

methyl groups^{*}. Similar reactions would afford n-propane via $\text{CH}_3\text{CH}_2(\text{CH}_3)_2\text{Au}^{\text{III}}\text{L}$ in slower subsequent steps. Indeed, the NMR spectrum at intermediate stages show the presence of $\text{CH}_3\text{Au}^{\text{I}}\text{L}$ and $(\text{CH}_3)_3\text{Au}^{\text{III}}\text{L}$, as well as a new species which we tentatively ascribe to $\text{CH}_3\text{CH}_2(\text{CH}_3)_2\text{Au}^{\text{III}}\text{L}$. The lability of ethyl groups is also shown by the formation of n-butane in principal amounts together with smaller quantities of propane and ethane when $\text{EtAu}^{\text{I}}\text{L}$ and $(\text{CH}_3)_2\text{Au}^{\text{III}}\text{L}$ react at -20° . Furthermore, it should be emphasized that in the absence of alkyl exchange this system would have afforded mainly propane.

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^{*}Based on the thermal stabilities of alkylgold(I)phosphine complexes (ref. 9).

Erratum

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The second line below eqn.(12) should read:

(0.98 mole) and Ph_3SiOPh (0.97 mole per mole of initial (III)), indicating the complete

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