

## ISCB AWARD FOR EXCELLENCE -2024 in Chemical sciences.

### CURRICULUM-VITAE

#### Name and Designation:

#### Prof. Krishna Nand Singh

Senior Professor of Organic Chemistry h-index: 35 (25 Since 2018)

Citations: >4200 (>2162 since 2018)

#### Research Webpage:

[https://new.bhu.ac.in/Site/FacultyProfile/1\\_150?FA000117](https://new.bhu.ac.in/Site/FacultyProfile/1_150?FA000117)

Date of Birth: 12 June 1962

Institution & Address: Department of Chemistry, Institute of Science

Banaras Hindu University, Varanasi-221005, INDIA

Mobile: 09415992580/ 07380543868

E-mail: [knsingh@bhu.ac.in](mailto:knsingh@bhu.ac.in); [knsinghbhu@yahoo.co.in](mailto:knsinghbhu@yahoo.co.in)

Permanent Address: Vill. & Post - Barachawar, Distt. - Ghazipur, U.P.

Academic Qualifications: A throughout First-Class Career.

M. Sc. (Organic Chemistry): BHU, 1985; Ph. D. (Chemistry): BHU, 1991.

Teaching Experience: 27 Years (UG & PG both)

- 18 July 2018 till date: Senior Professor, Department of Chemistry, BHU.
- 30 October 2007 till 17 July 2018: Professor, Department of Chemistry, BHU.
- 09 July 2002 till 29 October 2007: Associate Professor, IT-BHU (Now IIT, BHU).
- 09 July 1993 till 08 July 2002: Assistant Professor, IT-BHU (Now IIT, BHU).

Research Experience: 35 Years

- No. of Ph. D. Awarded/ Working under the Supervision : 20/06
- No. of Major Research Projects Completed/ in Hand as PI :15/03

Awards & Fellowships:

- FNA (Fellow of the Indian National Science Academy, New Delhi, 2020) [Fellowship No.: P-21-1891]
- FNASc (Fellow of the National Academy of Sciences, India, 2016)
- Silver Medal, Chemical Research Society of India (CRSI) (2023)
- Bronze Medal, Chemical Research Society of India (CRSI) (2018)
- Vice-Chancellor's Award for Excellence in Research (2014).
- Invited Professor, Institute of Chemistry, University of Rennes, France (2004).
- AICTE Career Award (1995).
- NET-JRF of both UGC and CSIR (1985) separately for Ph.D. Programme.

Publications in Refereed Journals: 154

- Book Chapters : 02
- Number of National/International Conferences Participated : > 50



### **List of Selected Recent Publications as Corresponding Author: Prof. K. N. Singh**

- (1) Synthesis of unsymmetrical ketones via dual catalysed cross-coupling of  $\alpha,\beta$ -unsaturated carboxylic acids with aryldiazonium salts, *Chem. Commun.*, **2023**, DOI: 10.1039/D3CC04898E.
- (2) Synthesis of functionalized alkenes via Cu(I)-catalysed allylation of acetanilides using Morita-Baylis-Hillman bromides, *Org. Biomol. Chem.*, **2023**, 7968–7976.
- (3) Visible-light-mediated synthesis of  $\alpha$ -ketoamides via oxidative amination of 2-bromoacetophenones using Eosin Y as a photoredox catalyst, *Chem. - Asian J.*, **18**, **2023**, e202300669.
- (4) A regioselective synthesis of  $\beta$ -difluoromethoxy vinyl sulfones via O-difluoromethylation of  $\beta$ -ketosulfones using sodium chlorodifluoroacetate, *Org. Biomol. Chem.*, **21**, **2023**, 6588–6594.
- (5) An easy access to  $\alpha$ -carbonyl sulfones using cross-coupling of  $\alpha$ -aryl- $\alpha$ -diazoesters with sulfonyl hydrazides, *Org. Biomol. Chem.*, **21**, **2023**, 987–993.
- (6) Copper-catalyzed thiolation of hydrazones with sodium sulfonates: A straightforward synthesis of benzylic thioethers, *J. Org. Chem.*, **88**, **2023**, 475–482.
- (7) Visible light photoredox-catalysed synthesis of *trans*-oxiranes via decarboxylative stereospecific epoxidation of *trans* cinnamic acids by aryldiazonium salts, *Org. Lett.*, **24**, **2022**, 6423–6427.
- (8) Visible-light-induced photo-catalytic trifluoromethylation of Bunte salts: An easy access to trifluoromethylthiolated synthons, *J. Org. Chem.*, **87**, **2022**, 11112–11120.
- (9) A convenient synthesis of N-(hetero)arylamides by oxidative coupling of methylheteroarenes with amines, *Org. Biomol. Chem.*, **20**, **2022**, 6915–6922.
- (10) Visible-light-induced photo-catalytic synthesis of  $\beta$ -keto dithiocarbamates via difunctionalization of styrenes, *Org. Lett.*, **23**, **2021**, 4147–4151.
- (11) Visible-light-induced photocatalytic oxidative decarboxylation of cinnamic acids to 1,2-diketones, *J. Org. Chem.*, **86**, **2021**, 6486–6493.
- (12) Iodine-catalyzed thioallylation of indoles using Bunte salts prepared from Baylis-Hillman bromides, *Org. Biomol. Chem.*, **19**, **2021**, 3484–3488.
- (13) Metal-free multicomponent reactions: A benign access to monocyclic six-membered *N*-heterocycles, *Org. Biomol. Chem.*, **19**, **2021**, 2622–2657.
- (14) Synthesis of 3-acylindoles via copper-mediated oxidative decarboxylation of ethyl aryacetates, *Org. Biomol. Chem.*, **18**, **2020**, 1623–1628.
- (15) Cu-catalysed oxidative amidation of cinnamic acids/arylacetic acids with 2° amines: An efficient synthesis of  $\alpha$ -ketoamides, *Org. Biomol. Chem.*, **17**, **2019**, 9348–9351.
- (16) Eosin Y catalyzed photoredox C–S bond formation: An easy access to thioethers, *Chem. - Asian J.*, **14**, **2019**, 4712–4716.
- (17) Visible light enabled  $\gamma$ -trifluoromethylation of Baylis-Hillman acetates: Stereoselective synthesis of trisubstituted alkenes, *Org. Chem. Front.*, **6**, **2019**, 989 – 993.
- (18) Multicomponent reactions: A sustainable tool to 1,2- and 1,3-azoles, *Org. Biomol. Chem.*, **16**, **2018**, 9084–9116.
- (19) Transition-metal-free regiospecific arylation of nitroarenes using ethyl aryacetates at room temperature, *Org. Lett.*, **20**, **2018**, 744–747.
- (20) Nickel catalyzed ipso-hydroxylation and subsequent cross dehydrogenative coupling of arylboronic acids with tertiary amines: A facile access to  $\alpha$ -phenolated tertiary amines, *Adv. Synth. Catal.*, **360**, **2018**, 1786–1789.
- (21) Palladium catalyzed C–C and C–N bond formation via *ortho* C–H activation and decarboxylative strategy: A practical approach towards *N*-acylated indoles, *Adv. Synth. Catal.*, **360**, **2018**, 422–426.
- (22) A practical protocol for the synthesis of bibenzyls via C(sp<sup>3</sup>)-H activation of methyl arenes under metal-free conditions, *Org. Chem. Front.*, **4**, **2017**, 147–150.
- (23) Palladium catalysed site selective C–H functionalization of weak coordinating sulfonamides: Synthesis of biaryl sulfonamides, *Chem. - Asian J.*, **11**, **2016**, 696–699.
- (24) Utilization of methylarenes as versatile building blocks in organic synthesis, *Chem. Soc. Rev.*, **44**, **2015**, 8062 – 8096.
- (25) A direct metal-free decarboxylative sulfono functionalization (DSF) of cinnamic acids to  $\alpha,\beta$ -unsaturated phenyl sulfones, *Org. Lett.*, **17**, **2015**, 2656–2659.
- (26) Sulphur promoted C(sp<sup>3</sup>)-C(sp<sup>2</sup>) cross dehydrogenative cyclisation of acetophenone hydrazones with aldehydes: Efficient synthesis of 3,4,5-trisubstituted 1*H*-pyrazoles, *Chem. Commun.*, **51**, **2015**, 366–369.
- (27) Elemental sulfur mediated decarboxylative redox cyclization reaction of *o*-chloronitroarenes and arylic acids, *Org. Lett.*, **17**, **2015**, 976–978.
- (28) Nickel-catalyzed C–S bond formation: Synthesis of aryl sulfides from arylsulfonyl hydrazides and boronic acids, *Adv. Synth. Catal.*, **357**, **2015**, 1181–1186.
- (29) Decarboxylative thioamidation of arylic acids and cinnamic acids: A new approach to thioamides, *Org. Lett.*, **16**, **2014**, 3624–3627.
- (30) AIBN-initiated metal free amidation of aldehydes using *N*-chloroamines, *Green Chem.*, **16**, **2014**, 351–356.
- (31) MnO<sub>2</sub> promoted sequential C–O and C–N bond formation via C–H activation of methylarenes: A new approach to amides, *Org. Lett.*, **15**, **2013**, 4908–4911.
- (32) Convenient MW-assisted synthesis of unsymmetrical sulfides using sulfonyl hydrazides as aryl thiol surrogate, *Org. Lett.*, **15**, **2013**, 5874–5877.
- (33) An efficient TBAF-catalyzed three component synthesis of 3-indole derivatives under solvent-free conditions, *Adv. Synth. Catal.*, **355**, **2013**, 1840–1848.
- (34) Regioselective hydrothiolation of alkynes by sulfonyl hydrazides using organic ionic base-Brønsted acid, *Org. Lett.*, **15**, **2013**, 4202–4205.
- (35) Nickel-mediated *N*-arylation with arylboronic acids: An avenue to Chan-Lam coupling, *Org. Lett.*, **14**, **2012**, 4326–4329.

## ISCB DISTINGUISHED WOMEN SCIENTISTS AWARD-2024 IN BIOLOGICAL SCIENCES

**Sonu Gandhi, PhD, FRSC  
Scientist E**

DBT-National Institute of Animal Biotechnology (NIAB)  
Hyderabad-500032, Telangana.  
Email: gandhi@niab.org.in



### **Brief Summary of Achievements-**

Dr Sonu Gandhi is a Scientist E at the National Institute of Animal Biotechnology, Hyderabad, India and her work is mainly focused on biosensor development and theranostic applications. Dr Gandhi did her PhD from IMTECH, Chandigarh and Post Doc from IFOM-IEO, Milan Italy. She worked as Visiting Scientist at University of Washington, Seattle, USA. Dr Gandhi has received various awards and recognitions at National and International platforms including the prestigious Connect Fellowship by Alexander von Humboldt Foundation Germany, DST-IGSTC Travel Award, Travel Award by Department of Science & Technology (DST)-IGSTC, New Delhi, DST-Humboldt Foundation Travel Award, ICAR-Panjab Rao Deshmukh Award, SERB Women Excellence Award, SERB-ECR Early Career Research Award, DBT-BioCare Women Scientist Award, Best Paper Award by CITAC (Co-operation on International Traceability in Analytical Chemistry), Portugal, Tech Exhibition Award at IKMC: Future Scan-Predict & Prepare, by IKP-BIRAC, DBT, and DST, Best Young Investigator Award at IIT-BHU, Varanasi, Visiting Faculty at Lomonosov Moscow State University, Russia, Marie Curie cofund Scholarship for post doc research, Three months' fellowship from NTU, Singapore for Ph.D. work, Senior research fellowship (SRF) from CSIR.

Recently, she has been elected as Fellow of Royal Society of Chemistry, Cambridge, United Kingdom, elected as Member of the National Academy of Sciences, India (NASI); Young Associate of Indian Academy of Sciences (IASc), Bengaluru and Member of INYAS, Materials Research Society of India (MRSI), Women in STEM from Asia in Australian Academy of Sciences (AAS), American Chemical Society (ACS), USA; Royal Society of Chemistry (RSC), Cambridge, United Kingdom; Life Member of the Indian Society of Chemists and Biologists (ISCB), Life Member of the Society of Materials Chemistry (SMC).

Dr Gandhi was also selected this year in SHE IS - 75 Women in Chemistry: Red Dot Foundation with the Office of the Principal Scientific Adviser, Government of India and Royal Society of Chemistry and Women in STEM: Vanguard of India@75, 2022, at Women in STEM Summit by Confederation of Indian Industry (CII) by Prof Ajay K Sood, PSA Office, Govt of India. Dr Gandhi has published 83 peer-reviewed publications and her research has been highlighted in PIB, Govt. of India; Nature India News; IISc Bengaluru News, and several newspapers and media.

Total Citation- 3174, H index- 33

## List of selected publications-

- 1) DrishyaPrakashan, Narlawar S. Shrikrishna, Manisha Byakodi, K. Nagamani, **Sonu Gandhi**<sup>§</sup>. Gold nanoparticle conjugate-based lateral flow immunoassay (LFIA) for rapid detection of RBD antigen of SARS-CoV-2 in clinical samples using a smartphone-based application. *Journal of Medical Virology*, 2023, 95, e28416. (*Impact Factor-12.7*)
- 2) DeepshikhaShahdeo, Akanksha Roberts, G J Archana, SubhasisMahari, NarlawarSagarShrikrishna, K Nagamani, **Sonu Gandhi**<sup>§</sup>. Label free detection of SARS CoV-2 Receptor Binding Domain (RBD) Protein by Fabrication of Gold Nanorods deposited on Electrochemical Immunosensor (GDEI). *Biosensors & Bioelectronics*, 2022, 212, 114406. (*Impact Factor-12.6*)
- 3) Akanksha Roberts, VeerbhanKesarwani, Rupal Gupta, **Sonu Gandhi**<sup>§</sup>. Electroactive Reduced Graphene Oxide for highly sensitive detection of secretory Non-Structural 1 protein: A potential diagnostic biomarker for Japanese Encephalitis Virus. *Biosensors & Bioelectronics*, 2022, 198, 113837. (*Impact Factor-12.6*)
- 4) NarlawarSagarShrikrishna, **Sonu Gandhi**<sup>§</sup>. Fabrication of graphene nanoplatelets embedded “partition cartridge” for efficient separation of target-bound ssDNA during SELEX. *Materials Today Advances*, 2021, 12, 100174. (*Impact Factor- 10.0*)
- 5) DeepshikhaShahdeo, VeerbhanKesarwani, Deepa Suhag, Jahangeer Ahmed, Saad M Alshehri,**Sonu Gandhi**<sup>§</sup>. Self-assembled chitosan polymer intercalating peptide functionalized gold nanoparticles as nanoprobe for efficient imaging of urokinase plasminogen activator receptor in cancer diagnostics. *Carbohydrate Polymers*, 2021, 266, 118138. (*Impact Factor-11.2*)
- 6) Akanksha Roberts, Prem Prakash Tripathi, **Sonu Gandhi**<sup>§</sup>. Graphene nanosheets as electric mediator for ultrafast sensing of urokinase plasminogen activator receptor-a biomarker of cancer. *Biosensors & Bioelectronics*, 2019, 141, 111398. (*Impact Factor- 12.6*)
- 7) Saurav Islam, Shruti Shukla, Vivek K. Bajpai, Young-Kyu Han, Yun Suk Huh, Arindam Ghosh, **Sonu Gandhi**<sup>§</sup>. A smart nanosensor for the detection of human immunodeficiency virus and associated cardiovascular and arthritis diseases using functionalized graphene-based transistors. *Biosensors & Bioelectronics*, 2019, 126, 792-799. (*Impact Factor-12.6*)
- 8) Anita Talan, Annu Mishra, Sergei A. Eremin, JagritiNarang, Ashok Kumar, **Sonu Gandhi**<sup>§</sup>. Ultrasensitive electrochemical immunosensing platform based on gold nanoparticles triggering chlorpyrifos detection in fruits and vegetables. *Biosensors & Bioelectronics*, 2018, 105, 14-21. (*Impact Factor-12.6*)
- 9) J. N. Tey\*, **S. Gandhi**\*, I. P. M. Wijaya, Al. Palaniappan, J. Wei, I. Rodriguez, C. R. Suri and S. G. Mhaisalkar. Direct Detection of Heroin Metabolites using a Carbon Nanotubes Liquid Gated Field Effect Transistor based Competitive Immunoassay. *Small*, 2010, 6 (9), 993-998. (*ImpactFactor-13.3*)(\**contributed equally*) (*highlighted in Nature India*)
- 10) **Sonu Gandhi**, HamedArami, Kannan M. Krishnan. Detection of cancer-specific proteases using magnetic relaxation of peptide-conjugated nanoparticles in biological environment. *Nanoletters*, 2016, 16 (6), 3668-3674. (*Impact Factor-10.8*)
- 11) **Sonu Gandhi**, NeenaCapalash, Prince Sharma and C Raman Suri. Strip based immunochromatographic assay using specific egg yolk antibodies for rapid detection of heroin and its metabolites in urine samples. *Biosensors & Bioelectronics*, 2009, 25 (2), 502-505. (*ImpactFactor-12.6*) (*highlighted in Nature India*)
- 12) C. Raman Suri, Robin Boro, YogeshNangia, **Sonu Gandhi**, NishimaWangoo, Priyanka Sharma, G. S. Shekhawat. Immunoanalytical techniques for the analysis of pesticides in the environment. *Trends in Analytical Chemistry*, 2009, 28 (1), 29-39. (*Impact Factor-13.1*)

## ISCB AWARD OF APPRECIATION FOR ACADEMIC SCIENTIST-2024 in Chemical Science

### Dr. Bapurao B. Shingate

Associate Professor,  
Department of Chemistry,  
Dr. Babasaheb Ambedkar Marathwada University,  
Chhatrapati Sambhajnagar (Aurangabad)-431 004,  
Maharashtra State, INDIA  
E-mail: [bapushingate@gmail.com](mailto:bapushingate@gmail.com)



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**Dr. Bapurao B. Shingate**, is an Associate Professor in Organic Chemistry at Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajnagar (Aurangabad). He obtained M. Sc. degree in Organic Chemistry from the same university. He has qualified MH-SET (2001) examination and also the first student of department of chemistry, qualified CSIR-UGC NET-JRF (2001) in Chemical Sciences. He did his Ph.D in Organic Chemistry at CSIR-National Chemical Laboratory, Pune under the supervision of Dr. B. G. Hazra from Savitribai Phule Pune University, Pune. He has significantly contributed through his Ph. D. work to steroid chemistry, particularly natural products synthesis.

After joining as an Assistant Professor at Department of Chemistry, he has focused on alternative, novel and new cost effective methodologies for value added organic transformations. His current research contribution in the area of medicinal chemistry using rational drug design approach is gaining recognition. His research group has synthesized a library of biodynamic heterocycles like rhodanines, thiazolidines, tetrazoles, 1,2,3-triazoles via click chemistry and others. Furthermore, performed various therapeutic properties such as antifungal, antibacterial, antioxidant, antitubercular, anticancer and anti-inflammatory activity is noteworthy. He has published 131 papers in the journals of international repute. His publications are cited over 3869 times with an average citation of 30/paper showing an H-index of 35 and i-10 index 95. His cumulative impact factor is 506. Two Indian patents are also on his credit. Under his supervision, 07 students are awarded Ph.D degree and 06 students are pursuing for their Ph.D degree. He has guided more than 200 students for M. Sc. Research Project. He has worked as a Visiting Researcher with Professor Larry Overman, University of California, Irvine, USA. He is an Editor/Associate editor/ Member of Editorial board for various reputed journals. He has also coauthored a book chapter in "Handbook on Applications of Ultrasound Sonochemistry for Sustainability," published by CRC Press Taylor and Francis Group. The outstanding and creditable contribution made by him is a review article published in the prestigious journal, "**Chemical Reviews**" with **impact factor 62.1**. He has also delivered several invited talks in International/National Seminars and Conferences.

As a teacher, he is keenly devoting his services to nurture fundamentals of chemistry to post graduate students and trying to enhance their capabilities for practicing chemistry with responsibility. He has developed a new method of teaching organic chemistry through online mode. He has also developed innovative methods in the practicals i.e. green methods for synthesis of bioactive organic compounds. He has been providing specific training and motivation to the students for qualifying NET, SET and GATE. Generation of students from the university department have cleared NET examination (~400 students in last 15 years). He has delivered around 100 guest lectures to the M. Sc chemistry students from central universities, state universities, institutions and colleges on the topic, "**How to Become Master in Organic Chemistry**". Delivered more than 85 invited talks in international/national conferences/seminars/symposia/workshops on various research topics. He is highly involved in promotion of scientific writings and motivated the researchers/academicians from various

disciplines all over the world by delivering a talk (~100) on the topic, “**Way to Prepare Best Scientific Review Articles**”.

He has received several awards like GTEA-Best Chemistry Professor (2020), Bentham Ambassador (2018--23), ISCB-Best Teacher Award (2018), Dr. BAMU-Research Professor Award (2017), Dr. BAMU-Ideal Teacher Award (2014), Indo-US Research Fellowship Award (2013) and Dr. BAMU-Shikshak Pratibha Award (2012).

**Total Citations** : 3869

**Average Citations** : 30

**H-index** : 35

**i-10 index** : 95

**Cumulative impact factor:** 506.24 (2022)

**Average Impact factor:** 3.86 (2022)

#### **Recent Selected Publications:**

1. Curcumin-based bioactive heterocycles derived via multicomponent reactions  
Archiv der Pharmazie 2023, 356, e2300171 (IF: 5.1)
2. New 1, 2, 3-triazole-appended bis-pyrazoles: Synthesis, bioevaluation, and molecular docking  
ACS Omega, **2021**, 6, 24879-24890 (IF: 4.1)
3. A copper-catalyzed synthesis of aryloxy-tethered symmetrical 1, 2, 3-triazoles as potential antifungal agents targeting 14  $\alpha$ -demethylase  
New Journal of Chemistry 2021, 45, 13104-13118 (IF: 3.3)
4. New N-phenylacetamide-linked 1,2,3-triazole-tethered coumarin conjugates: Synthesis, bioevaluation, and molecular docking study  
Archiv der Pharmazie 2020, 353, 2000164 (IF: 5.1)
5. Novel benzylidenehydrazide-1,2,3-triazole conjugates as antitubercular agents: Synthesis and molecular docking  
Mini-Reviews in Medicinal Chemistry 2019, 19, 1178-1194 (IF: 3.8)
6. New N-phenylacetamide-incorporated 1,2,3-triazoles:[Et<sub>3</sub>NH][OAc]-mediated efficient synthesis and biological evaluation  
RSC Advances, 2019, 9, 22080-22091 (IF: 3.9)
7. Quinolidene-rhodanine conjugates: Facile synthesis and biological evaluation  
Eur. J. Med. Chem. 2017, 125, 385-399 (IF: 6.7)
8. 1,2,3-Triazole incorporated coumarin derivatives as a potential antifungal and antioxidant agents  
Chin. Chem. Lett. 2016, 27, 295-301 (IF: 9.1)
9. Novel tetrazoloquinoline-thiazolidinone conjugates as possible antitubercular agents: Synthesis and molecular docking  
Med. Chem. Commun. 2016, 7, 1832-1848 (IF: 4.2)
10. 1,2,3-Triazole derivatives as antitubercular agents: Synthesis, biological evaluation and molecular docking study  
Med. Chem. Commun. 2015, 6, 1104-1116 (IF: 4.2)

## ISCB BEST TEACHER AWARDS

Dr. Ved Prakash Singh,  
Professor & Head, Department of Industrial Chemistry  
School of Physical Sciences, Mizoram University  
Aizawl-796004, India  
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E.Mail: [ypsingh@mzu.edu.in](mailto:ypsingh@mzu.edu.in),



Professor Ved Prakash Singh is currently serving as the Professor and Head of the Department of Industrial Chemistry at Mizoram University. He attained both his undergraduate and master's degrees from Banaras Hindu University, Varanasi. His doctoral studies were focused on Supramolecular & Medicinal Chemistry, culminating in a Ph.D. from Banaras Hindu University in 2010.

Following the completion of his Ph.D., Professor Singh began his academic career as an Assistant Professor at Guru Ghasidas Vishwavidyalaya (GGV), Bilaspur (2010-2011) and subsequently at Central University of Jharkhand (CUJ), Ranchi (2011-2012). In 2012, he joined the Department of Chemistry at Mizoram University and has since ascended in his career, achieving the positions of Associate Professor in the Department of Industrial Chemistry in 2021 and Full Professor in 2023.

During his academic journey, Professor Singh enriched his expertise through a postdoctoral tenure at Indiana University (2016-2017) under the guidance of Professor David R. Williams. His scholarly contributions include 43 research papers, a book, and two book chapters. Noteworthy among his publications are contributions to esteemed journals such as European Journal of Medicinal Chemistry, Organic Letters, Chinese Chemistry Letters, Bioorganic Chemistry, ACS Omega, RSC Chemistry, and Bioorganic & Medicinal Chemistry Journal. His research primarily revolves around the development of small organic molecules with applications in areas such as anticancer, antidiabetic, antimicrobial, anti-Parkinson agents, and intriguing supramolecular structures.

Professor Singh's dedication and accomplishments have been recognized through various accolades and awards. He secured a position in the Chhattisgarh Public Service Commission for Higher Education in 2012 and was honoured with the prestigious Raman Fellowship Award, enabling him to spend a year in the USA (2016-2017). Notably, he received the Best Oral Presentation Award at the national Seminar on "Conservation and Sustainable Use of Medicinal and Aromatic Plants" in 2018, the Young Scientist Award at the 12th Annual Convention of ABAP in BEHIET-2018, and the ICMR travel grant in 2020 for an international conference in Amsterdam, Netherlands.

Over the past decade, Professor Singh has effectively managed and completed four sponsored projects funded by government agencies such as DBT, CSIR & UGC. He has been an instrumental guide, supervising 33 PG students and four Ph.D. scholars, presently mentoring five Ph.D. students under his guidance.

Total Publications: 43;

Citations : 627 ;

h-index : 11;

i10-index: 13

**List of selected recent publications:**

1. J Dowarah, VP Singh, *Bioorganic & medicinal chemistry* 28 (5), 2020, 115263 (IF: 3.6)
2. BN Marak, J Dowarah, L Khiangte, VP Singh, *European Journal of Medicinal Chemistry* 203, 2020, 112571 (IF: 7.1)
3. J Dowarah, D Patel, BN Marak, UCS Yadav, PK Shah, PK Shukla, VP Singh, *RSC advances* 11 (57), 2021, 35737-35753 (IF: 4.0)
4. BN Marak, J Dowarah, L Khiangte, VP Singh, *Drug Development Research* 82 (3), 2021, 374-392 (IF: 5.2)
5. J Dowarah, BN Marak, BS Sran, PK Shah, PK Shukla, VP Singh, *ACS omega* 7 (28), 2022, 24485-24497 (IF: 4.1)
6. B Hazarika, VP Singh, *Chinese Chemical Letters*, 2023, 108220 (IF: 9.1)
7. Lalhruaizela, Zothansiam, Lalfakawmi, BN Marak, B Hazarika, R Kataria, VP Singh, *ChemPlusChem* 88 (4), 2023, e202200444 (IF: 3.4)
8. J Dowarah, B Hazarika, BS Sran, D Khiangte, VP Singh, *Journal of Molecular Structure* 1282, 2023, 135182 (IF: 3.8)
9. Lalhruaizela, BN Marak, L Khiangte, B Hazarika, R Kataria, VP Singh, *ChemistrySelect* 8 (19), 2023, e202300169 (IF: 2.3)
10. VP Singh, M Nidhar, P Yadav, R Kumar, P Sonker, AK Tewari, *Molecular Diversity* 27 (1), 2023, 209-222 (IF: 3.4)



## ISCB YOUNG SCIENTIST AWARD IN CHEMICAL SCIENCES FOR THE YEAR 2023

**Dr. Siddharth Sharma**, Assistant Professor @ Mohanlal Sukhadia University, Udaipur, Rajasthan

**B.Sc.** (2005): University of Kota, Kota, Rajasthan

**M.Sc.** (2007): Chemistry, Mohanlal Sukhadia University, Udaipur, Rajasthan

**Ph.D.** (July 2007-March-2012): Chemistry, Jawaharlal Nehru University, New Delhi/CSIR-CDRI, Lucknow (Awarded)

Title: Design and synthesis of novel heterocycle with potential of drug development

### **Work Experience:**

Post Doctoral Fellow: Pohang University of Science and Technology (POSTech), South Korea (March-2012 to March-2014)

DST INSPIRE Faculty: Guru Nanak Dev University, Amritsar (May-2014 to May-2016) -

### **Professional Recognition/Awards:**

CSIR-JRF (CSIR-New Delhi, 2007)

CSIR-SRF (CSIR-New Delhi, 2009)

CSIR-CDRI incentive award (CSIR-CDRI, Lucknow, 2010 & 2011)

DST-INSPIRE Faculty Award (DST-New Delhi, 2014)

### **Research Citations:**

Total Citation: 1950

Average Citation: 45

H index: 25

Published Research Papers: 45

Journal of Organic Chemistry (ACS Publications)

Organic Letters (ACS Publications)

Angewandte Chemie International Edition (Wiley-VCH Publications)

Green Chemistry (RSC Publications)

Lab on a Chip (RSC Publications)

ACS Catal. (ACS Publications)

ACS Nano (ACS Publications)

Chem. Sus. Chem. (Wiley-VCH Publications)

Nature Asia Material (Nature Group Publication)

Org. Biomol. Chem. (RSC Publications)

Catalysis Science and Technology (RSC Publications)

Note: Some articles were selected as cover image articles in prestigious journals.

**Total Research Grant:** 98 lakhs from SERB, DST, UGC