

## Profile Page



Name : Dr Virender Singh (On Lien)  
Designation : Assistant Professor  
Department : Chemistry  
Qualification : PhD Medicinal Chemistry (Central Drug Research Institute, Lucknow)  
M. Sc. Chemistry Organic Chemistry (Kurukshetra University)  
B. Sc. Medical (Kurukshetra University)  
CSIR-NET JRF Chemical Sciences (CSIR-New Delhi)  
GATE Chemical Sciences (IIT Bombay)  
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### **Research Interests :**

#### Organic Chemistry:

1. Transition-Metal assisted C-C and C-N coupling reactions
2. Asymmetric Synthesis of biologically active heterocycles
3. Total synthesis of Bioactive natural products and their mimics.
4. Morita-Baylis-Hillman Chemistry and methodology development.
5. Nanoparticles synthesis and their application in organic synthesis.
6. Green Chemistry, Multi-component Reactions, N-Heterocyclic Carbene Chemistry, and synthesis of heterocycles of pharmacological interest.
7. Organocatalysis and synthesis of chiral auxiliaries used for asymmetric synthesis.

#### Medicinal Chemistry:

1. Synthesis of anticancer and anti-infective Agents.
2. Lead generation/optimization.
3. Structure-based drug design.

### **Other Profile Links :**

#### **Google Scholar Link :**

Dr Virender Singh [Click Here](#)

## Journal Publications :

Year	Journal	Publication
2020	European Journal of Organic Chemistry, 2020, 1023-1041	Manpreet Singh, Pamita Awasthi, Virender Singh*. Iodine Catalysed Synthesis of Luminescent $\gamma$ -Carboline Tethered Thiazolo[4,5-c]carbazole and Naphtho[2,1-d]thiazole Derivatives and Estimation of their Light Emitting Properties
2020	Beilstein Journal of Organic Chemistry, 2020, 16, 1740–1753.	D. Singh, V. Kumar, Virender Singh.* Et <sub>3</sub> N-DMSO Supported One-pot Synthesis of Highly Fluorescent $\gamma$ -Carboline Linked Benzothiophenones via Sulphur Insertion and Estimation of Their Photophysical Properties
2020	New J. Chem. 2020, 44, 12370-12383.	Manpreet Singh, Avijit Paul, Virender Singh.* Transition Metal-free Approach towards Regioselective Synthesis of $\gamma$ -Carboline Tethered Pyrroles and 2,3-Dihydro-1H-pyrroles
2020	Asian Journal of Organic Chemistry, 2020,9, 637-643	Vipin Kumar, S K Tiwari, Virender Singh*. Ag(I) Catalyzed Regioselective Synthesis of Dihydrofuro[3,4-b]quinolines from <i>o</i> -Alkynylquinoline-MBH Adducts and Evaluation of their Photophysical Properties
2020	S. Sharma,* Virender Singh, J. Heterocyclic Chemistry, 2020, doi.org/10.1002/jhet.4097	Shubham Sharma* and Virender Singh, Exploration of Pyrazole Based Aldo-X Bifunctional Building Blocks for the Synthesis of Pyrazole Annulated Molecular Architectures
2020	Crystal Growth & Design, 2020, 20, 5277–5288.	Nikhil Kumar , Tanmay Rom , Virender Singh and Avijit Kumar Paul, Transition Metal-ions Regulated Structural and Catalytic Behaviors of Coordination Polymers
2020	Asian Journal of Organic Chemistry, 2020, 1, 1-15.	S. Sharma, C. C. Malakar, Virender Singh.* Transition Metal-Free C-S Bond Forming Strategy towards Synthesis of Highly Diverse Pyrazole Tethered Benzothiazoles: Investigation of their Photophysical Properties.
2020	ChemistrySelect 2020, 5, 5172 –5179	M. Singh, Vaishali, R. Kumar, Virender Singh*, Catalyst-Free and Metal-Free Approach towards Synthesis of Amide- and Thioamide-Linked $\gamma$ -Carboline-Pyridine Conjugates and Estimation of Their Photophysical Properties
2020	Organic & Biomolecular Chemistry, 2020, 18, 4459-4469.	M. Singh, A. K. Paul, Virender Singh*, Isatin as 2-Aminobenzaldehyde Surrogate: Transition Metal-free Efficient Synthesis of 2-(2'-Aminophenyl)benzothiazole Derivatives
2020	New Journal of Chemistry, 2020, 44, 684-694 (Hot Paper)	S. Sharma, A. K. Paul and Virender Singh*. La(OTf) <sub>3</sub> Catalysed One-Pot Synthesis of Pyrazole Tethered Imidazo[1,2-a]azine Derivatives and Evaluation of their Light Emitting Properties.
2019	New Journal of Chemistry, 2019, 3, 93 - 102	D. Singh, S. K. Tiwari and Virender Singh*. Transition Metal-Free Approach Towards Synthesis of $\gamma$ -Carboline Tethered 1,3,4-Oxadiazoles via Oxidative C-O Bond Formation
2019	Org. Biomol. Chem. 2019 , 17, 835–844.	D. Singh, S. Sharma, M. Kumar, I. Kaur, R. Shankar, S. K. Pandey and Virender Singh*. AcOH-Mediated Metal Free Expedient Approach towards Synthesis of Bis $\gamma$ -Carbolines and Imidazopyridindole Derivatives and Assessment of Their Photophysical Properties.
2019	Current Organic Chemistry, 2019, 23, 920 - 958.	D. Singh, V. Kumar, C. C. Malakar, and Virender Singh.* Structural Diversity Attributed by Aza-Diels-Alder Reaction in Synthesis of Diverse Quinoline Scaffolds.
2019	New J. Chem., 2019,43, 18304-18315.	V. Kumar, D. Singh, A K Paul, R. Shrivastavac and Virender Singh*. ZnO-NPs Assisted Synthesis of Fluorescent $\gamma$ -Carboline C-1 Tethered Benzimidazole/Benzothiazole/Benzoxazole Derivatives and Assessment of their Photophysical Properties.

2018	ChemistrySelect 2018, 3, 1 –7.	D. Singh, C. K. Hazra, C. C. Malakar, S. K. Pandey, B. S. Kaith, Virender Singh*. Indium-mediated Domino Alkylation-lactonisation Approach: Diastereoselective Synthesis of $\alpha$ -Carboline C-3 Tethered $\alpha$ -Methylene $\alpha$ -Butyrolactones.
2018	ChemistrySelect, 2018, 3, 399 –404	V Kumar, S. Chaudhary, M. Mathur, A. K. Swami, C. C. Malakar and Virender Singh. A Tandem Approach towards Diastereoselective Synthesis of Quinoline C-3
2018	Analytical Chemistry Letters, 2018, 8, 829-843, DOI: 10.1080/22297928.2018.1465470	K. Sharma, R. Bhatia, D. Anghore, Virender Singh, R. Khare & R. K. Rawal. Development and Validation of UV- Spectrophotometric and RP-HPLC Methods for Simultaneous Estimation of Fexofenadine Hydrochloride, Montelukast Sodium and Ambroxol Hydrochloride in Tablet Dosage Form
2018	Karbala International Journal of Modern Science, 2018, 4, 164-170.	N. Devi, A. K. Jana and Virender Singh, Assessment of Novel Pyrazolopyridinone Fused Imidazopyridines as Potential Antimicrobial Agents
2018	Chemistry of Heterocyclic Compounds 2018, 54(3), 280–291	Rohit Bhatia, Shelly Pathania, Virender Singh , Ravindra K. Rawal. Metal-catalyzed synthetic strategies toward coumarin derivatives
2018	Asian J. Org. Chem. 2018, 7, 6 – 36.	N. Devi, S. Kumar, S. K. Pandey and Virender Singh. 1(3)-Formyl- $\alpha$ -carboline: Potential Aldo-X Precursors for Synthesis of $\alpha$ -Carboline Based Molecular Architectures
2017	Asian J. Org. Chem., 2017, DOI: 10.1002/ajoc.201700545R1	D. Singh, P. Sharma, R. Kumar, S. K. Pandey, C. C. Malakar, Virender Singh, An Expedient Approach towards Synthesis of $\alpha$ -Carboline and Pyrazole/Pyrazoline Based Molecular Hybrids.
2017	International Journal of Theoretical & Applied Sciences, 2017, 9, 71-75.	N. Devi* and Virender Singh. Fluorescence Studies of Novel Imidazopyridine Conjugates.
2017	Drug Research 2017, DOI <a href="https://doi.org/10.1055/s-0043-125210">https://doi.org/10.1055/s-0043-125210</a>	S. Roy, Virender Singh, M. K. Gupta, R. K. Rawal. Molecular Docking Studies on Isocytosine Analogues as Xanthine Oxidase Inhibitors
2017	Bioorganic Chemistry, 2017, 71, 30-54.	D. Dheer, Virender Singh, R. Shankar. Medicinal attributes of 1,2,3-triazoles: Current developments.
2017	Adv. Synth. Catal. 2017, 359, 1213-1226.	D. Singh, V. Kumar, N. Devi, C. C. Malakar, R. Shankar and Virender Singh*. Metal-free Decarboxylative Amination: An Alternative Approach towards Regioselective Synthesis of $\alpha$ -Carboline N-fused Imidazoles
2017	New Journal of Chemistry, 2017, 41, 1082-1093.	N. Devi, D. Singh, G. Kaur, S. Mor, C C Malakar and Virender Singh*. In(OTf) <sub>3</sub> Assisted Synthesis of $\alpha$ -Carboline C-3 Tethered Imidazo[1,2-a]azine Derivatives.
2017	J. Het. Chem. 2017, 54, 1327–1341.	S. Mor, R. Mohil, S. Nagoria, A. Kumar, K. Lal, D. Kumar, and Virender Singh, Regioselective synthesis, antimicrobial evaluation and QSAR studies of some 3-aryl-1-heteroarylindeno[1,2-c]pyrazol-4(1H)-ones.
2017	J. Het. Chem. 2017, 55, 373-390.	N. Devi, R. Shankar, Virender Singh* 4-Formyl-pyrazole-3-carboxylate: A Useful Aldo-X Bifunctional Precursor for the Syntheses of Pyrazole-fused/substituted Frameworks.
2017	Tetrahedron, 2017, 73, 4295–4306	D. Dheer, R. K. Rawal, Virender Singh, P. Sangwan, P. Das, R. Shankar. $\alpha$ -CD/CuI catalyzed regioselective synthesis of iodo substituted 1,2,3-triazoles, imidazo[1, 2-a]-pyridines and benzoimidazo[2,1-b]thiazoles in water and their functionalization.
2017	J. Het. Chem. 2017, 54, 3282-3293.	S. Mor, Virender Singh, Synthesis of indane based 1,5-benzothiazepines derived from 3-phenyl-2,3-dihydro-1H-inden-1-one and antimicrobial studies thereof
2017	Bioorganic Chemistry, 2017, 75, 406-423	S. K. Manjal, R. Kaur, R. Bhatia, K. Kumar, Virender Singh, R. Shankar, R. Kaur, R. K. Rawal, Synthetic and medicinal perspective of thiazolidinones: A review.

2016	Curr. Top. Med. Chem., 2016, 16, 2963-2994.	N. Devi, D. Singh, R. K. Rawal, J. Bariwal, Virender Singh. Medicinal Attributes of Imidazo[1,2-a]pyridine Derivatives: An Update.
2016	Curr. Top. Med. Chem., 2016, 16, 3258-3273.	R. K Rawal, J. Bariwal, and Virender Singh. Chemistry and Bioactivities of Aristeromycins: An Overview.
2016	Curr. Top. Med. Chem., 2016, 17, 148-161.	B. Kumar, Virender Singh, R. Shankar, K. Kumar and R. K. Rawal. Synthetic and Medicinal Prospective of Structurally Modified Curcumins.
2016	Tetrahedron Lett. 2016, 57, 5695–5699.	N. Vodnala, D. Kaldhi, S. Polina, V.P. R. K. Putta, R. Gupta, S.C. P. Promily, R.K. Linthoinganbi, Virender Singh, C. C. Malakar. Pd-Catalyzed Domino Reactions of Nitroaromatics: A Surrogate Access towards the Saturated N-heterocycles.
2016	Org. Biomol. Chem. 2016, 14, 8154-8166.	D. Singh, N. Devi, V. kumar, C. C. Malakar, S. Mehra, S. Rattan, R. K. Rawal and Virender Singh. Natural Product Inspired Designing and Synthesis of $\beta$ -Carboline and $\beta$ -Lactones Based Molecular Hybrids
2016	ChemistrySelect, 2016, 18, 5784–5788.	N. Vodnala, D. Kaldhi, R. Gupta, R. K. Linthoinganbi, V. P. R. K. Putta, S. Polina, Virender Singh, C. C. Malaka, Novel Domino Routes for the Synthesis of N-Heterocycles via Reductive Cyclization of $\beta$ -(N-2-nitroaryl)- $\alpha,\beta$ -unsaturated ketones.
2016	RSC Advances, 2016, 6, 43881-43891.	N. Devi, D. Singh, Honey, S. Mor, S. Chaudhary, R. K Rawal, V. Kumar, A. K Chowdhury and Virender Singh. In(OTf) <sub>3</sub> Catalysed an Expeditious Synthesis of $\beta$ -Carboline- imidazo[1,2-a]pyridine and imidazo[1,2-a]pyrazine Conjugates.
2016	Tetrahedron Lett. 2016, 57, 1346-1350.	S. Swami, N. Devi, A. Agarwala, Virender Singh, Rahul Shrivastava. ZnO Nanoparticles as reusable heterogeneous catalyst for efficient one pot three component synthesis of imidazo-fused polyheterocycles.
2016	Tetrahedron Lett. 2016, 57, 5695–5699.	N. Vodnala, D. Kaldhi, S. Polina, V.P. R. K. Putta, R. Gupta, S.C. P. Promily, R.K. Linthoinganbi, Virender Singh, C. C. Malakar. Pd-Catalyzed Domino Reactions of Nitroaromatics: A Surrogate Access towards the Saturated N-heterocycles.
2016	RSC Adv. 2016, 2016, 6, 88066-88076.	D. Singh, N. Devi, V. Kumar, C. C. Malakar, S. Mehra, R. K Rawal, B. S. Kaith, and Virender Singh.* A Metal-free 1,3-Dipolar Cycloaddition Approach towards Regioselective Synthesis of $\beta$ -Carboline and Isoxazole Based Molecular Hybrids.
2016	ChemistrySelct, 2016, 1, 4696–4703.	N. Devi, D. Singh, R. K. Sunkaria, C. C. Malakar, S. Mehra, R. K. Rawal and Virender Singh.* In(OTf) <sub>3</sub> -HBF <sub>4</sub> Assisted Multicomponent Approach for One-Pot Synthesis of Pyrazolopyridinone Fused Imidazopyridines
2015	Tetrahedron 2015, 71, 183-232.	N. Devi, R. K. Rawal and Virender Singh. Diversity Oriented Synthesis of Fused-imidazole Derivatives via Groebke-Blackburn-Bienayme Reaction: A Review.
2015	Clinical and Experimental Hypertension, 2015, 37, 323-331.	B. K. Narang, S. Roy, R. Sharma, Virender Singh and R. K. Rawal. Riociguat as a Treatment Regime for Pulmonary Arterial Hypertension: A Review.
2014	Der Pharma Chemica, 2014, 6, 80-89.	B. K. Narang, Virender Singh, M. K. Gupta and R. K. Rawal. 3D-QSAR Analysis on 6-(1-Benzyl-1H-pyrrol-2-yl)-2, 4-dioxo-5-hexenoic acid Derivatives as Recombinant HIV-1 Integrase Inhibitors.
2012	Curr. Org. Syn. 2012, 9, 513-528.	Virender Singh and S. Batra. 1-Formyl-9H- $\beta$ -carboline: A useful scaffold for synthesizing substituted- and fused $\beta$ -carbolines.
2010	Eur. J. Org. Chem. 2010, 531-539.	Virender Singh, S. Hutait, S. Biswas and S. Batra. Versatility of substituted 1-formyl-9H- $\beta$ -carbolines for the syntheses of new fused $\beta$ -carbolines via intramolecular 1,3-Dipolar Cycloaddition.
2010	Eur. J. Org. Chem. 2010, 3684-3891.	Virender Singh, S. Hutait and S. Batra. Advancing the Baylis-Hillman chemistry of 1-formyl- $\beta$ -carbolines for the synthesis of indolizinoindole derivatives.

2010	Tetrahedron 2010, 66, 7781-7786.	S. Biswas, Virender Singh and S. Batra, Morita-Baylis-Hillman reaction of indole-2-carboxaldehyde: New opportunities for indole-annulated systems.
2010	Eur. J. Org. Chem. 2010, 6269-6276.	S. Hutait, Virender Singh and S. Batra. Facile synthesis of dihydroquinoline-fused canthines by intramolecular Aza-Diels-Alder reaction.
2009	Eur. J. Org. Chem. 2009, 3454-3466.	Virender Singh, S. Hutait and S. Batra. Reductive-cyclization-mediated syntheses of fused polycyclic quinolines from the Baylis-Hillman adducts of acrylonitrile: Scope and limitations.
2009	Eur. J. Org. Chem. 2009, 6211-6216.	Virender Singh, S. Hutait and S. Batra. Baylis-Hillman reaction of 1-formyl- $\beta$ -carboline: one-step synthesis of the canthin-6-one framework via an unprecedented cascade cyclization.
2008	Tetrahedron 2008, 64, 2979-2991.	Virender Singh, G. P. Yadav, P. R. Maulik and S. Batra. Synthesis of substituted 3-methylene-2-pyridones from Baylis-Hillman derivatives and its application for the generation of 2-pyridone substituted spiroisoxazolines.
2008	Eur. J. Org. Chem. 2008, 5446-5460.	Virender Singh, V. Singh and S. Batra. Straight forward strategy for stereoselective synthesis of spiro-fused (C-5)isoxazolino or (C-3)pyrazolino-(C-3)-quinolin-2-ones from Baylis-Hillman adducts via 1,3-dipolar cycloaddition and reductive cyclization. Eur. J. Org. Chem. 2008, 5446-5460
2007	ARKIVOC 2007, xiv, 185-203	S. Nag, Virender Singh and S. Batra. Studies on the Baylis-Hillman reaction of pyrazolecarbaldehydes under the influence of DABCO: Positional effect on the reactivity of the formyl group.
2006	Tetrahedron 2006, 62, 8740-8748.	S. Madapa, Virender Singh and S. Batra. An alternate approach to quinoline architecture via Baylis-Hillman chemistry: SnCl <sub>2</sub> -mediated tandem reaction toward synthesis of 4-(substituted vinyl)-quinolines.

## Conference Publications :

Year	Conference	Publication
2015	International conference on Current Challenges in Drug Discovery Research. 23-25 Nov. 2015. MNIT Jaipur, Rajasthan.	Virender Singh, N. Devi and R. Bala. Design and Synthesis of $\beta$ -carboline derivatives as anticancer agents.
2015	International conference on Advances in Pharmaceutical Nanotechnology and Nanomedicine. 6-8 Feb. 2015. ISF College of Pharmacy, Moga, Punjab.	Virender Singh, N. Devi and R. Bala. Design and Synthesis of $\beta$ -carboline derivatives as anticancer agents.
2015	International conference on Advances in Pharmaceutical Nanotechnology and Nanomedicine. 6-8 Feb. 2015. ISF College of Pharmacy, Moga, Punjab.	N. Devi, D. Singh and Virender Singh. Morita-Baylis-Hillman Reaction Assisted Synthesis of Pyrazole-fused Azepinone Derivatives as Anti-infective Agents.
2015	International conference on Advances in Pharmaceutical Nanotechnology and Nanomedicine. 6-8 Feb. 2015. ISF College of Pharmacy, Moga, Punjab	D. Singh, N. Devi, and Virender Singh. Indium Catalysed Synthesis of Biologically Active $\beta$ -Carboline Substituted Imidazopyridines and Butyrolactones.
2013	International Conference 24-26 Feb 2013. Arya P G College, Panipat, Haryana	Virender Singh, R. Bala and S. Batra. 1-Formyl-9H- $\beta$ -carboline: Opening new door for generating $\beta$ -carboline natural product mimics.
2009	4th J-NOST, 4-7th Dec. 2009, Indian Institute of Technology (IIT) Kanpur (UP).	Virender Singh and S. Batra. Synthetic application of 1-formyl- $\beta$ -carboline for generating $\beta$ -carboline derivatives with D-ring.

2008	5th J-NOST, 6-9th Nov. 2008, Kamraj University, Madurai.	Virender Singh and S. Batra. Applications of 1,3-dipolar cycloaddition for the synthesis of spiro-derivatives from the Baylis-Hillman derivatives.
2008	ISCB conference 22-24th Feb 2008, Birla Institute of Technology & Science, Pilani (Rajasthan).	Virender Singh and S. Batra. A general strategy to substituted 3-methylene -2-pyridones and its synthetic applications.

### Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Book Chapter (Chapter-6)	Diversity Oriented Synthesis of Substituted and Fused $\beta$ -Carbolines from 1-Formyl-9H- $\beta$ -Carboline Scaffolds.	CRC Press, a Taylor & Francis Group.	N. Devi, R. K. Rawal, Virender Singh.		2016

### Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Major Project	Natural Product Inspired Design, Synthesis, and Anticancer Evaluation of $\beta$ -Carboline Derivatives	CSIR, New Delhi	01/01/2015	31/12/2017	17.004 Lakh	Ongoing	Prof B S Kaith
Principle Investigator	Minor Project	Design and Synthesis of C-3 $\beta$ -Carboline imidazoazine Conjugates via Multicomponent Reaction as Anticancer agents	TEQIP-II "NITJ/TEQIP-II/R&D/1825" dated 30.11.2015	30.11.2015	30.11.2016	24000	Completed	NIL
Principle Investigator	Minor Project	Exploration of 2-Chloroquinoline 3-carbaldehydes and 2-azidoquinoline 3-carbaldehydes for the synthesis of privileged scaffolds	TEQIP-II "NITJ/TEQIP-II/R&D/1825" dated 30.11.2015	30.11.2015	30.11.2016	24000	Completed	NIL

Principle Investigator	Minor Project	Exploration of [4+2] Cycloaddition Chemistry for the Synthesis of Carbazole Fused Quinolines and Pyrazole derivatives and Investigation of their Fluorescent Properties	TEQIP-II "NITJ/TEQIP-II/R&D/2991/17314-318" dated 17.10.16	17.10.16	16.10.17	0.5 Lakh	Ongoing	NIL
Principle Investigator	Major Project	Application of Building Blocks from Morita-Baylis-Hillman Chemistry for the Synthesis of Privileged Scaffolds	SERB-DST, New Delhi	01/01/2014	31/12/2016	23.70 Lakh	Completed	NIL
Principal Investigator	Major Project	Development of New Platform for A3-Coupling and other Multicomponent Reactions towards Drug-Like Molecules using Transition Metal Catalysis	SERB-DST, New Delhi	2017	2020	36.058 Lakhs	ongoing	-
Principle Investigator	Minor Project	Design and Synthesis of $\beta$ -Carboline Tethered Pyrazole and Pyrazoline Architectures as Novel Anticancer Agents	"NITJ/TEQIP-II/R&D/2991/17314-318" dated 17.10.16	17/10/2016	30/6/2017	0.5 Lakh	Completed	-

PI	Minor Project	Exploration of 1-formyl-9H- $\beta$ -Carbolines for the Synthesis of $\beta$ -Carbolines containing Privileged Scaffolds and Evaluation of their Biological Properties	"NITJ/TEQI P-II/ R&D/2991/17314-318" dated 17.10.16	17.10.16	31.05.2017	0.5 Lakh	Completed	-
PI	Minor Project	Design and Synthesis of Novel $\beta$ -Carbolines N-fused Imidazole Derivatives and Evaluation of Their Fluorescence Properties	"NITJ/TEQI P-II/ R&D/2017/6067-6076" dated 22.02.17	22.02.17	31.05.2017	0.5 Lakh	Completed	-

### Events Organized :

Category	Type	Title	Venue	From	To	Designation
Short Term Course-One Week	National	Current Opportunities and New Directions in Chemical Sciences and Technology	Department of Chemistry, NIT Jalandhar	07/12/2015	13/12/2015	Co-coordinator
Short Term Course-One Week	National	Advanced Materials and Characterization Techniques	Department of Chemistry, NIT Jalandhar	01/06/2015	07/06/2015	Co-coordinator
Short Term Course-One Week	National	Frontiers in Chemical Sciences and Technology (FCST)	Department of Chemistry, NIT Jalandhar.	08/12/2014	14/12/2014	Convener

### Professional Affiliations :

Designation	Organization
Life time Member (Membership Number : LM-194)	Him Science Congress Association, Solan, Himachal Pradesh, India.
Life time Member (Membership Number : L28478)	Indian Science Congress Association, Kolkata, India.

### PhD Supervised :



Scholar Name	Research Topic	Status	Year	Co-Supervisor
Manpreet Singh (16411105)	Asymmetric Synthesis of N-Containing Heterocyclic Frameworks	Ongoing	Jan 2017	NIL
Vaishali (18511108)	Design and Synthesis of $\beta$ -Carboline Containing Natural Product and Their Mimics	Ongoing	Aug 2018	NIL
Vipin Kumar (15520001)	Designing and Synthesis of Quinoline Based Novel Architectures as Anti-infective Agents	Thesis writing	Aug 2015	NIL
Naveen Kumar	A3-Coupling in Drug Design and Developemnt	Ongoing	2020	NIL
Rahul Jamra (19811103)	Development of New Platform for A3-Coupling and other Multicomponent Reactions towards Drug-Like Molecules using Transition Metal Catalysis	Ongoing	2019	NIL
Sunit Kumar (16520003)	Exploration of Multicomponent and 1,3-Dipolar Cycloaddition Approaches for the Synthesis of Biologically Active $\beta$ -Carboline Derivatives	Thesis writing	2016	NIL
Shubham Sharma (16411104)	Designing and Synthesis of Quinoline and $\beta$ -Carboline Based Biologically Active Frameworks	Ongoing	2016	NIL
Dharmender Singh (15820001)	Natural Product Inspired Designing and Synthesis of Biologically Active Indole and $\beta$ -Carboline Derivatives	Thesis Awarded	2015-2019	NIL
Nisha Devi (13520002)	Design and Synthesis of Novel Indole and Pyrazole Fused Biologically Active Frameworks.	Thesis Awarded	2014-2018	NIL

### Admin. Responsibilities :

Position Held	Organization	From	To
Warden Mega Hostel Boys, F-Block	Dr B R Ambedkar National Institute of Technology Jalandhar	2015	09/03/2017
Coordinator (UG Scholarship)	Dr B R Ambedkar National Institute of Technology Jalandhar	23/12/2015	till date
Warden Mega Hostel, A-Block	Dr B R Ambedkar National Institute of Technology Jalandhar	2014	2015
Warden Hostel-6	Dr B R Ambedkar National Institute of Technology Jalandhar	03/09/2013	05/01/2015
Faculty coordinator- NSS	Dr B R Ambedkar National Institute of Technology Jalandhar	2012	2014
Faculty Advisor, Music And Dramatic Society (MADS)	Dr B R Ambedkar National Institute of Technology Jalandhar	2014	2014
Faculty Advisor, TechNiti	Dr B R Ambedkar National Institute of Technology Jalandhar	2015	2015
Coordinator, Music And Dramatic Society (MADS)	Dr B R Ambedkar National Institute of Technology Jalandhar	2015	2015
Member Library Committee NITJ	Dr B R Ambedkar National Institute of Technology Jalandhar	2012	2013
Member Library Committee NITJ	Dr B R Ambedkar National Institute of Technology Jalandhar	2015	till date
Coordinator Photography and Videography club, Utkansh NITJ	Dr B R Ambedkar National Institute of Technology Jalandhar	2013	2013
Member Proctor Cell	Dr B R Ambedkar National Institute of Technology Jalandhar	2016	till date
Warden Mega Hostel Boys, B-Block	Dr B R Ambedkar National Institute of Technology Jalandhar	20-9-2017	till date

Faculty coordinator- NSS	Dr B R Ambedkar National Institute of Technology Jalandhar	2017	till date
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### **Award and Honours :**

<b>Title</b>	<b>Activity</b>	<b>Given by</b>	<b>Year</b>
Best Oral Presentation Award	International Conference	Him Science Congress Association	2018
Best Poster award - 9 Times	International and National Conference	Conference Organisers	2013-18
Young Scientist Award from Him Science Congress		Him Science Congress, Himachal	2013
Sh. NandLal Telesara Memorial Award from ICC	Conference	Indian Council of Chemists	2012
Prof. S. M. Mukherji Award for Excellence in Chemistry		Kurukshetra University	2012
Dr. M. M. Dhar Memorial Prize from CDRI	Best Thesis Award	Central Drug Research Institute, Lucknow, India	2011
D. S. Kothari Postdoc fellowship	Postdoc Fellowship	UGC New Delhi	2011
CSIR-Nehru Postdoc Fellowship	Postdoc Fellowship	CSIR-New Delhi	2011
Senior Research Fellowship	Research Fellowship	CSIR-New Delhi	2008-2011
Junior Research Fellowship	Research Fellowship	CSIR-New Delhi	2006-2008
Gold Medalist in M. Sc. Chemistry	M. Sc. Chemistry	Kurukshetra University	2005
Prof. C. P. Garg Medal	M. Sc. Chemistry	Kurukshetra University	2005
Lupin Award	M. Sc. Chemistry	Kurukshetra University	2004
R S Medal	Graduation (B. Sc. Topper)	Govt. P. G. College, Jind	2003