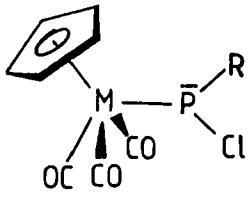
Metallation of organodichlorophosphanes $RPCl_2$ (R = Me, Ph, tBu, C_5Me_5) with $Na[M(CO)_3Cp]$ (M = Mo, W) in benzene yields the thermolabile Metallo(alkyl)chlorophosphanes **1a-g**.



	1a	**b**	**c**	**d**	**e**	**f**	**g**
M	Mo	W	Mo	W	Mo	W	W
R	Me	Me	Ph	Ph	tBu	tBu	C_5Me_5

In solution **1a-d** show a high tendency to decompose to the corresponding metal chloride $Cp(CO)_3M$-Cl with phosphinidene elimination. The rate of decomposition depends on the metal and the phosphorus ligand (Mo > W, Me > Ph > tBu C_5Me_5).

Treatment of **1f** with Me_3P affords $[Cp(CO)_3W$-$P(tBu)PMe_3]Cl$ (**2**), which can be described as a cationic phosphinidene-phosphorane complex.