

New Metal Carboxylates prepared at Room Temperature and by Hydrothermal Methods

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New alkaline-earth metal derivatives of nicotinic, isonicotinic, and *cis*-4-cyclohexene dicarboxylic (CDCA) acid have been prepared at room temperature and/or by hydrothermal methods. They have been characterized by spectroscopic, thermal, and X-ray diffraction techniques in polycrystalline and single crystal samples.

Layered structures are obtained in all cases. However, it should be noted that the Ba derivative of CDCA prepared under hydrothermal conditions crystallizes in an orthorhombic unit cell, space group Cmc2₁, with $a = 28.633(8)$, $b = 9.036(3)$, $c = 7.438(2)$ Å. This is a completely different structure from the one obtained previously at room temperature. The Sr and Ba complexes of isonicotinic acid are monoclinic, P2₁/c, with $a = 6.1403(6)$, $b = 43.976(4)$, $c = 7.2170(7)$ Å, $\beta = 118.72(1)^\circ$ for the Sr complex and $a = 6.276(2)$, $b = 44.334(8)$, $c = 7.345(2)$ Å, $\beta = 118.74(2)^\circ$ for the Ba complex.

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