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Dinuklearni kompleksi srebra(I) sa *N,N',N'',N'''*-tetrakis(2-piridilmetil)-1,4,8,11--tetraazaciklotetradekanom: sinteza, karakterizacija i biološka aktivnost

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U ovom radu, *N,N',N'',N'''*-tetrakis(2-piridilmetil)-1,4,8,11-tetraazaciklotetradekan (tpmc) kao makrociklicni ligand sa 2-piridilmetil grupama je korišćen za sintezu kompleksa srebra(I). Različite AgX soli (X = $CF_3SO_3^-$, CF_3COO^- i BF_4^-) su korišćene za sintezu u cilju ispitivanja uticaja kontra-anjona na nuklearnost, stabilnost i biološku aktivnost kompleksa. Sintetisani kompleksi srebra(I) su okarakterisani primenom različitih spektroskopskih metoda, ciklične voltametrije i rendgenske strukturne analize. Ovi kompleksi pokazuju značajnu antimikrobnu aktivnost prema različitim sojevima bakterija i gljiva.

Dinuclear silver(I) complexes with *N,N',N'',N'''*-tetrakis(2-pyridylmethyl)--1,4,8,11-tetraazacyclotetradecane: synthesis, characterization and biological evaluation

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In this study, *N,N',N'',N'''*-tetrakis(2-pyridylmethyl)-1,4,8,11-tetraazacyclotetradecane (tpmc) as a macrocyclic ligand with pendant 2-pyridylmethyl groups was used for the synthesis of silver(I) complexes. Different AgX salts (X = $CF_3SO_3^-$, CF_3COO^- and BF_4^-) were used for the synthesis in order to investigate the influence of a counter-anion on nuclearity, stability and biological activity of the complexes. The synthesized complexes were characterized by different spectroscopic techniques, cyclic voltammetry and single-crystal X-ray diffraction analysis. All investigated complexes show remarkable antimicrobial activity against different bacterial and fungal strains.