

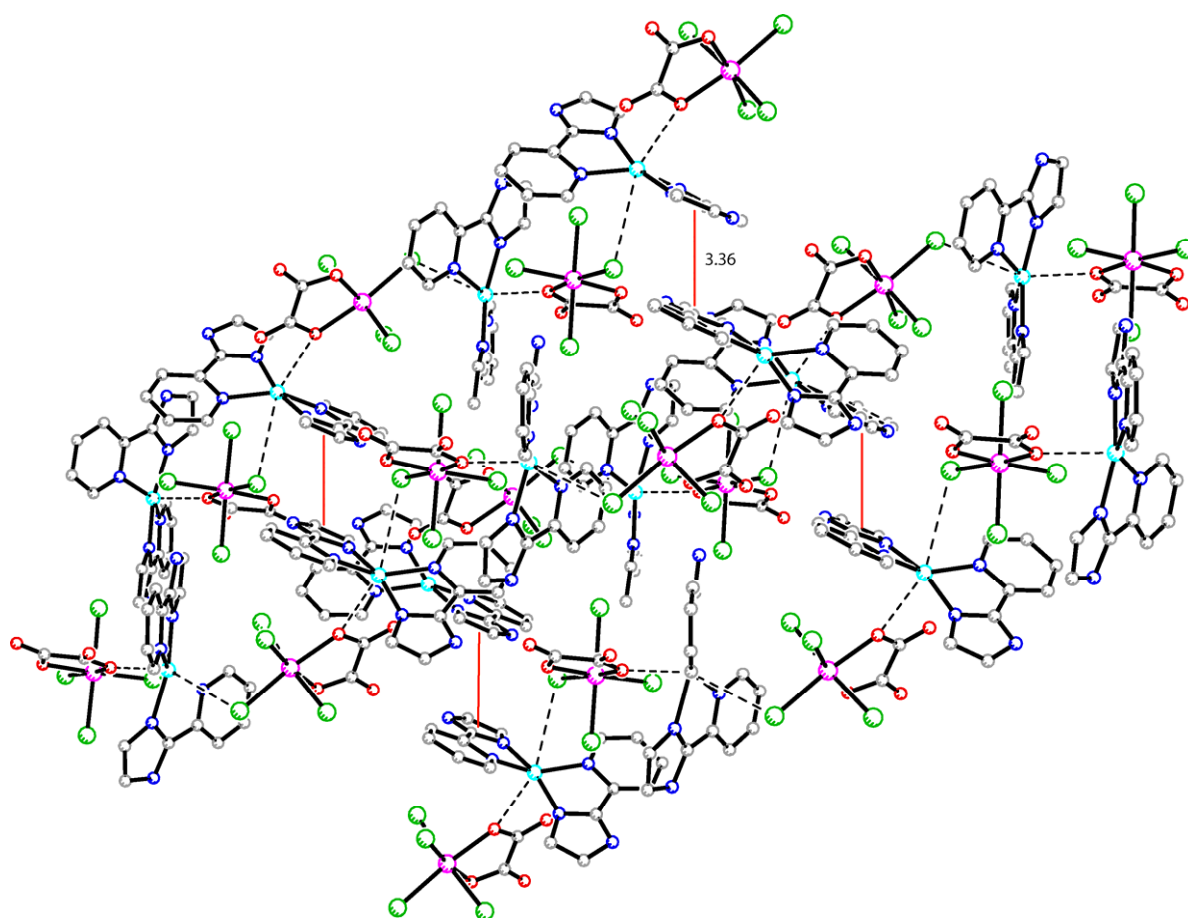
## X-ray Structure of $[\text{ReCl}_4(\mu\text{-ox})\text{Cu}(\text{pyim})_2]$ : A New Heterobimetallic $\text{Re}^{\text{IV}}\text{Cu}^{\text{II}}$ Ferrimagnetic Chain

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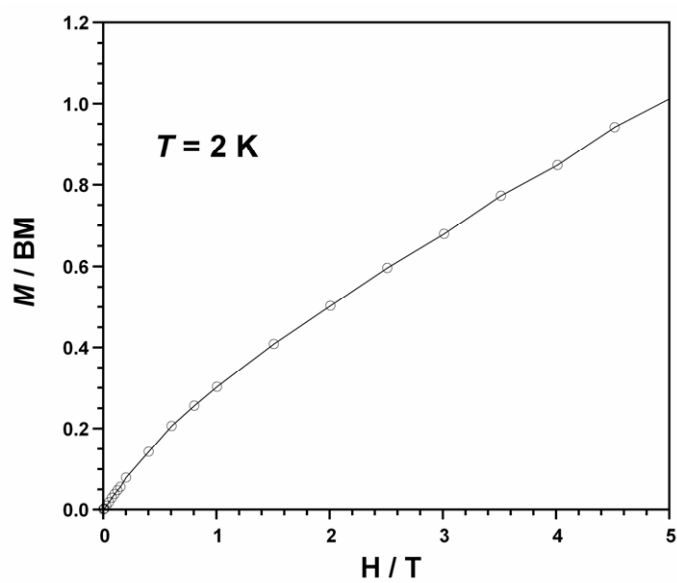
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### Supporting Informations



**Figure S1.** A view of the  $\pi$  –  $\pi$  stacking interactions of adjacent layers in **1** (involved planes are indicated by red lines).



**Figure S2.** Field dependence of the magnetization (o) for **1** at 2.0 K. The solid line is an eye-guide.

## Appendix.

$$\chi_{//} = \frac{N\beta^2}{4kT} (g_{Cu_{//}}^2 + g_{Re_{//}}^2 F_{D_{//}}) F_{J_{//}} \quad (1)$$

$$\chi_{\perp} = \frac{N\beta^2}{4kT} (g_{Cu_{\perp}}^2 + g_{Re_{\perp}}^2 F_{D_{\perp}}) F_{J_{\perp}} \quad (2)$$

where

$$F_{D_{//}} = \frac{1 + 9 \exp\left(-\frac{D}{kT}\right)}{1 + \exp\left(-\frac{D}{kT}\right)} \quad (3)$$

$$F_{D_{\perp}} = \frac{4 + 6 \frac{kT}{D} \left[1 - \exp\left(-\frac{D}{kT}\right)\right]}{1 + \exp\left(-\frac{D}{kT}\right)} \quad (4)$$

$$F_{J_{//}} = \frac{\exp\left(\frac{J_{+}}{kT}\right) + R^2 \exp\left(-\frac{J_{+}}{2kT}\right)}{(1 + R^2) \cosh\left(\frac{J_{-}}{2kT}\right)} \quad (5)$$

$$F_{J_{\perp}} = \frac{2kT}{j} \tanh\left(\frac{j}{4kT}\right) + \frac{1}{2} \operatorname{sech}^2\left(\frac{j}{4kT}\right) \quad (6)$$

$$J_{\pm} = \frac{J \pm j}{2}, \quad g_{\pm} = \frac{g_{Re} \pm g_{Cu}}{2}, \quad R = \frac{g_{-}}{g_{+}} \quad (7)$$