

List of Publication for the academic session Jan-June 2023

School of Pharmaceutical Sciences, GCU (Guwahati & Tezpur), Assam.

Research/Review publications

1. Ahmad MZ, Pathak K, Das RJ, Saikia R, **Sarma H**, Gogoi N, Gogoi U, Das A, Alasiri ALS, Abdel-Wahab BA, Abdullah MM. Design and Optimization of Quercetin-Loaded Polymeric Eudragit L-100 Nanoparticles for Anti-diabetic Activity with Improved Oral Delivery: In-Vitro and In-Vivo Evaluation. J Inorg Organomet Polym. 2023;33:2411–2428. <https://doi.org/10.1007/s10904-023-02694-w> (**Springer Link, Impact Factor- 4.0, Indexed in Scopus, SCI**) (Published on June 2023) **GIPS**.
2. Sarma MK, **Saha D**, **Das BK**, **Das T**, Azizov S, Kumar D. A delve into the pharmacological targets and biological mechanisms of *Paederiafoetida*Linn. a rather invaluable traditional medicinal plant. Naunyn-Schmiedeberg's Archives of Pharmacology, 2023. <https://doi.org/10.1007/s00210-023-02496-4> (**Springer Nature, Impact factor 3.2, Indexed in Scopus & SCI**) (Published 26 April 2023), **GIPS**
3. Pathak K, Saikia R, **Sarma H**, Pathak MP, Das RJ, Gogoi U, Ahmad MZ, Das A, Abdel Wahab BA. Nanotheranostics: application of nanosensors in diabetes management. J Diabetes Metab Disord. 2023;22:119–133. <https://doi.org/10.1007/s40200-023-01206-4>
4. Prasad RS, Yenorkar NY, Dhaswadikar SR, Sinha SK, Rai N, Sharma P, Kulkarni O, Kumar N, Dhobi M, **Laloo D**, Gurav SS, Itankar PR, Prasad SK. A systematic antidiarrhoeal evaluation of a vegetable root *Begonia roxburghii* and its marker flavonoids against nonpathogenic and pathogenic diarrhea. Food Bioscience. 2023; 53: 102672. <https://doi.org/10.1016/j.fbio.2023.102672> (**Impact factor 5.2, Elsevier**) (June 2023.) **GIPS**
5. Osman AI, Hosny M, Eltaweil AS, Omar S, Elgarahy AM, Farghali M, Yap PS, Wu YS, Nagandran S, Batumalaie K, Gopinath SCB, John OD, Sekar M, **Saikia T**, Karunanithi P, Hatta MHM, Akinyede KA. Microplastic sources, formation, toxicity and remediation: a review. Environmental chemistry letters. 2023; 1–41. <https://doi.org/10.1007/s10311-023-01593-3>(**Springer Nature, Impact Factor 15.7**) (04 April 2023) **GIPS**
6. Joshi K, Das M, **Sarma A**, Arora MK, Singhal M, Bhavna. Insight on cardiac chronobiology and latest developments of chronotherapeutic antihypertensive interventions for better clinical outcomes. Current Hypertension Reviews. 2023;19. <https://dx.doi.org/10.2174/1573402119666230109142156> (21 February, 2023). **GIPS**
7. Gogoi N, **Goswami AK**, Chetia D. Quantitative assessment of an antimalarial flavonoid in the *Citrus maxima* (Burm.) Merr. hydroalcoholic root extract using HPTLC densitometric analysis, Chem. Afr., 2023, <https://doi.org/10.1007/s42250-023-00714-3>. (**Impact factor 2.6; Springer Nature**), (15 June 2023). **GIPS**
8. **Bharali A**, **Sarma H**, **Biswas N**, **Kalita JM**, Das B, **Sahu BP***, Prasad SK, **Laloo D****. Green synthesis of silver nanoparticles using hydroalcoholic root extract of *Potentillafulgens* and evaluation of its cutaneous wound healing potential. Materials Today Communications. 2023; 35: 106050.

List of Publication for the academic session Jan-June 2023

- <https://doi.org/10.1016/j.mtcomm.2023.106050> (Elsevier publication, Impact factor: 3.8) (9 May 2023). GCU
9. Gam S, **Kumar S, Kushari S**, Dutta RS, Sarma H, Paul A, Zaman MK. Phytochemical Screening, HPTLC Fingerprinting and evaluation of in vitro cytotoxic activity of stem bark extracts of *Oroxylum indicum* (L.) Vent. against human cervical cancer cells. Indian Journal of Clinical Biochemistry. 2023;1-7. <https://doi.org/10.1007/s12291-023-01137-0>(**Impact Factor 2.1; Springer Link**). (13 June 2023).GIPS
 10. **Bhattacharjee B**, Syeda AF, **Rynjah D**, Hussain SM, Chandra Bora S, Pegu P, Sahu RK, Khan J. Pharmacological impact of microRNAs in head and neck squamous cell carcinoma: Prevailing insights on molecular pathways, diagnosis, and nanomedicine treatment. Frontiers in pharmacology. 2023;14:1174330. <https://doi.org/10.3389/fphar.2023.1174330> (**Impact Factor 5.6; Frontiers**). (03 May 2023). GIPS
 11. **Bhattacharjee B**, Bezbaruah R, **Rynjah D**, Newar A, Sengupta S, Pegu P, Dey N, Bora SC, Barman D. Cold Atmospheric Plasma: A Noteworthy Approach in Medical Science. Sciences of Pharmacy. 2023;2(2):46-76. <https://doi.org/10.58920/sciphar02020046> (**Etflin publishers**). (11 May 2023). GIPS
 12. Kalita P, **Ahmed AB**, Sen S, Pachua L, Phukan M. Synthesis and characterization of citrate soft rice starch: A new strategy of producing disintegrating agent for design drug and resistant starch. International Journal of Biological Macromolecules. 2023;240:124475.<https://doi.org/10.1016/j.ijbiomac.2023.124475> (**Impact Factor- 8.025, Elsevier**). (23 April 2023.). GIPS
 13. **Ahmed AB**, Chetia P. MAO–B Inhibitor “Selegiline” Attenuates Oxidative Stress and Arthritic Parameters in an In vitro Repurposed Studies. Journal of Biomedical Engineering. 2023;40(2):171-81. Doi: 10.105515/JBE.40.2.17. (15 June 2023). GIPS
 14. Kalita P, **Ahmad AB**, Sen S, Deka B, Hazarika QK, Kapil MJ, Pachua L. High-Value Compounds and Bioactivity of Rice Bran, Rice Bran Protein: A review. Recent Adv Food Nutr Agric. 2022doi: 10.2174/2772574X14666221227151558. Epub ahead of print. PMID: 36578259. [**Impact Factor- 1.814, Bentham Science**] (01 March, 2023). GIPS
 15. Ali SR, **Alom S**, Kumari S, **Ali F**, Afruja J, Singh GK, Bhat HR, Ghosh SK, Shakya A. A Systematic Overview of Monkeypox: from Origin to Treatment. Advanced Chemicobiology Research [Internet]. 2023;2(2):151-68. Available from: <https://ojs.wiserpub.com/index.php/ACBR/article/view/acbr.v2i22023.151-168>(**Universal Wiser Publisher**) (12 June 2023).GIPS
 16. **Bhattacharjee B**, Ikbali AMA, Farooqui A, Sahu RK, Ruhi S, Syed A, Miatmoko A, Khan D, Khan J. Superior possibilities and upcoming horizons for nanoscience in COVID-19: noteworthy approach for effective diagnostics and management of SARS-CoV-2 outbreak. ChemZvesti. 2023;4:1-24. doi 10.1007/s11696-023-02795-3. [**Impact Factor- 2.2, Springer**] (04 April 2023). GIPS

List of Publication for the academic session Jan-June 2023

17. Islam R, Gogoi B, Das J, Phukan M, Parasar A, **Chowdhury R**. Unlocking The Potential: Bioavailability And Formulation Challenges of Nutraceutical Nanoparticles Utilising Food Grade Nanocarriers. Lat. Am. J. Pharm. 2023;42(6):61-75. (Published June 2023) **GIPS**.

Book Chapter:

1. **Sarma A, Sahu BP**, Das MK. Exploration on Metal Nanoparticles for Treatment of Malaria. In: Shegokar R, Pathak Y (Eds.) Malarial Drug Delivery Systems: Advances in Treatment of Infectious Diseases; 2023, pp. 359–391. **Springer Cham**. ISBN (Print): 978-3-031-15847-6, ISBN (Online): 978-3-031-15848-3. https://doi.org/10.1007/978-3-031-15848-3_16 (7 March 2023). **GIPS**
2. Krishnatreyya H, Hazarika H, **Das BK**, Gogoi N, **Ahmed AB**, Zaman K. Drug delivery options for treatment of ebola infection. In: Shegokar, R., Pathak, Y. (eds) Viral Drug Delivery Systems. Advances in Treatment of Infectious Diseases. 2023, Chapter 8, pp. 161-191. (**Springer International Publishing**) https://doi.org/10.1007/978-3-031-20537-8_8 (10 Apr 2023). **GIPS**
3. **Bhattacharjee B**, Deka B, Shivavedi N, Bhat HR, Sinha SK, Ghosh SK, Shakya A. Neuroprotective Role of Medicinal Plants from North Eastern Region of India. In: Singh SP, Birla H, Keswani C (Eds.). Traditional Medicine for Neuronal Health. 2023, Chapter 30, pp 103-128. <https://doi.org/10.2174/10.2174/9789815040197123010008> (**Bentham Books**). (March 2023). **GIPS**
4. **Hazarika H**, Krishnatreyya H, Bhattacharjee B, **Rynjah D**, Gogoi D, Ahmed AB, Zaman K. Liposomal Drug Delivery in Malaria. In: Shegokar R, Pathak Y (Eds.), Malarial Drug Delivery Systems: Advances in Treatment of Infectious Diseases 2023, Chapter 8, 161-185. https://doi.org/10.1007/978-3-031-15848-3_8 (**Springer International Publishing**). (07 March 2023). **GIPS**
5. Gohain, A., Alom, S., Choudhury, D., Das, A.K. (2023). Species of the Genus Selinum Found in the Western Himalayas. In: Sharma, A., Nayik, G.A. (eds) Immunity Boosting Medicinal Plants of the Western Himalayas. Springer, Singapore. https://doi.org/10.1007/978-981-19-9501-9_20 (March 2023). **GIPS**
6. **Alom S, Ali F**, Choudhury D, Gohain A, **Ahmed AB**, Zaman MK. Tuberculosis and Drug Delivery System: Clinical Trials in TB. Tubercular Drug Delivery Systems: Advances in Treatment of Infectious Diseases. 2023 Mar 15:289-305. https://doi.org/10.1007/978-3-031-14100-3_14. (15 March 2023). **GIPS**

Patents

1. Singha R, Siangshai AG, Warjri I, Jyrwa R, Mawlieh BH, Gogoi B, Gam S, **Kalita T**. Digital Writing Pad for Medical Recording. **2023**, Indian Patent. Design no. 378151-001. (**Published 28 Jan 2023**).

List of Publication for the academic session Jan-June 2023

2. Singha R, Siangshai AG, Mawlieh BH, Siangshai S, **Kalita T**, Deka K, Gogoi B, Gam S, Verma P. Electroencephelography (EEG) Monitoring System. **2023**, Indian Patent. Design no. 380354-001. (**Granted 28-02.2023**)
3. Sashi A, Yanmandru, VK, Bora NS, **Sengupta R**, Sarangdevot SY, Vyas B. Portable Soxhlet apparatus for extraction of Herbal drugs. **2023**, Indian Patent, Application number: 382300-001, **Date- 27/03/2023**.
4. Ankita Wal, Preeti Mishra, Shweta Mishra, Avneet Kaur, **Smriti Rekha Chanda Das**, Arun Kumar Mishra. Device for synthesis of Oxadiazole. **2023**, Indian Patent, Application number: 385081-001, **Date- 26/04/2023**.

List of Publication for the academic session Jan-June 2023

School of Engineering & Technology, Dept. of Mechanical Engineering, GCU, Assam

Research/Review publications

1. **Mallick D**, Sharma P, Bora BJ, Baruah D, Bhowmik R, Barbhuiya SA, Balakrishnan D. Mechanistic investigation of pyrolysis kinetics of water hyacinth for biofuel employing isoconversional method. Sustainable Energy Technologies and Assessments. 2023;57: 103175. <https://doi.org/10.1016/j.seta.2023.103175> (**Impact Factor 8; Elsevier**). (Published June 2023). GCU
2. Borah PP, **Pathak KK**, Gupta A, Roy S, Das B. Experimental study of a solar air heater with modified absorber plate through square obstacles with threaded pin fins. Applied Thermal Engineering. 2023;228: 120544. <https://doi.org/10.1016/j.applthermaleng.2023.120544>(**Impact Factor 6.4; Elsevier**) (**Published 11 April 2023**) GCU
3. Bezbarua P, **Das S**, Das S. Machining investigation of textured tungsten carbide tools. In: MajidMSbA. Materials Today: Proceedings. International Conference on “Advanced Materials & Processes for Engineering Applications” (ICAMP 2022), 2023; 76(3): 542-550. <https://doi.org/10.1016/j.matpr.2022.11.161> (**Elsevier**). (25 February 2023). GIMT

Book Chapters

1. **Das S**, Bezbarua P, Das S. Sustainable Nanomaterial Coatings for Anticorrosion: A Review. Nanomaterials for Sustainable Tribology. In: Raina A, Haq MIU, Victoria PI, Mohan SRJ, Anand A. Nanomaterial for sustainable Tribology. 2023, 1st Edition, Chapter 13, 2023, pp 203-214. <https://www.routledge.com/Nanomaterials-for-Sustainable-Tribology/Raina-Haq-Victoria-Mohan-Anand/p/book/9781032306902#> (**CRC press, Taylor & Francis Group**) (24 March 2023). GIMT

Patent

1. **Pathak KK**. Solar Air Heater System with Modified Absorber. German Patent and Trade Mark Office (DPMA), Application Number: 202022104782.0, Date of application: 24.08.2022, Date of registration (grant): 13.01.2023.

School of Engineering & Technology, Dept. of Civil Engineering, GCU, Assam.

Research/Review publications:

1. Swaminathen AN, Ramanjaneyalu B, Dhanasekar K, **Ravi SR**, Vivek Kumar C. Landslide modelling and susceptibility assessment by soil moisture sensors at Katteri watershed in

List of Publication for the academic session Jan-June 2023

Southern India. E3S Web of Conferences, 2023;391, 01209. ICMED-ICMPC 2023.
<https://doi.org/10.1051/e3sconf/202339101209> (EDP Sciences) (05 June 2023). GCU

Patent:

1. Chakravarthy VJ, Saksheshwari, JeyaliLaseetha TS, Sandhya D, Jayanth K, Mohammed Uveise SA, Sheik Yousuf T, Rajakumari R, Lingeshwaran NN, **Robert Ravi S**. Resistive imbibed mesh sensor based concrete wall and ceiling strength monitoring system employing IOT. 2023, **Intellectual Property India**, Application no: **202341026499**, Application filing date 10.04.2023, Published date: 05.05.2023.
2. Bharathi C, Kholiya D, Meshram VP, Varshney Y, Alam S, Tiwari S, Nitinbhai A, Shah P, **Robert Ravi S**, Shah MA, Aravindan A, Khot SA. Integration of IoT and deep learning approaches for air pollution monitoring in smart cities. 2023, Intellectual Property India, Application no: 202341007283, Application filing date 05.02.2023, Published date: 10.02.2023.

School of Engineering & Technology, Dept. of Computer Science and Engineering, GCU, Assam.

Research/Review articles

1. **Medhi, S, Gogoi, M**. Comparison of non-ensemble and ensemble supervised machine learning techniques for Pm2.5 prediction in Guwahati city. Juni Khyat. 2023; 13(6):55-70. (Published June 2023)

School of Engineering & Technology, Dept. of Mechanical Engineering, GCU, Assam.

Research/Review articles

1. Rahman M, Rabha DK, **Nath T**. The performance analysis of Hydraulic Ram Pump: Influence of specific parameters and validation with Comsol-Multiphysics. Int. J. Exp. Res. Rev. 2023;32:216-234. <https://doi.org/10.52756/ijerr.2023.v32.019> (Published August 2023)
2. Borthakur PP, **Nath T**, Hatibaruah D. Study and analysis of A Vehicular Traffic Intersection Point, For Traffic and Congestion Control in Amolapatty, Dibrugarh, Assam. Eur. Chem. Bull. 2023;12(10):2103-2120.

School of Natural Sciences, Dept. of Mathematics, GCU, Assam.

Research/Review publications:

List of Publication for the academic session Jan-June 2023

1. Goswami J, **Sarmah M.** On domination in the total torsion element graph of a Module. *Proyecciones Journal of Mathematics*. 2023; 42(3):795–814. (**Revistas Cientificas**). (June 2023). GIMT

School of Humanities and Social Sciences, Dept. of English and Foreign Languages, GCU, Assam.

Research/Review publications:

1. **Priti Sarmah**, Anita Tamuli. ELT for Pharmaceutical Science Undergraduates: An Integration of Multidisciplinary Approaches. *Journal of English Language Teaching*. 2023;65(2):3-12.