Supporting information

Structure diversity and reversible anion exchange properties of cadmium(II) complexes with 1,3,5-tris(imidazol-1-ylmethyl)benzene: counteranion-directed flexible ligand conformational variation

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Fig. S1. The ethanol molecules and nitrate anions were filled in channels of the 3D framework of 2.

Fig. S2. Crystal packing diagram of 3 with the hydrogen bonds indicated by the dashed lines.
Fig. S3. The intermolecular hydrogen bonds in the 2D network of 4.

Fig. S4. The hydrogen bonds within the 2D network of 5 indicate in the red dashed lines.
Table S1  Distances (Å) and angles (deg) of hydrogen bonds for complexes 1-6

<table>
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<th>D-H---A</th>
<th>Distance (H---A)</th>
<th>Distance (D---A)</th>
<th>Angle (D-H---A)</th>
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Symmetry transformations used to generate equivalent atoms: #1: 1+x, y, z. #2: 2/3-x, 1/3-y, 1/3-z. #3: 2/3+y, 1/3-x+y, 1/3-z. #4: 2/3-x-y, 1/3+x, 1/3-z. #5: 3/2-x, 1/2+y, 3/2-z. #6: -1/2+x, 3/2-y, -1/2+z. #7: 3/2-x, 3/2-y, 1-z. #8: 3/2-x, 1/2-y, 1-z. #9: x, 1-y, 1/2+z. #10: 1-x, y, 3/2-z. #11: x, 1-y, -1/2+z. #12: 1-x, 1-y, 1-z. #13: -1/2+x, 1/2-y, -1/2+z. #14: 1/2-x, 1/2-y, 1-z. #15: x, -1+y, z. #16: -1+x, 3/2-y, -1/2+z. #17: 1-x, -1/2+y, 1/2-z. #18: x, 1+y, z. #19: 1+x, -1+y, z. #20: x, 1/2-y, -1/2+z. #21: -x, -1/2+y, 1/2-z. #22: 1-x, 1/2+y, 1/2-z. #23: -1+x, y, z.