

Publication Report of Dr. Semanti Ghosh:

Research Articles in peer-reviewed Scientific Journals:

1. Samanta A, **Ghosh S.** (2024). Molecular Insight of Q126P PINK1 Mutation Parkinson's Disease. *Journal of Advanced Zoology*, 45(1), 499–503. <https://doi.org/10.53555/jaz.v45i1.4564>
2. Nahar M, **Ghosh S.** (2024). Comprehensive In-Silico Study of PLAT Domain Containing Protein 1 Upregulated from Salinity Stress In Oryza Sativa. *Journal of Advanced Zoology*, 45(1), 529–534. <https://doi.org/10.53555/jaz.v45i1.4570>
3. Samanta A, **Ghosh S.** (2023) Protein – protein Interaction Mapping of Neurodegenerative Disease. *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6449 – 6450.
4. Nahar M, **Ghosh S.** (2023) Comparative in-silico Study of The Major Prolamin Protein of Wheat and Rice in Relation to Celiac Disease, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6451 – 6453.
5. Dutta S, Bose D, **Ghosh S** & Chakrabarti A (2022) Spectrin: an alternate target for cytoskeletal drugs. *Journal of Biomolecular Structure and Dynamics*. DOI: 10.1080/07391102.2022.2109063. [I.F.: 5.235]
6. Biswas, G. **Ghosh S.***, Basu, S., Bhattacharya, D., Dutta, A.K., Banerjee R.* (2022) Can the Jigsaw Puzzle Model of Protein Folding Re-assemble a Hydrophobic Core? *Proteins: Structure, function, Bioinformatics*. DOI: 10.1002/prot.26321 [I.F. 2.9]
7. Basak, D., Jamal, Z., Ghosh, A., Mondal, PK., Talukdar, PD., **Ghosh, S.**, et al. (2021) Reciprocal interplay between asporin and decorin: Implications in gastric cancer prognosis. *PLoS ONE* 16(8): e0255915. DOI: <https://doi.org/10.1371/journal.pone.0255915>. [I.F.: 3.7]
8. **Ghosh, S.**, & Bagchi, A. (2020). Protein dynamics and molecular motions study in relation to molecular interactions between DsrAB and DsrC proteins from sulfur oxidizer proteobacteria *Allochromatium vinosum*. *Journal of Biomolecular Structure and Dynamics*. Taylor & Francis. DOI: [10.1080/07391102.2020.1754914](https://doi.org/10.1080/07391102.2020.1754914) [I.F.: 5.235]
9. Biswas, G., **Ghosh, S.**, Raghuraman H., Banerjee R. (2020). Probing conformational transitions of PIN1 from *L. major* during chemical and thermal denaturation. *International journal of biological macromolecules*, 154, 904–915. Elsevier. DOI: <https://doi.org/10.1016/j.ijbiomac.2020.03.166> [I.F.: 8.025]

10. **Ghosh, S.,** & Bagchi, A. (2019). Structural study to analyze the DNA-binding properties of DsrC protein from the dsr operon of sulfur-oxidizing bacterium *Allochromatium vinosum*. *Journal of molecular modeling*, 25(3), 74. **Springer**. DOI: <https://doi.org/10.1007/s00894-019-3945-3> [I.F.: 2.2]
11. Biswas, A., **Ghosh, S.,** Sinha, D., Dutta, A., Seal, S., Bagchi, A., & Sau, S. (2019). Dimerization ability, denaturation mechanism, and the stability of a staphylococcal phage repressor and its two domains. *International journal of biological macromolecules*, 124, 903-914. **Elsevier**. DOI: <https://doi.org/10.1016/j.ijbiomac.2018.11.263> [I.F.: 8.025]
12. **Ghosh, S.,** & Bagchi, A. (2018). Insight into the molecular mechanism of the sulfur oxidation process by reverse sulfite reductase (rSiR) from sulfur oxidizer *Allochromatium vinosum*. *Journal of molecular modeling*, 24(5), 117. **Springer**. DOI: <https://doi.org/10.1007/s00894-018-3652-5> [I.F.: 2.2]
13. Mandal, S., **Ghosh, S.,** Sinha, D., Seal, S., Mahapa, A., Polley, S., ... & Sau, S. (2018). Alanine substitution mutations in the DNA binding region of a global staphylococcal virulence regulator affect its structure, function, and stability. *International journal of biological macromolecules*, 113, 1221-1232. **Elsevier**. DOI: <https://doi.org/10.1016/j.ijbiomac.2018.03.045> [I.F.: 8.025]
14. Samui, S., Chakraborty, A., Biswas, S., Singh, G., Mondal, S., **Ghosh, S.,** ... & Naskar, J. (2018). A Terminally Capped Synthetic, Acyclic Tripeptide Forms Dimer in the Solid, Liquid and Gaseous States. *Chemistry Select*, 3(9), 2523-2527. **Wiley**. DOI: <https://doi.org/10.1002/slct.201702722> [I.F.: 2.307]
15. Ali, A., **Ghosh, S.,** & Bagchi, A. (2017). Structural study of the effects of mutations in proteins to identify the molecular basis of the loss of local structural fluidity leading to the onset of autoimmune diseases. *Biochemical and biophysical research communications*, 484(1), 165-170. **Elsevier**. DOI: <https://doi.org/10.1016/j.bbrc.2017.01.048> [I.F.: 3.1]
16. Biswas, R., **Ghosh, S.,** & Bagchi, A. (2017). A structural perspective on the interactions of TRAF6 and Basigin during the onset of melanoma: A molecular dynamics simulation study. *Journal of Molecular Recognition*, 30(11), e2643. **Wiley**. DOI: <https://doi.org/10.1002/jmr.2643> [I.F.: 2.7]
17. Karmakar, S., Manna, D., **Ghosh, S.,** Hansda, S., Mitra, A., Bagchi, A., & Ghosh, R. (2017). 9-Phenyl Acridine: A Possible Poly (ADP-ribose) Polymerase-1 Inhibitor. *Journal of Chemical and Pharmaceutical Research*, 9(5), 188-200.

18. Ray, S., **Ghosh, S.**, & Bagchi, A. (2018). Molecular Interactions, Structural Transitions and Alterations in SoxB Protein Due to SoxYZ Interaction from Two Distinct β -Proteobacteria: An In-silico Approach Towards the Thiosulfate Oxidation and Recycling of SoxY Protein. *Interdisciplinary Sciences: Computational Life Sciences*, 10(2), 390-399. **Springer**. DOI: <https://doi.org/10.1007/s12539-016-0199-y> [I.F.: 4.8]
19. **Ghosh, S.**, & Bagchi, A. (2015). Comparative analysis of the mechanisms of sulfur anion oxidation and reduction by dsr operon to maintain environmental sulfur balance. *Computational biology and chemistry*, 59, 177-184. Publishers: **Elsevier**. DOI: <https://doi.org/10.1016/j.compbiolchem.2015.07.001> [I.F.: 3.1]
20. Bhattacharya, S., Das, A., **Ghosh, S.**, Dasgupta, R., & Bagchi, A. (2014). Hypoglycosylation of dystroglycan due to T192M mutation: a molecular insight behind the fact. *Gene*, 537(1), 108-114. Publishers: **Elsevier**. DOI: <https://doi.org/10.1016/j.gene.2013.11.071> [I.F.: 3.913 (2021)]
21. **Ghosh, S.**, & Bagchi, A. (2013). Mutation study of DsrM from *Allochromatium vinosum* using the amino acid sequences. *Meta gene*, 1, 33-42. Publishers: **Elsevier**. DOI: <https://doi.org/10.1016/j.mgene.2013.10.006>
22. **Ghosh, S.**, & Bagchi, A. (October-December, 2013). Characterization of DsrK and DsrO from *Allochromatium vinosum* and other Proteobacteria Using the Amino Acid Sequences. *Research and Reviews: Journal of Material Sciences*, 31-38. e-ISSN: 2321-6212. p-ISSN: 2347-2278.
23. **Ghosh, S.**, & Bagchi, A. (2013). Amino Acid Sequence Comparison of DsrP Protein from Proteobacteria to Analyze the Probable Molecular Mechanism of Sulfur Oxidation Process. *Open Structural Biology Journal*, 5, 1-10. Publishers: **Bentham Open**. ISSN: 1874-1991.

Review Articles:

1. Ghosh, A., Naskar, P., Dey, S., Mukherjee, S., Biswas, S., Das, R., Sarkar, S., **Ghosh, S.**, Ghosh, B., Sarkar, S. The Key to A Sustainable Future - Algal Biofuel, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6395-6400.
2. Nayak, S., Chakraborty, S., Roy, S., Roy, S., Ghosh, K., Ghorui, A., Sarkar, S., Ghosh, B., **Ghosh, S.**, Sarkar, S. The Role of Plant Hormone on Root Development, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6401 – 6407.
3. Ghosh, S., Ghosh, B., Ghosh, M., Paul, S., Pal, A., Dey, T., Sarkar, S., **Ghosh, S.**, Ghosh, B., Sarkar, S. Phytoremediation- Friendlier and Affordable Approach to Remediate

Heavy Metal Pollution, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6291-6296.

4. Pal, N., Das, P., Dutta, R., Sarkar, S., Mukherjee, S., Devi, P., Mukherjee, M., Dhar, S., **Ghosh, S.**, Sarkar, S., Sarkar, S., Ghosh, B. Water Reclamation Through Nano-remediation & Bioremediation: A Weal Against Conventional Chemical Techniques, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6297-6305.
5. Banerjee, D., Sadhu, P., Das, S., Pal, S., Mitra, S., Ghosal, A., Sarkar, S., Ghosh, B., **Ghosh, S.**, Sarkar, S. Phosphate Solubilizing Bacteria: A potential biotic component for solubilizing phosphate in soil and its application as Biofertilizer: A Review. *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6306-6315.
6. Biswas, D., Chourasia, A., Sasmal, A., Santra, S., Panigrahi, S., Kundu, M., Sarkar, S., Ghosh, B., **Ghosh, S.**, Sarkar, S. Mycoremediation is a Potential Strategy for Environmental Clean-up of Heavy Metal: A Review, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6316- 6327.
7. Sen, A., Mondal, I., Das, S., Roy, S., Mondal, M., Roy, R., Sarangi, S., Banerjee, S., Sarkar, S., Ghosh, B., Sarkar, S., **Ghosh, S.** Analytical approach of micro-RNA interaction study in ovarian cancer, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6328- 6335.
8. Chakraborty, B., Gosai, R., Saha, D., Nayek, B., Biswas, P., Das Gupta, A., Ghosh, R., Ghosh, B., Sarkar, S., Sarkar, S., **Ghosh, S.** Structural and functional relationship study in plant salinity stress, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6336- 6343.
9. Dalalathakur, S., Singh, P., Singh, S., Sasmal, A., Deb, T., Karmakar, S., Dasgupta, T., Sarkar, S., Sarkar, S., Ghosh, B., **Ghosh, S.** Role of pathogenesis-related (PR) proteins in plant microbes defense mechanism, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6344- 6352.
10. Noor, S., Mondal, M., Singh, S., Sadhu, P., Chourasia, S., Patra, S., Ghosh, K., Pal, S., Sarkar, S., Sarkar, S., **Ghosh, S.**, Ghosh, B. Scavenging of Waste Water Using Oyster Mushrooms, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6364- 6371.
11. Saha, S., Devi, P., Das, S., Roy, S., Sing, P., Mitra, S., Banerjee, S., Mallick, J., Sarkar, S., Sarkar, S., **Ghosh, S.**, Ghosh, B. Study About the Absorption Pattern of Soil Chromium By Perennial Flowering Herbs, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6372- 6377.

12. Sharma, P., Das, S., Sadhu, P., Pal, S., Mitra, S., Ghoshal, A., Biswas, S., Roy, S., Sarkar, S., Ghosh, B., **Ghosh, S.**, Sarkar, S. Therapeutic Role of Probiotics In Managing Various Diseases, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6378-6380.
13. Ghoshal, A., Saha, P., Mallick, J., Sarkar, S., Chakarborty, M., Sarkar, S., Ghosh, B., **Ghosh, S.**, Sarkar, S. Phytoremediation: A Way Forward Towards Heavy Metal Management, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6381-6394.
14. Bidisha Ghosh, Monoswita Chakraborty, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Genetic Basis And Clinical Perspectives Of Breast Cancer. *Journal of Advanced Zoology*, 44(S6). <https://doi.org/10.53555/jaz.v44iS6.3708>
15. Santanu Biswas, Subhajit Pal, Sayani Das, Soumili Banerjee, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Microbial Plastic Degradation: Nature's Solution for Sustainable Waste Management. *Journal of Advanced Zoology*, 44(S6), 2315–2321. <https://doi.org/10.53555/jaz.v44iS6.3720>
16. Abhishek Ghoshal, Joydev Mallick, Suranjana Sarkar, **Semanti Ghosh**, Bidisha Ghosh, & Subhasis Sarkar. (2023). Efflux Pumps In Antimicrobial Resistance: Mechanism, Regulation And Therapeutic Implications. *Journal of Advanced Zoology*, 44(S5), 2575–2580. <https://doi.org/10.53555/jaz.v44iS5.3282>
17. Dipti Das, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Recombinant Protein Production: Advancements And Applications. *Journal of Advanced Zoology*, 44(S6), 2236–2242. <https://doi.org/10.53555/jaz.v44iS6.3706>
18. Sayantani Chakraborty, Sampanna Roy, Aayushee Chatterjee, Falguni Pal, Ritu Das, Puja Sadhu, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Exosomal RNA: Interplay and Therapeutic Potential. *Journal of Advanced Zoology*, 44(S6), 2309–2314. <https://doi.org/10.53555/jaz.v44iS6.3718>
19. Puja Sadhu, Suranjana Sarkar, Aritri Laha, **Semanti Ghosh**, Bidisha Ghosh, & Subhasis Sarkar. (2023). Oncolytic Viral Nanoparticles: A Combination Of Targeted And Immunotherapeutic Approach For Cancer Treatment: A Review. *Journal of Advanced Zoology*, 44(S5), 2537–2550. <https://doi.org/10.53555/jaz.v44iS5.3277>
20. Sulogna Mitra, Suranjana Sarkar, Debjit De, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar. (2023). Management Of Microbial Biofilm Using Nano Particle: A Review. *Journal of Advanced Zoology*, 44(S6), 2070–2080. <https://doi.org/10.17762/jaz.v44iS6.2696>

21. Prity Singh, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Application Of Genetic Engineering In Crop Improvement. *Journal of Advanced Zoology*, 44(S6), 2301–2308. <https://doi.org/10.53555/jaz.v44iS6.3717>
22. Sourav Banerjee, Suranjana Sarkar, Subhasis Sarkar, Bidisha Ghosh, & **Semanti Ghosh**. (2023). Biofertilizer and their importance in sustainable agriculture. *Journal of Advanced Zoology*, 44(S5), 2526–2529. <https://doi.org/10.53555/jaz.v44iS5.3222>
23. Sayani Da, Suranjana Sarkar, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar. (2023). Gut Microbiome And Human Health: A Review. *Journal of Advanced Zoology*, 44(S6), 2062–2069. <https://doi.org/10.17762/jaz.v44iS6.2695>
24. Sulogna Mitra, Suranjana Sarkar, Debjit De, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar. (2023). Management Of Microbial Biofilm Using Nano Particle: A Review. *Journal of Advanced Zoology*, 44(S6), 2070–2080. <https://doi.org/10.17762/jaz.v44iS6.2696>.
25. Sayani Das, Sulogna Mitra, Monalisa Mallik, Soumili Banerjee, Subhajit Pal, Abhijit Kumar, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Advancing Biomedical Frontiers: Unveiling The Potential Of 3d Bioprinting In Organ Regeneration. *Journal of Advanced Zoology*, 44(S5), 2488–2493. <https://doi.org/10.53555/jaz.v44iS5.3210>
26. Tilatoma Dasgupta, Bidisha Ghosh, Suranjana Sarkar, Subhasis Sarkar, & **Semanti Ghosh**. (2023). Tuberculosis - A multisystemic disease and antimicrobial resistance in Mycobacterium tuberculosis. *Journal of Advanced Zoology*, 44(S5), 2641–2645. <https://doi.org/10.53555/jaz.v44iS5.3304>
27. Ankit Pal, Shreyoshi Pal, Saikat Manna, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Unlocking The Potential of Phytochemicals in Anti-Diabetic Therapy: Mechanisms, Challenges, And Future Prospects. *Journal of Advanced Zoology*, 44(S6), 2284–2289. <https://doi.org/10.53555/jaz.v44iS6.3713>
28. Sahely Roy, **Semanti Ghosh**, Srijani Karmakar, Subhasis Sarkar, Suranjana Sarkar, & Bidisha Ghosh. (2023). Immunity Risk Associated with Cytomegalovirus Infection After Organ Transplantation. *Journal of Advanced Zoology*, 44(S5), 2451–2456. <https://doi.org/10.53555/jaz.v44iS5.3202>
29. Srijani Karmakar, Sahely Roy, Suranjana Sarkar, Bidisha Ghosh, Subhasis Sarkar, & **Semanti Ghosh**. (2023). Genetic Diagnosis of Vexas Syndrome: A New Rare And Deadly Autoinflammatory Disorder In Adults. *Journal of Advanced Zoology*, 44(S5), 2636–2640. <https://doi.org/10.53555/jaz.v44iS5.3302>

30. Anwesha Das, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Recombinant Hormones: Applications And Challenges. *Journal of Advanced Zoology*, 44(S6), 2279–2283. <https://doi.org/10.53555/jaz.v44iS6.3712>
31. Deeti Das, Sudipta Chakraborty, Moumita Mukherjee, Susoma Garai, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Revolutionizing the Biological Landscape: the Power of Genome Editing. *Journal of Advanced Zoology*, 44(S5), 2446–2450. <https://doi.org/10.53555/jaz.v44iS5.3199>
32. Smarta Das, & **Semanti Ghosh**. (2023). Melittin based nano drug delivery system for cancer therapy. *Journal of Advanced Zoology*, 44(S5), 2607–2610. <https://doi.org/10.53555/jaz.v44iS5.3290>
33. Shrestha Mukherjee, Subhasis Sarkar, Suranjana Sarkar, **Semanti Ghosh**, Bidisha Ghosh. CRISPR-Cas based nano-sensors in water pathogen detection. *Int J Res Adv Electron Eng* 2024; 5(1):07-10. DOI: [10.22271/27084558.2024.v5.i1a.32](https://doi.org/10.22271/27084558.2024.v5.i1a.32)
34. Arijit Maity, Subhasis Sarkar, **Semanti Ghosh**, Suranjana Sarkar and Bidisha Ghosh. Recent advances in dendrimer-based drug and gene delivery system. *Int. J. Pharmacol. Pharm. Sci.*, 2024; 6(1): 01-04. <https://doi.org/10.33545/26647206.2024.v6.i1a.13>
35. Addityaa Sinha, Suranjana Sarkar, Subhasis Sarkar, **Semanti Ghosh** and Bidisha Ghosh. Recent insights into anti-adhesion inhibition in medical implants to treat bacterial infections through naturally derived compounds. *Int. J. Res. Med. Sci.* 2024;6(1):21-26. DOI: [10.33545/26648733.2024.v6.i1a.53](https://doi.org/10.33545/26648733.2024.v6.i1a.53)
36. Ritika Roy, Bidisha Ghosh, Suranjana Sarkar, Subhasis Sarkar, & **Semanti Ghosh**. (2024). Immunotherapy: A New Generation Treatment For Cancer. *Journal of Advanced Zoology*, 45(1), 504–507. <https://doi.org/10.53555/jaz.v45i1.4565>
37. Monisha Sarker, & **Semanti Ghosh**. (2024). Recent Advancement Of Algal Biofuel Production And Its Potential Uses. *Journal of Advanced Zoology*, 45(1), 508–510. <https://doi.org/10.53555/jaz.v45i1.4566>
38. Debojyati Datta, & **Semanti Ghosh**. (2024). A Study On Potential Drug Target For SARS-CoV-2-And Combinatorial Therapeutic Approach To Combat COVID-19. *Journal of Advanced Zoology*, 45(1), 511–517. <https://doi.org/10.53555/jaz.v45i1.4567>.
39. Prabahan Nath, & **Semanti Ghosh**. (2024). Role Of LncRNA In Alzheimer's Diseases. *Journal of Advanced Zoology*, 45(1), 518–523. <https://doi.org/10.53555/jaz.v45i1.4568>

40. Satabdi Dey, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar and Suranjana Sarkar. (2024) Analysis of pathogenic genes in dengue virus. *Zoological and Entomological Letters*, 2024; 4(1): 67-70.

Publications in peer-reviewed conference Book Chapters:

1. Ghosh S., Bagchi A. (2015) Analysis of the structural details of DsrO protein from *Allochromatium vinosum* to identify the role of the protein in the redox transport process through the dsr operon. In: Muppalaneni N., Gunjan V. (eds) Computational Intelligence in Medical Informatics. Springer Briefs in Applied Sciences and Technology. **Springer**, Singapore
ISSN 2191-530X ISSN 2191-5318 (electronic) ISBN 978-981-287-259-3; ISBN 978-981-287-260-9 (eBook). DOI: https://doi.org/10.1007/978-981-287-260-9_1. Pp 1-10.
2. Ghosh S., Bagchi A. (2015) Intermolecular Interaction Study of Dissimilatory Sulfite Reductase (DsrAB) from Sulfur Oxidizing Proteobacteria *Allchromatium vinosum*. In: Mandal J., Satapathy S., Kumar Sanyal M., Sarkar P., Mukhopadhyay A. (eds) Information Systems Design and Intelligent Applications. Advances in Intelligent Systems and Computing, vol 340. **Springer**, New Delhi, Proceedings of Second International Conference INDIA 2015, Volume 2, ISBN 978-81-322-2247-7.

Publications in peer-reviewed National/ International Book Chapters:

1. **Ghosh S.**, Bagchi A. (2022) An Overview of Computational Tools and Databases. Multidisciplinary Review Book. Mallick P, Chakravarti A R, Tewari S. (Eds) ISBN: 978-93-91074-40-1. Taurean Publications. New Delhi.
2. **Ghosh S.**, Bagchi A. (2022). A short note on Computational biomolecular modelling and molecular docking. The Gen-Next Genomics Revolution. Bagchi P (Eds). ISBN: 978-81-952207-1-7 (online) ISBN: 978-81-952207-0-0 (print). Sarvasumanâ Association, India.
3. Samanta A, **Ghosh S**, Bagchi A. Protein – protein Interaction Mapping of Phospholipase. Phospholipases in Physiology & Pathology, V6: Stem cell, Nanotechnology, System Biology and Bioinformatic Approaches in therapy of phospholipases induced Diseases. Editor: Sajal Chakraborti. Hardcover ISBN: 9780323956871. Publisher: Academic Press.
<https://doi.org/10.1016/B978-0-443-15177-4.00009-1>
4. **Semanti Ghosh***, Suranjana Sarkar, Bidisha Ghosh, Subhasis Sarkar. Recent Advancements on Computational Enzyme Designing: Rational To *De-Novo*. Frontiers In Biotechnology: Emerging Approaches And Strategies. ISBN: 978-93-5980-245-9

5. Bidisha Ghosh, Subhasis Sarkar, Suranjana Sarkar, **Semanti Ghosh**. Recent Advances In The Sensing Of Pesticides And Antibiotics In Water Through Fluorescent Quantum Dots. *Frontiers In Biotechnology: Emerging Approaches and Strategies*. ISBN: 978-93-5980-245-9
6. Subhasis Sarkar, Bidisha Ghosh, Suranjana Sarkar, **Semanti Ghosh**. Advances In Wastewater Treatment Technology. *Microbiome Principles and Explorations*. ISBN: 978-93-5980-246-6
7. Suranjana Sarkar, **Semanti Ghosh**, Bidisha Ghosh, Subhasis Sarkar. Beyond The Plate: Advances and Future Frontiers in Food Microbiology. *Microbiome Principles and Explorations*. ISBN: 978-93-5980-246-6
8. Bidisha Ghosh, Suranjana Sarkar, **Semanti Ghosh***. Advancing Sustainable Wastewater Treatment: Unleashing the Potential of Nano-Sponges for Effective Remediation. “Innovative and Hybride Technologies for Wastewater Treatment and Recycling”. Under review in CRC Press, Taylor & Francis.
9. Suranjana Sarkar, Bidisha Ghosh, **Semanti Ghosh***. Microbial Interventions in Bioremediation of Nuclear Waste. “Radioactive Pollutant - Sources, Issues and Remediation”. Under review. Springer Nature Singapore Pte Ltd.

Other publications: (PDB Accession)

1. **PDB ID: 6L2B** - Crystal structure of cyclophilin mutant I164M from *Leishmania donovani* at 2.65 angstrom resolution. **Ghosh, S.**, Biswas, G., Datta, AK., Banerjee, R.
- ❖ I have also submitted **11 full papers** (both review and research articles) in **ICALF-2024** (22nd -24th February) which are now submitted for Book Chapters and journal publications. I have also submitted **3 papers** (both review and research articles) in **ICSA -2024**.
1. Deep Saha, Prabahan Nath, **Semanti Ghosh**. Gene enrichment, network mapping and identification of potential core genes associated with Parkinson’s disease. Submitted in ICALF 2024.
 2. Debojyati Datta, **Semanti Ghosh**, A Review on role of long non coding RNA in Dengue Fever. Submitted in ICALF 2024.
 3. Srijani Karmakar, Sahely Roy, Ritika Roy, **Semanti Ghosh**. Phage Therapy: A Promising Paradigm Shift in Antibiotic Resistance. Submitted in ICALF 2024.
 4. Ritika Roy, Riya Ghosh, Tilatoma Dasgupta, Srijani Karmakar, **Semanti Ghosh**. Role of *Helicobacter pylori* in gastric carcinogenesis. Submitted in ICALF 2024.
 5. Rajiv Gosai, **Semanti Ghosh**. Medicinal impact of *Costus igneus* on diabetes mellitus: Insulin Plant. Submitted in ICALF 2024.
 6. Joysurya Kanthal, **Semanti Ghosh**. Nanotechnology-based immunotherapeutic medication for Cancer diagnosis and treatment. Submitted in ICALF 2024.

7. Manashi Paul, **Semanti Ghosh**. Functional effect of Secondary metabolites produced by Endophytic fungi. Submitted in ICALF 2024.
8. Pooja Kumari, **Semanti Ghosh**. Anticancer peptides: synthesis methods, modes of action, and future potential therapeutic uses for cancer treatment. Submitted in ICALF 2024.
9. Ramu Samanta, **Semanti Ghosh**. Functional effect of yogurt in human health. Submitted in ICALF 2024.
10. Krittika Das, Soumashree Mondal, Suranjana Dhara, Aditi Das, Daizy, **Semanti Ghosh**. Genetic diagnosis of Alagille syndrome: A genetic disorder. Submitted in ICALF 2024.
11. Pratim Patra, Srijita Ghosh, Ipsmita Pan, Tandrima Tikadar, Shaloni Das, Monisha Sarker, **Semanti Ghosh**. Cystic Fibrosis: An inherited life threatened genetic disorder. Submitted in ICALF 2024.