

## Acid-base properties and complexing ability of 6-methyluracil derivatives, containing sulfoxide and amide (or hydrazide) groups

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### Abstract

1,3-bis[5-(aminocarbonylmethylsulfinyl)pentyl]-6-methyluracil and 1,3-bis[5-(hydrazinocarbonylmethylsulfinyl)pentyl]-6-methyluracil have been synthesized as potential antituberculosis compounds. The behavior of these compounds in a DMSO-water solution (60 % vol. DMSO) has been studied by means of potentiometry, spectrophotometry and mathematical simulation of equilibria in solution (CPESP program). The protolytic properties of compounds have been described. The composition and stability constant of complexes with copper(II) were determined. The structures of various forms of compounds and their complexes have been simulated by the molecular mechanics method MM2 (software package *ChemBioOffice* ver. 12.0).