



state and in dichloromethane solution in the presence of carbon monoxide but solutions rapidly darken in the absence of free CO. Formation of (II) gives a further example of binuclear reductive elimination of H<sub>2</sub> from (I) [9]. As well as undergoing oxidative addition of H<sub>2</sub>, (II) adds methanethiol to give the known [Pt<sub>2</sub>H<sub>2</sub>(μ-SMe)(μ-dppm)<sub>2</sub>][PF<sub>6</sub>] [10]. The reactions of equation (2) are of particular interest as models for reactions occurring during heterogeneous catalysis at a platinum surface, where activation of molecular hydrogen is often important.

#### Acknowledgements

We thank NSERC for financial support (to R.J.P.), NATO for a travel grant (to M.P.B. and R.J.P.), Dr. D. Cole-Hamilton for helpful discussions and Johnson-Matthey Ltd. for the generous loan of platinum.

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