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List of Publications

1. A. K. Rai, R. Tilak, P. Tiwari, P. Meena, A. Kumar, **A. K. Tiwari**, and M. K Gupta; **(2024)** Emergence of rare uncommon yeast-like pathogens causing neonatal sepsis at a tertiary care center, North India. (***Accepted Manuscript GERMS-OA-2023-0133)***

2. **A. K. Tiwari**, Munesh Kumar Gupta, P.C. Pandey, Roger J. Narayan. **(2024).** Molecular weights of polyethyleneimine dependent physicochemical tuning of gold nanoparticles and FRET-based turn-on sensing of Polymyxin B. ***(Accepted Manuscript, Sensors, 2860126).***

3. **A. K. Tiwari**, M. K. Gupta, H. P. Yadav, R. J. Narayan, P. C. Pandey, **(2024)** Aggregation resistant, FRET-based fluorometric sensing of glutathione and Nickel (II) by vancomycin-conjugated gold nanoparticles. *Biosensors*, 14 (1), 49.

4. Pandey, P.C., Yadav, H.P., **Tiwari, A.K.,** Sawant, S.N., Sinharoy, P., Banerjee, D. and Narayan, R., **(2023)** Prussian blue Nanoparticles Mediated Sensing and Removal of 137 Cs. *Frontiers in Environmental Science*, 11, 1230983.

5. **Tiwari, A.K.,** Yadav, H.P., Gupta, M.K., Narayan, R.J. and Pandey, P.C., **2023.** Synthesis of vancomycin functionalized fluorescent gold nanoparticles and selective sensing of mercury (II). *Frontiers in Chemistry*, 11, 1238631.

6. **Tiwari, A.K.,** Gupta, M.K., Narayan, R.J. and Pandey, P.C., **2023**. A whole-cell fluorescence quenching-based approach for the investigation of Polyethyleneimine functionalized silver nanoparticles interaction with *Candida albicans*. *Frontiers in Microbiology*, 14, 1131122.

7. **Tiwari, A.K.,** Gupta, M.K., Pandey, G. and Pandey, P.C., **2023**. Siloxane-silver Nanofluid as a potential self-assembling disinfectant: a preliminary study on the role of functional alkoxysilane. *Nanoarchitectonics,* 4 (1), 1-15.

8. **Tiwari, A.K.,** Gupta, M.K., Pandey, G. et al. Amine-Functionalized Silver Nanoparticles: A Potential Antiviral-Coating Material with Trap and Kill Efficiency to Combat Viral Dissemination (COVID-19). *Biomedical Materials & Devices* **(2022).**

9. **Tiwari, A.K.;** Gupta, M.K.; Pandey, G.; Tilak, R.; Narayan, R.J.; Pandey, P.C. Size and Zeta Potential Clicked Germination Attenuation and Anti-Sporangiospores Activity of PEI Functionalized Silver Nanoparticles against COVID-19 Associated Mucorales (*Rhizopus arrhizus*). *Nanomaterials* **2022**, *12*, 2235.

10. **Tiwari, A.K.,** Mishra, A., Pandey, G., Gupta, M.K. and Pandey, P.C., **2022.** Nanotechnology: A Potential Weapon to Fight against COVID-19. *Particle & Particle Systems Characterization,* 39 (1), 2100159.

11. Pandey, P.C., Mitra, M.D., **Tiwari, A.K**. and Singh, S., **2021**. Synthetic incorporation of palladium-nickel bimetallic nanoparticles within mesoporous silica/silica nanoparticles as efficient and cheaper catalyst for both cationic and anionic dyes degradation. *Journal of Environmental Science and Health, Part A,* 56(4), pp.460-472.

12. Kaur, R., **Tiwari, A**., Manish, M., Maurya, I.K., Bhatnagar, R. and Singh, S., **2021**. Common garlic (Allium sativum L.) has potent anti-Bacillus anthracis activity. *Journal of Ethnopharmacology*, 264, 113230.

13. **Tiwari, A.K.,** Gupta, M.K., Pandey, G., Narayan, R.J. and Pandey, P.C., **2020**. The molecular weight of Polyethyleneimine-dependent transfusion and selective antimicrobial activity of functional silver nanoparticles. *Journal of Materials Research*, 35 (18), 2405-2415.

14. Pandey, P.C., **Tiwari, A.K.**, Gupta, M.K., Pandey, G. and Narayan, R.J., **2020.** Effect of the organic functionality on the synthesis and antimicrobial activity of silver nanoparticles. *Nano Life*, 10 (03), 2050002.

Patents Filed

1. **P.C. Pandey, A. K. Tiwari;** A Process for 3-aminopropyltrimethoxysilane mediated synthesis of functional silver nanoparticles as potent anti-*Acinetobacter baumannii* for biomedical applications, Indian Patent; **IP201911029351. (2019)**

2. **P.C. Pandey, A. K. Tiwari**; A process for Siloxane-silver nanoparticle as a potential self-assembling disinfectant. Indian Patent; **IP202111033827. (2021)**

3. **P.C. Pandey, A. K. Tiwari** & **Shilpa N. Sawant**, A process for microwave-assisted synthesis of hybrid nanoparticles-based electro catalytic printing ink and hydrogen peroxide sensing device **IP202111047038 (2021)**