

Figure S1. Electronic spectrum of $[\{\text{Os}(\text{PPh}_3)_2(\text{pap})\}_2(\text{ca})]^{2+}$ complex in acetonitrile solution.

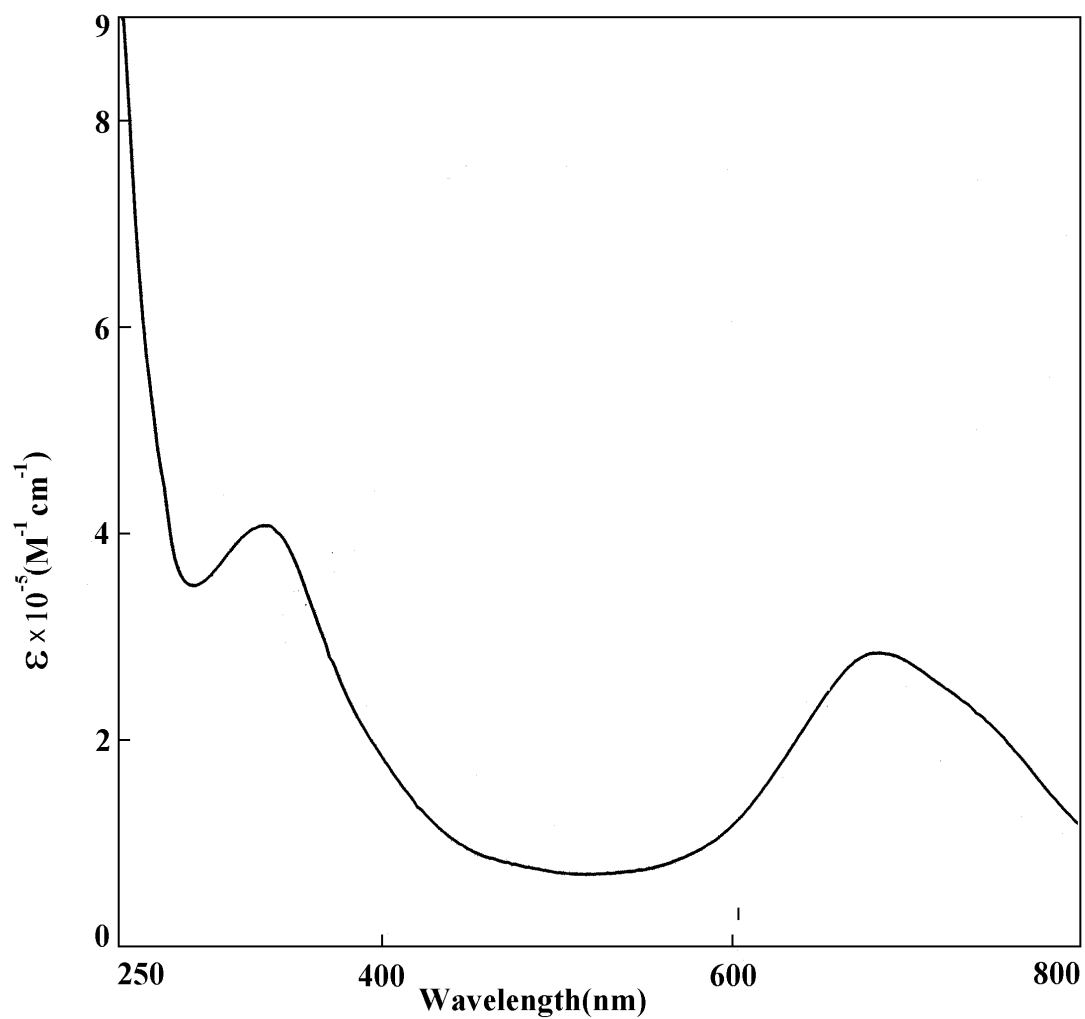


Figure S2. Electronic spectrum of $[\{\text{Os}(\text{PPh}_3)_2(\text{pap})\}_2(\text{ca})]^{2+}$ complex in acetonitrile solution.

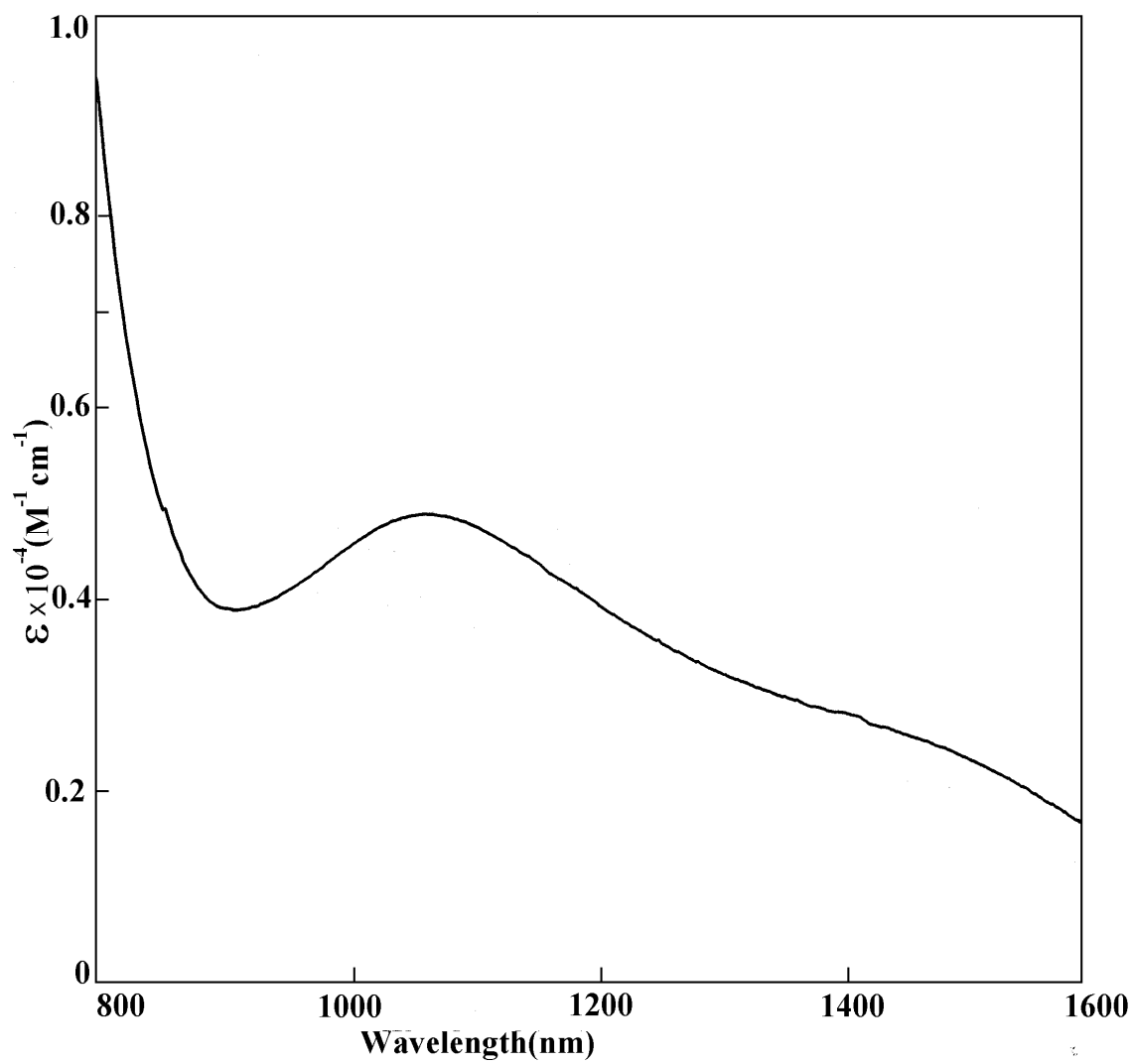


Figure S3. Electronic spectrum of $[\{\text{Os}^{\text{II}}(\text{PPh}_3)_2(\text{pap}) \text{Os}^{\text{III}}(\text{PPh}_3)_2(\text{pap})\}(\text{ca})]^{3+}$ complex in acetonitrile solution.

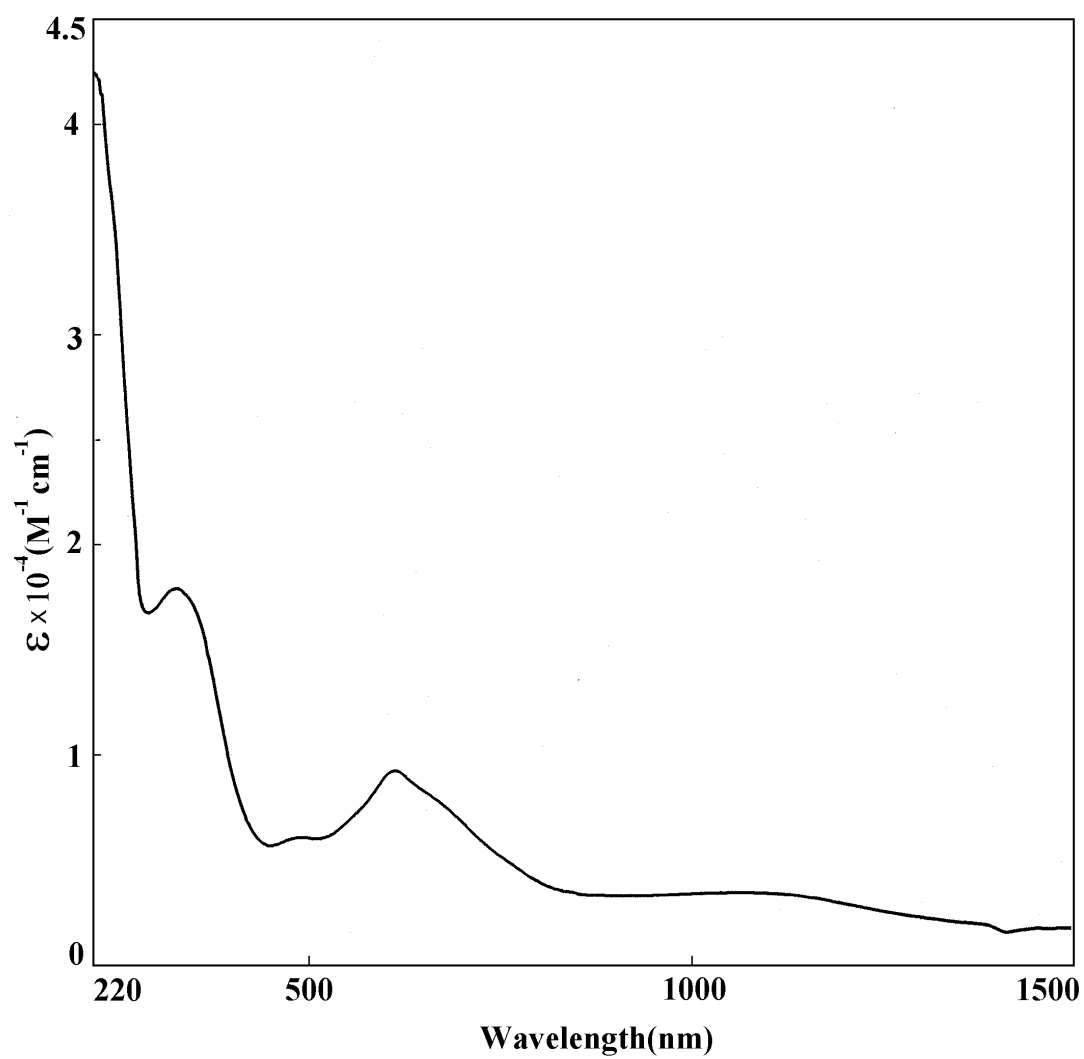


Figure S4. Electronic spectrum of $[\{\text{Os}^{\text{II}}(\text{PPh}_3)_2(\text{pap}) \text{Os}^{\text{III}}(\text{PPh}_3)_2(\text{pap})\}(\text{ca})]^{3+}$ complex in acetonitrile solution.

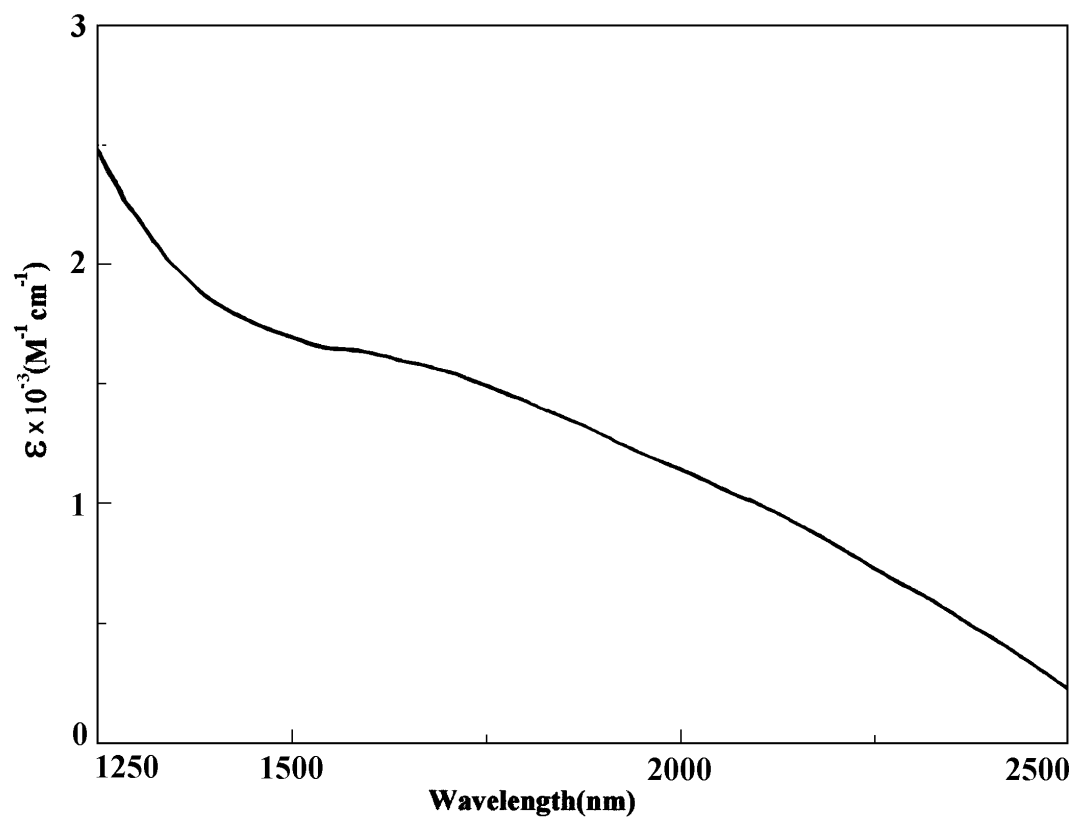


Figure S5. Electronic spectrum of [$\{\text{Os}(\text{PPh}_3)_2(\text{pap})(\text{ca})\}$] complex in acetonitrile solution.

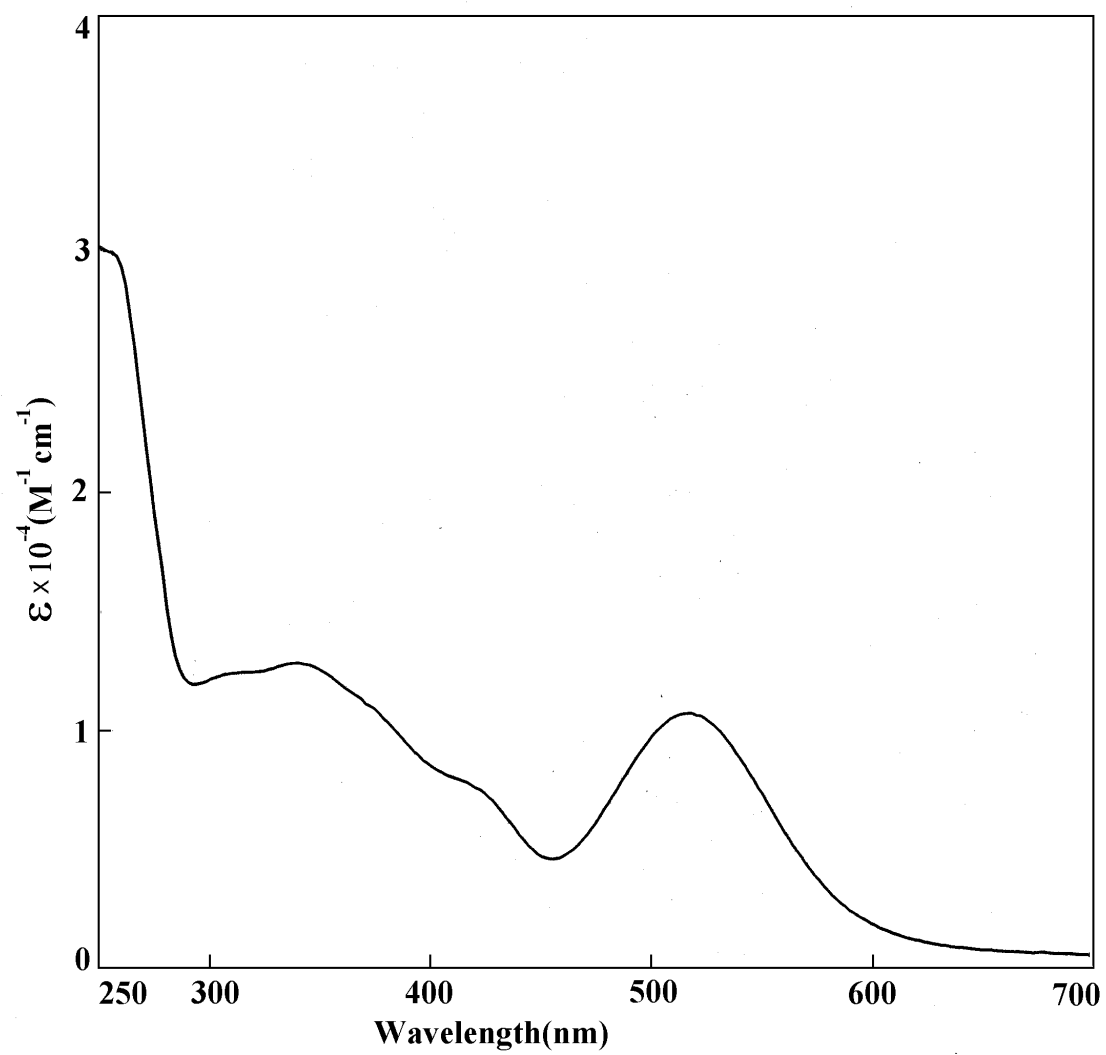


Figure S6. Electronic spectrum of [$\{\text{Os}(\text{PPh}_3)_2(\text{pap})(\text{ca})\}$] complex in acetonitrile solution.

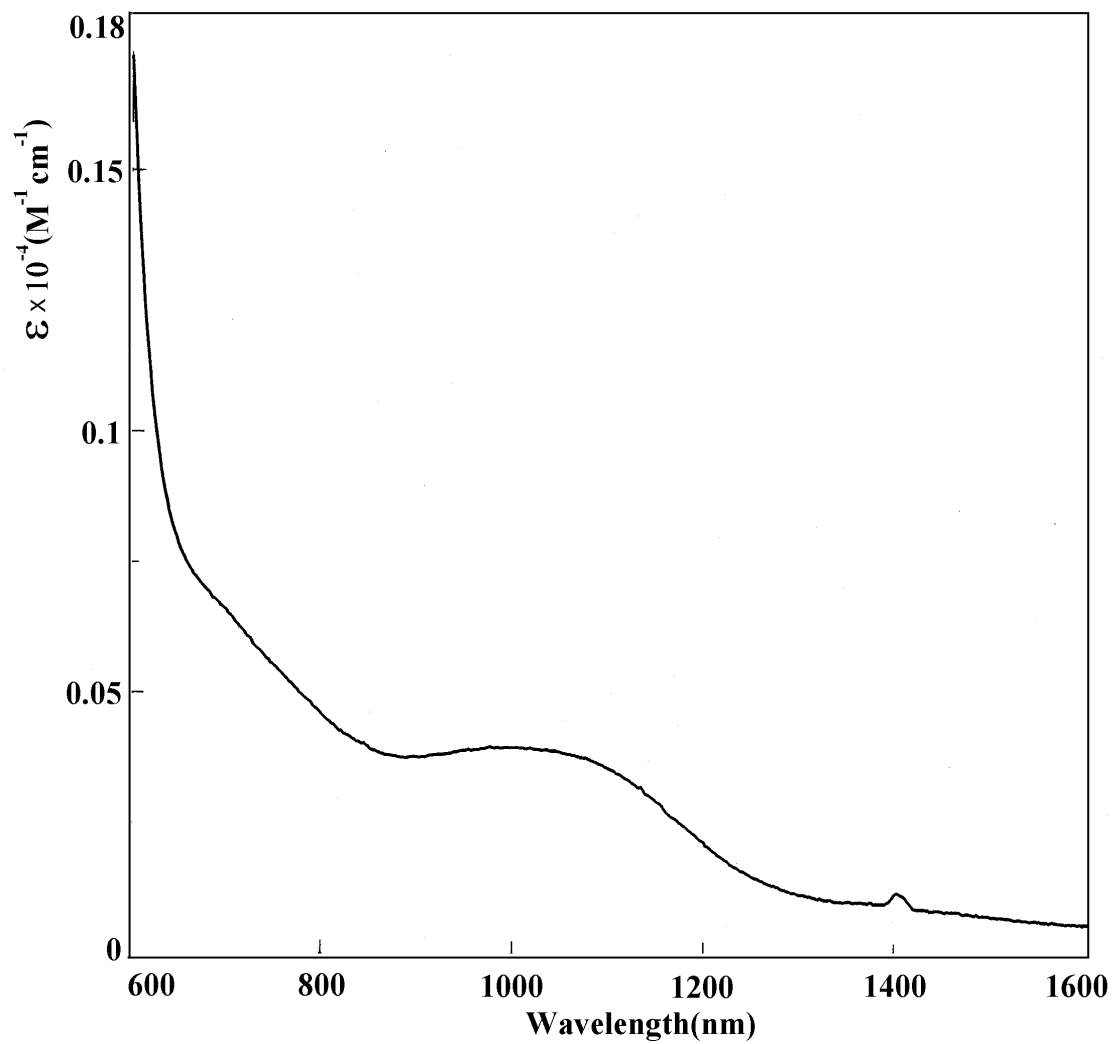


Figure S7. Electronic spectrum of $[\{\text{Os}(\text{PPh}_3)_2(\text{CO})\}_2(\text{r-ca})]$ complex in 1:9 dichloromethane-acetonitrile solution.

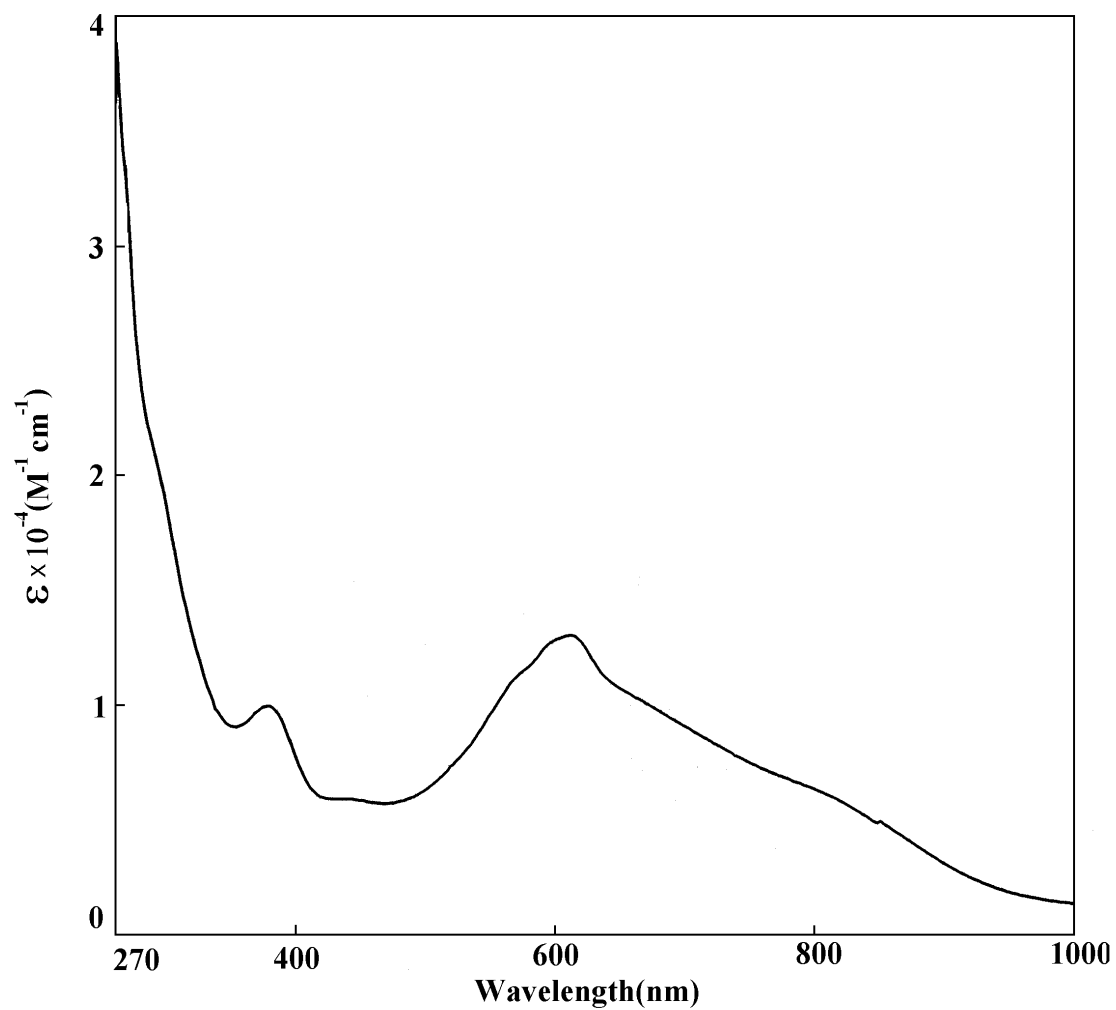


Figure S8. Cyclic voltammogram of $[\{\text{Os}(\text{PPh}_3)_2(\text{pap})\}_2(\text{ca})]^{2+}$ complex in acetonitrile solution (0.1 M TBAP) at a scan rate of 50 mVs^{-1} .

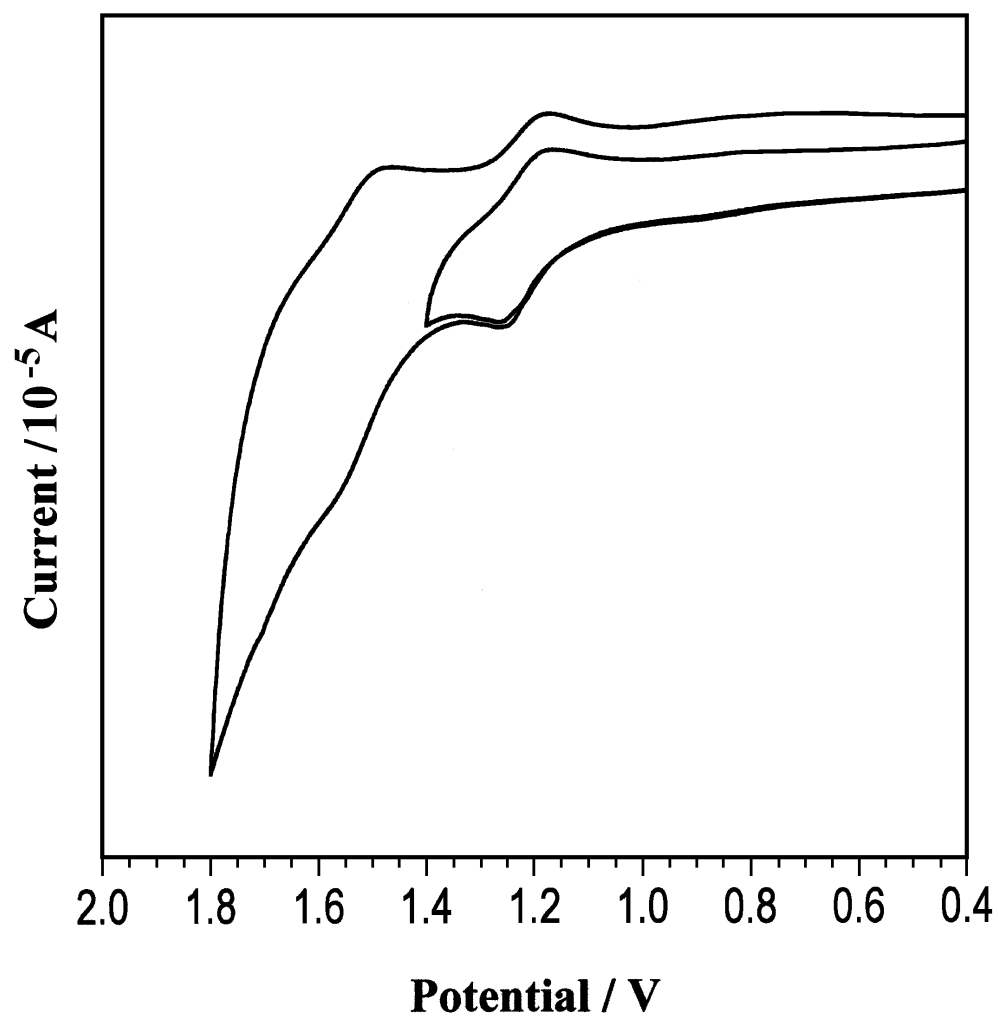


Figure S9. Cyclic voltammogram of $[\text{Os}(\text{PPh}_3)_2(\text{pap})(\text{ca})]$ complex in acetonitrile solution (0.1 M TBAP) at a scan rate of 50 mVs^{-1} .

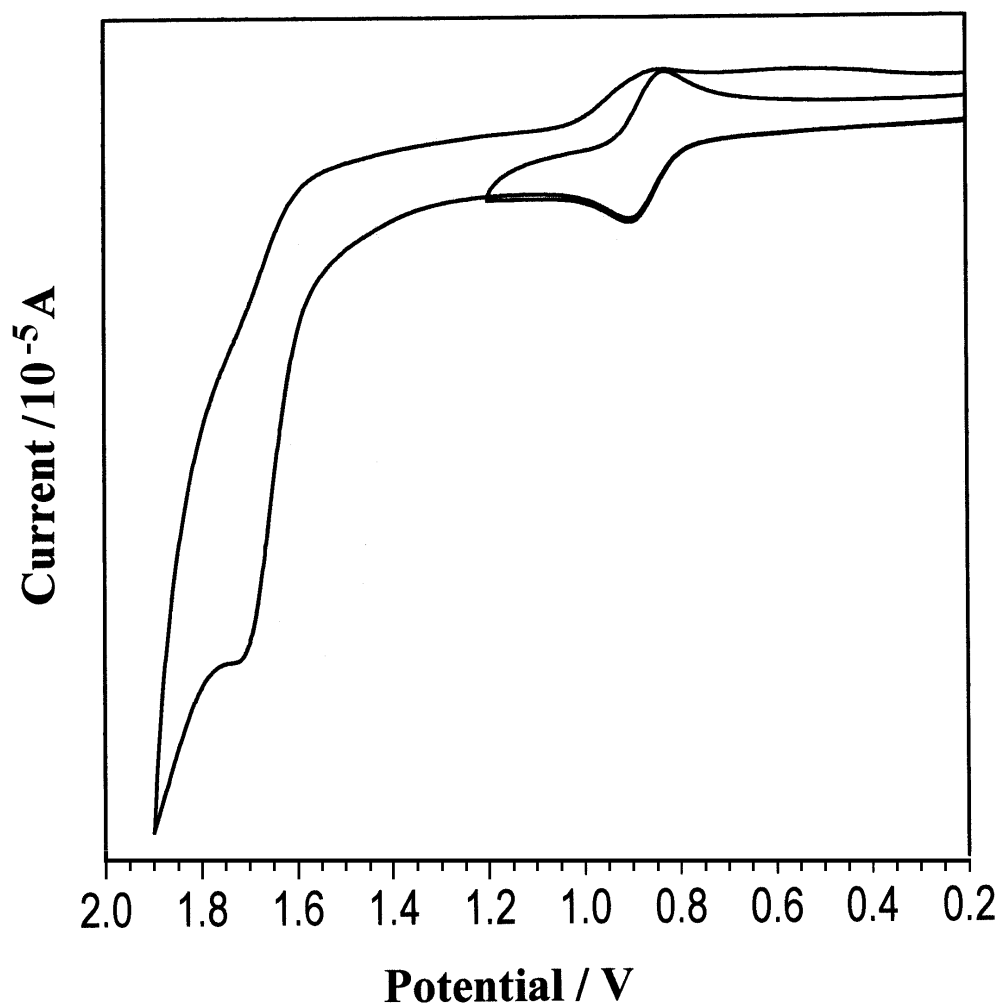


Figure S10. Cyclic voltammogram of $[\{\text{Os}(\text{PPh}_3)_2(\text{CO})\}_2(\text{r-ca})]$ complex in 1:9 dichloromethane-acetonitrile solution (0.1 M TBAP) at a scan rate of 50 mVs^{-1} .

