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Daniela Šojić Merkulov

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Sinteza i karakterizacija kompleksa tributilkalaja(IV) sa 2-(4-hidroksi-2-oksohinolinil)propanskom kiselinom

Marijana P. Kasalović^{1,2}, Jelena Lađarević³, Bojan Božić⁴, Verica V. Jevtić², Goran N. Kaluđerović¹, Nebojša Đ. Pantelić⁵

¹ University of Applied Sciences - Department of Engineering and Natural Sciences, Merseburg, Nemačka

² Univerzitet u Kragujevcu - Prirodno-matematički fakultet, Institut za hemiju, Kragujevac, Srbija

³ Univerzitet u Beogradu - Tehnološko-metalurški fakultet, Katedra za organsku hemiju, Beograd, Srbija

⁴ Univerzitet u Beogradu - Biološki fakultet, Institut za fiziologiju i biohemiju „Ivan Đaja“, Beograd, Srbija

⁵ Univerzitet u Beogradu - Poljoprivredni fakultet, Katedra za hemiju i biohemiju, Beograd, Srbija

U datom radu opisana je sinteza 2-(4-hidroksi-2-oksohinolinil)propanske kiseline i njenog kompleksa tributilkalaja(IV). Ligand prekursor je dobijen hidrolizom metil-estra sintetisanog u reakciji između 4-hidroksi-2-hinolona i metil-2-bromopropanoata. U reakciji deprotonovanog liganda i ekvimolarne količine Bu_3SnCl dobijen je kompleks u obliku belog taloga. Sintetisana jedinjenja su okarakterisana standardnim analitičkim metodama. Ligand prekursor i odgovarajući kompleks tributilkalaja(IV) biće testirani na antitumorsku aktivnost prema raznim tumorskim ćelijskim linijama.

Synthesis and characterization of novel tributyltin(IV) complex with 2-(4-hydroxy-2-oxoquinolinyl)propanoic acid

Marijana P. Kasalović^{1,2}, Jelena Lađarević³, Bojan Božić⁴, Verica V. Jevtić², Goran N. Kaluđerović¹, Nebojša Đ. Pantelić⁵

¹ University of Applied Sciences - Department of Engineering and Natural Sciences, Merseburg, Germany

² University of Kragujevac - Faculty of Science, Department of Chemistry, Kragujevac, Serbia

³ University of Belgrade - Faculty of Technology and Metallurgy, Department of Organic Chemistry, Belgrade, Serbia

⁴ University of Belgrade - Faculty of Biology, Institute of Physiology and Biochemistry „Ivan Đaja“, Belgrade, Serbia

⁵ University of Belgrade - Faculty of Agriculture, Department of Chemistry and Biochemistry, Belgrade, Serbia

Synthesis of 2-(4-methyl-2-oxoquinolinyl)propanoic acid and its tributyltin(IV) complex has been performed. The ligand precursor has been obtained by the hydrolysis of methyl ester synthesized in the reaction between 4-hydroxy-2-quinolone and methyl 2-bromopropanoate. In the reaction of deprotonated ligand with equimolar amount of Bu_3SnCl , the desired complex was precipitated as a white solid. The synthesized compounds have been characterized using standard analytical methods. The following research of ligand precursor and corresponding tributyltin(IV) complex will be focused on examining their antitumor activity against various cancer cell lines.