Electronic Supporting Information

Copper(II) complexes of 3- and 4-picolinehydroxamic acids: from mononuclear compounds to 1D- and 2D-coordination polymers

Irina A. Golenya, Elzbieta Gumienna-Kontecka, Matti Haukka, Oleksandr M. Korsun, Oleg N. Kalugin, and Igor O. Fritsky

Supporting Information
Table S1. Bond distances (Å) and angles (°) in 1.

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Symmetry codes: (i) −x+1/2, −y+3/2, −z+1.

Table S2. Bond distances (Å) and angles (°) in 4a.
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Symmetry codes: (i) −x+1, −y+1, −z.
Table S3. Hydrogen bonds parameters (Å, °) for 4a.

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Symmetry codes: (ii) −x+1, −y+1, −z−1.
Table S4. Bond distances (Å) and angles (°) for 7.

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Symmetry codes: (i) x+1/2, -y+1/2, z+1/2; (ii) x-1/2, -y+1/2, z-1/2.
Table S5. Hydrogen bonds parameters (Å, °) for 7.

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Symmetry codes: (iii) x−1/2, −y+1/2, z+1/2.
Table S6. Bond distances (Å) and angles (°) for 8.

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Symmetry codes: (i) $-x, y+1/2, -z+1/2$; (ii) $-x, y-1/2, -z+1/2$; (iii) $-x+1, y+1/2, -z+1/2$; (iv) $-x+1, y-1/2, -z+1/2$. 
Table S7. Hydrogen bonds parameters (Å, °) for 8.

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Symmetry codes: (v) −x+1, −y+1, −z+1; (vi) −x, −y+1, −z; (vii) x, −y+1/2, z−1/2; (viii) x, −y+1/2, z+1/2; (iii) −x+1, y+1/2, −z+1/2; (ix) x−1, y, z; (i) −x, y+1/2, −z+1/2.
Table S8. Bond distances (Å) and angles (°) in 9.

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Symmetry codes: (i) \(x+1, y, z\); (ii) \(x-1, y, z\).
Table S9. Hydrogen bonds parameters (Å, °) for 9.

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Symmetry codes: (iii) x, y+1, z.
Table S10. Bond distances (Å) and angles (°) in 10.

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Symmetry codes: (i) −x+1, y+1/2, −z+1/2; (ii) −x+1, −y, −z+1; (iii) −x+1, y−1/2, −z+1/2.
Table S11. Hydrogen bonds parameters (Å, °) for 10.

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Table S12. Bond distances (Å) and angles (°) in 11.

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Symmetry codes: (i) \(-x+1/2, y+1/2, z\); (ii) \(-x+1/2, y-1/2, z\).
Table S13. Hydrogen bonds parameters (Å, °) for 11.

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Symmetry codes: (iii) x−1/2, −y+1/2, −z+1.
Figure S1. Unit cell in [Cu(3-HPicHA)$_2$(ClO$_4$)$_2$] (1).

Figure S2. Packing diagram for \textit{catena}-[Cu(3-PicHA)(phen)]$_n$(ClO$_4$)$_n$ (7)
Figure S3. Structure of monomeric fragment of the coordination polymer \textit{catena-}[Cu(4-PicHA)(bpy)]\textsubscript{n}(OH)\textsubscript{n}·3.25nH\textsubscript{2}O (8).

Figure S4. Mutual disposition of the polymeric chains conoformers in \textit{catena-}[Cu(4-PicHA)(bpy)]\textsubscript{n}(OH)\textsubscript{n}·3.25nH\textsubscript{2}O (8).
Figure S5. Temperature dependence of $\chi_M T$ product for $\{\text{Cu(4-HPicHA)(bpy)(ClO}_4\}_2]\text{(ClO}_4\}_2$ (4a).
Figure S6. Temperature dependences of $\chi_M^{-1}$ (top) and effective magnetic moment per one copper(II) ion (bottom) for catena-$[\text{Cu(3-PicH\AA)(phen)}]_n(\text{ClO}_4)_n$ (7).
Figure S7. Temperature dependences of $\chi_M^{-1}$ (top) and effective magnetic moment per one copper(II) ion (bottom) for catena-[Cu(4-PicH1A)(bpy)]$_n$(OH)$_n$·3.25nH$_2$O (8).
Figure S8. Temperature dependences of $\chi_M^{-1}$ for catena-[Cu(4-PicHA)(DMSO)$_2$]$_{2n}$(ClO$_4$)$_{2n}$ (9).

Figure S9. Temperature dependences of $\chi_M^{-1}$ for [Cu(3-PicHA)(DMSO)(ClO$_4$)]$_{nm}^\cdot$nmDMSO (10).
**Figure S10.** Temperature dependences of $\chi_M^{-1}$ (top) and effective magnetic moment per one copper(II) ion (bottom) for $\left\{\text{Cu(4-PicHA)(phen)}\right\}_n(\text{ClO}_4)_2n$ (11).