The invention relates to the chemistry of coordinative compounds, to metal-organic complex compounds of copper(II) with pyrazine and pyridine derivatives, in particular to the class of 2,3-bis(2-pyridyl)pyrazine. Due to their antimicrobial and antitumor activity, these compounds may be promising candidates for use in medicine.

Summary of the invention consists in developing an optimal process for producing a new coordinative dinuclear compound of copper(II)  $[Cu_2(acdpp)_2Cl_2]\cdot 2(CH_3OH)$ , which contains a unique ligand 1-(7-chloro-6-methyl-2,3-bis(pyridin-2-yl)-5H-cyclopenta[b]pyrazin-5-yl)ethanone) (*acdpp*)<sup>-</sup>, obtained by condensation of 2,3-bis(2-pyridyl)pyrazine and acetylacetone ligands.

The process for producing this compound consists in dissolving copper(II) chloride dihydrate and 2,3-bis(2-pyridyl)pyrazine in methanol with subsequent addition of acetylacetone. Slow evaporation of this solution leads to the growth of single crystals of the target product  $[Cu_2(acdpp)_2Cl_2]\cdot 2(CH_3OH)$ .

CuCl.+2H\_O

Claims: 1 Fig.: 4