<Electronic Supplementary Information>

Triple-*meso* helices as alcohol reservoir and discriminator. Structural properties and thermal behaviors of silver(I) coordination molecular braids containing diethylbis(4-pyridyl)silane

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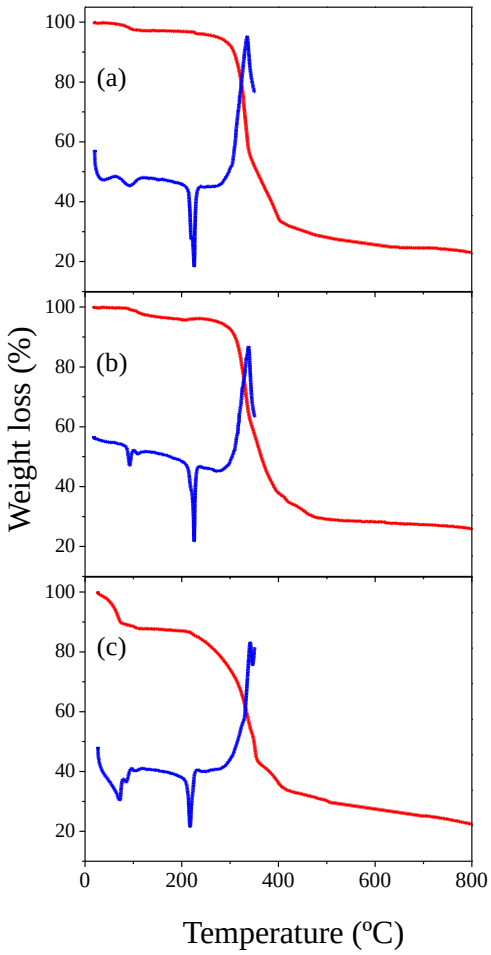

Fig. S1 TGA (red) and DSC (blue) curves of $[Ag_3(L)_3(EtOH)](CF_3SO_3)_3$ (a), $[Ag_3(L)_3(n\text{-}PrOH)](CF_3SO_3)_3$ (b), and $[Ag_3(L)_3(n\text{-}BuOH)](CF_3SO_3)_3$ (c).

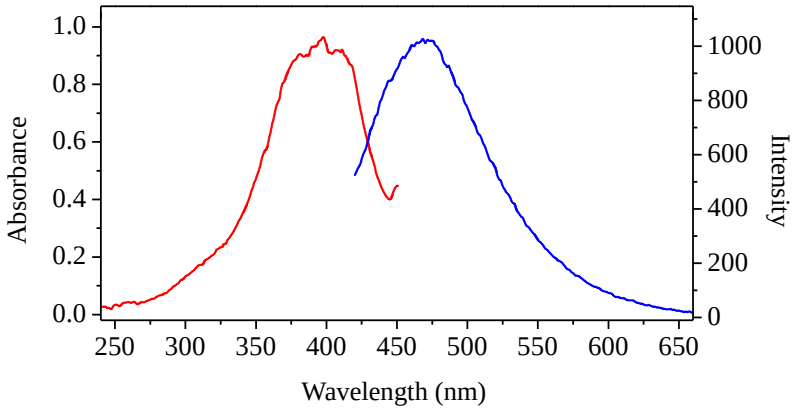

Fig. S2 Solid-state UV/vis (red) and photoluminescence (blue) spectra for $[Ag_3(L)_3(n\text{-}PrOH)](CF_3SO_3)_3$.

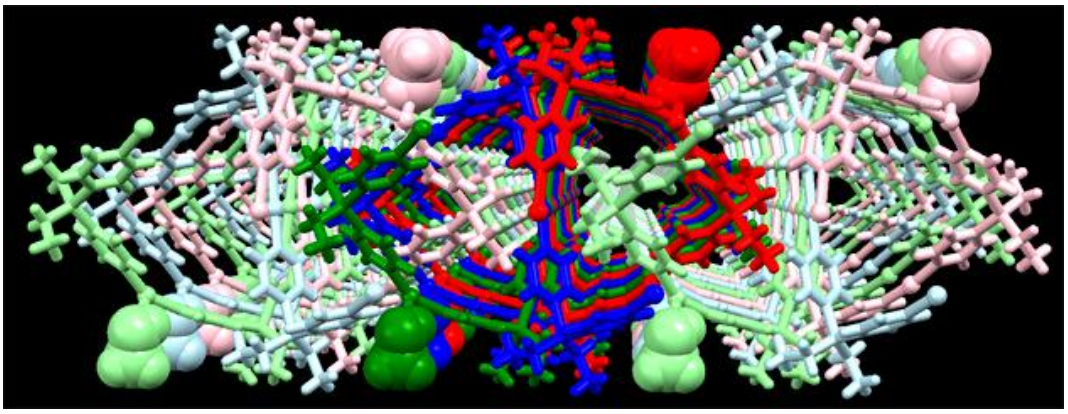

Fig. S3 Packing diagrams for $[Ag_3(L)_3(MeOH)](CF_3SO_3)_3$. Space-filling model represents the solvate methanol molecules.

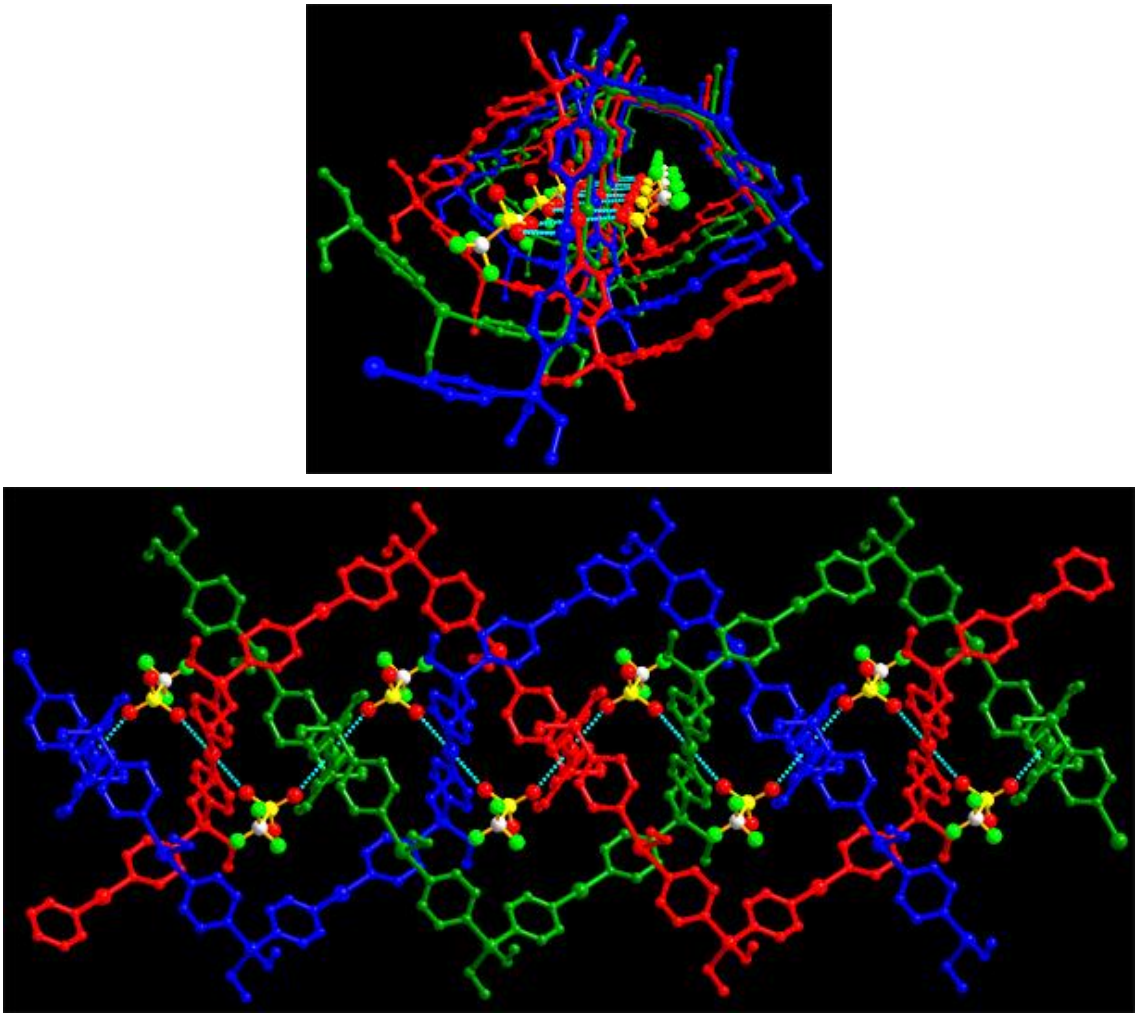

Fig. S4 Top and side views of 3-fold interpenetrated *meso* helices for $[Ag_3(L)_3(MeOH)](CF_3SO_3)_3$ showing the bridged triflate anions.

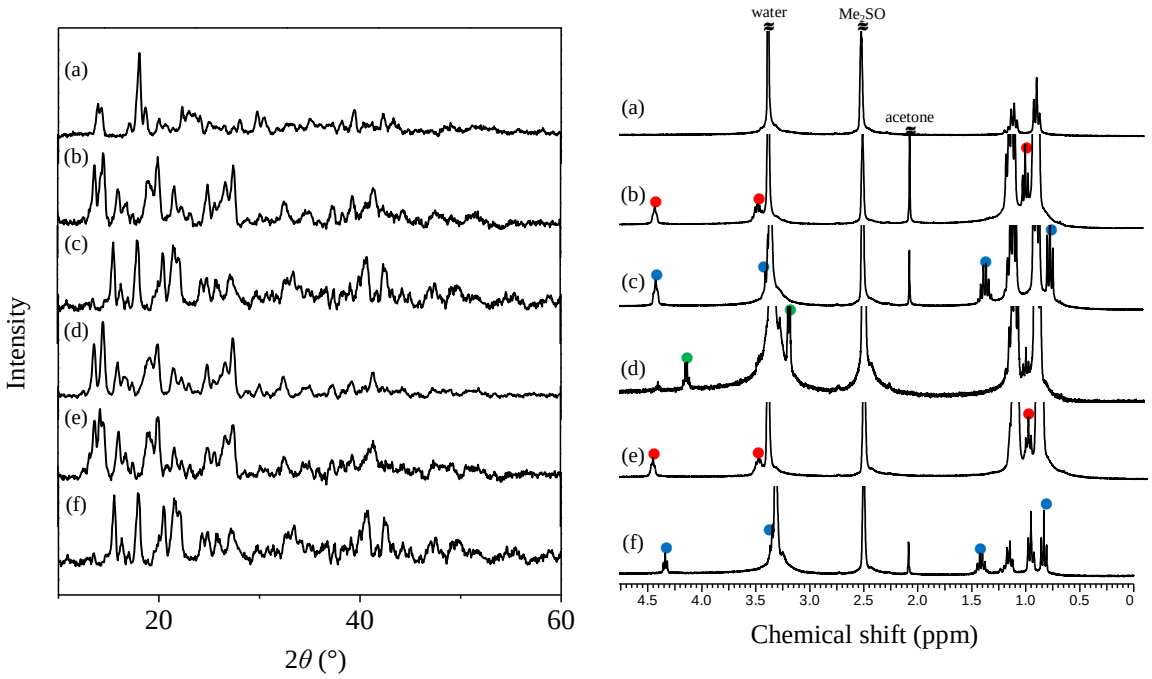

Fig. S5 Powder XRD patterns (left) and partial ^{1}H NMR spectra (in Me_2SO-d_6, right) for the evacuated samples, $[Ag_3(L)_3](CF_3SO_3)_3$ (a), and re-absorbed samples, $[Ag_3(L)_3(EtOH)](CF_3SO_3)_3$ (b) and $[Ag_3(L)_3(n\text{-}PrOH)](CF_3SO_3)_3$ (c). (d)–(f) designate the original compounds, $[Ag_3(L)_3(MeOH)](CF_3SO_3)_3$, $[Ag_3(L)_3(EtOH)](CF_3SO_3)_3$, and $[Ag_3(L)_3(n\text{-}PrOH)](CF_3SO_3)_3$, respectively. Red, blue, and green circles denote the resonances of methanol, ethanol, and *n*-propanol, respectively.

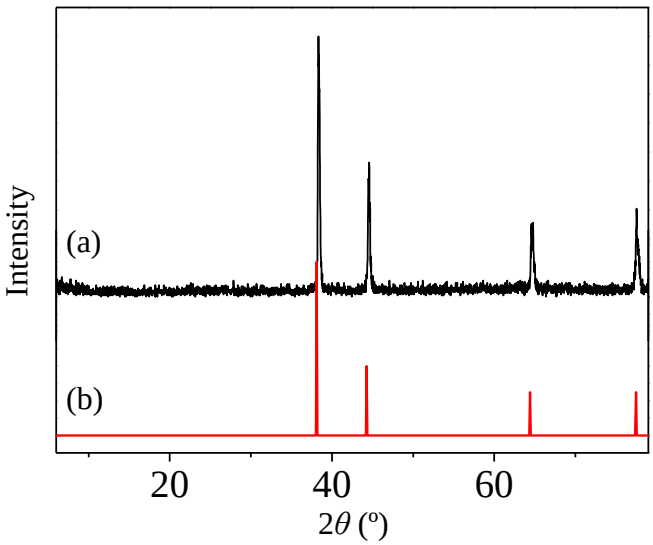

Fig. S6 Powder XRD pattern for Ag residue (a) by calcination of $[Ag_3(L)_3(MeOH)](CF_3SO_3)_3$ at 600 ºC for 2 h. (b) represents the reference pattern of Ag from the ICDD database (PDF no. 04-0783).

Table S1 EDX data for Temperature-dependent change of $[Ag_3(L)_3(MeOH)](CF_3SO_3)_3$

	C	N	O	F	S	Si	Ag
25 °C	56.187	10.719	8.368	10.197	3.719	6.116	4.693
200 °C	43.098	7.000	9.766	12.791	8.106	8.558	10.681
400 °C	2.330	0.860	9.027	7.408	2.564	6.834	70.976
600 °C	2.550	2.929	5.754	0.730	3.343	0.983	85.712