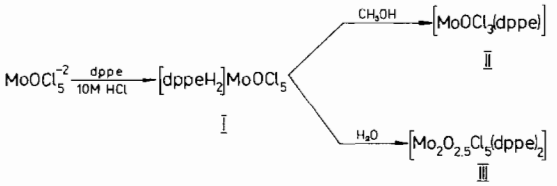
The complexes in question exhibit very interesting catalytic properties in the reactions of decomposition of organic hydroperoxides and olefin epoxidation.

Further investigations on the preparation of this type of complexes with molybdenum in other oxidation states in aqueous solutions are in progress.



Experimental

The IR spectra were obtained on a Perkin-Elmer 180 spectrophotometer (KBr discs). The reflectance visible spectra were recorded on a Beckmann 5240 spectrophotometer (MgO discs). The magnetic measurements were performed on a Gouy's balance (Cahn) Ventron Model RM-2 with ±0.5 B.M. accuracy.

Molybdenum was determined by the gravimetric method using 8-hydroxyquinoline [8].

[dppeH$_2$]MoOCl$_5$, Green Compound (I)

To a 0.05 molar solution of dppe in concentrated hydrochloric acid a 0.003 molar solution of Mo(V) [9] was added dropwise, during continuous stirring. Immediately a bright-green precipitate was formed. On addition the colour changed to brown-green. The precipitate was filtered, washed with concentrated HCl and dried in vacuum. *Anal.*: Calc. Mo: 13.92%; Cl: 25.74%; C: 45.25%; H: 3.48%. Found, Mo: 13.46%; Cl: 24.97%; C: 44.66%; H: 4.31%.

[MoOCl$_3$(dppe)], Brown Compound (II)

The complex was prepared from the compound I by treating with an excess of dry methanol at room temperature. As a result a brown complex was obtained which, after drying in vacuum, analysed satisfactorily. *Anal.*: Calc. Mo: 15.57%; Cl: 17.27%; C: 50.60%; H: 3.89%. Found, Mo: 15.52%; Cl: 17.17%; C: 49.87%; H: 4.24%.

[Mo$_2$O$_{2.5}$Cl$_5$(dppe)$_2$], Violet Compound (III)

The compound [dppeH$_2$]MoOCl$_5$ prepared as above was filtered on a synthetic glass and washed subsequently with several portions of conc. HCl, excess of water and again with small amounts of conc. HCl and water during continuous stirring of the precipitate. The dark-violet complex obtained was dried in a vacuum for 6 hours at room temperature. *Anal.*: Calc. Mo: 15.90%; Cl: 14.71%; C: 51.73%; H: 3.98%. Found, Mo: 15.30%; Cl: 14.59%; C: 52.05%; H: 4.35%.

Acknowledgement

The author wishes to thank Doz. Dr. J. O. Dzięgielewski for helpful suggestions at the beginning of this research.

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Erratum

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A ^{117}Sn and ^{31}P NMR Study of Trans-[Pt(SnCl$_3$)$_n$Cl$_{2-n}$(P(CH$_2$CH$_3$)$_3$)$_2$] (n = 1,2) in Acetone: the Effect of Solvent

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Please note the principal author's correct initials (K. R. as opposed to the erroneously published B. R.). The same error should be corrected in the Author Index on p. 292 of the volume.