

Name: Dr. Partha Sarathi Sengupta

Current Position: Associate Professor in Chemistry

Previous Employment: 1. Dubra High (H.S) School 1988-1997

2. A.M. College, Jhalda, 1997-2006

Education: M.Sc. Ph.D.

Award: Merit Scholarship (1984-1986)

1. UGC-CSIR lectureship 1995
2. SLET 1994
3. GATE 1990
4. Joint CSIR-UGC JRF 1989

List of Publications: Total 27

National Journal: 8, Internal Journal: 19

1. Electrochemical and UV-Vis spectroscopic studies on the interaction of sodium 1,4-dihydroxy-9,10-anthraquinone-2-sulphonate with cetyltrimethylammonium bromide micelles; S. Roy, P.S. Sengupta, P.S. Guin, Chem. Phys. Let, 694, 7-13, 2018
2. Effect of electrolytes on the solubility and solution thermodynamics of 1-amino-4-hydroxy-9,10-anthraquinone, an analogue of anthracycline anticancer drugs, in aqueous ethanol media using theoretical and UV-Vis spectroscopic study, S. Imran, A. Hossain, S. Parui, , P.S. Sengupta, S. Roy, P.S. Guin; Journal of molecular liquids; 252, 151-157,2018
3. Computational and docking studies of 5,6-dihydroxy-7,8,4'-trimethoxyflavone: A α -Glucosidase inhibitory constituent from *Limnophila indica*: D. K. Rana, D. Saha, P.S. Sengupta, B. Sarkar, P. Mondal, S.K. Jash; Journal of Chemistry and Chemical Sciences, 8, 548-561, 2018
4. Synthesis, spectroscopic characterization with computational modeling and epoxidation activity of two iron(III)-Schiff base complexes; A. Sahu, P.S. Sengupta, B. Biswas, J Indian Chem Soc.95, 507-515, 2018
5. An iron(III)-Schiff base complex as a functional model of phenoxazine synthase enzyme: B. Biswas, P.S. Sengupta; J Indian Chem Soc. 94, 1-82017
6. An experimental and theoretical approach on the kinetics and mechanism for the formation of a four membered (S,S) chelated Pt(II) complex; V. P. Reddy, S. Mukherjee, I. Mitra, K. Mishra, P.S. Sengupta, W. Linert, J. C. Bose, G. K. Ghosh and S. C. Moi; RSC Adv, 6, 18288,2016

7. A theoretical investigation on hydrolysis mechanism of biologically relevant Pt(II)/Pd(II) complexes with σ -donor and π -acceptor carrier ligand; V. P. Reddy, I. Mitra, S. Mukherjee, P.S. Sengupta, S. Reddy Dodda and S. C. Moi, Chem Phys Lett, 657, 148-155, 2016
8. Unusual crystallographic existence of a hydrated zinc(II) bisulphate complex: experimental and theoretical observations; D. Dey, S. Pal, H. R. Yadav, P.S. Sengupta, A. Roy Choudhury, N. Kole and B. Biswas, RSC Adv, 5, 42681,2015
9. Synthesis and spectroscopic characterization of cobalt(II) complex containing a N-donor Schiff base: DNA binding and antimicrobial activity; D. Dey, B. choudhury, S. Dutta, P.S. Sengupta, N. Kole and B. Biswas; J Indian Chem Soc., 92, 1-11,2015
10. 1-Amino-4-hydroxy-9,10-anthraquinone- An analogue of anthracycline anticancer drugs, interacts with DNA and induces apoptosis in human MDA-MB-231 breast adenocarcinoma cells: Evaluation of structure activity relationship using computational, spectroscopic and biochemical studies, P. Mondal, S. Roy, G. Loganathan, B. Mandal, D. Dharumadurai, A. Akbarsha, P.S. Sengupta, S. Chattopadhyay, P.S. Guin, Biochemistry and Biophysics Reports, 4, 312-323,2015
11. A detailed theoretical DFT study of the hydrolysis mechanism of orally active anticancer drug ZD0473, S. Banerjee, P.S. Sengupta, A. K. Mukherjee, Chemical Physics Letters, 487, 108, 2010
12. trans-Platinum anticancer drug AMD443: A detailed theoretical study by DFT-TST method on the hydrolysis mechanism, S. Banerjee, P. S. Sengupta, A. K. Mukherjee, Chemical Physics Letters, 497, 142, 2010
13. A detailed theoretical study of the interaction of thiourea with cis-diaqua(ethylenediamine) platinum(II), S. Banerjee, P.S. Sengupta, A.K. Mukherjee, Journal of molecular structure. Theochem, 913, 97, 2009
14. Chloride anation reaction of aqua (diethylenetriamine) platinum (II): Density functional studies "Dedicated to Prof. H. B. Gray", P.S. Sengupta, S. Banerjee and A.K. Ghosh, Journal of Computational Biology and Bioinformatics Research, JCBBR 1, 1, 2009
15. Modeling the ground state geometry and estimating the charge transfer transition energy of the toluene-icl molecular complex by *ab initio* and DFT methods, A.S. Tiwary, P.S.Sengupta, A.K.Mukherjee, Journal of Theoretical and Computational Chemistry (JTCC), 7, 331, 2008
16. Study of charge transfer transition in benzene-ICl complex in gas phase and in CCl₄ medium by *ab initio* and TDDFT method, A.S. Tiwary, P.S. Sengupta, A.K. Mukherjee, Chem Phys Letters, 433, 427, 2007
17. The water exchange process of tetraaquaplatinum(II):Density-functional theory and *ab initio* computational study, Partha Sarathi Sengupta, J. Chem Phys, 124, 074511, 2006
18. Substitution of aqua ligands from *cis*-[Pt(en)(H₂O)₂](ClO₄)₂ and *cis*-[Pt(dmen)(H₂O)₂](ClO₄)₂ (en =ethylenediamine, dmen = N,N[\] dimethylethylenediamine) by glutathione(reduced) (GSH) in aqueous medium- A Kinetic and Mechanistic Study, S. K. Bera, P. S. Sengupta and G.S. De, Inorg Reaction Mech, 5, 65, 2003

19. Kinetics of substitution of aqua ligands from *cis* - diaqua(ethylenediamine)platinum(II) perchlorate by guanosine in aqueous medium, Partha S. Sengupta, R. Sinha, G. S. De, Ind J Chem, 41A,712,2002
20. Kinetics of the displacement of aqua ligands from *cis* - diaqua(ethylenediamine)platinum(II) perchlorate by adenosine-5'-monophosphate in aqueous medium, Partha S. Sengupta, R. Sinha, G.S.De, Trans Met Chem, 27,550,2002
21. Kinetics of Substitution of aqua ligands from *cis* - diaqua(ethylenediamine)platinum(II) perchlorate by DL-penicillamine in aqueous medium, Partha S. Sengupta, G. S. De, Trans Met Chem, 26,638,2001
22. Kinetic and mechanistic studies on the interaction of L-glutamine with *cis* - diaqua(ethylenediamine)platinum(II) perchlorate in aqueous medium P. S. Sengupta, R. Sinha, G. S. De, Ind. J Chem, 40A, 509, 2001
23. Kinetics and mechanism of the interaction of pyridine -2-thiol with *cis* - diaqua(ethylenediamine)platinum(II) perchlorate in aqueous medium, P.S. Sengupta, G. S. De, Ind.J Chem, 39A, 928, 2000
24. Kinetics and mechanism of the interaction of thiourea with *cis* - diaqua(ethylenediamine)platinum(II) perchlorate in aqueous medium, P.S. Sengupta, S. Ghosh, G. S.De, Trans Met Chem, 25,279, 2000
25. Kinetic and mechanistic studies on the interaction of thiosemicarbazide with *cis* - diaqua(ethylenediamine)platinum(II) ion, S. Ghosh, P.S. Sengupta, G. S. De, Ind. J Chem, 38A, 453, 1999
26. Kinetics and mechanism of the interaction of DL-methionine with *cis* - diaqua(ethylenediamine)platinum(II) perchlorate in aqueous medium: Trans Met Chem, S. Ghosh, P.S. Sengupta, G.S. De, Trans Met Chem, 24,59, 1997
27. Interaction of L-cysteine with hydroxopentaaquarhodium(III)ion: Kinetic and mechanistic studies, A.K. Ghosh, P. S. Sengupta, G.S.De; Ind. J Chem, 36A, 611, 1997

Research Projects: Minor 3

1. Kinetic and Mechanistic study for the nonenzymatic reaction between L-carnosine and 4-hydroxynonenal (HNE) by ab-initio and Density Functional Theory, 2011
2. Study of Structure relation of Pt-amine complexes by Density Functional Theory, 2007
3. Ab-initio calculations for the model system, Reactions of Pt(II) ion, $[\text{Pt}(\text{en})(\text{H}_2\text{O})_2]^{2+}$ with guanosine, 2004

Contact: Mob no. 9434176330, 8250385104

Mail address: anapspsmo@gmail.com