Abstract

The reaction of $[Mo(NO){HB(dmpz)_3}Cl_2]$ $[HB(dmpz)_3 = tris(3,5-dimethylpyrazolyborate]$ with nickel(II) and palladium(II) Schiff-base complexes derived by condensation of two mole equivalents of 2,5-dihydroxybenzaldehyde with α,ω -diamines $[1,2-C_6H_4(NH)_2),(CH_2)_nNH_2, n = 2-4$ for Ni, n = 2 for Pd) affords trimetallic species. From cyclic, square wave and differential pulse voltammetric data it is shown that the species may be reduced to a dianion and that the sites of reduction are probably the two molybdenum nitrosyl fragments. From the electrochemical and limited EPR spectral data obtained from reduced species, it is clear that there is very weak electronic and minimal magnetic interaction between the redox centres.