

CURRICULAM VITAE

UPENDRA SHARMA, PhD

Senior Scientist
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PROFESSIONAL EXPERIENCE

Senior Scientist (1st September 2017 onwards) at NPC&PDD, CSIR-IHBT, Palampur
(One-year **advance Promotion i.e. Merit Promotion** from Scientist to Senior Scientist)

Scientist (1st September 2014- 31st August 2017) at NPC&PDD, CSIR-IHBT, Palampur

Postdoctoral Fellow (14th March 2014- 22nd August) at KAIST, South Korea, worked on transition metal catalyzed remote C-H activation.

Young Scientist-DST Fast Track (24th May 2013-11th March 2014) at IIT Bombay, worked on development of catalytic processes for heterocycle synthesis through multiple C-H activation.

Research Assistant (6th Nov. 2012-22nd May 2013) at IIT Bombay, worked on stereoselective nitration and trifluoromethylation of olefins.

EDUCATION

- 2007 – 2012** PhD (Organic Chemistry) GNDU, Amritsar, Punjab / CSIR-IHBT, Palampur
Mentor: Dr. Bikram Singh, Chief Scientist & HOD, NPC&PDD, CSIR-IHBT
(Submitted on 21st May, 2012 and defended on 26th Oct. 2012) entitled
“**Phytochemical Investigation of *Tinospora cordifolia*, *Asparagus racemosus* and Synthesis of Phthalimide Derivatives for Immunomodulatory Active Molecules**”
- 2005-2006** Research Scholar in Panjab University, Chandigarh
- 2003 - 2005** M.Sc Chemistry, DAV collage, Jalandhar, GNDU, Amritsar, 1st Class with 63 %

2002 - 2003 B.Ed., Jammu University, Jammu, 1st Class with 67 %

1999 - 2002 BSc, University Govt. College Chowari, HPU, Shimla 1st Class 72%

SKILLS

- **Synthetic methodology development** (C-H activation/functionalization leading to value added molecules)
- **Isolation and structure elucidation of plant secondary metabolites** from Himalayan medicinal plants using modern spectroscopic techniques including NMR (1D & 2D), LC-MS, IR and UV-vis. Development of eco-friendly processing technology at pilot scale for bioactives of industrial importance.
- **Medicinal Chemistry:** Synthesis of New Heterocycles (Quinoline, Indole, Furan) Derivatives as Potential Therapeutic Agents
- **Chemical Profiling** using NMR (1D & 2D) and hyphenated chromatographic techniques such as UPLC-MS/MS and GC-MS
- **Analytical Chemistry** using UPLC, HPLC & GC for **standardization of plant extracts** through development of quantification method for marker compounds

AWARDS/HONOURS

- One Year Advance Promotion *i.e.* Merit Promotion from Scientist to Senior Scientist
- Early Career Advisory Board of *Asian Journal of Organic Chemistry* (2020-)
- Manjushree Pal Memorial Award for Best Oral Presentation from Ethnopharmacology Society of India, Kolkata (2017)
- Chaired a poster session in National Conference on Innovation in Bioprocess Technology (IBT-2019), CIAB, Mohali, Punjab, India, December 11-13, 2019.
- Chaired a poster session in 4th International Congress of the Society for Ethnopharmacology, India Healthcare in 21st century: Perspectives of Ethnopharmacology & Medicinal Plant Research, UKA Tassadia University, Bardoli, Surat, Gujrat on February 23-25, 2017.
- Thieme Chemistry Journal Award (2016)
- D S Kothari Postdoc Fellowship (2012)
- Fast Track Young Scientist project for three years (2012)
- Postdoc Fellowship KAIST, South Korea (2014)
- CSIR Senior Research Fellowship (2009)
- CSIR Junior Research Fellowship (2007)
- GATE (2007)
- CSIR-NET (2006)

INSTITUTIONAL RESPONSIBILITIES

- DAC member of Ph.D students enrolled in AcSIR
- Technical and Purchase Committee Member for the procurement of instruments

PROJECTS

Project Title		Funding Agency	Duration	Role
In Progress				
1	Exploration of Himalayan Plants for Novel Antimalarial Agents: Characterization of potential molecules (Phase-II).	CSIR/Agri Nutri Biotech Mission	2020-2023	PI
2	Next generation genomics for genetaic improvement of <i>Stevia rebaudiana</i> .	CSIR/Agri Nutri Biotech Mission	2020-2023	Co-PI
3	High throughout genotyping to expedite the genetic characterization and dissection of important agronomic traits of tea.	DST	2018-2021	Co-PI
4	Development of the natural glycoside (stevioside/rebaudioside A) based drug delivery nano-probe-carrier for cancer therapeutics.	CSIR-EMR	2020-2023	Co-PI
5	Value Addition of Aromatic Crop (Aroma Mission-Phase-II)	CSIR/Aroma Mission	2020-2023	Co-PI
Completed				
6	Evaluating SARS-CoV-2 Main protease (Mpro) inhibitors identified from the library of FDA approved drugs and novel CSIR molecules.	CSIR-Healthcare Mission: Drugs and APIs for COVID-19	2020-2021	PI
	Transition Metal Catalyzed Simultaneous Distant C-H Activation and Hetero-atom Transfer: Direct Synthesis of Bioactive Derivatives of Heterocyclic Compounds.	SERB-DST (EMR/2014/001023)	2015-2018	PI
7	Exploration of Himalayan Plants for Novel Antimalarial Agents: Characterization of potential molecules.	CSIR/Agri Nutri Biotech Mission	2019-2020	PI
8	Phytopharmaceutical development from as <i>Cissampelos pareira</i> per regulatory guidelines of AYUSH.	CSIR/Phytopharma Mission	2017-2020	PI
9	Technology packages for production of GMP grade medicinal plant extracts of <i>Ginkgo biloba</i> .	CSIR/Phytopharma Mission	2017-2020	PI
10	Phytochemical investigation of selected high value rare, endangered and threatened (RET) medicinal Plants.	CSIR/Phytopharma Mission	2017-2020	Co-PI

11	Nutraceutical formulation for boosting bone and cartilage health.	CSIR/Neutraceutical Mission	2018-2020	Co-PI
12	A kaempferol-enriched nutraceutical formulation for ageing bone: to concurrently stop bone loss and restoring lost bone (CSIR-CDRI, CSIR-IHBT).	CSIR/Neutraceutical Mission	2018-2020	Co-PI
13	Identification of improved clone(s) of <i>Stevia rebaudiana</i> (Bertoni).	CSIR/Agri Nutri BiotechMission	2018-2020	Co-PI
14	Development of process for converting raw cellulosic biomass into textile fiber and nanocellulose.	CSIR/Agri Nutri BiotechMission	2018-2020	Co-PI

DISSERTATIONS SUPERVISED

(a) **Ph.D:** Awarded/Submitted: 5 Current: 17

Pursuing	Awarded
<ol style="list-style-type: none"> Mr. Ankit Kumar Dhiman Mr. Patil Shiv Prasad Suresh Mr. Devesh Chandra Ms. Diksha Parmar Ms. Surekha Kumari Mr. Sumit Kumar Ms. Manisha Bhardwaj Mr. Anmol Ms. Ankita Thakur Mr. Rohit Kumar Mr. Shiv Kumar Mr. Prithavi Pal Singh Er. Mohit Sharma Ms. Shivani Puri Mr. Raman Singh Ms. Shivani Mr. Mahak Sharma 	<ol style="list-style-type: none"> Mr. Inder Kumar submitted thesis entitled “Development of Photo-catalytic Methodologies for the C-C and C-Heteroatom Bond Formation” on 3rd May, 2021. Dr. Rakesh Kumar completed thesis entitled “Synthesis and Derivatization of N-Heterocyclic Compounds through C-H Bond Functionalization” on 5th February, 2020. Dr. Ritika Sharma completed thesis entitled “Synthesis of Quinoline Derivatives via Catalytic Remote C-H Activation” on 26th July, 2019. Dr. Deepali Katoch completed Thesis entitled “Phytochemical and pharmacological investigation of Zephyranthes grandiflora and Narcissus tazetta for Amaryllidaceae alkaloids and their synthetic modification” 19th July, 2019. Dr. Vinod Bhatt completed thesis entitled “Phytochemical and Synergy-Directed Biological Studies of Zanthoxylum Species” on 15th Feb, 2018.

(b) **Post graduation training/thesis:** National: 15 International: 1

Awarded
International Student Under CSIR-TWAS Fellowship
1. Mrs. Adenike Evelyn ADENIYI , University of Ibadan, Nigeria completed six-month

TWAS-CSIR fellowship research on thesis entitled “**Suitability of Seed Oil of *Hildegardia barteri* (Mast. Kosterm) for Production of Selected Bio-Products**” in 24th January-July, 2018.

National

2. **Mr. Arpit Mahajan, Guru Nanak Dev University**, completed four months training entitled “**Protection of amino acids using phthalic anhydride**” in Jan-April, 2020.
3. **Mr. Ayush Kumar**, DAV University, Jalandhar (Pb) completed one-month training on basic lab practices in organic synthesis in January, 2020.
4. **Dr. Naresh Kumar**, IIT, Indore (MP) completed six-month training on synthesis of heterocyclic molecules in July-December, 2019.
5. **Miss. Pooja Babbar** SRM university, Delhi- NCR, completed one and half month training entitled “**Study on Isolation and Characterization of Secondary Metabolites from Medicinal Plants**” in July-December, 2019.
6. **Ms. Ankita Rana**, Chandigarh University, Gharuan, Pb, completed one and half month training entitled “**Study towards Oxidation of Quinoline Derivatives**” in June-August, 2019.
7. **Mr. Anurag Shukla**, Amity University, Noida (UP) completed one and half month training entitled “**Extraction, qualitative and quantitative analysis of *Camellia sinensis* leaves**” May-July, 2019.
8. **Mr. Vikrant**, Shoolini University, Solan, HP, completed two-month training entitled “**Synthesis of Quinoline *N*-oxide and maleimides**” in June-August, 2018.
9. **Ms. Vivekshu**, Chandigarh University, Chandigarh, completed one month training entitled “**Analytical Techniques used in Phytochemical investigations**” in May-June, 2018.
10. **Ms. Alka Devi**, Ahilya Vishwavidyalaya, Indore (M.P.) completed six-month training entitled “**Phytochemical and In-silico biological studies of *Cissampelos pareira***” in January-June, 2018.
11. **Ms. Jyoti**, Amity University Gurgaon, Haryana, completed two-month training entitled “**Extraction, Fractionation and Isolation of Secondary Metabolites from *Cissampelos pareira* Roots**” in March-April, 2018.
12. **Mr. Sachin**, Amity University Gurgaon, Haryana, completed two-month training entitled “**Functionalization of Quinoline and their characterization**” in March-April, 2018.
13. **Mr. Saurabh Kumar**, SHUATS, Allahabad, completed one-month training entitled “**Fractionation and Isolation of Secondary metabolites from *Cissampelos pareira***” in July, 2017.

14. **Mr. Amit**, Amity University Gurgaon, Haryana, completed one-month training entitled "**Phytochemical Investigation of *Cissampelos pareira***" in July, 2017.
15. **Ms. Reetu Bala**, SGGS College, Punjab University, Chandigarh, completed one-month training entitled "**Lewis Acid Catalyzed N-alkylation of 1,2,3,4-Tetrahydroisoquinolines with Acrylates**" in July, 2017.
16. **Mr. Sachin**, Amity University Gurgaon, Haryana, completed one-month training entitled "**Synthesis of Quinoline N-Oxides and Quinoline Ylides**" in July, 2017.

MEMBERS OF PROFESSIONAL SOCIETY

Life member of Catalysis Society of India since 2021 (LM No. LM1068).

Life member of Analytical Society of Analytical Scientists since 2008 (LM No. 2008/38).

EDITORSHIP

1. Early Career Advisory Board of *Asian Journal of Organic Chemistry* (2020-)

RESOURCE PERSON FOR JOURNALS

Synthetic Chemistry

ACS Catalysis
Organic Letters
Chemical Communication
Green Chemistry
Advance Synthesis & Catalysis
Organic Chemistry Frontier
The Journal of Organic Chemistry
ACS Omega
New Journal of Chemistry
Chemistry Select
Catalysis Letter
Journal of Heterocyclic Chemistry
Organic Chemistry-An Indian Journal
Polyhedron
Synthesis

Natural Product Chemistry

Journal of Natural Products
Journal of Ethnopharmacology
Natural Product Reports
Natural Product Communications
Studies in Natural Product Chemistry
Phytochemical Analysis
Separation Science and Technology
Biomedicine & Pharmacotherapy
Toxicology and Environmental Health Sciences
Agriculture Water Management
Journal of Functional Foods
SN Applied Science
Journal of Functional Food and Analysis
Chinese Journal of Natural Medicines
Chemico-Biological Interaction

PHD THESIS EXAMINER

PhD Thesis Evaluated till date: **7** Viva Exam Taken: **3**

PUBLICATIONSTotal: **119**Citation: **>2935**h-index: **28**i-10 index: **64**After Independent Research Lab: **73**Book Chapter: **3**Patent: **3** (Granted: 02; Filed: 01)Invited/Oral Presentations: **15**Paper presented in conferences: **28**

S. No.	NAMES OF ALL THE AUTHORS	TITLE OF THE PAPER	NAME OF THE JOURNAL, VOLUME, YEAR AND PAGE
119	Patil Shivprasad Suresh, Prithvi Pal Singh, Anamika Sharma, Yogendra S Padwad,* and Upendra Sharma*	Steroidal Saponins of Trillium govanianum: Quality Control, Pharmacokinetic Analysis, and Anti-inflammatory Activity	<i>Journal of Biocatalysis and Agricultural Biotechnology</i> , 2021, accepted.
118	Ankit Kumar Dhiman, Rohit Kumar, and Upendra Sharma*	Catalyst and Additive-Free Synthesis of Fluoroalkoxyquinolines.	<i>Synthesis</i> , 2021, accepted.
117	Ankita Thakur, Ankit Kumar Dhiman, Sumit, Rakesh Kumar, and Upendra Sharma*	Rh(III)-Catalyzed Regioselective C8-Alkylation of Quinoline N-Oxides with Maleimides and Acrylates.	<i>The Journal of Organic Chemistry</i> , 2021, 86, 6612-6621.
116	Inder Kumar, Rakesh Kumar, Shiv Shankar Gupta, and Upendra Sharma*	C70 Fullerene Catalyzed Photo-induced Aerobic Oxidation of Benzylamines to Imines and Aldehydes.	<i>The Journal of Organic Chemistry</i> , 2021, 86, 6449-6457.
115	Sumit, Devesh Chandra, and Upendra Sharma*	Merging Kinetic Resolution with C-H Activation: An Efficient Approach for Enantioselective Synthesis.	<i>Organic & Biomolecular Chemistry</i> , 2021, 19, 4014-4026.
114	Shiv Shankar Gupta, Ashwani Kumar, Ravi Shankar,* Upendra Sharma*	<i>In Silico</i> Approach for Identifying Natural Lead Molecules Against SARS-COV-2.	<i>Journal of Molecular Graphics and Modelling</i> , 2021, 106, 107916.
113	Surekha Kumari, Anmol, Vinod Bhatt, Patil Shivprasad Suresh, and Upendra Sharma*	<i>Cissampelos pareira</i> L.: A Review of its Traditional Uses, Phytochemistry, and Pharmacology.	<i>Journal of Ethnopharmacology</i> , 2021, 274, 113850.
112	Devesh Chandra, Ankit Kumar Dhiman, Diksha Parmar and Upendra	Alkylation, Alkenylation, and Alkynylation of Heterocyclic Compounds through Group 9	<i>Catalysis Reviews: Science and Engineering</i> , 2020,

	Sharma*	(Co, Rh, Ir) Metal-Catalyzed C-H Activation.	doi.org/10.1080/01614940.2020.1839849.
111	Shudh Kirti Dolma, Patil Shivprasad Suresh, Prithvi Pal Singh, Upendra Sharma,* and S.G. Eswara Reddy*	Insecticidal activity of the extract, fractions, and pure steroidal saponins of <i>Trillium govanianum</i> Wall. ex D. Don for the control of diamondback moth (<i>Plutella xylostella</i> L.) and aphid (<i>Aphis craccivora</i> Koch)	Pest Management Science , 2021, 77, 956-962.
110	Patil Shivprasad Suresh, Prithvi Pal Singh, Yogendra S. Padwad, Upendra Sharma*	Steroidal saponins from <i>Trillium govanianum</i> as α -amylase, α -glucosidase, and dipeptidyl peptidase IV inhibitory agents. (One of the Most Read Article)	Journal of Pharmacy and Pharmacology , 2021, 73, 487-495.
109	Shivani Puri, Sarthak Sharma, Avnesh Kumari, Mohit Sharma* Upendra Sharma* and Sanjay Kumar*	Extraction of lignocellulosic constituents from cow dung: Preparation and characterization of nanocellulose.	Biomass Conversion and Biorefinery , 2021, doi.org/10.1007/s13399-020-01119-9.
108	Inder Kumar, Shiv Shankar Gupta, Rakesh Kumar, Rohit Kumar, Prakhar Agrawal, Dinkar Sahal and Upendra Sharma*	Photocatalytic Unsymmetrical Coupling of 2-Substituted Quinolines: Synthesis and Evaluation of Antiplasmodial Potential of β -norbenzomorphan Framework.	Journal of ACS Sustainable Chemistry & Engineering , 2020, 8, 12902-12910.
107	Diksha Parmar, Rohit Kumar, Rakesh Kumar and Upendra Sharma*	Ru(II)-Catalyzed Chemoselective C(sp ³)-H Monoarylation of 8-Methyl Quinolines with Arylboronic Acids. (One of the Most Read Article)	The Journal of Organic Chemistry , 2020, 85, 11844-11855.
106	Vinod Bhatt, Surekha Kumari, Pooja Upadhyay, Prakhar Agrawal, Anmol, Dinkar Sahal* Upendra Sharma*	Chemical profiling and quantification of potential active constituents responsible for the antiplasmodial activity of <i>Cissampelos pareira</i> .	Journal of Ethanopharmacology , 2020, 262, 113185.
105	Dinkar Sahal* and	<i>Cissampelos pareira</i> 's tale	Research Journal of Plant Pathology ,

	Upendra Sharma	from the benevolent world of medicinal plants (<i>Expert Commentary</i>)	2020, 3, 1-2. DOI: 10.36648/plant-pathology.3.2.2
104	Ankit K. Dhiman, Ankita Thakur, Rakesh Kumar and Upendra Sharma*	Recent Advances in Rhodium-Catalyzed Selective C-H Bond Functionalization of Quinolines (<i>This article also appears in: Hot Topic: C-H Activation</i>) https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)2193-5815.hottopic-c-h-activation)	<i>Asian Journal of Organic Chemistry</i> , 2020, 9, 1502-1518.
103	Ankit Kumar Dhiman, Ankita Thakur, Inder Kumar, Rakesh Kumar and Upendra Sharma*	Co(III)-Catalyzed C-H Amidation of Nitrogen Containing Heterocycles with Dioxazolones under Mild Condition.	<i>The Journal of Organic Chemistry</i> , 2020, 85, 9244-9254.
102	Rakesh Kumar, Diksha Parmar, Shiv Shankar Gupta, Devesh Chandra, Ankit Kumar Dhiman and Upendra Sharma*	Cp*Rh(III)-Catalyzed Sterically Controlled C(sp ³)-H Selective Mono- and Diarylation of 8-Methylquinolines with Organoborons. (<i>Published as Hot Paper</i>)	<i>Chemistry-A European Journal</i> , 2020, 26, 4396-4402.
101	Prithvi Pal Singh, Prateek Singh Bora, Patil Shivprasad Suresh, Vinod Bhatt, and Upendra Sharma*	Qualitative and quantitative determination of steroidal saponins in <i>Trillium govanianum</i> by UHPLC-QTOF-MS/MS and UHPLC-ELSD.	<i>Phytochemical Analysis</i> , 2020, 31, 861-873.
100	Prithvi Pal Singh, Patil Shivprasad Suresh, Prateek Singh Bora, Vinod Bhatt, and Upendra Sharma*	Govanoside B, A New Steroidal Saponin from Rhizomes of <i>Trillium govanianum</i> .	<i>Natural Product Research</i> , 2020, doi:10.1080/14786419.2020.1761360.
99	Shiv Shankar Gupta, Surekha Kumari, Inder Kumar and Upendra Sharma*	Eco-friendly and Sustainable Synthetic Approaches for Biologically Significant Fused N-Heterocycles. (<i>Invited Article</i>)	<i>Chemistry of Heterocyclic Compounds</i> , 2020, 56, 433-444.
98	Rakesh Kumar, Ritika Sharma, Rohit Kumar and Upendra Sharma*	Cp*Rh(III)-Catalysed Regioselective C(sp ³)-H Methylation of 8-Methylquinolines with Organoborons.	<i>Organic Letters</i> , 2020, 22, 305-309.

97	Rohit Kumar, Rakesh Kumar, Diksha Parmar, Shiv Shankar Gupta and Upendra Sharma*	Ru(II)/ Rh(III)-Catalyzed C(sp ³)-C(sp ³) Bond Formation through C(sp ³)-H Activation: Selective Linear Alkylation of 8-Methylquinolines and Ketoximes with Olefins.	The Journal of Organic Chemistry , 2020, 85, 1181-1192.
96	Shiv Shankar Gupta, Rakesh Kumar and Upendra Sharma*	Regioselective Arylation of Quinoline <i>N</i> -Oxides (C8), Indolines (C7) and <i>N</i> -tert-Butylbenzamide with Arylboronic Acids.	ACS Omega , 2020, 5, 904-913.
95	Deepali Katoch*, Dharmesh Kumar, Yogendra S Padwad, Bikram Singh,* Upendra Sharma*	Narciclasine-4- <i>O</i> - β -D-xylopyranoside, a new narciclasine glycoside from <i>Zephyranthes minuta</i> .	Natural Product Research , 2020, 34, 233-240.
94	Sandeep Kaur, Ajay Kumar, Sharad Thakur, Kapil Kumar, Ritika Sharma, Anket Sharma, Prabhpreet Singh, Upendra Sharma , Subodh Kumar, Marco Landi *, Marián Brestič, Satwinderjeet Kaur *	Antioxidant, Antiproliferative and Apoptosis-Inducing Efficacy of Fractions from <i>Cassia fistula</i> L. Leaves.	Antioxidants , 2020, 9, 173. doi:10.3390/antiox9020173
93	Deepali Katoch*, Dharmesh Kumar, Yogendra S Padwad, Bikram Singh,* and Upendra Sharma*	Pseudolycorine <i>N</i> -oxide, a new <i>N</i> -oxide from <i>Narcissus tazetta</i> .	Natural Product Research , 2020, 34, 2051-2058.
92	Deepali Katoch,* and Upendra Sharma*	Simultaneous Quantification and Identification of Amaryllidaceae Alkaloids in <i>Narcissus tazetta</i> by Ultra Performance Liquid Chromatography-Diode Array Detector-Electrospray Ionisation Tandem Mass Spectrometry.	Journal of Pharmaceutical and Biomedical Analysis , 2019, 175, 112750.
91	Ankit Kumar Dhiman, Shiv Shankar Gupta, Ritika Sharma, Rakesh Kumar, and Upendra Sharma*	Rh(III)-Catalyzed C(8)-H Activation of Quinoline <i>N</i> -oxides: Regioselective C-Br and C-N Bond Formation <i>(Part of Special Issue:</i>	The Journal of Organic Chemistry , 2019, 84, 12871-12880.

		<i>C-H Bond Functionalization)</i>	
90	Ankit Kumar Dhiman, Devesh Chandra, Rakesh Kumar and Upendra Sharma*	Catalyst-Free Synthesis of 2-Anilinoquinolines and 3-Hydroxyquinolines via Three-Component Reaction of Quinoline <i>N</i> -oxides, Aryldiazonium salts and Acetonitrile.	The Journal of Organic Chemistry , 2019, 84, 6962-6969.
89	Devesh Chandra, Ankit Kumar Dhiman, Rakesh Kumar, Upendra Sharma*	Microwave-Assisted Metal-Free Rapid Synthesis of C4-Arylated Quinolines via Povarov Type Multicomponent Reaction.	European Journal of Organic Chemistry , 2019, 2019, 2753-2758.
88	Meenakshi Thakur, Shruti Sharma, Upendra Sharma, Rakesh Kumar	Study on effect of pruning interval on growth, yield and quality of scented rose (<i>Rosa damascena</i> Mill.) varieties under acidic conditions of western Himalayas	Journal of Applied Research on Medicinal and Aromatic Plants , 2019, 13, 100202
87	Ritika Sharma, Rakesh Kumar, Upendra Sharma*	Rh/O ₂ -Catalyzed C8 Olefination of Quinoline <i>N</i> -oxides with Activated and Unactivated Olefins.	The Journal of Organic Chemistry , 2019, 84, 2786-2797.
86	Rakesh Kumar, Rohit Kumar, Devesh Chandra, Upendra Sharma*	Cp*Co(III)-Catalyzed Alkylation of Primary and Secondary C(sp ³)-H Bonds of 8-Alkylquinolines with Maleimides.	The Journal of Organic Chemistry , 2019, 84, 1542-1552.
85	Rakesh Kumar, Ritika Sharma, Inder Kumar, Pooja Upadhyay, Ankit Kumar Dhiman, Rohit Kumar, Rakesh Kumar, Rituraj Purohit,* Dinkar Sahal* and Upendra Sharma*	Evaluation of antiplasmodial potential of C-2 and C-8 modified quinolines: in vitro and in silico study.	Medicinal Chemistry , 2019, 15, 790-800.
84	Ritika Sharma, Rakesh Kumar, Rohit Kumar, Pooja	Rh(III)-Catalyzed C(8)-H Functionalization of	The Journal of Organic Chemistry , 2018, 83,

	Upadhyay, Dinkar Sahal, Upendra Sharma*	Quinolines via Simultaneous C-C and C-O Bond Formation: Direct Synthesis of Quinoline Derivatives with Antiplasmodial Potential.	12702-12710.
83	Rakesh Kumar, Sandeep Chaudhary, Rohit Kumar, Pooja Upadhyay, Dinkar Sahal, Upendra Sharma*	Catalyst and Additive-free Diastereoselective 1,3-Dipolar Cycloaddition of Quinolinium Imides with Olefins, Maleimides and Benzynes: Direct Access to Fused <i>N,N'</i> -Heterocycles with Promising Activity against Drug Resistant Malaria Parasite.	<i>The Journal of Organic Chemistry</i> , 2018, 83, 11552-11570.
82	Ritika Sharma, and Upendra Sharma*	Remote C-H Bond Activation/Transformations: A Continuous Growing Synthetic Tool; Part II.	<i>Catalysis Reviews: Science and Engineering</i> , 2018, 60, 497-565.
81	Inder Kumar, Ritika Sharma, Rakesh Kumar, Rakesh Kumar, and Upendra Sharma*	C70 Fullerene-Catalyzed Metal-Free Photocatalytic ipso-Hydroxylation of Aryl Boronic Acids: Synthesis of Phenols.	<i>Advanced Synthesis & Catalysis</i> , 2018, 360, 2013-2019.
80	Inder Kumar, Rakesh Kumar and Upendra Sharma*	Recent Advances in Regioselective Synthesis of Indoles <i>via</i> C-H Activation/Functionalization.	<i>Synthesis</i> , 2018, 50, 2655-2677.
79	Shruti Sharma, Vijeta Patial,; Dharam Singh, Upendra Sharma,* Dinesh Kumar*	Antimicrobial homoisoflavanoids from the rhizomes of <i>Polygonatum verticillatum</i> .	<i>Chemistry and Biodiversity</i> 2018, 15, e1800430
78	Vinod Bhatt, Neeraj Kumar Upendra Sharma and Bikram Singh*	Comprehensive metabolic profiling of <i>Zanthoxylum armatum</i> and <i>Zanthoxylum acanthopodium</i> leaves, bark, flowers and fruits using Ultra high performance liquid chromatography.	<i>Separation Science Plus</i> , 2018, 1, 311.

		(Highlighted in Cover Page of the Journal: doi.org/10.1002/sscp.201870017)	
77	Dinesh Kumar and Upendra Sharma*	High-performance thin-layer chromatography: An economical alternative for the quality control of medicinal plants and derived products. (Highlighted in Cover Page of the Journal: doi.org/10.1002/sscp.201870007)	<i>Separation Science Plus</i> , 2018, 1, 100.
76	Ritika Sharma, Rupali Jandrotia, Bikram Singh, Upendra Sharma* and Dinesh Kumar*	Comprehensive Metabolomics Study of Traditionally Important <i>Rumex</i> Species Found in Western Himalayan Region.	<i>Natural Product Communications</i> , 2018, 13, 189.
75	Ashun Chaudhary, Sonika Choudhary, Upendra Sharma , Adarsh Pal Vig, Bikram Singh and Saroj Arora*	Purple Head Broccoli (<i>Brassica oleracea</i> L. var. italica Plenck), A Functional Food Crop for Antioxidant and Anticancer Potential.	<i>Journal of Food Science and Technology</i> 2018, 55, 1806.
74	Dinesh Kumar,* Pawan Kumar and Upendra Sharma*	UPLC-DAD-MS based quality control and discrimination analysis of different aerial parts of <i>Crataegus rhipidophylla</i> Gand. found in Indian western Himalaya.	<i>Analytical Chemistry Letters</i> , 2018, 8, 177.
73	Manoranjan Kumar, Krishna Thakur, Sushila Sharma, Onkar S. Nayal, Neeraj Kumar, Bikram Singh* and Upendra Sharma*	Solvent-free, L-leucine catalyzed direct dehydrative esterification of carboxylic acids with alcohols: Direct synthesis of 3-alkoxy 1(3H)-isobenzofuranone.	<i>Asian Journal of Organic Chemistry</i> , 2018, 7, 227.
72	Ankit Kumar Dhiman, Rakesh Kumar, Rakesh Kumar* and Upendra Sharma*	Metal-free synthesis of 2-substituted-3-(2-hydroxyaryl)quinolines and 4-(2-hydroxyaryl)acridines via benzyne chemistry.	<i>The Journal of Organic Chemistry</i> , 2017, 82, 12307.
71	Ritika Sharma, Inder Kumar, Rakesh Kumar, Upendra Sharma*	Rhodium-Catalyzed Remote (C-8) alkylation of Quinolines with Activated and Unactivated Olefins: Mechanistic Study and Total Synthesis of EP4 Agonist. (Highlighted in Science	<i>Advanced Synthesis & Catalysis</i> , 2017, 359, 3022.

		Trends: https://sciencetrends.com/rhiii-catalyzed-distal-alkylation-quinoline-application-total-synthesis/	
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BOOK CHAPTER

1. P. S. Suresh, V. Bhatt, P. P. Singh, and **U. Sharma**.* Steroidal Sapogenins from Genus Trillium: Chemistry, Synthesis, and Opportunities in Neuro-active Steroids Designing. *Studies in Natural Product Chemistry (Elsevier)*, 2021, Vo. 68, Chapter 3; pp 67-95; doi.org/10.1016/B978-0-12-819485-0-00004-9.
2. **U. Sharma**, A. Modak, S. Maity, A. Maji and D. Maiti. Direct Arylation via C-H activation. Thomas Colacot eds., *Introduction to New Trends in Cross-Coupling: Theory and Applications (RSC)*, 2014.
3. M. Chandel, **U. Sharma**, N. Kumar, B. Singh and S. Kaur. In Vitro Studies on the Antioxidant/Antigenotoxic Potential of Aqueous Fraction from *Anthocephalus cadamba* Bark. P.R. Sudhakaran et al. (eds.), *Perspectives in Cancer Prevention-Translational Cancer Research (Springer)*, 2013, pp 61-72.

PATENT

Filed: 01

1. M. Sharma, S. Thakur, **U. Sharma** and S. Kumar.
An eco-friendly process for isolation of fiber from plant species and product thereof.
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2. D. Maiti, **U. Sharma**, N. Tagoti.
Palladium-Catalyzed Synthesis of Benzofurans and Coumarins from Phenols and Olefins.
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PAPER PRESENTED IN CONFERENCE

Invited/Oral Presentations (National/International)

2021

1. **“C-H Activation: A Sustainable Approach for the Direct Functionalization of Quinolines”** in Virtual International Conference on Physical Sciences (ICPS – 2021) Jointly organized by Department of Physics, Chemistry and Applied Mathematics & Humanities, SVNIT on 5-6 February, 2021.

2020

2. **“Utilizing Plant Traditional Knowledge for the Discovery of Bioactives”** in Young Scientist Conference, IISF-2020 on 22-25th Decemembr, 2020.
3. **“Traditional Knowledge and Modern Spectroscopic Techniques: Unique Combination for the Discovery of Bioactive Molecules from Medicinal Plants”** in E-Conference on Phytopharmaceuticals: Development, Regulatory, IPR & Marketing Challenges, School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi on 6th August, 2020.
4. **“Regioselective C(sp³)-Methylation, Alkylation and Arylation via C(sp³)-H Activation”** in International conference on organometallics and Catalysis-II (ICOC-II, 2020) at Holiday Inn Resort, Goa, India during March 07-10, 2020.

2019

5. **“Don’t forget the Past: Traditional Knowledge Derived Discovery of Novel Bioactive Molecules”** in National Conference on Innovation in Bioprocess Technology (IBT-2019), CIAB, Mohali, Punjab, India, December 11-13, 2019.
6. **“Remote C-H Activation: Direct Access to C8-Functionalized Quinolines International Conference”** in Catalysis and Organic Synthesis (ICCOS-2019), Moscow, Russia, September 15-20, 2019.
7. **“Innovative Approaches for the Synthesis of Antimalarial Quinolines”** in Natural Product Based Therapeutics in Drug Development, NIPER-Raebareli, Lucknow, 14-15 Feb. 2019.

2018

8. **“Quinoline Functionalization via C-H Bond Activation: Synthesis of Anti-malarial Quinolines”** in International conference on organometallics and Catalysis (ICOC 2018) at Holiday Inn Resort, Goa, India during December 13-16, 2018.
9. **“Herbal Material: Basic Research and Issue of Contamination”** in two Week Intensive Course on Recent Trends and Challenges in Regulation and Standardization of Herbal Drugs and Formulations" organised by NIPER-SAS Nagar, 06-16 August 2018.

2017

10. **“Quinoline Functionalization through Remote C-H Activation Using Traceless Directing Group”** in Contemporary Facets in Organic Chemistry Synthesis (CFOS) 2017, IIT Roorkee, Uttarakhand, 22-24 December, 2017.
11. **“Medicinal Plant Processing: Novel Bioactive Molecules”** in Scenario of Medicinal Plants in Himalayan Region-Cultivation, Processing and Marketing, CSIR-IHBT, Palampur, India. Organised by State Medicinal Plants Board, Himachal Pradesh, Ayurveda Bhawan, SDA Complex, Kasumpti, Shimla on 10-11 October, 2017.
12. **“Traditional Knowledge: A Perfect Guide for the Discovery of Novel Bioactive Molecules”** in Seventh Euro-India International Conference on Holistic Medicine (ICHM-2017), Kottayam, Kerala, India on 15-17 September 2017.
13. **“Future Affordable Medicines: Efforts Towards Novel Bioactive Molecules”** in Multidisciplinary National Conference on Innovative Trends in Science, Technology and Management-IV on 24th August, 2017 Organised by Sri Sai University, Palampur, Himachal Pradesh.
14. **“Efforts Towards Characterization of Bioactive Molecules from Medicinal Plants”** 4th International Congress of the Society for Ethnopharmacology, India Healthcare in 21st century: Perspectives of Ethnopharmacology & Medicinal Plant Research, UKA Tassadia University, Bardoli, Surat, Gujrat on February 23-25, 2017.
(Manjushree Pal Memorial Award for Best Presentation from Ethanopharmacology Society of India, Kolkata)

2016

15. **“Phytochemical Investigation of *Tinospora cordifolia* and *Asparagus racemosus* for Potential Immunomodulatory Agents”** in Scientific Validation of Traditional knowledge, IIT Rorkee, Uttarakhand on March 12-13, 2016 Organized by MHRD-IPR Chair IIT Roorkee, Uttarakhand

Poster Presentation/Oral Presentation from Group

2019

1. S. Patil, P. Singh, and **U. Sharma***. Steroidal Saponins from Trillium govanianum: Isolation and Characterization. Gyantarang 2020, CSIR-NEIST, Jorhat Assam, 23-25 January 2020.
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