

The invention relates to chemistry and medicine, namely to a new compound of the type of one-dimensional coordination polymer of zinc(II) comprising the residue of (E)-2,2'-(4,4'-dioxo-2,2'-dithioxo-2H,2'H-[5,5'-dithiazoliden]-3,3'(4H,4'H)-diyl)diacetic acid as a ligand, as well as to a process for its preparation, and the compound can be used as an antifungal and antibacterial drug.

According to the invention, a polymeric coordination compound of zinc (II) of the formula $[Zn(5,5'\text{-Rda-Rda})(dmf)_2(H_2O)_2]_n$ is claimed, where 5,5'-Rda-Rda is the residue of (E)-2,2'-(4,4'-dioxo-2,2'-dithioxo-2H,2'H-[5,5'-dithiazoliden]-3,3'(4H,4'H)-diyl)diacetic acid; dmf – dimethylformamide. The claimed compound exhibits antifungal and antibacterial properties.

The process, according to the invention, consists in that zinc tetrafluoroborate monohydrate and 2-(4-oxo-2-thioxothiazolidin-3-yl)acetic acid are dissolved in a mixture of solvents consisting of water, methanol and dimethylformamide, the resulting solution is stirred at 40°C, slowly evaporated to obtain a compound of the formula $[Zn(5,5'\text{-Rda-Rda})(dmf)_2(H_2O)_2]_n$, comprising a new bridging ligand, representing a residue of (E)-2,2'-(4,4'-dioxo-2,2'-dithioxo-2H,2'H-[5,5'-dithiazoliden]-3,3'(4H,4'H)-diyl)diacetic acid, obtained as a result of condensation reaction of 2-(4-oxo-2-thioxothiazolidin-3-yl)acetic acid.

Claims: 3

Fig.: 3