

**LIST OF
RESEARCH
PUBLICATIONS**

List of Publications

1. P Verma, S Chauhan, **V Singh**, S Singh, V Srivastava, "Urea hydrogen peroxide-initiated synthesis of pyranopyrazoles through oxidative coupling under base- and metal-free conditions by physical grinding method," *Molecular Diversity*, **26** (2022) 1769–1777.
2. **V Singh**, K. Rajput, P Verma, S Singh, V Srivastava, "A green approach for the synthesis of 2-oxo-1,2,3,4-tetrahydropyrimidines through oxidative functionalization of methyl arenes/benzyl derivatives via in situ generated urea," *Research on Chemical Intermediate*, **49** (2023) 2969–2987.
3. **V Singh**, K Rajput, A Mishra, S Singh, V Srivastava, "Microwave-assisted Chemoselective Transamidation of Secondary Amides by Selective N-C(O) bond Cleavage Under Catalyst, Additive and Solvent-Free Conditions," *Chemical Communications*, **59** (2023) 14009–14012.
4. K. Rajput, **V. Singh**, A. Kamal, H. K. Singh, S. Singh and V. Srivastava, "A novel approach towards synthesis of benzothiazoles and benzimidazoles: Eosin Y-catalyzed photo-triggered C–S and C–N bond formation," *New Journal of Chemistry*, **47** (2023) 22276–22280.
5. K. Rajput, **V. Singh**, P. Mahaur, S. Singh and V. Srivastava, "Visible-Light-Induced C-S Bond Formation in the Synthesis of 2,4-Disubstituted Thiazoles through Cascade Difunctionalization of Acetophenone: A Greener Approach," *Organic & Biomolecular Chemistry*, **22** (2024), 2774–2779.
6. **V Singh**, K Rajput, P Mahaur, S Singh, V Srivastava, "Transamidation of Secondary Carboxamides and Amidation of Esters are Facilitated by Magnetic

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- Co@NC Nanoparticles, as a Highly Efficient and Recyclable Catalyst Under Neat Conditions,” *New Journal of Chemistry*, **48** (2024), 13350–13357.
7. **V Singh**, K Rajput, S Singh, V Srivastava, “Montmorillonite K-10 Catalyzed Synthesis of Hantzsch Dihydropyridine Derivatives from Methyl arenes via *in situ* Generated Ammonia under Microwave Irradiation in Neat Conditions,” *RSC Advances*, (2024) Accepted.
8. K Rajput, **V Singh**, P Mahaur, S Singh, V Srivastava, “A Chromatography-Free One-Pot, Two-Step synthesis of 1,2,4-Thiadiazoles from Primary Amides via Thiolation and Oxidative Dimerization under Solvent-Free Conditions: A Greener Approach,” *RSC Advances*, **14** (2024), 22480–22485.
9. P Mahaur, K Rajput, **V Singh**, S Singh, V Srivastava, “Enhancing C-S and C-N Bond Formation with Ultrasound Assistance: Lipase - Catalyzed Synthesis of 2,4 Disubstituted Thiazole Derivatives from Arylethanones and Thioamides,” *RSC Advances*, **14** (2024), 21213–21218.

Conferences/Symposium

Paper presented

1. A physical grinding approach: Urea hydrogen peroxide promoted synthesis of pyranopyrazoles under base and metal-free conditions through oxidative coupling, International Conference on Enabling transition Two words sustainable future Chem TSF September, 8-10, 2022 (IIT Roorkee), India.
2. Microwave-Assisted Chemoselective Transamidation of Secondary Amides by Selective N-C(O) bond Cleavage Under Catalyst, Additive and Solvent-Free Conditions, International Conference on Chemical and Biological Sciences (ICCBS-24) January, 27-30, 2024, Department of Chemistry (University of Delhi), India.
3. A Green Approach for the Synthesis of Pharmaceutically Active 1, 4-Dropyrimidinones Derivatives through Oxidative Functionalization of Methyl Arenes/Benzyl Derivatives via in situ Generated Urea, International Conference on Advancement in Functional Materials (ICAFM 2024) February, 8-10, 2024, Department of Chemistry (Veer Bahadur Singh Purvanchal University, Jaunpur (UP), India.
4. β -Cyclodextrin: A Supramolecular Catalyst for Metal-free Approach towards the Synthesis of 2-Oxo-1,2,3,4-Tetrahydropyrimidines through C (sp³)-H Functionalization of Methyl Arenes via in situ Generated Urea, International Conference on Sustainable and Innovative Materials for Modern Life (ICSMML-2024) March 12&13, 2024, department of chemistry Faculty of Science Siddharth University Kapilvastu, Sidharth Nagar, India.

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5. Microwave-induced Chemoselective transamidation of Activated Secondary carboxamide under Additive and Solvent-Free Conditions, International Conference on Fundamental and Advanced Research in Chemistry-2024 (FARC-2024) June, 6 to 8, 2024, Organized by the School of Chemical Sciences at the Indian Institute of Technology Mandi (H. P), India.