**Neorganska hemija** / Inorganic Chemistry

**NH O 1**

## Srebro(I) kompleksi sa piridinkarboksilatnim ligandima: sinteza, strukturna karakterizacija i antimikrobna aktivnost

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Sintetisani su i strukturno okarakterisani kompleksi srebra(I) sa piridinkarboksilatnim ligandima, [Ag(py-2py-*N,N'*)($NO_3$-*O*)]$_n$ (**1**), [Ag(py-2metz-*N,N'*)($NO_3$-*O*)]$_n$ (**2**), [Ag(py-2py-*N,N'*)($CH_3CN$-*N*)]$BF_4$ (**3**), [Ag(py-2tz-*N,N'*)$_2$]$BF_4$ (**4**) i [Ag(py-2metz-*N,N'*)$_2$]$BF_4$ (**5**), py-2py je dimetil[2,2'-bipiridin]-4,5-dikarboksilat, py-2metz je dimetil 6-(4-metiltiazol-2-il)piridin-3,4-dikarboksilat i py-2tz je dimetil 6-(tiazol-2-il)piridin-3,4-dikarboksilat. Antimikrobna aktivnost kompleksa **1 – 5** i piridinkarboksilata korišćenih za njihovu sintezu je ispitivana *in vitro* prema panelu bakterijskih i *Candida* spp. sojeva. Većina sintetisanih kompleksa pokazuje značajnu aktivnost prema *Candida* sojevima, dok ligandi nisu aktivni.

## Silver(I) complexes with pyridinecarboxylate ligands: synthesis, structural characterization and antimicrobial activity

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New silver(I) complexes, [Ag(py-2py-*N,N'*)($NO_3$-*O*)]$_n$ (**1**), [Ag(py-2metz-*N,N'*)($NO_3$-*O*)]$_n$ (**2**), [Ag(py-2py-*N,N'*)($CH_3CN$-*N*)]$BF_4$ (**3**), [Ag(py-2tz-*N,N'*)$_2$]$BF_4$ (**4**) & [Ag(py-2metz-*N,N'*)$_2$]$BF_4$ (**5**), py-2py is dimethyl [2,2'-bipyridine]-4,5-dicarboxylate, py-2metz is dimethyl 6-(4-methylthiazol-2-yl)pyridine-3,4-dicarboxylate and py-2tz is dimethyl 6-(thiazol-2-yl)pyridine-3,4-dicarboxylate, were synthesized and structurally characterized. Antimicrobial activity of complexes **1** – **5**, along with that of pyridinecarboxylates used for their synthesis, were evaluated *in vitro* against a panel of bacterial and *Candida* spp. strains. Most of the synthesized complexes show significant anti-*Candida* activity, while the corresponding ligands are not active.

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