

## List of Publications

- 1) Kaur, M., Mehta, V., Wani, A. A., Arora, S., Bharatam, P. V., Sharon, A., ... & **Kumar, R.** (2021). Synthesis of 1, 4-dihydropyrazolo [4, 3-b] indoles via intramolecular C (sp<sup>2</sup>)-N bond formation involving nitrene insertion, DFT study and their anticancer assessment. *Bioorganic Chemistry*, 114, 105114.
- 2) Joshi, G., Chauhan, M., Kumar, R., Thakur, A., Sharma, S., Singh, R., Wani, A., Sharon, A., Bharatam, P., **Kumar, R.** (2018). Cyclocondensation reactions of an electron deactivated 2- aminophenyl tethered imidazole with mono/1,2-biselectrophiles: Synthesis and DFT studies on rationalisation of imidazo[1,2-*a*]quinoxaline versus benzo[*f*]imidazo[1,5-*a*][1,3,5]triazepine selectivity switch. *Organic Chemistry Frontiers*, 5, 3526-3533.
- 3) Sawant, D. M., Sharma, S., Pathare, R. S., Joshi, G., Kalra, S., Sukanya, Maurya, A. K., Metre, R. K., Agnihotri, V. K., Khan, S., **Kumar, R.**, Pardasani, R.T. (2018). Relay Tricyclic Pd (II)/Ag (I) Catalysis: Design of a Four-Component Reaction Driven by Nitrene-Transfer on Isocyanide Yields Inhibitors of EGFR. *Chemical Communication*, 2018, 54, 11530--11533.
- 4) Ansari, A. J.; Joshi, G.; Sharma, P.; Maurya, A. K.; Metre, R.; Agnihotri, V. K.; Chandaluri, C. G.; **Kumar, R.**; Singh, S.; Sawant, D. M. (2019), Pd-Catalyzed four-Component Sequential Reaction Delivers a Modular Fluorophore Platform for Cell Imaging. *Journal of Organic Chemistry*, DOI: 10.1021/acs.joc.8b02845, 84, 73817-3825.
- 5) G. Joshi, S.M. Amrutkar, A.T. Baviskar, H. Kler, S. Singh, U.C. Banerjee, **R. Kumar**, Synthesis and biological evaluation of new 2, 5-dimethylthiophene/furan based N-acetyl pyrazolines as selective topoisomerase II inhibitors, *RSC Advances*, 6 (2016) 14880-14892.
- 6) Sharma, M., Joshi, G., Arora, S., Singh, T., Biswas, S., Sharma, N., Bhat, Z.R., Tikoo, K., Singh, S., & **Kumar, R.** (2021). Design and synthesis of Non-Covalent Imidazo[1,2-*a*]quinoxaline-Based Inhibitors of EGFR and Their Anti-Cancer Assessment. *Molecules*, 26(5), 1490.
- 7) Joshi, G., Sharma, M., Kalra, S., Gavande, N. S., Singh, S., & **Kumar, R.** (2021). Design, synthesis, biological evaluation of 3, 5-diaryl-4, 5-dihydro-1H-pyrazole carbaldehydes as non-purine xanthine oxidase inhibitors: Tracing the anticancer mechanism via xanthine oxidase inhibition. *Bioorganic Chemistry*, 107, 104620.
- 8) Joshi, G., Kalra, S., Yadav, U. P., Sharma, P., Singh, P. K., Amrutkar, S., ... & **Kumar, R.** (2020). E-pharmacophore guided discovery of pyrazolo [1, 5-*c*] quinazolines as dual inhibitors of topoisomerase-I and histone deacetylase. *Bioorganic Chemistry*, 94, 103409.
- 9) K. Nepali, G. Singh, A. Turan, A. Agarwal, S. Sapra, **R. Kumar**, U.C. Banerjee, P.K. Verma, N.K. Satti, M.K. Gupta, A rational approach for the design and synthesis of 1-acetyl-3, 5-diaryl-4, 5-dihydro (1H) pyrazoles as a new class of potential non-purine xanthine oxidase inhibitors, *Bioorganic & Medicinal Chemistry*, 19 (2011) 1950-1958.
- 10) **R. Kumar**, R.K. Ujjinamatada, R.S. Hosmane, The first synthesis of a novel 5: 7: 5-fused diimidazodiazepine ring system and some of its chemical properties, *Organic Letters*, 10 (2008) 4681-4684.