

Electronic Supplementary Information

A Cyanide-Bridged Trinuclear Fe(II)-Ru(II)-Fe(II) Complex with Three Stable States: Synthesis, Crystal Structures, Electronic couplings and Magnetic property

Xiao Ma,^a Sheng-Min Hu,^a Chun-Hong Tan,^a Yue-Hong Wen,^a Qi-Long Zhu,^a
Chao-Jun Shen,^a Tian-Lu Sheng,*^a Xin-Tao Wu^a

^a*State Key Laboratory of Structural Chemistry, Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fuzhou, Fujian 350002, P. R. China.*

E-mail: tsheng@fjirsm.ac.cn;

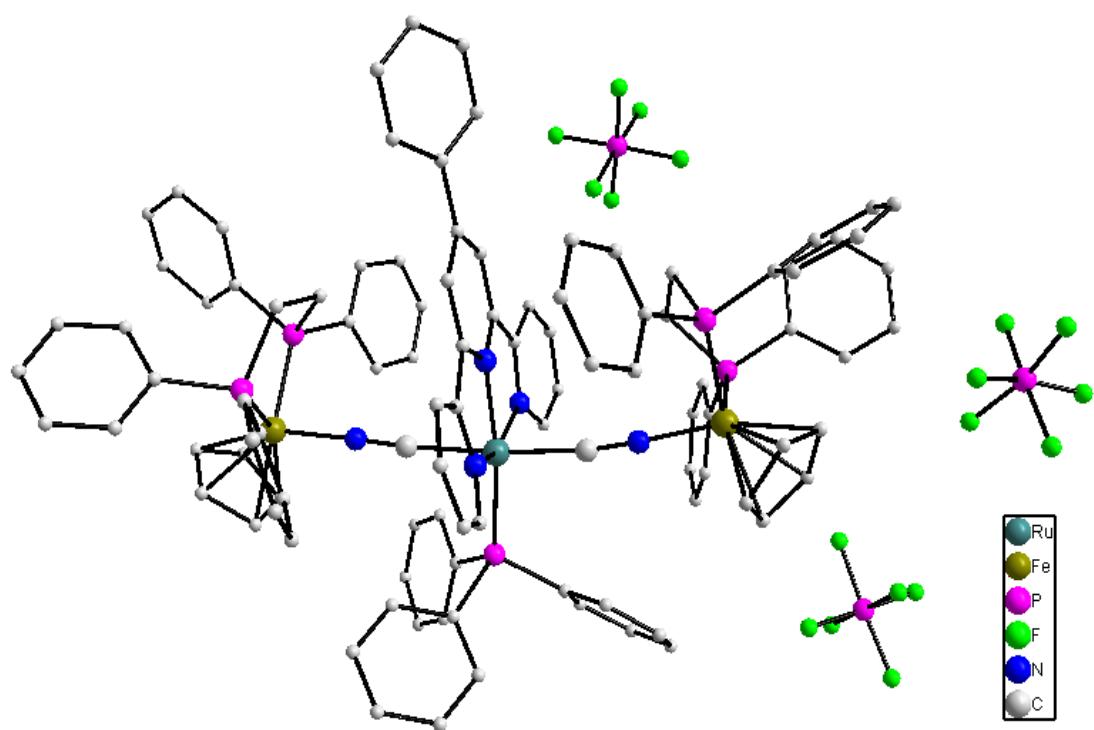


Figure S1. Molecular structures of $\mathbf{1}[\text{PF}_6]_3$ (hydrogen atoms were omitted for clarity).

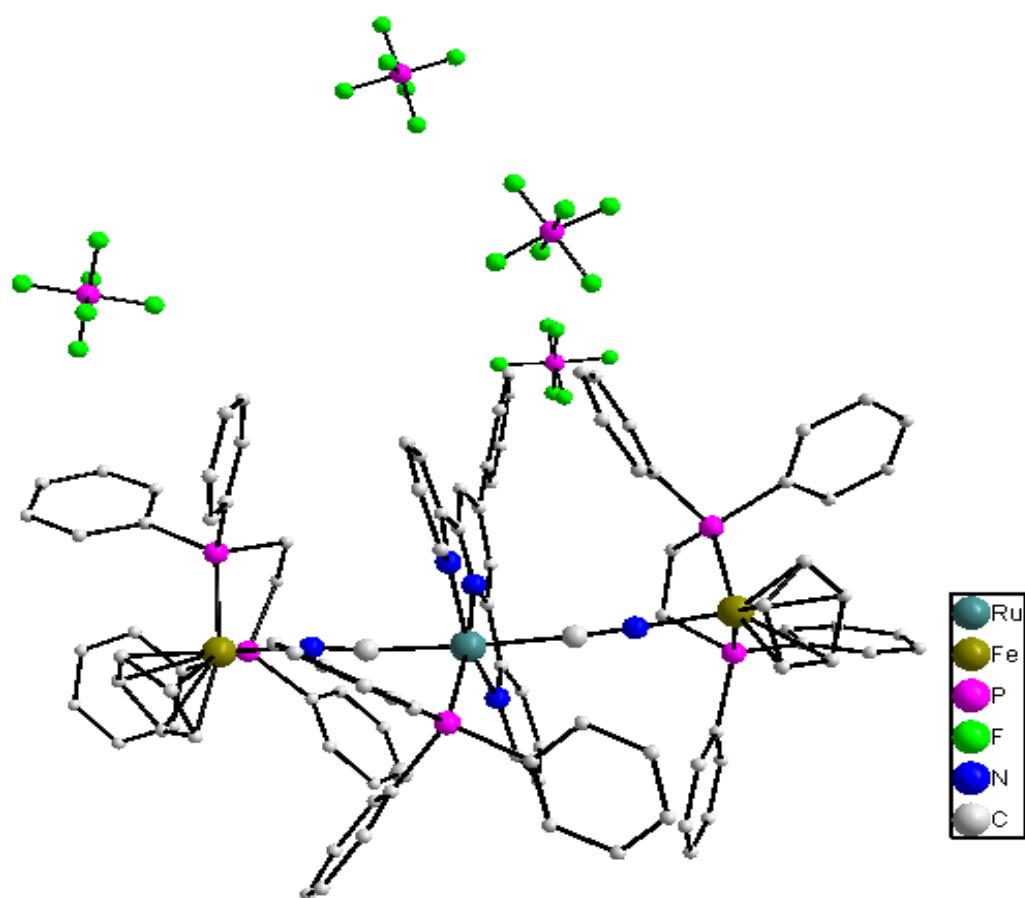


Figure S2. Molecular structures of **1**[PF₆]₄ (solvent molecules, hydrogen atoms were omitted for clarity).

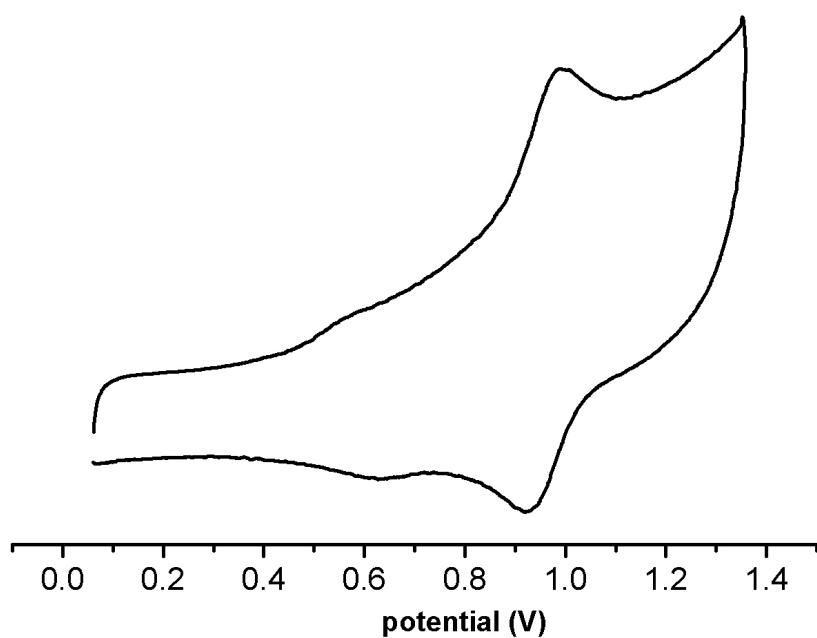


Figure S3. Cyclic voltammogram of *trans*-(Ph-tpy)Ru(PPh₃)(CN)₂ in 0.10 M DMF solution of Bu₄NPF₆ at a scan rate of 100 mV/s.
 $E_{1/2}(\text{Ru}^{\text{II}}/\text{Ru}^{\text{III}}) = 0.95 \text{ V}$