



## Department of Basic Sciences

### Details of publications in Conferences and Journals

#### Journal Publications 2023-24

1. Kusuma, K. B., Manju, M., Nagaswarupa, H. P., Anilkumar, M. R., Ravikumar, C. R., Amulya, M. A., & Surendra, B. S. (2023, December). Study of decolorisation of mixtures of azo dyes using aluminium oxide nanoparticles synthesized by probe sonication method. In *AIP Conference Proceedings* (Vol. 2399, No. 1). AIP Publishing.

**Dr. Kusuma K. B.**

2. Kusuma, K. B., Manju, M., Ravikumar, C. R., Raghavendra, N., Kumar, T. N., Anilkumar, M. R., ... & Aravind, K. U. (2023). Synthesis of strontium oxide nanoparticles by probe sonication method: Its photocatalytic activity and electrochemical sensor studies. *Sensors International*, 4, 100231.

**Dr. Kusuma K. B.**

3. Shreyas, S., Siddaramanna, S. C., Keerthana, R. K., Roopini, B. M., Rakesh, B. R., Smitha Patil, (2024). Admet Analysis Of Triazole Derivative: A Theoretical Investigation Towards Its Evaluation As A Drug Candidate. *International Journal of Advanced Research*, 10.21474/IJAR01/18411.

**Shreyas, S., Siddaramanna, S. C., Keerthana, R. K., Roopini, B. M., Rakesh, B. R., Smitha Patil**

4. Pruthviraj, K., Chethan, B. S., Ramesh, H., Lokanath, N. K., PC, K. P., Devaraju, K. S., & Sunil, K. (2024). E5-((3-phenoxyphenyl) diazenyl) quinolin-8-ol (PPDQ): A Novel Promising Anticorrosive for Mild Steel in Acid Media, and a Pharmacologically Potent Antidiabetic, Antioxidant Azo Dye. *Orbital: The Electronic Journal of Chemistry*, 198-204.

**Dr. Chethan B. S.**

5. Sapnakumari, M., Chethan, B. S., Jinkle, T., Urs, M. D., Lingegowda, N. S., Lokanath, N. K., & Naveen, S. (2024). Multicomponent synthesis, structural and molecular dynamics simulation studies of a novel spirooxindole derivative. *Chemical Physics Impact*, 8, 100467.

**Dr. Chethan B. S.**

6. Rekharani, D., Shivalingegowda, N., Urs, M. D., Chethan, B. S., & Krishnappagowda, L. N. (2024). A novel pyrazole derivative as COVID-19 main protease inhibitor: Synthesis, quantum computational studies, pharmacokinetic properties, drug likeness, molecular docking and dynamics simulation; a CADD approach. *Chemical Physics Impact*, 8, 100475.

**Dr. Chethan B. S.**

7. Pruthviraj, K., Chethan, B. S., Lohith, T. N., NS, D. B., Chandrakumar, R., Kumar, M., ... & Sunil, K. (2024). Synthesis, evaluation of antimicrobial activity, and DFT analysis of 1-(4, 5-diphenyl-1H-imidazol-2-yl) naphthalen-2-ol. *Indian Journal of Pharmacy & Drug Studies*, 3(2).

**Dr. Chethan B. S.**

8. AlAli, A., AlObaid, A., Chethan, B. S., Shalalin, K., Alzeqri, N., Alkanad, K., ... & Khanum, S. A. (2024). Synthesis, Jahn-Teller labeled via crystal structure in trans-(ClO<sub>4</sub>)<sub>2</sub>CuII (Me<sub>2</sub>N-Py) 4 complex: S9/S6/CH... O synthons, thermal, physicochemical and 1BNA-docking. *Journal of King Saud University-Science*, 103302.

**Dr. Chethan B. S.**

9. Pruthviraj, K., Chethan, B. S., Lokanath, N. K., Niranjana, S. V., Hebbar, N. N., & Sunil, K. (2024). Schiff base derived from 2-hydroxy naphthaldehyde as anti-corrosive for mild steel in acid media: experimental investigation and theoretical modelling. *Molecular Physics*, e2385580.

**Dr. Chethan B. S.**

10. Shalini, V., Priyadarshini, A. N., Harsha, K. B., DC, V. K., Chethan, B. S., Sudhanva, M. S., ... & Rangappa, K. S. (2024). Novel quinoline-4-carboxamide derivatives potentiates apoptosis by targeting PDK1 to overcome chemo-resistance in colorectal cancer: theoretical and experimental results. *Helijon*.

**Dr. Chethan B. S.**

11. Rekharani, D., DC, V. K., Chethan, B. S., Urs, D., Sathisha, K. R., Lokanath, N. K., & Naveen, S. (2024). Exploration of crystal structure, supramolecular organization, and computational studies of a novel pyrazole derivative: A structural and theoretical perspectives. *Journal of Molecular Structure*, 140265.

**Dr. Chethan B. S.**

12. Hamsaveni, M., Hegde, R. R., Sahana, B., Chethan, B. S., Pruthviraj, K., Maithra, N., ... & Lokanath, N. K. (2024). Synthesis, biological evaluation of novel pyridine derivative as antibacterial agent: DFT, molecular docking and ADMET studies. *Journal of Molecular Structure*, 1318, 139367.

**Dr. Chethan B. S.**

13. Chethan, B. S., Kannan, D., Kumar, A. U., Urs, M. D., Lingegowda, N. S., Lokanath, N. K., & Naveen, S. (2025). Synthesis of novel chromeno-tethered imidazolone scaffold through one pot sequential multicomponent reaction mediated cyclization: A structural, computational and in silico investigation. *Journal of Molecular Structure*, 1320, 139728.

**Dr. Chethan B. S.**