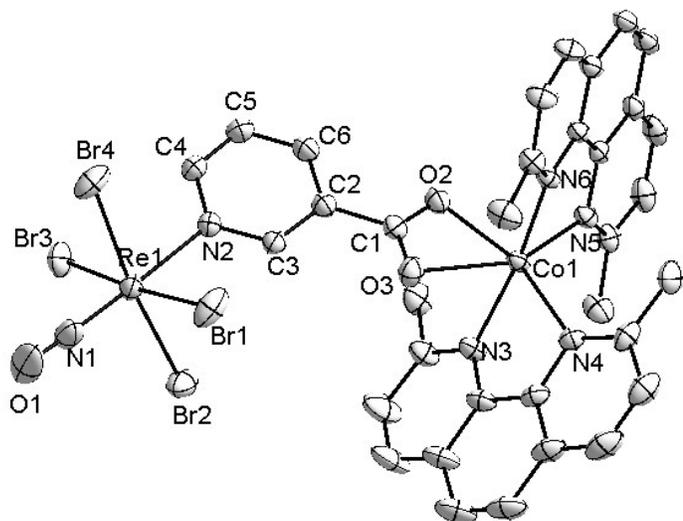
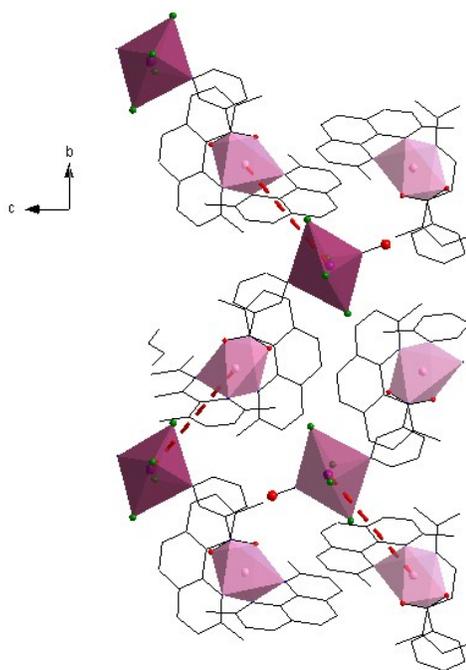


**Figure S1.** Perspective drawing of the  $[\text{Re}(\text{NO})\text{Br}_4(\mu\text{-nic})\text{Co}(\text{dmphen})_2]$  heterobimetallic unit of **3** showing the atom numbering. Thermal ellipsoids are plotted at 30% probability level, and the

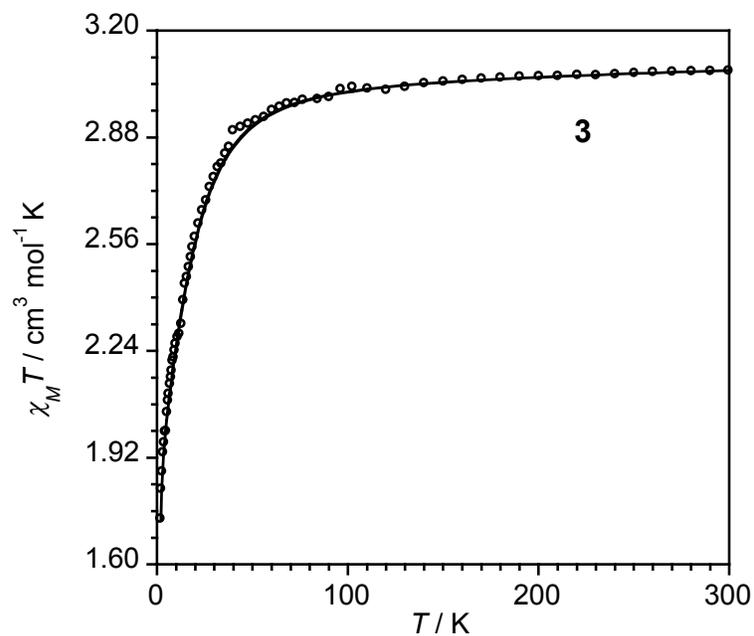


hydrogen atoms were omitted for clarity.

**Figure S2.** A view of the crystal packing of **3**. Purple and pink octahedrons represent the coordination environment of the  $\text{Re}(\text{II})$  and  $\text{Co}(\text{II})$  ions, respectively. The shortest  $\text{Re}\cdots\text{Co}$  distances are drawn as red broken lines.



**Figure S3.** Thermal dependence of the  $\chi_M T$  product for **3**: (o) experimental, (—) best-fit curve through eq. (4) (see text).



**Figure S4.** Thermal dependence of the  $\chi_M T$  product for **4**: (o) experimental, (—) best-fit curve through eq. (3) (see text).

