

A Novel Zn(II) Coordination Polymer with a Honeycomb Network: Inhibiting Human Glioma Cell Strains

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SUMMARY. A new Zn(II) coordination polymer $[Zn_{0.5}(pdc)_{0.5}(H_2O)]_n$ (**1**, pdc = 3,5-pyridinedicarboxylic acid) has been synthesized by the volatile method and characterized by IR, PXRD, single-crystal X-ray diffraction analysis and thermogravimetric analysis. The complex shows a 2D stacked hcb layer through π - π interaction with the point symbol 6^3 . The *in vitro* antitumor activities of **1** and its corresponding organic ligand pdc were studied and evaluated, in which three human glioma cell lines (A172, H4 and HT22) were used in the screening tests.

RESUMEN. Se ha sintetizado un nuevo polímero de coordinación Zn (II) $[Zn_{0.5}(pdc)_{0.5}(H_2O)]_n$ (**1**, pdc = ácido 3,5-piridindicarboxílico) por el método volátil y caracterizado por IR, PXRD, análisis de difracción de rayos X monocristalino y análisis termogravimétrico. El complejo muestra una capa de hcb apilada en 2D a través de la interacción π - π con el símbolo de punto 6^3 . Se estudiaron y evaluaron las actividades antitumorales *in vitro* de **1** y de su correspondiente ligando orgánico pdc, en el que tres líneas celulares de glioma humano (A172, H4 y HT22) fueron utilizadas en las pruebas de detección.

KEY WORDS: anti-bladder cancer, crystal structure, luminescent property.

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