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Supporting Information

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manuscript title: Heterometallic one-dimensional chain with tetradeca metal repetition constructed by amidate bridged dirhodium and pivalate bridged diplatinum complexes influenced by hydrogen bonding **name of the journal:** *Dalton Transactions*



Figure S1. Crystal structure of $[{Rh_2(acam)_4}_3 {Pt_2(OPiv)_2(NH_3)_4}_4](ClO_4)_8$ (4). The hydrogen atoms and ClO_4^- ions are omitted for clarity.



Figure S2. Hydrogen bonding fashion between 1-D chain and ClO₄⁻. The hydrogen atoms are omitted for clarity.



Figure S3. IR spectra of (a) $[Pt_2(OPiv)_2(NH_3)_4](ClO_4)_2 \cdot PivOH$, (b) $[Rh_2(acam)_4(H_2O)_2] \cdot 6H_2O$, and (c) 4. The bands around 1122 cm⁻¹ are attributed to ClO_4^- anion. The v(C–O) bands around 1611 and 1546 cm⁻¹ which are attributed to acam and OPiv, respectively, are slightly shifted from those original compounds, $[Rh_2(acam)_4(H_2O)_2] \cdot 6H_2O$ (1605 cm⁻¹) and $[Pt_2(OPiv)_2(NH_3)_4](ClO_4)_2 \cdot PivOH$ (1570 cm⁻¹).