

Complete List of Publications of Vinod K. Singh

(2023)

185. Organocatalytic Asymmetric Direct Vinylogous Michael Initiated Ring Closure Reaction of 4-Nitroisoxazole Derivatives to 3-Isopropylidene oxindoles (A. Manna, H. Joshi, and V.K. Singh, **J. Org. Chem.** 2023, under revision).
184. Chiral Phosphoric Acid Catalyzed Asymmetric Friedel-Crafts Addition of Indolizine to Cyclic N-sulfonyl Imine (P. Subba, M.M. Sadhu, and V.K. Singh, **J. Org. Chem.** 2023, 88, 000).
183. Organocatalytic Diastereoselective Dearomative [4+2] Cycloaddition of In-situ Generated ortho-Quinone Methides (S.R. Sahoo and V.K. Singh, **Eu. J. Chem.** 2023, 00, 00).
182. Kinetic Resolution of Electron-Deficient Bromohydrins via Copper(II) Catalyzed C-C Bond Cleavage (K. Choudhary, R. Biswas, A. Manna, and V.K. Singh, **J. Org. Chem.** 2023, 88, 12041).
181. Central-to-Axial Chirality: Asymmetric Organocatalytic Synthesis of Axially Chiral Chalcones via Exocyclic Dihydronaphthalenes (Ankit Yadav, Mamta Gill, and V.K. Singh, **Org. Lett.** 2023, 25, 4813).
180. Copper-Catalyzed Asymmetric Propargylic [3+2] Cycloaddition: Synthesis of Enantioenriched Dihydrofuro[3,2-c] coumarins and its Quinolinone and Thiocoumarin Analogues (S. Rohilla, S. Shah, and V.K. Singh, **Org. Lett.** 2023, 25, 3733).
179. Enantioselective Synthesis of Substituted 1-Pyrrolines via Michael Addition of Iminoesters with α , β -unsaturated 2-acyl imidazoles Catalyzed by Chiral Cu(I)-BPE Complex (M. Gill and V.K. Singh, **Tetrahedron Lett.** 2023, 113, 154555).
178. Brønsted Acid Catalyzed Friedel-Crafts Alkylation of naphthols with in situ Generated Naphthol-derived ortho-Quinone Methides: Synthesis of Chiral and Achiral Xanthene Derivatives (S.R. Sahoo and V.K. Singh, **J. Org. Chem.** 2023, 88, 3159).

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177. Asymmetric Organocatalysis - An ingenious tool for building molecules (R. Ramapanicker and V.K. Singh, **Resonance** 2022, 27, 2161).
176. Asymmetric Synthesis of Spiro-3,3'-cyclopropyl Oxindoles via Vinylogous Michael Initiated Ring Closure (MIRC) Reaction (Abhijit Manna, Harshit Joshi, and V.K. Singh, **J. Org. Chem.** 2022, 87, 16755).
175. A Brønsted acid-catalyzed thioacid addition to *in situ* generated aldimine for the synthesis of isoindolinones with *N,S*-acetal framework (M.M. Sadhu, C. Khajuria and V.K. Singh, **Org. Biomol. Chem.** 2022, 20, 9098).
174. Chiral phosphoric acid-catalyzed reaction between C-alkynyl imine precursor and thiol: Access to highly enantioenriched alkynyl isoindolinones with *N,S*-ketal framework (C. Khajuria, M.M. Sadhu, R.A. Unhale, and V.K. Singh **Tetrahedron Lett.** 2022, 112, 154230).
173. Cinchona Derivatives as bifunctional H-bonding organocatalysts in asymmetric vinylogous conjugate addition reactions (H. Joshi and V.K. Singh, **Asian J. Org. Chem.** 2022, 11, e202100053).

172. Asymmetric Umpolung (3+2) Cycloadditions of Iminoesters with α,β -unsaturated-2-acyl imidazoles for the Synthesis of Substituted Pyrrolidines (M. Gill, A. Das, and V.K. Singh **Org. Lett.** 2022, 24, 5629).
171. Chiral Brønsted acid catalyzed enantioselective synthesis of spiro-isoindolinone indolines via formal [3 + 2] cycloaddition (R. A. Unhale, M. M. Sadhu, and V.K. Singh, **Org. Lett.** 2022, 24, 3319).
170. Enantioselective synthesis of tetrahydrofuran spirooxindoles via domino oxa Michael/Michael addition reaction using a bifunctional squaramide catalyst (K. Shukla, Khushboo, P. Mahto and V.K. Singh, **Org. Biomol. Chem.** 2022, 20, 4155).
169. Brønsted acid-catalyzed enantioselective addition of 1,3-diones to *in situ* generated *N*-acyl ketimines (M. M. Sadhu, S. K. Ray, R. A. Unhale and V.K. Singh, **Org. Biomol. Chem.** 2022, 20, 410).

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168. Asymmetric α -functionalization of 2-alkyl azaarenes: Synthesis of tertiary fluorides having vicinal stereogenic centers (A. Das, H. Joshi, V.K. Singh, **Org. Lett.** 2021, 23, 9441).
167. Organocatalytic Asymmetric Cascade Michael-acyl Transfer Reaction between 2-Fluoro-1,3-diketones and Unsaturated Thiazolones: Access to Fluorinated 4-Acyloxy Thiazoles (R.G. Biswas, S.K. Ray, R.A. Unhale, V.K. Singh, **Org. Lett.** 2021, 23, 6504).
166. Cu-Catalyzed Chemodivergent, Stereoselective Propargylic Dearomatization and Etherification of 2-Naphthols (B.G. Das, S. Shah, A. Das, V.K. Singh, **Org. Lett.** 2021, 23, 6262).
165. Recent advancement in copper-catalyzed asymmetric reactions of alkynes (S. Shah, B.G. Das, V.K. Singh, **Tetrahedron** 2021, 93, 132238).
164. Direct enantioselective synthesis of pyrrolizidines (R.G. Biswas and V. K Singh, **Tetrahedron Lett.** 2021, 69, 152954).
163. Cu(I)-catalyzed asymmetric exo-selective synthesis of substituted pyrrolidines via a 1,3-dipolar cycloaddition reactions (R.G. Biswas, S.K. Ray, V.K. Kannaujiya, R.A. Unhale, V.K. Singh, **Org. Biomol. Chem.** 2021,19, 4685).
162. Organocatalytic asymmetric synthesis of pyrrolo[3,2-c]quinolones via a formal [3+2] cycloaddition-lactamization cascade reaction using a bifunctional squaramide catalysts (P. Mahto, K. Shukla, A. Das, V.K. Singh, **Tetrahedron** 2021, 87, 132115).

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161. Organocatalytic Asymmetric Hetero-Diels–Alder Reaction of *in Situ* Generated Dienes: Access to α,β -Unsaturated δ -Lactones Featuring CF₃-Substituted Quaternary Stereocenter (H. Joshi, A. Yadav, A. Das, V.K. Singh, **J. Org. Chem.** 2020, 85, 3202).
160. An enantioselective sulfa-Michael addition of alkyl thiols to α,β -unsaturated 2-acyl imidazoles catalyzed by a bifunctional squaramide (R.K. Jha, S. Rout, H. Joshi, A. Das, V.K. Singh, **Tetrahedron** 2020, 76, 130800).

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159. An efficient and highly diastereoselective synthesis of carbocyclic spiropyrazolones via one-pot sequential dual organo-silver catalyzed Michael-hydroalkylation reactions (K. Shukla, S. Shah, N.K. Rana, V.K. Singh, **Tetrahedron Lett.** 2019, 60, 92).

158. A General Catalytic Route to Enantioenriched Isoindolinones and Phthalides: Application in the Synthesis of (S)-PD 172938 (S.K. Ray, M.M. Sadhu, R.G. Biswas, R.A. Unhale, V.K. Singh, **Org. Lett.** 2019, 21, 417).
157. Enantioselective A³-Coupling Reaction Employing Chiral CuI-iPropylboxdiPh/N-Boc-(L)-Proline Complex under Cooperative Catalysis: Application in the Synthesis of (Indol-2-yl)methanamines (S. Dhanasekaran, V.K. Kannaujiya, R.G. Biswas, V.K. Singh, **J. Org. Chem.** 2019, 84, 3275).
156. Copper Catalyzed One-Pot Three-Component Imination-Alkynylation-aza-Michael Sequence: Enantio- and Diastereoselective Syntheses of 1,3-Disubstituted Isoindolines and Tetrahydroisoquinolines (B.G. Das, S. Shah, and V.K. Singh, **Org. Lett.** 2019, 21, 4981).
155. Asymmetric Multifunctional Modular Organocatalysis: One-Pot Direct Strategy to Enantiopure α,β -Disubstituted γ -Butyrolactones (P. Mahto, N.K. Rana, K. Shukla, B.G. Das, H. Joshi, V.K. Singh, **Org. Lett.** 2019, 21, 5962).
154. BF₃·OEt₂-Catalyzed Vinyl Azide Addition to in Situ Generated N-Acyl Iminium Salts: Synthesis of 3-Oxoisoindoline-1-acetamides (D.K. Das, V.K. Kannaujiya, M.M. Sadhu, S.K. Ray, V.K. Singh, **J. Org. Chem.** 2019, 84, 15865).

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153. A facile and highly diastereoselective synthesis of carbocyclic spiro-pyrazolones via DABCO catalyzed Michael-Michael domino reaction (N.K. Rana, K. Shukla, P. Mahato, R.K. Jha, V.K. Singh, **Tetrahedron** 2018, 74, 5270).
152. Metal-controlled switching of enantioselectivity in the Mukaiyama-Michael Reaction of α,β -unsaturated 2-acyl imidazoles catalyzed by chiral metal-pybox complexes (S. Rout, A. Das, and V.K. Singh, **J. Org. Chem.** 2018, 83, 5058).
151. A chiral Bronsted acid catalyzed highly enantioselective Mannich-type reaction of α -diazoesters with in situ generated N-acyl ketimines (R.A. Unhale, M.M. Sadhu, S.K. Ray, R.G. Biswas, V.K. Singh, **Chem. Commun.** 2018, 54, 3516)
150. (R)-DM-SEGPHOS-Ag(I)-Catalyzed Enantioselective Synthesis of Pyrrolidines and Pyrrolizidines via (1,3)- and Double (1,3)-Dipolar Cycloaddition Reactions (S.K. Ray, R.G. Biswas, A. Suneja, M.M. Sadhu, V.K. Singh, **J. Org. Chem.** 2018, 83, 2293).
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148. Asymmetric construction of remote vicinal quaternary and tertiary stereocenters via direct doubly vinylogous Michael addition (S. Rout, H. Joshi, V.K. Singh, **Org. Lett.** 2018, 20, 2199).

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147. Enantioselective Tandem Oxidation/Michael-Aldol Approaches to Tetrasubstituted Cyclohexanes (N.K. Rana, H. Joshi, R.K. Jha, and V.K. Singh **Chem. Eur. J.** 2017, 23, 2040).
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142. Copper-catalyzed Pummerer type Reaction of α -thio aryl/heteroarylacetates: Synthesis of aryl/ heteroaryl α -keto esters (P. Saha, S.K. Ray, V.K. Singh **Tetrahedron Lett.** 2017, 58, 1765).
141. Chiral phosphoric acid catalyzed enantioselective addition of thiols to in situ generated ketimines: Synthesis of N,S-ketals (R.A. Unhale, N. Molleti, N.K. Rana, S. Dhanasekaran, S. Bhandary **Tetrahedron Lett.** 2017, 58, 145.)

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139. Ag(I) Catalyzed Indolization/C3-Functionalization Cascade of 2-Ethynylanilines via Ring Opening of Donor-Acceptor Cyclopropanes (R. Karmakar, A. Suneja, and V.K. Singh, **Org. Lett.** 2016, 18, 2636).
138. Asymmetric Synthesis of Medicinally Important Isoindolinones, (S)-PD 172938, (R)-JM 1232 and Related Structures (A. Suneja, V. Bisai, and V.K. Singh, **J. Org. Chem.** 2016, 81, 4779).
137. Recent Developments in Asymmetric Alkynylations (V. Bisai and V.K. Singh, **Tetrahedron Lett.** 2016, 57, 4771).
136. Highly Fluorescent 1,2-Dihydropyrimido[1,6a]indole: An Efficient Metal free Synthesis and Photophysical Study (T. Das, A. Kayet, R. Mishra, and V.K. Singh **Chem. Commun.** 2016, 52, 11231).

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134. An Efficient Entry to syn- and anti-Selective Isoindolinones via an An Organocatalytic Direct Mannich/Lactamization Sequence (V. Bisai, R.A. Unhale, A. Suneja, S. Dhanasekaran, and V.K. Singh **Org. Lett.** 2015, 17, 2102).
133. Chiral Phosphine-Silver Complex (I) Catalyzed Enantioselective Interrupted Feist-Benary Reaction with Ynones: The Aldol Cycloisomerization Cascade (D. Sinha, A. Biswas, and V.K. Singh **Org. Lett.** 2015, 17, 3302).
132. Unified Approach to Isoindolinones and THIQs via Lewis Acid Catalyzed Domino Mukaiyama-Mannich Lactamization/Alkylations: Application in the Synthesis of (\pm)-Homolaudanosine (D. Dhanasekaran, A. Kayet, A. Suneja, V. Bisai, and V.K. Singh **Org. Lett.** 2015, 17, 2780).

131. Ni(II)-Catalyzed Highly Stereo- and Regioselective Syntheses of Isoindolinones and Isoquinolinones from in Situ Prepared Aldimines Triggered by Homoallylation/Lactamization Cascade (R. Karmakar, A. Suneja, V. Bisai, and V.K. Singh, **Org. Lett.** 2015, 17, 5650).
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