

Publication
Gupta College of Technological Sciences
2018-2020

1. Maiti, S., Jana, S., **Laha, B. (2018)** Cationic polyelectrolyte–biopolymer complex hydrogel particles for drug delivery. 10.1016/B978-0-12-813627-0.00006-5.
2. **Ray, S., Sinha, P., Laha, B., Maiti, S., Bhattacharyya, U., Nayak, A. (2018)** Polysorbate 80 coated crosslinked chitosan nanoparticles of ropinirole hydrochloride for brain targeting. Journal of Drug Delivery Science and Technology. 48. 10.1016/j.jddst. 2018.08.016.
3. **Mukherjee, A., Mehta, BK., Sen, KK., Banerjee, S. (2018)** Metabolic syndrome-associated cognitive decline in mice: Role of minocycline. Indian Journal of Pharmacology, 50(2):61-68.
4. **Panda, S., Ehsan, I. (2018)** Molecular docking studies of snake venom serine protease of sharp-nosed pit viper with hesperetin. Asian Journal of Pharmaceutical and Clinical Research, 11(6):457-461.
5. **Panda, S., Kumari, L., Panda, S. (2018)** Structural analysis CD59 of Chinese tree shrew: a new reference molecule for human immune system specific CD59 drug discovery. Current Drug Discovery Technologies, 15(4):326-334.
6. Biswas, R., **Sen, KK. (2018)** Pharmacognostical evaluation, in vitro antioxidant effects of *syzygium cumini* linn. Seed extract, and the potential role of this extract as hypoglycemic agent in alloxan–induced diabetic rats, Asian Journal of Pharmaceutical and Clinical Research, 11(10), 155-160.
7. Biswas, R., **Sen, KK. (2018)** Development and characterization of novel herbal formulation (Polymeric microspheres) of *syzygium cumini* seed extract, International Journal of Applied Pharmaceutics, 10(5), 226-234.
8. **Gangopadhyay, A., Chakraborty, M., Haldar, PK., Chaulya, NC., Ghosh, A. (2018)** Evaluation of anticancer activity of ethanolic extract of *cyperus kyllingia* endl. in ehrlich ascites carcinoma-induced swiss albino mice. Asian Journal of Pharmaceutical and Clinical Research. 11(10):482-485.
9. **Banerjee, S., Sen, KK. (2018)** Aquasomes: A novel nanoparticulate drug carrier. Journal of Drug Delivery Science and Technology, 43:446-452.

10. **Mukherjee, A., Sen, KK., Banerjee, S. (2018)** Effect of metabolic syndrome on depression in mice. *Indian Journal of Pharmaceutical Education*, 52:S46-53.
11. De, S., Subran, SK., Ramasamy, SK., **Banerjee, S., Paira, P., Kalleshappa, AKS. (2018)** Luminescent anticancer acenaphtho[1, 2-b]quinoxaline: green synthesis, dft and molecular docking studies, live-cell imaging and reactivity towards nucleic acid and protein bsa. *Chemistry Select, Wiley Online Library*. 3(19):5421-5430. <https://doi.org/10.1002/slct.201800487>
12. De, S., Sarkar, B., Jadhav, GR., Ramasamy, SK, **Banerjee, S., Moorthy, A. (2018)** Experimental and theoretical study on the biomolecular interaction of novel acenaphtho quinoxaline and dipyrrophenazine analogues. *ChemistrySelect*, 3(38):10593-10602.
13. **Ray, S., Bera, M., Bhattacharyya, U., Das, S., Seth, S., Pal, P., Aziz, A. (2019)** pH Sensitive interpenetrating network bio containers of gum ghatti for sustained release of glipizide. *Current Drug Delivery*. 16. 10.2174/1567201816666191017154719.
14. Ali, SA., Nayak, AK., **Sen, KK. (2019)** Preparation and characterization of vetiver oil encapsulated polymeric microcapsules for sedative and hypnotic activity. *International Journal of Research in Pharmaceutical Sciences*, 10(4). <https://doi.org/10.26452/ijrps.v10i4.1743>
15. **Laha, B., Goswami, R., Maiti, S., Sen, KK. (2019)** Smart karaya-locust bean gum hydrogel particles for the treatment of hypertension: Optimization by factorial design and preclinical evaluation. *Carbohydrate polymers*, 210:274-288.
16. **Laha, B., Das, S., Maiti, S., Sen, KK. (2019)** Novel propyl karaya gum nanogels for bosentan: In vitro and in vivo drug delivery performance, *Colloids and Surfaces B: Biointerfaces*, 180:263-272.
17. **Sen, SO., Devbhuti, P., Sen, KK., Ghosh, A. (2019)** Development and evaluation of sustain release microparticles of metoprolol succinate, *International Journal of Applied Pharmaceutics*, 11(5):166-172.
18. **Das, A., Hazra, S., Patil, S., Sen, KK. (2019)** Evaluation of acute oral toxicity of ethanolic extract of (Roxb.) *Terminalia tomentosa* stem bark in Swiss albino mice. *Asian Journal of Pharmacy and Pharmacology*, 5(3):559-564.
19. **Laha, B., Maiti, S., Sen, KK., Jana, S. (2019)** Nanoscale polysaccharide-based particles for the delivery of therapeutic molecules. *Green Synthesis, Characterization and Applications of Nanoparticles*, 347-368. 10.1016/B978-0-08-102579-6.00014-9.
20. **Panda S., Kumari L. (2019)** Anti-ophidian properties of herbal medicinal plants: could it be a remedy for snake bite envenomation? *Current Drug Discovery Technologies*, 16(4):319-329.

21. **Gangopadhyay, A., Chaulya, NC., Ghosh, A. (2019)** In vitro pharmacognostical evaluation of *Cyperus kyllingia* root. World Journal of Pharmacy and Pharmaceutical Sciences, 8(3):924-936.
22. **Nayak, A., Gohel, S. (2019)** Antimicrobial activities of desi cow dung extracts against human pathogens and phytochemical analysis using chloroform extracts. International Journal of Advanced Chemistry, 7(2):112-118.
23. **Paul, R., Dutta, M., Chakraborty, D., Nayak, A. (2019)** Antimicrobial agents from natural sources: An overview. Advance Pharmaceutical Journal. 2456-1436.
24. **Paira, P., Kumar, AKS., De, S., Banerjee, S. (2019)** Critical role of Dipeptidyl Peptidase IV: A therapeutic target for cancer & diabetes. Mini-Reviews in Medicinal Chemistry, 19(2) DOI : 10.2174/1389557518666180423112154
25. **De, S., Chaudhuri, SR., Panda, A., Jadhav, GR., Kumar, RS., Manohar, P., Ramesh, N., Mondal, A., Moorthy, A., Banerjee, S., Paira, P., Kumar, AKS. (2019)** Synthesis, characterisation, molecular docking, biomolecular interaction and cytotoxicity studies of novel ruthenium(ii)–arene-2-heteroarylbenzoxazole complexes. New Journal of Chemistry, 10.1039/C8NJ04999H.
26. **Sen, SO., Nayak, AK., Devbhuti, P., Ghosh, A. (2019)** Modification of gums by periodate oxidation: A natural cross-linker. International Journal of Pharmacy and Pharmaceutical Sciences, 11(7):1-6.
27. **Roy, J., Ghosh, S., Ojha, PK., Roy, K. (2019)** Predictive quantitative structure–property relationship (QSPR) modeling for adsorptioorganic pollutants by carbon nanotubes (CNTs). Environmental Sciences Nano, 6:224-247.
28. **Ghosh, S., Ojha, PK., Roy, K. (2019)** Exploring QSPR modeling for adsorption of hazardous synthetic organic chemicals (SOCs) by SWCNTs. Chemosphere, 228:545-555.
29. **Das, M., De, B., Banerjee, S., Samanta, A. (2019)** Antimicrobial investigation and binding mode analysis of some newly synthesized 4-amino-5-((aryl substituted)-4h-1, 2, 4-triazole-3-yl)-thio linked hydroxamic acid derivatives”. Asian Journal of Pharmaceutical and Clinical Research, 12:469-7.
30. **Das, A., Patil, AG., Patil, S. (2019)** Involvement of imidazoline binding sites in the anticomulsive like activity of ellagic acid. Biomedicine, 39(3):442-446.

31. **Banerjee, S., Sen, KK. (2019)** Qualitative and quantitative evaluation study along with method development and validation for UV spectrophotometric analysis of *Chelidonium majus* L. extract. *Journal of Pharmacognosy and Phytochemistry*, 8(3):4629-4636.
32. **Banerjee, S., Sen, KK. (2020)** Preparation and evaluation of surface modified nanoparticles of calcium phosphate as extract carrier. *International Journal of Applied Pharmaceutics*, 12(4):248-257.
33. **Chakraborty, S., Yilmadlie, Z., Mukherjee, B., Besra, SE., Sengupta, S., Sen, R., Mukherjee, A. (2020)** Comparative investigation of the ability of various aptamer-functionalized drug nanocarriers to induce selective apoptosis in neoplastic hepatocytes: in vitro and in vivo outcome. *AAPS PharmSciTech*, 21:89 (DOI: 10.1208/s12249-020-1629-z)
34. **Chakraborty, S., Yilmadile, Z., Chakraborty, S., Roy, S., Mukherjee, B., Besra, SE., Dewanjee, S., Mukherjee, A., Ojha, PK., Kumar, V., Sen, R. (2020)** Aptamer-functionalized drug-nanocarrier improves hepatocellular carcinoma towards normal by targeting neoplastic hepatocytes. *Molecular Therapy of Nucleic Acids*, 20:34-49.
35. **Ghosh, S., Ojha, PK., Carnesecchi, E., Lombardo, A., Roy, K., Benfenati, E. (2020)** Exploring QSAR modeling of toxicity of chemicals on earthworm. *Ecotoxicology and Environmental Safety*. 190:110067.
36. Ali, SA., Nayak, AK., **Banerjee, S., Sen, KK., Prabhakar, T. (2020)** *In silico* molecular docking of vetiver oil and formulation of vetiver oil-encapsulated gellan gum-based microcapsules for antidepressant activity. *Research Journal of Pharmacy and Technology*, 13(7):3135-3142.
37. **Banerjee, S., Banerjee, S., Jha, G., Bose, S. (2020)**. Conspectus of phytoconstituents and pharmacological activities of *Barleria lupulina* Lindl.: A Review. *Current Traditional Medicine*. 06. 10.2174/2215083806666200312150825.
38. **Banerjee, S., Banerjee, S., Jha, G., Bose, S. (2020)**. *Barleria Prionitis* L.: An illustrative traditional, phytochemical and pharmacological review. *The Natural Products Journal*. 10. 10.2174/2210315510666200131114525.
39. Bose, S., **Banerjee, S., Mondal, A., Chakraborty, U., Pumarol, J., Croley, C., Bishayee, A. (2020)**. Targeting the JAK/STAT signaling pathway using phytocompounds for cancer prevention and therapy. *Cells*. 9. 1451. 10.3390/cells9061451.

40. Kumar, D., Jain, R., **Banerjee, S.**, Prabhu, S., Kumar, R., Abul, A., Roy Chowdhury, D. (2020). Bandwidth enhancement of planar terahertz metasurfaces via overlapping of dipolar modes. *Plasmonics*. 1-10. 10.1007/s11468-020-01222-7.
41. Kumar, D., Ambatipudi, S., **Banerjee, S.**, Kumar, R., Roy Chowdhury, D. (2020). Multifold coupling enabled high quality factor toroidal resonances in metasurfaces. *Journal of Applied Physics*. 127. 193103. 10.1063/5.0007997.
42. **Banerjee, S.**, Singh, S., Pandey, S., Bhandari, M., Pandey, A., Giri, K. (2020). Biocontrol potential of *Pseudomonas azotoformans*, *Serratia marcescens* and *Trichoderma virens* against Fusarium wilt of *Dalbergia sissoo*. *Forest Pathology*. 50. e12581. 10.1111/efp.12581.
43. Das, A., Nandi, S., Das, K., **Banerjee, S.** (2020) Virtual screening of few novel sulindac derivatives as multi-targeted agents. *Drug Discovery*, 14(33):33-43.
44. **Datta, R.**, Bose, S., Mandal, SK. (2020) Evaluation of *in vitro* hepatic toxicity of leaves of *Pterospermum acerifolium* (L.) Willd. *Asian Journal of Pharmaceutical and Clinical Research*, 13(5): 1-3.
45. **Dhua, M.**, Maiti, S., **Sen, KK.** (2020) Modified karaya gum colloidal particles for the management of systemic hypertension. *International Journal of Biological Macromolecules*, 164: 1889-97.

Book Chapter

1. S Maiti, **KK Sen**, Bio-Targeted Nanomaterials for Theranostic Applications *Drug Discovery and Development*, 2019; Third Edition, 99-117.
2. S Jana, A Gandhi, **KK Sen**, Nanocomplexes for Topical Drug Delivery, *Applications of Encapsulation and Controlled Release*, 2019; 19.
3. S Jana, A Gandhi, **KK Sen**, Chitosan-Based Interpenetrating Polymer Networks: Drug Delivery Application, *Functional Chitosan*, 2019; 269-295.
4. S Jana, A Gandhi, **KK Sen**, Delivery Systems for Proteins and Peptides, *Applications of Encapsulation and Controlled Release Formulation*, 2019, 145.
5. S Jana, S Maiti, S Jana, **KK Sen**, AK Nayak, Guar gum in drug delivery applications, *Natural Polysaccharides in Drug Delivery and Biomedical Applications*, 2019, 187- 201.
6. S Jana, N Jasmin, **KK Sen**, Chitosan-based particulate composites: drug delivery and biomedical potential, *Materials for Biomedical Engineering*, 2019, 477-513.

7. S Jana, S Maiti, **KK Sen**, S Jana, Interpenetrating polysaccharide networks as oral drug delivery modalities, *Polysaccharide Carriers for Drug Delivery*, 2019, 319-338.
8. S Jana, **KK Sen**, Gellan gum/PVA Interpenetrating Network Micro-beads for Sustained Drug Delivery. *Materials Today: Proceedings*, 2019, 11, 614-619.
9. B Mukherjee., **S Chakraborty.**, I Ehsan., A Chakraborty., L Kumari, Alankar Mukherjee, and Shounak Sarkhel. Conventional and Nonconventional Approaches to Site-Specific Targeting of Nanotherapeutics in Some Infectious Diseases and Metabolic Disorders In: *Nanoformulations in Human Health*, Edited by S. Talegaonkar, M. Rai. Chapter 6, Springer Nature Switzerland AG 2020.
10. B Mukherjee, L Kumari, I Ehsan, Prasanta Ghosh, Soumyabrata Banerjee, Samrat Chakraborty, Manisheeta Ray, Ashique Al Hoque, Ratan Sahoo. Guar gum based nanomaterials in drug delivery and biomedical applications. In: *Biopolymer-based Nanomaterials in Drug Delivery and Biomedical Applications*. Chapter 6, Elsevier.

Seminar Proceedings

1. **B Laha.**, S Maiti, (2019) Design of core-shell stearyl pullulan nanostructures for drug delivery. *Materials Today: Proceedings*. 11. 620-627. 10.1016/j.matpr.2019.03.019.
2. Souvik Mukherjee, Priyanka Chatterjee, **Malini Sen**, Mithun Bhowmick. Phytochemical investigation and antiproliferative potential of dormant and germinated seed extracts from *Cucurbita pepo* (pumpkin) [Abstract]. In: *Key concerns and considerations in pharmaceutical sciences and technology: South-east Asian perspective*; 2019 Feb 4-5; Dr. B.C.Roy College of Pharmacy & AHS, Durgapur, West Bengal, India; BCRCPiCON:2019, Abstract No. BCRCPiCON-19-P-131
3. Subhajit Makar, Souvik Mukherjee, Arghya Pariya, **Malini Sen**, Mithun Bhowmick. Design, synthesis and evaluation of phenyl pyrimidine bridged chalcone derivatives as putative anticancer agents [Abstract]. In: *Key concerns and considerations in pharmaceutical sciences and technology: South-east Asian perspective*; 2019 Feb 4-5; Durgapur, West Bengal, India; BCRCPiCON:2019, Abstract No. BCRCPiCON-19-P-140
4. **Malini Sen**, Arghya Paria, Anamika Sengupta, Mithun Bhowmick. Determination of in-vitro antioxidant activity of *Withania somnifera* root extract by DPPH free radical scavenging method [Abstract]. In: *Renovation of pharmaceutical education towards the need of the health care*

system; 2019 Jan 27; Jakir Hossain Institute of Pharmacy, Murshidabad, West Bengal, India;
JHIP-INT:2019, Abstract No. JHIP-INT.-SEMINAR/P-20/2019

5. Garima Sharma, Malini Sen. Phytochemical screening & in-vitro evaluation of antimicrobial activity of *Amorphophallus paeoniifolius* tuber extracts [Abstract]. In: Innovations in Pharmacy & Green Chemistry in Post COVID-19 Era; 2020 June 11-13; Kolkata, West Bengal, India; Colloquium-2020, Abstract No. COLLOQUIUM/ABS/HDP-13