

## Two new Zn(II)- and Cu(II)-Based Coordination Polymers: Inhibition of Human Osteogenic Sarcoma Cells

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**SUMMARY.** Two new Zn(II)-based and Cu(II)-based coordination polymers, {[Zn(TFBDC)(bmip)](DMA)<sub>2</sub>}<sub>n</sub> (**1**, H<sub>2</sub>TFBDC = tetrafluoroterephthalic acid, bmip = 1,3-bis(2-methylimidazolyl)propane, DMA = dimethylacetamide) and [Cu<sub>2</sub>(bmip)<sub>2</sub>(TFBDC)(H<sub>2</sub>O)<sub>4</sub>·(TFBDC)]<sub>n</sub> (**2**), have been successfully synthesized and structurally characterized by single crystal X-ray analysis. In addition, *in vitro* anticancer activity of compounds **1** and **2** on four human osteogenic sarcoma cell lines (MG63, HOS, U2OS and 143B) have also been evaluated using MTT assay.

**RESUMEN.** Dos nuevos polímeros de coordinación basados en Zn(II) y Cu(II), {[Zn (TFBDC)(bmip)](DMA)<sub>2</sub>}<sub>n</sub> (**1**, H<sub>2</sub>TFBDC = ácido tetrafluorotereftálico, bmip = 1,3-bis(2-metilimidazolil) propano, DMA = dimetilacetamida) y [Cu<sub>2</sub>(bmip)<sub>2</sub>(TFBDC)(H<sub>2</sub>O)<sub>4</sub>·(TFBDC)]<sub>n</sub> (**2**), se han sintetizado con éxito y se han caracterizado estructuralmente por análisis de rayos X de cristal único. Además, la actividad anticancerígena *in vitro* de los compuestos **1** y **2** en cuatro líneas celulares de sarcoma osteogénico humano (MG63, HOS, U2OS y 143B) también se han evaluado usando el ensayo de MTT.

**KEY WORDS:** coordination polymer, osteogenic sarcoma, X-ray.

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