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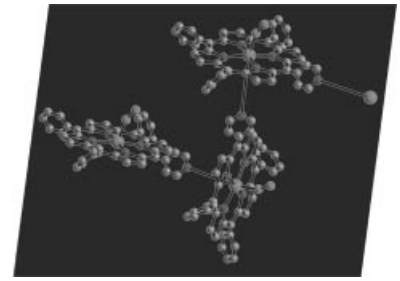
## COVER PICTURE

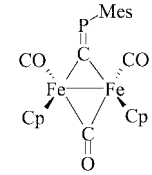
**The cover picture shows** a schematic view of part of a novel complex that undergoes reversible dioxygen binding. The complex is a zig-zag oligomer formed in sublimed layers of [*meso*-triphenyl(4-pyridyl)porphyrinato]cobalt(II) and is depicted here with molecular dioxygen coordinated at each cobalt centre. The relatively open, microporous structure of the oligomer arises as a result of pyridine coordination, which inhibits closer-packed structures (e.g. with parallel contiguous porphyrin rings), and ensures facile transport of molecular oxygen to the coordination site. The zig-zag chain also inhibits the formation of dioxygen-bridged centres, with the result that this basic structure is relatively stable. On warming, the Co–dioxygen link may be broken, with the evolution of dioxygen, which can readily diffuse through the microporous structure, leaving the zig-zag oligomer chain effectively intact. Details are discussed in the article by T. S. Kurtikyan et al. on p. 1861 ff.



## MICROREVIEW

**Contents**






**Keywords:** Isophosphaalkynes / Phosphaalkynes / Phosphorus / Synthetic methods

# SHORT COMMUNICATION

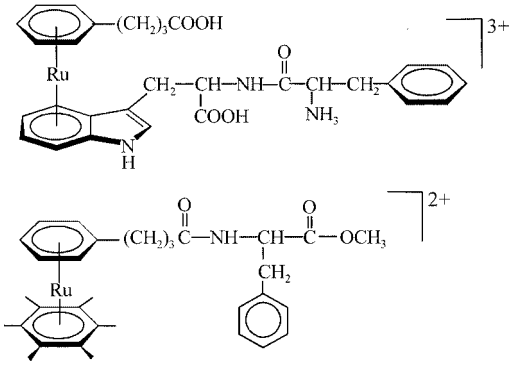


# FULL PAPERS

**1873** **R. Stodt, S. Gencaslan, I. M. Müller, W. S. Sheldrick***

Preparation, Reactivity and Peptide Labelling Properties of ($\eta^6$-Arene)ruthenium(II) Complexes with Pendant Carboxylate Groups

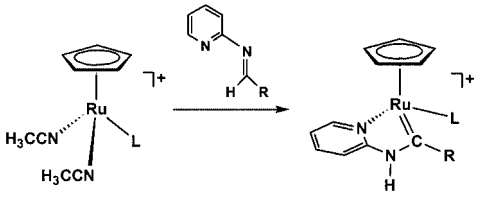
**Keywords:** Ruthenium / Amino acids / Peptides / Bioinorganic chemistry




**1883** **C. M. Standfest-Hauser, K. Mereiter, R. Schmid, K. Kirchner***

Formation of Ruthenium−Aminocarbene Complexes from Aldimines and Aminals

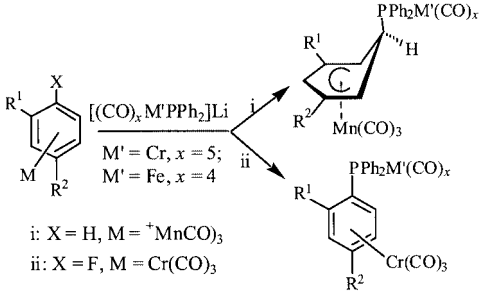
**Keywords:** Carbenes / Density functional calculations / N ligands / Ruthenium




**1893** **V. Comte, J. P. Tranchier, F. Rose-Munch,* E. Rose, D. P. P. Richard, C. Moïse**

Reactivity of Metallophosphide Anions with Electrophilic (Arene)tricarbonylmetal Complexes

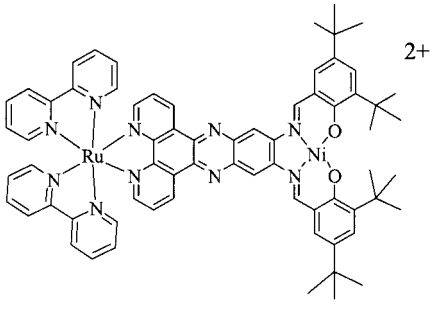
**Keywords:** Anions / Carbonyl ligands / Arene ligands / Manganese / Chromium / Iron




**1900** **K. E. Berg, Y. Pellegrin, G. Blondin, E. Anxolabéhère-Mallart, W. Leibl, A. Aukauloo***

A Rigid Molecular Scaffold Affixing a (Polypyridine)ruthenium(II)- and a Nickel(II)-Containing Complex: Spectroscopic Evidence for a Weakly Coupled Bichromophoric System

**Keywords:** Ruthenium / Nickel / Polynuclear complexes / Rigid heteroditopic ligands / Redox chemistry / Photophysical studies

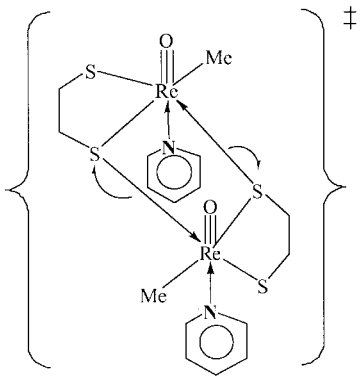


## 1911 J. H. Espenson,* S. M. Nabavizadeh

Kinetic and Equilibrium Studies of Reactions of N-Heterocycles with Dimeric and Monomeric Oxorhenium(V) Complexes

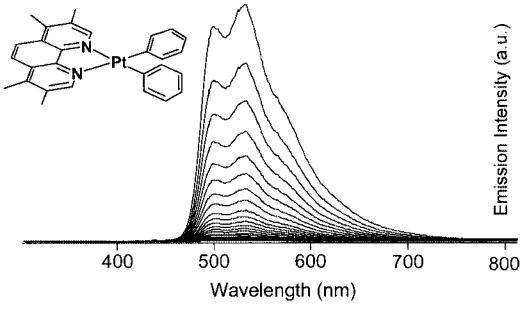
**Keywords:** Rhenium / N ligands / Kinetics / Linear free-energy relationships




## 1917 A. Klein,* J. van Slageren,* S. Záliš

Co-Ligand Involvement in Ground and Excited States of Electron-Rich (Polypyridyl)$Pt^{II}$ Complexes

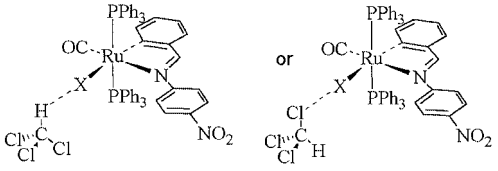
**Keywords:** Emission / Platinum / N ligands / Photophysics / Optical spectroscopy / Theoretical calculations / DFT / Crystal structure




## 1929 K. R. Flower,* R. G. Pritchard, J. E. Warren

Synthesis of [RuX(CO){$\eta^2$-*C*,*N*-$C_6H_4C(H)$=$NC_6H_4$-4-$NO_2$}$(PPh_3)_2$] (X = F, Cl, Br, I): Evidence of Non-Conventional Ru−X Hydrogen Bonds Leading to Octahedral Coordination at the Halide Atom

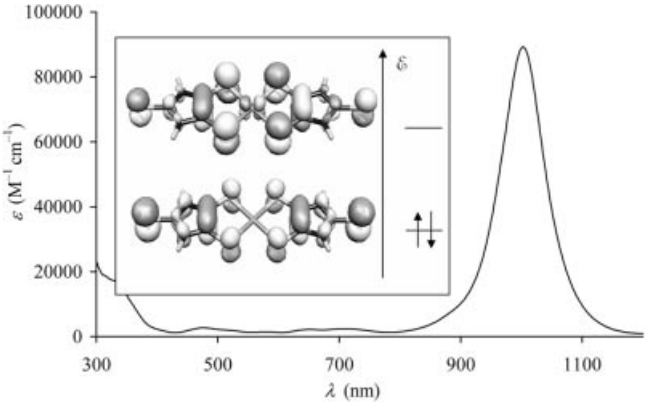
**Keywords:** Ruthenium / Cyclometallated ligands / Charge transfer / Hydrogen bonds / Pi interactions



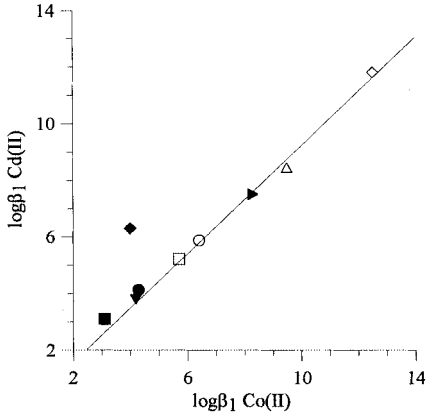

## 1939 M. C. Aragoni, M. Arca,* T. Cassano, C. Denotti, F. A. Devillanova, R. Frau, F. Isaia, F. Lelj, V. Lippolis, L. Nitti, P. Romaniello, R. Tommasi, G. Verani

NIR Dyes Based on [M(R,R′timdt)$_2$] Metal-Dithiolenes: Additivity of M, R, and R′ Contributions To Tune the NIR Absorption (M = Ni, Pd, Pt; R,R′timdt = Monoreduced Form of Disubstituted Imidazolidine-2,4,5-trithione)

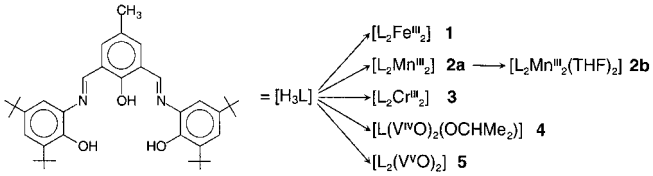
**Keywords:** S ligands / Nickel / Palladium / Platinum / Density functional calculations / Nonlinear optics



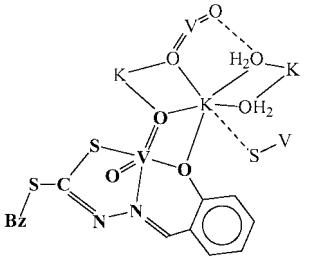

  



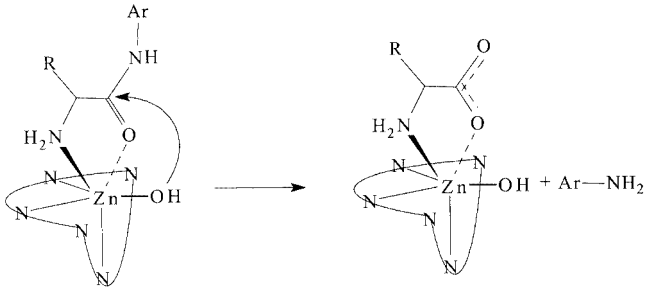






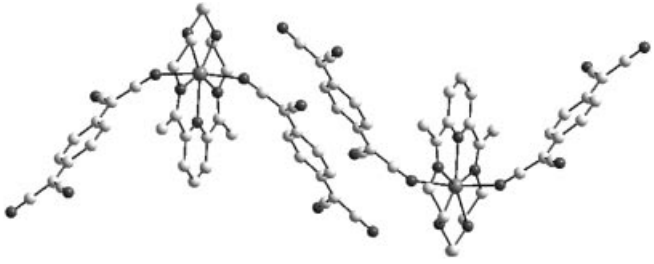
**1984** **M. Soibinet, I. Déchamps-Olivier,* E. Guillon, J.-P. Barbier, M. Aplincourt, F. Chuburu, M. Le Baccon, H. Handel**

XAS, ESR and Potentiometric Studies of Three Dinuclear *N*,*N*′-*para*-Xylylenebis(tetraazamacrocycle)copper(II) Complexes − X-ray Crystal Structure of [*N*,*N*′-*p*-Xylylenebis(cyclen)]-copper(II)


**Keywords:** Copper / ESR spectroscopy / Macrocyclic ligands / Potentiometry / X-ray studies

**1995** **A. M. Madalan, V. Voronkova, R. Galeev, L. Korobchenko, J. Magull, H. W. Roesky,* M. Andruh***

Exchange Interactions at the Supramolecular Level − Synthesis, Crystal Structure, Magnetic Properties, and EPR Spectra of $[Mn(MAC)(TCNQ)_2]$ (MAC = Pentaaza Macrocyclic Ligand; $TCNQ^{\cdot -}$ = Radical Anion of 7,7,8,8-Tetracyano-*p*-quinodimethane)




**Keywords:** Manganese / N ligands / Stacking interactions / Magnetic properties / EPR spectroscopy / Radicals