



SUPPLEMENTARY MATERIAL TO  
**Synthesis, characterization and antibacterial studies of Mn(II)  
and Co(II) complexes of an ionic liquid tagged Schiff base**

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CHARACTERISATION DATA FOR **1, 2, 3 AND 4**

*[2-Aemim]Br (1)*. Yield: 69 %; yellow oil; Anal. Calcd. for C<sub>6</sub>H<sub>12</sub>N<sub>3</sub>Br: C, 34.97; H, 5.87; N, 20.39 %. Found: C, 34.62; H, 5.52; N, 20.08 %; FT-IR (KBr, cm<sup>-1</sup>): 3431, 2991, 2754, 1546, 1458, 625; <sup>1</sup>H-NMR (400 MHz, D<sub>2</sub>O, δ / ppm): 3.83 (3H, s, CH<sub>3</sub>), 4.49 (2H, t, N-CH<sub>2</sub>), 4.55 (2H, t, N-CH<sub>2</sub>), 7.40 (1H, s, NCH), 7.49 (1H, s, NCH), 8.54 (2H, s, NH<sub>2</sub>), 8.81 (1H, s, N=CH); ESI-MS (*m/z*, (relative abundance, %)): 126.02 (100) [(M-Br)<sup>+</sup>].

*LH (2)*. Yield: 65–70 %; brown oil; Anal. Calcd. for C<sub>13</sub>H<sub>16</sub>N<sub>3</sub>OBr: C, 50.34; H, 5.20; N, 13.55 %. Found: C, 50.11; H, 5.09; N, 13.20 %; FT-IR (KBr, cm<sup>-1</sup>): 3429, 3143, 1626, 1579, 1454, 1279, 623; <sup>1</sup>H-NMR: (400 MHz, DMSO-*d*<sub>6</sub>, δ / ppm): 3.95 (3H, s, CH<sub>3</sub>), 4.68 (1H, t, N-CH<sub>2</sub>), 4.58 (1H, t, N-CH<sub>2</sub>), 7.83–7.72 (4H, m, Ar-H), 7.92 (1H, s, NCH), 7.90 (1H, s, NCH), 9.20 (1H, s, N=CH), 9.29 (1H, s, N=CH), 8.31 (1H, s, OH); ESI-MS (*m/z*, (relative abundance, %)): 227 (28) [(M-3H-Br)<sup>+</sup>].

*Mn(II) complex (3)*. Yield: 65 %; brown solid; Anal. Calcd. for C<sub>26</sub>H<sub>30</sub>Br<sub>2</sub>MnN<sub>6</sub>O<sub>2</sub>: C, 46.38; H, 4.49; N, 12.48; Mn, 8.16 %. Found: C, 46.22; H, 4.43; N, 12.36; Mn, 8.06 %; FT-IR (KBr, cm<sup>-1</sup>): 3398, 1616, 1444, 756, 565, 460; ESI-MS (*m/z*, (relative abundance, %)): 675 (25) [M+4].

*Co(II) complex (4)*. Yield: 71 %; dark brown solid; Anal. Calcd. for C<sub>26</sub>H<sub>30</sub>Br<sub>2</sub>CoN<sub>6</sub>O<sub>2</sub>: C, 46.11; H, 4.46; N, 12.41; Co, 8.20 %. Found: C, 46.02; H, 4.33; N, 12.39; Co, 8.10 %; FT-IR (KBr, cm<sup>-1</sup>): 3423, 1601, 1449, 761, 590, 475; ESI-MS (*m/z* (relative abundance, %)): 679 (35) [M+4].

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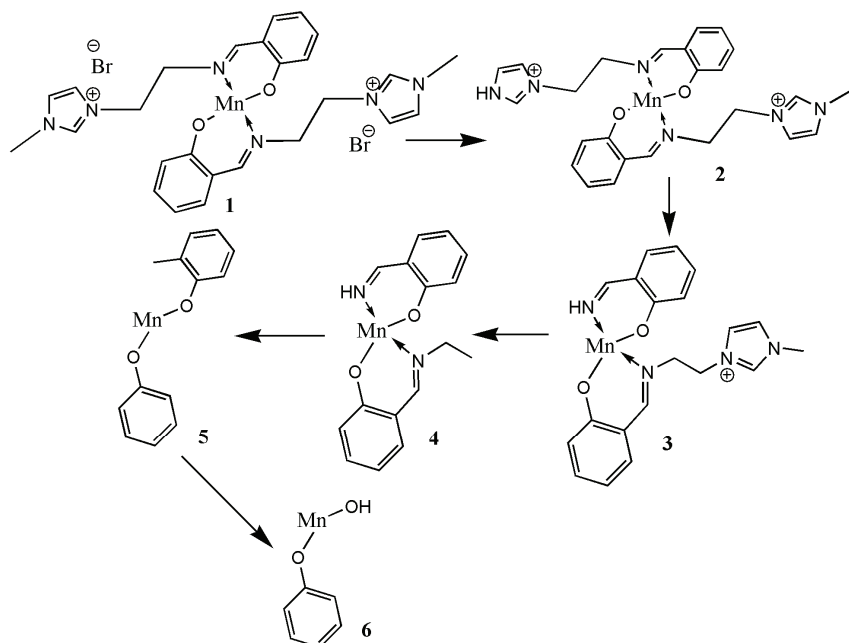


Fig. S-1. The mass fragmentations of the Mn(II) complex (3) with peaks at  $m/z$ : 1, 671; 2, 499; 3, 404; 4, 323; 5, 255; 6, 165.

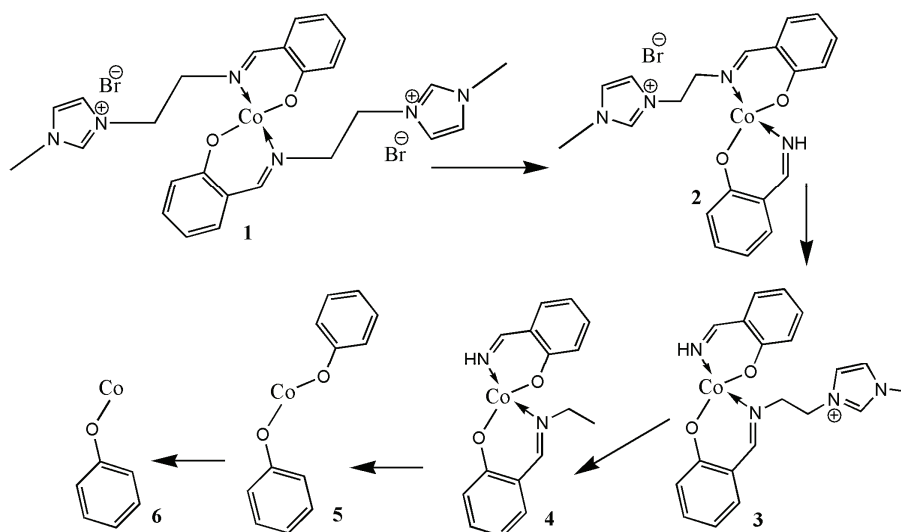


Fig. S-2. The mass fragmentations of the Co(II) complex (4) with peaks at  $m/z$ : 1, 675; 2, 487; 3, 408; 4, 327; 5, 245; 6, 152.