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**Abstract Book**

ABSTRACT BOOK OF  
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## Synthesis, characterization and interactions of newly platinum(II) complex with propyl ester of (*S,S*)-propylenediamine-*N,N'*-di-(2,2'-di-(4-hydroxy-benzil)) acetic acid with BSA

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**Abstract** – In this work, we have reported synthesis and spectroscopic characterization of new platinum(II) complex with propyl ester of (*S,S*)-propylenediamine-*N,N'*-di-(2,2'-di-(4-hydroxy-benzil)) acetic acid.  $K_2[PtCl_4]$  (0.1 g, 0.241 mmol) was dissolved in 10 mL of water and placed on magnet steerer. Equimolar amount of the ligand, propyl ester of (*S,S*)-propylenediamine-*N,N'*-di-(2,2'-di-(4-hydroxy-benzil)) acetic acid (0.135 g, 0.241 mmol) was dissolved in water and mixed with the LiOH in molar ratio 1:2. The dissolved ligand was being added in small portions into water solution of  $K_2[PtCl_4]$  for 1h. After the addition of the entire amount of the dissolved ligand, the mixture was stirred for 3h. During this period, other precipitate of the complex was obtained, filtered off, washed with cold water and dried on air. The characterization of the synthesized complex was carried out by elemental microanalysis, IR and NMR spectroscopy. The interaction of the new complex with bovine serum albumin (BSA) was investigated by fluorescence spectroscopy. The fluorescence spectra were recorded to examine the structural changes of BSA induced by the addition of complex and to determine their binding constant (*K*<sub>b</sub>) and the number of binding sites (*n*) for this biomolecule. The high value of the binding constant, *K*<sub>b</sub>, and the Stern-Volmer quenching constant, *K*<sub>SV</sub>, are the result of good binding of the complex to BSA.

**Keywords** – propylenediamine derivative, platinum(II) complex, BSA interaction