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MIGRATION REACTION OF A SILYL GROUP FROM A PHOSPHORUS TO A CARBONYL OXYGEN IN A MOLYBDENUM COORDINATION SPHERE

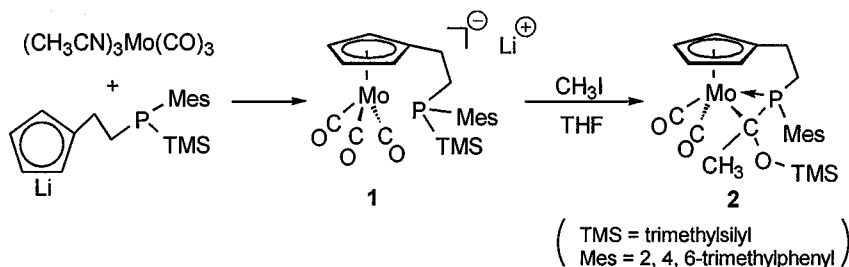
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The reaction of Cp anion, $[C_5H_4CH_2CH_2P(TMS)Mes]^-$ with $(CH_3CN)_3Mo(CO)_3$ leads to the formation of $[(\eta^5-C_5H_4CH_2CH_2-P(TMS)Mes)Mo(CO)_3]^-$, which then reacts with MeI to give a metallaphosphacyclopropane complex with silyl migration.

Keywords: Metallacycle; phosphine pendant; silyl migration

The reaction of $(CH_3CN)_3Mo(CO)_3$ with $LiC_5H_4CH_2CH_2P(TMS)Mes$ in which Cp and phosphine moieties are connected with an ethylene bridge gives a phosphine-uncoordinated complex, **1**. The complex reacts MeI to yield a metallaphosphacyclopropane, **2**. In this reaction, silyl migration from phosphorus to carbonyl oxygen took place. The x-ray analysis confirmed the structure and the spectroscopic data of **2** in C_6D_6 show that the complex keeps the structure in solution.



SCHEME 1

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