

LIST OF PUBLICATIONS

1. **Bharat Kumar**, Jyoti Kuntail, Dinesh K. Verma, Rashmi B. Rastogi, Indrajit Sinha, “Mechanism of triboactivity of Schiff bases Experimental and molecular dynamics simulations studies”. *J. Mol. Liq.* 289 (2019) 111171.
2. **Bharat Kumar**, Dinesh K. Verma, Alok K. Singh, Kavita, Nivedita Shukla, Rashmi B. Rastogi, “Nanohybrid Cu@C: synthesis, characterization and application in enhancement of lubricity” *Compos. Interfaces.* 6440 (2019) 1-18.
3. **Bharat Kumar**, Dinesh K. Verma, Nivedita Shukla, Alok K. Singh, Kavita and Rashmi B. Rastogi, “Ionic liquid stabilized Ag@C composite for improvement of triboactivity. *Journal of molecular liquids*”. *J. Mol. Liq.* 307 (2020) 113012.
4. **Bharat Kumar**, Dinesh K. Verma, Kavita and Rashmi B. Rastogi, “Mixture of imidazolium imide type of ionic liquid and calcium doped ceria nanoparticles as highly efficient friction and wear modifier”. *Proc IMechE Part J: J Engineering Tribology* 2020
5. Dinesh K. Verma, **Bharat Kumar**, Kavita and Rashmi B. Rastogi, Zinc oxide- and magnesium-doped zinc oxide-decorated nanocomposites of reduced graphene oxide as friction and wear modifiers. *ACS Appl Mater Interfaces.* 2019; 11: 2418–2430.
6. Kavita, Pratibha Verma, Dinesh K. Verma, **Bharat Kumar**, Alok K. Singh, Nivedita Shukla, Vandana Srivastava, Rashmi B. Rastogi, Tetrahydropyrazolopyridines as antifriction and antiwear agents: experimental and DFT calculations, *RSC Advances* 2020; 10, 10188-10196.
7. Dinesh K. Verma, Jyoti Kuntail, **Bharat Kumar**, Nivedita Shukla, Alok K. Singh, Kavita, Indrajit Sinha and Rashmi B. Rastogi, “Amino Borate-Functionalized Reduced Graphene Oxide Further Functionalized with Copper Phthalocyanine Nanotubes for Reducing Friction and Wear”. *ACS Appl. Nano Mater.* 2020, 3, 5530–5541.

8. Dinesh K. Verma, Nivedita Shukla, **Bharat Kumar**, Alok K. Singh, Kavita, Mithilesh Yadav, Kyong Yop Rhee and Rashmi B. Rastogi, “Synergistic Tribocactivity of nanohybrid of Zirconia/Cerium-doped Zirconia nanoparticles with nanolameller reduced graphene oxide and Molybdenum disulfide”. *Nanomaterials* 2020, 307.
9. Nivedita Shukla, Dinesh K. Verma, Alok K. Singh, **Bharat Kumar**, Kavita and Rashmi B. Rastogi, “Ternary Composite of Methionine-Functionalized Graphene Oxide, Lanthanum-Doped Yttria Nanoparticles, and Molybdenum Disulfide Nanosheets for Thin Film Lubrication”. *ACS Appl. Nano Mater.* 2020, 3, 8, 8012–8026.
10. Kavita, Jyoti Kuntail, Dinesh K. Verma, **Bharat Kumar**, Alok K. Singh, Nivedita Shukla, Indrajit Sinha and Rashmi B. Rastogi, “Theoretical and experimental studies of pyranopyrazoles and their tribological compatibility with a borate ester. <https://doi.org/10.1016/j.colsurfa.2020.125497>.”