

LIST OF PUBLICATIONS YEAR 2016 - 2021

PROF. KALLOL K. GHOSH

2016				
1.	Adsorption kinetics and binding studies of protein quantum dots interaction: A spectroscopic approach	S. K. Vaishnav, J. Korram, R. Nagwanshi, K. K. Ghosh and M. L. Satnami	<i>J. Fluoresc.</i> , 2016 , 1-11	08
2.	Spectrofluorometric determination of mercury and lead by colloidal CdS nanomaterial	M. L. Satnami, S. K. Vaishnav, R. Nagwanshi and K. K. Ghosh	<i>J. Dispersion. Sci. Tech.</i> , 2016 , 37, 196-204	22
3.	Activity of α -chymotrypsin in cationic and nonionic micellar media: ultraviolet and fluorescence spectroscopic approach	S. K. Verma, K. K. Ghosh, R. Verma, S. Verma and X. Zhao	<i>Inte. J. Chemi. Kinet.</i> , 2016 , 48 (2), 79-87	04
4.	Progress in drug development for Alzheimer's disease: An overview in relation to mitochondrial energy metabolism	J. Hroudová, N. Singh, Z. Fišar and K. K. Ghosh	<i>Euro. J. Medi. Chem.</i> , 2016 , 121, 774-784	45
5.	Interaction of bovine serum albumin with cationic monomeric and dimeric surfactants: A comparative study	S. Sinha, D. Tikariha, J. Lakra, T. Yadav, S. Kumari, S. K. Saha and K. K. Ghosh	<i>J. Mol. Liq.</i> , 2016 , 218, 421-428	20
6.	Protein nanoparticle interaction: A spectrophotometric approach for adsorption kinetics and binding studies	S.K.Vaishnav, K. Chandraker, J. Korram, R. Nagwanshi, K. K. Ghosh and M. L. Satnami,	<i>J. Mol. Struc.</i> , 2016 ,1117, 300-310	10
7.	Oxime-mediated in vitro reactivation kinetic analysis of organophosphates-inhibited human and electric eel acetylcholinesterase	A. K. Sahu, R. Sharma, B. Gupta, K. Musilek, K. Kuca, J. Acharya and K. K. Ghosh	<i>Toxicol Mech Methods</i> , 2016 , 26, 319-326.	07

8.	Synthesis and in-vitro reactivation screening of imidazolium aldoximes as reactivators of sarin and VX-inhibited human acetylcholinesterase (hAChE)	R. Sharma, B. Gupta, A. K. Sahu, J. Acharya, M. L. Satnami and K. K. Ghosh	<i>Chem.-Biol. Interact.</i> , 2016 , 259, 85-92	13
9.	Degradation of organophosphate pesticides using pyridinium based functional surfactants	R. Sharma, B. Gupta, T. Yadav, S. Sinha, A. K. Sahu, Y. Karpichev, N. Gathergood, J. Marek, K. Kuca and K. K. Ghosh	<i>ACS Sustainable Chem. Eng.</i> , 2016 , 4, 6962–6973	17
10.	Green luminescent CdTe quantum dot based fluorescence nano-sensor for sensitive detection of arsenic (III)	S. K. Vaishnav, J. Korram, P. Pradhan, K. Chandraker, R. Nagwanshi, K. K. Ghosh and M. L. Satnami	<i>J. Fluoresc.</i> , 2017 , 27, 781–789	25
11.	Influence of octanohydroxamic acid on the association behavior of cationic surfactants: Hydrolytic cleavage of phosphate ester	<u>M. L. Satnami</u> , <u>H. K. Dewangan</u> , <u>N. Kandpal</u> , <u>R. Nagwanshi</u> , <u>K. K. Ghosh</u>	<i>J. Mol. Liq.</i> , 2016 , 221, 805–814	06
12.	Influence of amine-based cationic gemini surfactants on catalytic activity of α -chymotrypsin	S. K. Verma, B. K. Ghritlahre, K. K Ghosh, R. Verma, S. Verma and X. Zhao	<i>Int. J. Chem. Kinet.</i> 2016 , 48, 779–784	05
13.	Metallosurfactant aggregates as catalysts for the hydrolytic cleavage of carboxylate and phosphate esters	K. K Ghosh, B. Gupta and S. Bhattacharya	<i>Curr. Organocatalysis</i> , 2016 , 3, 6-23	08
2017				
14.	Mn ²⁺ doped-CdTe/ZnS modified fluorescence nanosensor for detection of glucose	S. K. Vaishnav, J. Korram, R. Nagwanshi, K. K. Ghosh and M. L. Satnami	<i>Sens. Actuators B Chem.</i> , 2017 , 245, 196–204	19
15.	Biophysical studies on the interactions between antidepressant drugs and bile salts	T. Yadav, D. Tikariha, S. Sinha and K. K Ghosh	<i>J. Mol. Liq.</i> 2017 , 233, 23–28	07
16.	Surface plasmon resonance based spectrophotometric determination of	S. K. Vaishnav, K. Patel, K. Chandraker, J. Korram,	<i>Spectrochim Acta A.</i> , 2017 , 179 155–162	13

	medicinally important thiol compounds using unmodified silver nanoparticles	R. Nagwanshi, K. K. Ghosh and M. L. Satnami		
17.	Antibacterial properties of amino acid functionalized silver nanoparticles decorated on graphene oxide sheets	K. Chandraker, R. Nagwanshi, S. K. Jadhav, K. K. Ghosh and M. L. Satnami.	<i>Spectrochim Acta A</i> , 2017 ,181 47–54	27
18.	Kinetic investigation of micellar promoted pyridine based oximate and hydroxamate catalysis on phosphotriester pesticides	H. K. Dewangan, R. Nagwanshi, K. K. Ghosh and M. L. Satnami	<i>Catal Lett.</i> , 2017 , 147, 602–611	02
19.	A comparative study on the effect of imidazolium-based ionic liquid on self-aggregation of cationic, anionic and nonionic surfactants studied by surface tension, conductivity, fluorescence and FTIR spectroscopy	M. K. Banjare, R. Kurrey, T. Yadav, S. Sinha, M. L. Satnami and K. K. Ghosh	<i>J. Mol. Liq.</i> , 2017 , 241, 622–632	34
20.	Host-guest complex formation of ionic liquid 1-butyl-3-methylimidazolium octylsulphate with α - and β -cyclodextrins.	M. K. Banjare, K. Behera, M. L. Satnami, S. Pandey and K.K Ghosh	<i>Chem, Phys. Lett.</i> , 2017 , 689, 30–40	11
21.	An investigation of kinetic and physicochemical properties of vesicular surfactants with oximate and hydroxamate ions: Hydrolytic reactions of organophosphorus pesticides	N. Kandpal, H. K. Dewangan, R. Nagwanshi, K. K. Ghosh and M. L. Satnami	<i>J. Mol. Liq.</i> , 2017 , 243, 178–186.	05
2018				
22.	Spectroscopic studies on in vitro molecular interaction of highly fluorescent carbon dots with different serum albumins	Reshma, S. K. Vaishnav, I. Karbhal, M. L. Satnami and K. K. Ghosh	<i>J. Mol. Liq.</i> , 2018 , 255, 279–287	16
23.	Self-assembly of short-chain ionic liquid within deep eutectic solvents	M. K. Banjare, K. Behera, M. L. Satnami, S. Pandey and K.K Ghosh	<i>RSC Adv.</i> , 2018 , 8, 7969	18
24.	An imidazolium-based ionic liquid as modulator of physicochemical properties of cationic, anionic, nonionic and gemini surfactants	A. Kumar, M. K. Banjare, S. Sinha, T. Yadav, Reshma, M. L Satnami and K. K. Ghosh	<i>J. Surfactants Deterg.</i> , 2018 , 21, 355–366	04

25.	Self-aggregation of bio-surfactants within ionic liquid 1-ethyl-3-methylimidazolium bromide: A comparative study and potential application in antidepressants drug aggregation	M. K. Banjare, K. Behera, R. Kurrey, R. K. Banjare, M. L. Satnami, S. Pandey and K. K. Ghosh	<i>Spectrochim. Acta A</i> , 2018 , 199, 376–386	10
26.	Host-guest complexation of ionic liquid with α - and β -cyclodextrins: a comparative study by ¹ H-NMR, ¹³ C-NMR and COSY	M. K. Banjare, K. Behera, M. L. Satnami, S. Pandey and K. K. Ghosh	<i>New J. Chem.</i> , 2018 , 42 , 14542-14550	07
27.	Gold nanoprobe for inhibition and reactivation of acetylcholinesterase: An application to detection of organophosphorus pesticides	M. L. Satnami, J. Korram, R. Nagwanshi, S. K. Vaishanav, I. Karbhal, H. K. Dewangan and K. K. Ghosh	<i>Sens. Actuators B Chem.</i> , 2018 , 267 , 155-164	24
2019				
28.	Silver nanoparticles for selective detection of phosphorus pesticide containing π -conjugated pyrimidine nitrogen and sulfur moieties through non-covalent interactions	K. Shrivastava, S. Sahu, B. Sahu, R. Kurrey, T. K. Patle, Tushar Kant, I. Karbhal, M. L. Satnami, M. K. Deb and K. K. Ghosh	<i>J. Mol. Liq.</i> , 2019 , 275, 297-303	09
29.	A carbon quantum dot–gold nanoparticle system as a probe for the inhibition and reactivation of acetylcholinesterase: detection of pesticides	J. Korram, L. Dewangan, R. Nagwanshi, I. Karbhal, K. K. Ghosh and M. L. Satnami,	<i>New J. Chem.</i> , 2019 , 43 , 6874-6882	14
30.	Antidepressant drug-protein interactions studied by spectroscopic methods based on fluorescent carbon quantum dots	Reshma, S. K. Vaishanav, T. Yadav, S. Sinha, S. Tiwari, M. L. Satnami and K.K. Ghosh	<i>Heliyon</i> , 2019 , 5 , e01631	01
31.	Interaction of ionic liquid with silver nanoparticles: potential application in induced structural changes of globular proteins	M. K. Banjare, K. Behera, Reshma, S. Sharma, R. K. Banjare, S. Pandey and K. K. Ghosh	<i>ACS Sustainable Chem. Eng.</i> , 2019 , 7 , 11088-11100,	06
32.	Interaction of synthesized nitrogen enriched graphene quantum dots with novel anti-alzheimer's drugs: spectroscopic insights	S. Sharma, N. Singh, E. Nepovimova, J. Korabecny, K. Kuca, M. L. Satnami and K. K. Ghosh	<i>J Biomol Struct Dyn.</i> , 2020 , 38 , 1822-1837.	06

33.	Inclusion complexation of novel synthesis amino acid based ionic liquid with β -cyclodextrin	M. K. Banjare, K. Behera, Siddharth Pandey, R. K. Banjare, P. Mundeja and K. K. Ghosh	<i>J. Mol. Liq.</i> , 2019 , 299, 112204	03
34.	Inclusion complexation of imidazolium-based ionic liquid and β -Cyclodextrin : A detailed spectroscopic investigation	M. K. Banjare, K. Behera, Siddharth Pandey, R. K. Banjare, K. K. Ghosh	<i>J. Mol. Liq.</i> , 2019 , 302, 112530	04
35.	Facile and visual detection of acetylcholinesterase inhibitors by carbon quantum dots	Reshma, B. Gupta, R. Sharma and K. K. Ghosh	<i>New Journal of Chemistry</i> , 2019 , 43, 9924-9933	04
2020				
36.	Multi-spectroscopic investigation on the inclusion complexation of α -cyclodextrin with long chain ionic liquid	M. K. Banjare, K. Behera, Siddharth Pandey, R. K. Banjare and K. K. Ghosh	<i>Carbohydrate Research</i> , 2020 , 491, 107982.	00
37.	An example of green surfactant systems based on inherently biodegradable IL-derived amphiphilic oximes	S. J. Pandya, I. V. Kapitanov, Z. Usmani, R. Sahu, D. Sinha, N. Gathergood, K. K. Ghosh and Y. Karpichev	<i>J. Mol. Liq.</i> , 2020 , 305, 112857	03
38.	Interaction of an acid functionalized magnetic ionic liquid with gemini surfactants	R. Suryawanshi, M. K. Banjare, K. Behera, R. K. Banjare, R. Sahu, A. Saha, S. Pandey, S. Banerjee and K. K. Ghosh	<i>J Sol Chem.</i> , 2020 , 49, 715–731.	00
39.	Influence of cationic surfactants and inorganic salts on the enzymatic activity of mucor javanicus lipase	S. K. Verma, K. K. Ghosh, R. Verma and S. Verma	<i>Int. J. Chem. Kinet.</i> , 2020 , 1-9	-
40.	Exploring spectroscopic insights into molecular recognition of potential anti-alzheimer's drugs within the hydrophobic pockets of β -cycloamylose	S. Sharma, M. K. Banjare, N. Singh, J. Korábečný, Z. Fišar, K. Kuča and K. K. Ghosh	<i>J. Mol. Liq.</i> , 2020 , 311, 113269	02
41.	CdTe QD-based inhibition and reactivation assay of acetylcholinesterase for detection of organophosphorus pesticides	J. Korram, L. Dewangan, I. Karbhal, R. Nagwanshi, S. Vaishnav, K. K. Ghosh and M. Manmohan	<i>RSC Adv.</i> , 2020 , 10, 24190-24202	02

42.	IntIntererfacial and thermodynamic approach of surfactants with α -chymotrypsin and trypsin: A comparative study	R. K. Banjare, M. K. Banjare, K. K. Ghosh, P. Mundeja and S. Panda	<i>Indian J. Chem.</i> , 2020 , 59A, 1128-1135	-
43.	Inclusion complex formation of novel synthesized ionic liquids with B-cyclodextrin	M.K. Banjare, P. Mundeja, A. Saraf and K.K. Ghosh	<i>Int. J. Sci. Res. (IJSR)</i> , 2020 , 8, 18.	-
44.	Molecular interaction on imidazolium based ionic liquids and serum albumin: A spectroscopy approach	M.K. Banjare, R.K.Banjare and K.K. Ghosh	<i>Int. J. Adv. Chem.</i> , 2020 , 8, 209-216.	-
45.	Micellization behaviour of conventional cationic surfactants within glycerol based deep eutectic solvent	R. K. Banjare, M. K. Banjare, K. Behera, S. Pandey and K. K. Ghosh	<i>ACS Omega</i> , 2020 , 5, 19350–19362	01
46.	Glycosylated-imidazole aldoximes as reactivators of pesticides inhibited AChE: synthesis and in-vitro reactivation study	R. Sharma, K. Upadhyaya, B. Gupta, K. K. Ghosh, R. P. Tripathi, K. Musilek and K. Kuca	<i>Environ. Toxicol. Pharmacol</i> , 2020 , 80, 103454	01
47.	Novel formation of Au/Ag bimetallic nanoparticles by a mixture of monometallic nanoparticles and their application for rapid detection of lead in onion sample	S. Sahu, S. Sharma and K. K. Ghosh	<i>New J. Chem.</i> , 2020 , 44, 15010-15017	01
48.	Thermodynamic investigation of the interaction between ionic liquid functionalized gold nanoparticles and human serum albumin for selective determination of glutamine	S. Sahu, Reshma, S. Sharma, I. Karbhal and K. K. Ghosh	<i>RSC Adv.</i> , 2020 , 10, 31400	02
49.	Multi-spectroscopic monitoring of molecular interactions between an amino acid-functionalized ionic liquid and potential anti-Alzheimer's drugs	S. Sharma, M. Kumar Banjare, N. Singh, J. Kora'bec'ny', K. Kuc'a and K. K. Ghosh	<i>RSC Adv.</i> , 2020 , 10, 38873	00
2021				
50.	Colorimetric determination of L-cysteine in milk samples with surface functionalized silver nanoparticles	S. Sahu, S. Sharma, T. Kant, K. Shrivastava and K. K. Ghosh	<i>Spectrochim. Acta A</i> , 2021 , 246, 118961	00
51.	Physicochemical studies on the micellization of anionic surfactants in the presence of long alkyl chain ionic liquid	L.K.S. Tanwar, M.K. Banjare, S.Sharma, K.K. Ghosh	<i>Chem. Phys. Lett</i> , 769 , 2021, 138399	00

52.	Spectroscopic detection of Hg ²⁺ in water samples using fluorescent carbon quantum dots as sensing probe	L.K.S. Tanwar, S.Sharma, K.K. Ghosh	<i>Main Group Chemistry, 20, 2021, 1-18</i>	00
53.	Severe Acute Respiratory Syndrome Coronavirus -2 (SARS-CoV-2): A Review on Pathophysiology, Diagnosis and Investigational Therapeutics	R. Sharma, D. Khokhar, B. Gupta, P. Saxena, K.K. Ghosh, A.K. Geda, K. Kuca	<i>Curr. Med. Chem., 2021</i>	
54.	Interaction of Folic Acid with Mn ²⁺ Doped CdTe/ZnS Quantum Dots: In Situ Detection of Folic Acid	S.K. Vaishnav, J. Korram, R. Nagwanshi, I. Karbhal, L. Dewangan, K.K. Ghosh and M.L. Satnami	<i>J. Fluoresc. 31, 951–960 (2021)</i>	01
55.	Molecular interactions between novel synthesized biodegradable ionic liquids with antidepressant drug	M.K. Banjare, K. Behera, R.K. Banjare, S. Pandey, K.K. Ghosh, Y. Karpichev	<i>Chemical Thermodynamics and Thermal Analysis, 3–4 (2021) 100012</i>	