Poster Presentation

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Ni (II), Co (II) bzac and amp complexes alcohol sensor

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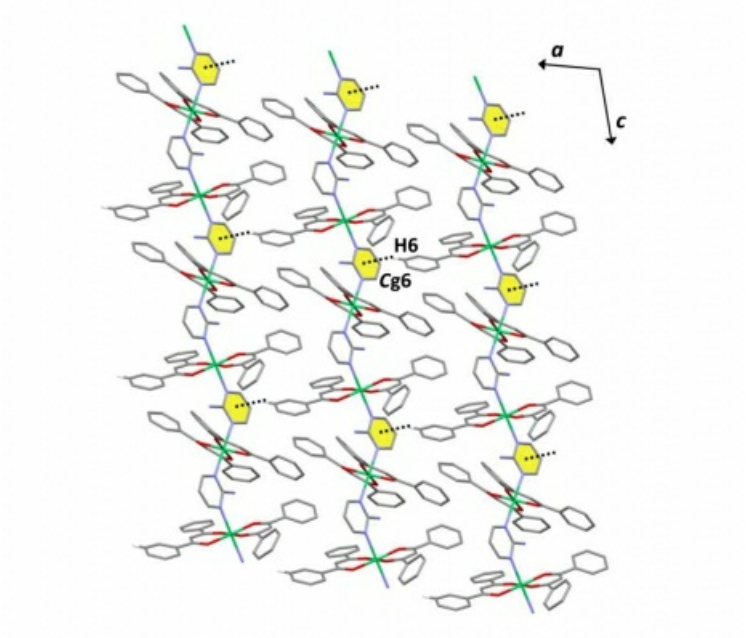
Two new isostructural (but not isomorphous) complexes of [M(bzac)2(apm)2], M = Ni (1), Co (2); bzac = benzoylacetonate, apm = 2-aminopyrimidine, have been synthesized and fully characterized by elemental analyses, IR spectroscopy and single crystal X-ray diffraction. At 296(2) K, complex 1 crystallizes in the orthorhombic polar space group Pna21, while complex 2 crystallizes in the monoclinic centrosymmetric space group P21/c. The crystal structures of both complexes found to be distorted octahedral geometry. The metal atoms are sit in a six coordination with two bzac and two apm ligands. The apm ligands are connected adjacent another apm ligands, forming an infinite 1D zigzag chain by the classical N–H·•·N hydrogen bonds with the other nitrogen atoms from near by the apm ligands. Furthermore, the alcohol sensor applications of both complexes 1 and 2 were also investigated with a positive signal.

[1] Delgado, S. et al. (2006) Inorg Chim Acta. 359, 109-117.
[2] Buvaylo, O.A. et al. (2013) J Mol Struct. 1048, 460–463.



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