

Supplementary Material

for

Zinc(II) and Copper(II) Complexes of 4-Styrylpyridine and 1-Adamantanecarboxylic Acid: Syntheses, Crystal Structures, and Photopolymerization

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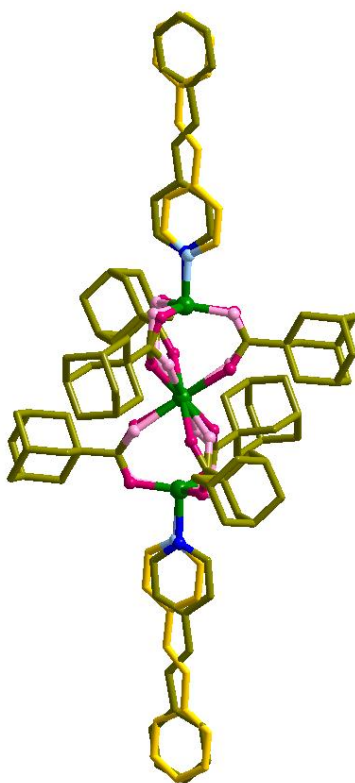


Figure S1. Crystal structure of $[\text{Zn}_3(\text{spy})_2(\text{adc})_6]$ (**1**). The spy ligands and oxygen atoms of adc ligands are disordered.

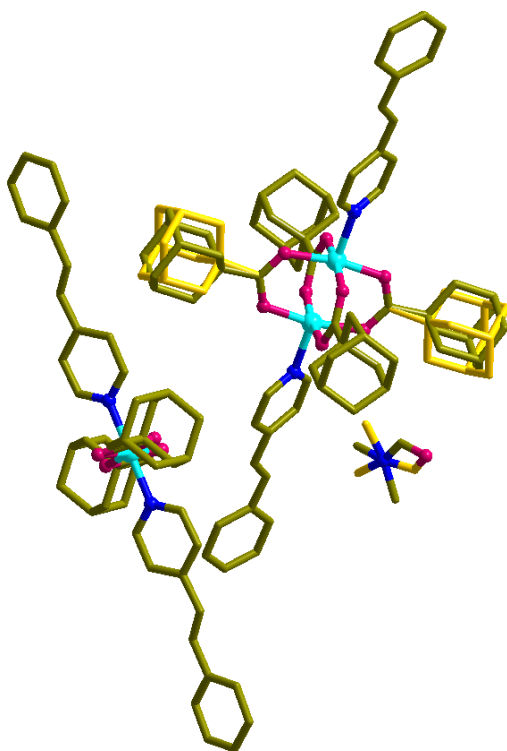


Figure S2. Crystal structure of $[\text{Cu}_2(\text{spy})_2(\text{adc})_4][\text{Cu}(\text{spy})_2(\text{adc})_2] \cdot \text{DMF}$ (**2**). The adc ligands and DMF molecule are disordered.

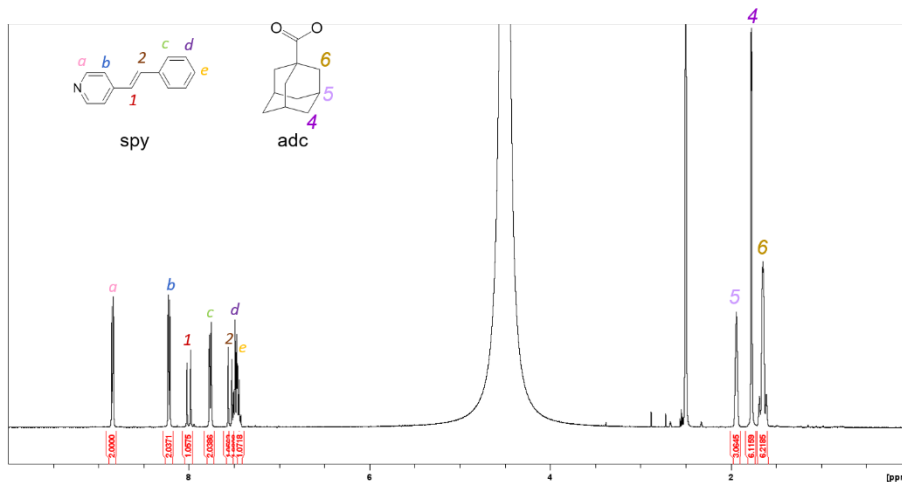


Figure S3. ^1H NMR spectrum of **1** in $\text{DMSO-}d_6$ with a small drop of HNO_3 to dissolve the crystals.

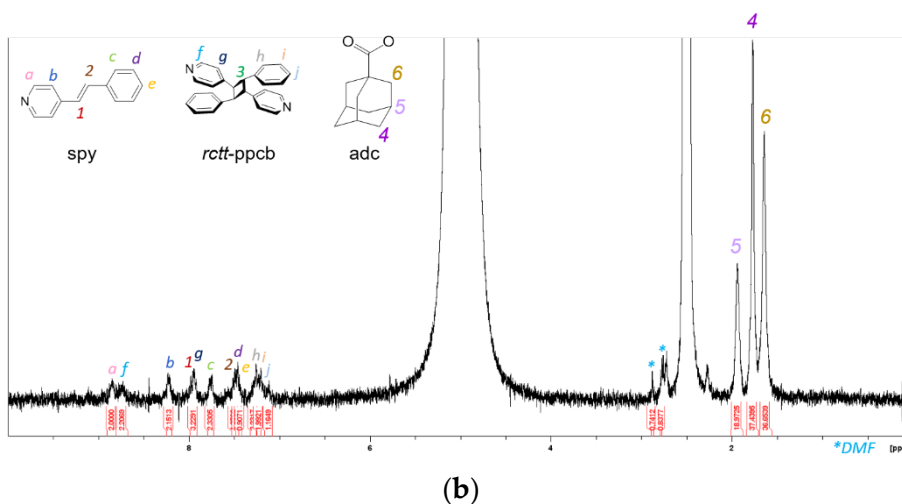
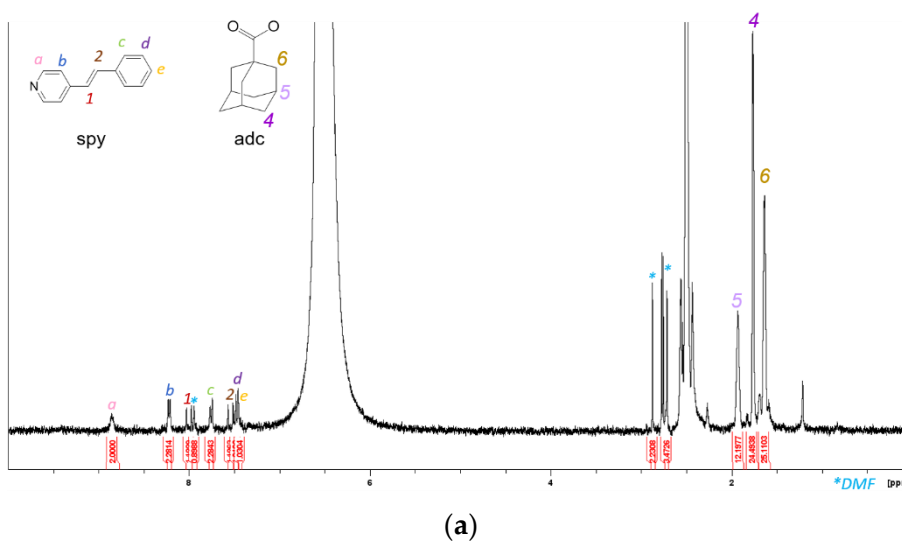


Figure S4. ^1H NMR spectra of (a) **2** and (b) **3** in $\text{DMSO-}d_6$ with a small drop of HNO_3 to dissolve the crystals. The water peak shifted from 3.20 ppm to 6.50 and 5.00 ppm for **2** and **3**, respectively, due to the addition of HNO_3 .

Table S1. Selected bond lengths (Å) and bond Angles (°) for **1**^a

| | | | |
|---------|-----------|----------|-----------|
| Zn1-O2 | 1.964(17) | Zn1-O2X | 2.02(2) |
| Zn1-O3 | 1.945(19) | Zn1-O3X | 1.92(3) |
| Zn1-O5 | 1.940(15) | Zn1-O5X | 1.95(3) |
| Zn1-N1 | 2.099(3) | Zn1-N1X | 2.014(17) |
| Zn2-O1 | 2.254(8) | Zn2-O1A | 2.254(8) |
| Zn2-O1X | 2.240(10) | Zn2-O1XA | 2.240(10) |
| Zn2-O4 | 2.299(8) | Zn2-O4A | 2.299(8) |
| Zn2-O4X | 2.300(10) | Zn2-O4XA | 2.300(10) |
| Zn2-O6 | 2.306(7) | Zn2-O6A | 2.306(7) |
| Zn2-O6X | 2.282(13) | Zn2-O6XA | 2.282(13) |

^aSymmetry operation: (A) 1-x, 1-y, 1-z.**Table S2.** Selected bond lengths (Å) and bond Angles (°) for **2**^a

| | | | |
|---------|----------|--------|----------|
| Cu1-O1A | 1.961(3) | Cu1-O2 | 1.964(3) |
| Cu1-O3A | 1.964(3) | Cu1-O4 | 1.962(3) |
| Cu1-N1 | 2.161(3) | Cu2-O5 | 1.954(2) |
| Cu2-O5B | 1.954(2) | Cu2-N2 | 2.035(3) |
| Cu2-N2B | 2.035(3) | | |

^aSymmetry operations: (A) 1-x, 2-y, 2-z; (B) -x, 1-y, 1-z.