

## CURRICULAM VITAE

### UPENDRA SHARMA, PhD

Senior Scientist

Chemical Technology Division

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&

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## PROFESSIONAL EXPERIENCE

**Senior Scientist (1<sup>st</sup> September 2017 onwards)** at Chemical Technology Division, CSIR-IHBT, Palampur (One-year **advance Promotion i.e. Merit Promotion** from Scientist to Senior Scientist)

**Scientist (1<sup>st</sup> September 2014- 31<sup>st</sup> August 2017)** at Chemical Technology Division, CSIR-IHBT, Palampur

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

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

**Research Assistant (6<sup>th</sup> Nov. 2012-22<sup>nd</sup> 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 21<sup>st</sup> May, 2012 and defended on 26<sup>th</sup> 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, 1<sup>st</sup> Class with 63 %
- 2002 - 2003**      **B.Ed.**, Jammu University, Jammu, 1<sup>st</sup> Class with 67 %
- 1999 - 2002**      **BSc**, University Govt. College Chowari, HPU, Shimla 1<sup>st</sup> 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

- Member of Early Career Board of *Science of Synthesis* (2022-)
- One Year Advance Promotion *i.e.* Merit Promotion from Scientist to Senior Scientist
- Member of 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 on December 11-13, 2019.
- Chaired a poster session in 4<sup>th</sup> 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)

## 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 member of *Science of Synthesis* (2022-)
2. Early Career Advisory Board member of *Asian Journal of Organic Chemistry* (2020-)

## RESOURCE PERSON FOR JOURNALS

**Synthetic Chemistry**

*Nature Chemistry*

**Natural Product Chemistry**

*Journal of Natural Products*

*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*

*Journal of Ethanopharmacology*  
*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*

#### INSTITUTIONAL RESPONSIBILITIES

- Member, Technical and Purchase Committee (2018 onwards)
- Member, Students selection committee in Chemical Sciences, CSIR-IHBT
- DAC Member, Ph.D. students enrolled in Academy of Scientific and Innovative Research (AcSIR), Ghaziabad-201002, India/CSIR-IHBT, Palampur

#### SCIENTIFIC PROGRAMME ORGANIZED

- Coordinated “**One-day visit/training programme**” in CSIR-IHBT on 30.03.2022 under SERB-Scientific Social Responsibility Programme in a SERB Funded Project (File No. CRG/2021/000878).
- Co-Coordinator and acted as resource person in a Capacity Building Programme for Ph.D. students and Faculty from MDU, Rohtak on “**Bioprospecting Natural Products for Human Health and Socio-economic Development**” under UGC-STRIDE Programme at CSIR-IHBT, Palampur March 07-11, 2022.

#### PHD THESIS EXAMINER

- Ph.D. Thesis Evaluated till date: **10** Viva Exam Taken: **5**

#### PROJECTS HANDLED

	Project Title	Funding Agency	Duration	Role
<b>In Progress: 10</b>				
20	Chemometrics as Inventive Tool for Quality Assessment of Medicinal Plants: A Case Study with Aconitum heterophyllum (Nation Priority Plant).	Science and Engineering Research Board (SERB) File No.: CRG/2021/000878	<b>2021-2024</b>	<b>Principal Investigator</b>
19	Value Addition and Product Diversification in Tea.	Department of Biotechnology (NER-BPMC)	<b>2022-2025</b>	<b>Co-Principal Investigator</b>

		File No. BT/PR45264/NER/95/1920/2022		
18	Process optimization and up-scale production of lignocellulosic extremozymes from Himalayan microbes for biomass valorization/depolymerization.	Department of Biotechnology (NER-BPMC) File No. BT/PR45190/NER/95/1902/2022	2022-2025	Co-Principal Investigator
17	Bio-prospecting and product development from <i>Curcuma longa</i> (turmeric) in Uttarakhand. <i>In collaboration: Graphic Era (Deemed to be University), Uttarakhand.</i>	R&D; Sponsored by Uttarakhand State Council for Science and Technology, DST, Uttarakhand	2021-2022	Co-Principal Investigator
16	Exploration of Himalayan Plants for Novel Antimalarial Agents: Characterization of potential molecules (Phase-II).	CSIR/Agri Nutri Biotech Mission	2020-2023	Principal Investigator
15	Next generation genomics for genetaic improvement of <i>Stevia rebaudiana</i> .	CSIR/Agri Nutri Biotech Mission	2020-2023	Co-Principal Investigator
14	Development of the natural glycoside (stevioside/rebaudioside A) based drug delivery nano-probe-carrier for cancer therapeutics.	CSIR-EMR	2020-2023	Co-Principal Investigator
13	CSIR-Aroma Mission – Phase II (HCP0007)	CSIR/Aroma Mission	2020-2023	Co-Principal Investigator
12	Development of nutraceutical formulation for kidney health.	CSIR/ Immunity Mission	2021-2023	Co-Principal Investigator
11	Development of Immunomodulatory Products based on <i>Carum carvi</i> and <i>Bunium persicum</i> .	CSIR/ Immunity Mission	2021-2023	Co-Principal Investigator
<b>Completed: 10</b>				
10	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	Principal Investigator
9	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	Principal Investigator
8	Exploration of Himalayan Plants for Novel Antimalarial Agents: Characterization of potential molecules.	CSIR/Agri Nutri Biotech Mission	2019-2020	Principal Investigator
7	Phytopharmaceutical development from as <i>Cissampelos pareira</i> per regulatory guidelines of AYUSH.	CSIR/Phytopharma Mission	2017-2020	Principal Investigator
	Technology packages for production of GMP grade medicinal plant extracts of <i>Ginkgo biloba</i> .	CSIR/Phytopharma Mission	2017-2020	Principal Investigator
6	High throughout genotyping to expedite the genetic	DST	2018-2021	Co-Principal Investigator

	characterization and dissection of important agronomic traits of tea.			
5	Phytochemical investigation of selected high value rare, endangered and threatened (RET) medicinal Plants.	CSIR/Phytopharma Mission	2017-2020	Co-Principal Investigator
4	Nutraceutical formulation for boosting bone and cartilage health.	CSIR/Neutraceutical Mission	2018-2020	Co-Principal Investigator
3	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-Principal Investigator
2	Identification of improved clone(s) of <i>Stevia rebaudiana</i> (Bertoni).	CSIR/Agri Nutri Biotech Mission	2018-2020	Co-Principal Investigator
1	Development of process for converting raw cellulosic biomass into textile fiber and nanocellulose.	CSIR/Agri Nutri Biotech Mission	2018-2020	Co-Principal Investigator

#### DISSERTATIONS (BEING) SUPERVISED

(a) **Postdoc:** 06 [Completed: 03; Current: 03]

(b) **Ph.D.:** 24 [Awarded: 8; Current: 16]

Pursuing	Awarded
<ol style="list-style-type: none"> <li>Mr. Devesh Chandra</li> <li>Ms. Diksha Parmar</li> <li>Ms. Surekha Kumari</li> <li>Mr. Sumit</li> <li>Ms. Manisha</li> <li>Mr. Anmol</li> <li>Ms. Ankita Thakur</li> <li>Mr. Rohit Kumar</li> <li>Mr. Shiv Kumar Gupta</li> <li>Mr. Prithavi Pal Singh</li> <li>Er. Mohit Sharma</li> <li>Ms. Shivani Puri</li> <li>Ms. Shivani</li> <li>Mr. Raman Singh</li> <li>Ms. Mahek Sharma</li> <li>Mr. Parteek Singh Bora</li> </ol>	<ol style="list-style-type: none"> <li>Dr. Shruti Sharma completed thesis entitled "<b>Exploration of <i>Polygonatum verticillatum</i> for its chemistry and therapeutic potential</b>" on 21<sup>st</sup> September 2022.</li> <li>Dr. Patil Shiv Prasad Suresh completed thesis entitled "<b>Phytochemical and Pharmacological Investigation of <i>Trillium goavniatum</i> Wall. Ex D.Don for Steroidal Saponins</b>" on 15<sup>th</sup> February 2022.</li> <li>Dr. Ankit Kumar Dhiman completed thesis entitled "<b>Development of Methodologies for the Synthesis of N-Heterocyclic Derivatives through C-H Bond Functionalization</b>" on 23<sup>rd</sup> December 2021.</li> <li>Dr. Inder Kumar completed thesis entitled "<b>Development of Photocatalytic Methodologies for the C-C and C-Heteroatom Bond Formation</b>" on 15<sup>th</sup> July 2021.</li> <li>Dr. Rakesh Kumar completed thesis entitled "<b>Synthesis and Derivatization of N-Heterocyclic Compounds through C-H Bond Functionalization</b>" on 5<sup>th</sup> February 2020.</li> <li>Dr. Ritika Sharma completed thesis entitled "<b>Synthesis of Quinoline Derivatives via Catalytic Remote C-H Activation</b>" on 26<sup>th</sup> July, 2019.</li> <li>Dr. Deepali Katoch completed Thesis entitled "<b>Phytochemical and pharmacological investigation of <i>Zephyranthes grandiflora</i> and <i>Narcissus tazetta</i> for Amaryllidaceae alkaloids and their synthetic modification</b>" 19<sup>th</sup> July 2019.</li> <li>Dr. Vinod Bhatt completed thesis entitled "<b>Phytochemical and Synergy-Directed Biological Studies of <i>Zanthoxylum</i> Species</b>" on 15<sup>th</sup> February 2018.</li> </ol>

Awarded
<p><b>International Student Under CSIR-TWAS Fellowship</b></p> <ol style="list-style-type: none"> <li>1. <b>Mrs. Adenike Evelyn ADENIYI</b>, University of Ibadan, Nigeria completed six-month TWAS-CSIR fellowship research on thesis entitled <b>“Suitability of Seed Oil of <i>Hildegardia barteri</i> (Mast. Kosterm) for Production of Selected Bio-Products”</b> in 24<sup>th</sup> January-July, 2018.</li> </ol>
<p><b>National</b></p> <ol style="list-style-type: none"> <li>2. <b>Mr. Sahil Rana</b>, Chandigarh University, completed one and half months training entitled <b>“Phytochemical Investigation of Plants”</b> in June-August, 2022.</li> <li>3. <b>Ms. Nivedita Thakur</b>, GNDU, Amritsar, completed five months training entitled <b>“Synthesis and Characterisation of Isoquinoline Derivatives”</b> in Feb-July, 2022.</li> <li>4. <b>Ms. Anjali</b>, Chandigarh University, completed two months training entitled <b>“Basics in natural product chemistry”</b> under SERB-DST funded project in Jan-March, 2022.</li> <li>5. <b>Mr. Arpit Mahajan</b>, Guru Nanak Dev University, completed four months training entitled <b>“Protection of amino acids using phthalic anhydride”</b> in Jan-April, 2020.</li> <li>6. <b>Mr. Ayush Kumar</b>, DAV University, Jalandhar (Pb) completed one-month training on basic lab practices in organic synthesis in January, 2020.</li> <li>7. <b>Dr. Naresh Kumar</b>, IIT, Indore (MP) completed six-month training on synthesis of heterocyclic molecules in July-December, 2019.</li> <li>8. <b>Miss. Pooja Babbar</b> SRM University, Delhi- NCR, completed one and half month training entitled <b>“Study on Isolation and Characterization of Secondary Metabolites from Medicinal Plants”</b> in July-December, 2019.</li> <li>9. <b>Ms. Ankita Rana</b>, Chandigarh University, Gharuan, Pb, completed one and half month training entitled <b>“Study towards Oxidation of Quinoline Derivatives”</b> in June-August, 2019.</li> <li>10. <b>Mr. Anurag Shukla</b>, Amity University, Noida (UP) completed one and half month training entitled <b>“Extraction, qualitative and quantitative analysis of <i>Camellia sinensis</i> leaves”</b> May-July, 2019.</li> <li>11. <b>Mr. Vikrant</b>, Shoolini University, Solan, HP, completed two-month training entitled <b>“Synthesis of Quinoline N-oxide and maleimides”</b> in June-August, 2018.</li> <li>12. <b>Ms. Vivekshu</b>, Chandigarh University, Chandigarh, completed one-month training entitled <b>“Analytical Techniques used in Phytochemical investigations”</b> in May-June, 2018.</li> <li>13. <b>Ms. Alka Devi</b>, Ahilya Vishwavidyalaya, Indore (M.P.) completed six-month training entitled <b>“Phytochemical and In-silico biological studies of <i>Cissampelos pareira</i>”</b> in January-June, 2018.</li> <li>14. <b>Ms. Jyoti</b>, Amity University Gurgaon, Haryana, completed two-month training entitled <b>“Extraction, Fractionation and Isolation of Secondary Metabolites from <i>Cissampelos pareira</i> Roots”</b> in March-April, 2018.</li> <li>15. <b>Mr. Sachin</b>, Amity University Gurgaon, Haryana, completed two-month training entitled <b>“Functionalization of Quinoline and their characterization”</b> in March-April, 2018.</li> <li>16. <b>Mr. Saurabh Kumar</b>, SHUATS, Allahabad, completed one-month training entitled <b>“Fractionation and Isolation of Secondary metabolites from <i>Cissampelos pareira</i>”</b> in July, 2017.</li> <li>17. <b>Mr. Amit</b>, Amity University Gurgaon, Haryana, completed one-month training entitled <b>“Phytochemical Investigation of <i>Cissampelos pareira</i>”</b> in July, 2017.</li> <li>18. <b>Ms. Reetu Bala</b>, SGGS College, Punjab University, Chandigarh, completed one-month training entitled <b>“Lewis Acid Catalyzed N-alkylation of 1,2,3,4-Tetrahydroisoquinolines with Acrylates”</b> in July, 2017.</li> <li>19. <b>Mr. Sachin</b>, Amity University Gurgaon, Haryana, completed one-month training entitled <b>“Synthesis of Quinoline N-Oxides and Quinoline Ylides”</b> in July, 2017.</li> </ol>

## PUBLICATIONS

Total: **139** Citation: **>3930** h-index: **32** i-10 index: **86**

After Independent Research Lab: **93**

Book Chapter: **9**

Patent: **3** (Granted: 02; Filed: 01)

Invited/Oral Presentations: **21**

Paper presented in conferences: **33**

S. No.	NAME OF ALL THE AUTHORS	TITLE OF THE PAPER	NAME OF THE JOURNAL, YEAR, VOLUME, PAGE
139	Shiv Shankar Gupta, Diksha Parmar, Rohit Kumar, Devesh Chandra, and Upendra Sharma*	Construction of <i>N</i> -Heterocycles through Group 9 (Co, Rh, Ir) Metal-Catalyzed C-H Activation: Utilizing Alkynes and Olefins as Coupling Partners.	<i>Catalysis Reviews: Science and Engineering</i> , 2022, doi.org/10.1080/01614940.2022.2097640.
138	Chirag Kulkarni, Shivani Sharma, Prateek Singh Bora, Saurabh Verma, Swati Rajput, Konica Porwal, Srikanta K. Rath, Jiaur R. Gayen, Upendra Sharma, Naibedya Chattopadhyay*	A novel extraction method enhanced the osteogenic and anti-osteoporosis effect of tea extract without any hepatotoxicity in ovariectomized rats.	<i>Frontiers in Endocrinology</i> , 2022, doi: 10.3389/fendo.2022.951800.
137	Diksha Parmar, Ankit Kumar Dhiman, Rohit Kumar, Akhilesh K. Sharma* and Upendra Sharma*	Cp*Co(III)-Catalyzed Selective C8-Olefination and Oxyarylation of Quinoline <i>N</i> -Oxides with Terminal Alkynes.	<i>The Journal of Organic Chemistry</i> , 2022, 87, 9069-9087.
136	Patil Shivprasad Suresh, Prithvi Pal Singh, Anmol, Smita Kapoor Yogendra S. Padwad and Upendra Sharma*	Lactic acid-based Deep Eutectic Solvent: An Efficient Green Media for the Selective Extraction of Steroidal Saponins from <i>Trillium govanianum</i> .	<i>Separation and Purification Technology</i> , 2022, 294, 121105.
135	Ajay Kumar, Sandeep Kaur, Sukhvinder Dhiman, Prithvi Pal Singh, Gaurav Bhatia, Sharad Thakur, Hardeep Singh Tuli, Upendra Sharma, Subodh Kumar, Abdulmajeed G. Almutary*, Abdullah M. Alnuqaydan, Arif Hussain, Shafiul Haque, Kuldeep Dhama, Satwinderjeet Kaur*	Targeting Akt/NF-κB/p53 pathway and apoptosis inducing potential of 1,2-benzenedicarboxylic acid, bis (2-methyl propyl) ester isolated from <i>Onosma bracteata</i> Wall. against human osteosarcoma (MG-63) cells.	<i>Molecules</i> , 2022, 27, 3478.
134	Madiha Haider, Vivek Anand, M. Ghalib Enayathullah, Yash Parekh, Sushma Ram, Surekha Kumari, Anmol, Gayatri Panda, Manjari Shukla, Dhvani Dholakia, Arjun Ray, Sudipta Bhattacharyya, Upendra Sharma, Kiran Kumar	Anti-SARS-CoV-2 potential of <i>Cissampelos pareira</i> L. identified by Connectivity map-based analysis and <i>in vitro</i> studies.	<i>BMC Complementary Medicine and Therapies</i> , 2022, 22, 114.



	Bokara, Bhavna Prasher* and Mitali Mukerji*		
133	Ankita Thakur, Manisha, Inder Kumar, and Upendra Sharma*	Visible Light Induced Functionalization of C-H Bonds: Opening of New Avenues in Organic Synthesis.	<a href="#">Asian Journal of Organic Chemistry</a> , 2022, 11, e202100804.
132	Surekha Kumari, Shudh Kirti Dolma, Anmol, Upendra Sharma,* and S.G. Eswara Reddy*	Insecticidal activity of extracts, fractions and pure molecules of <i>Cissampelos pareira</i> Linnaeus against aphid, <i>Aphis craccivora</i> Koch.	<a href="#">Molecules</a> , 2022, 27, 633.
131	Anmol, Surekha Kumari, Raman Singh, Gaurav Aggarwal, Prakhar Agrawal, Dinkar Sahal,* and Upendra Sharma*	Antiplasmodial diterpenoid alkaloid from <i>Aconitum heterophyllum</i> Wall. ex Royle: Isolation, characterization, and UHPLC-DAD based quantification.	<a href="#">Journal of Ethanopharmacology</a> , 2022, 287, 114931.
130	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> .	<a href="#">Natural Product Research</a> , 2022, 36, 37-45.
129	Rohit Kumar, Devesh Chandra, and Upendra Sharma*	Pd-Catalyzed Atropselective C-H Olefination Promoted by a Transient Directing Group.	<a href="#">Advance Synthesis &amp; Catalysis</a> , 2022, 364, 897-908.
128	Devesh Chandra, Manisha, and Upendra Sharma*	Recent Advances in the High-Valent Cobalt-Catalyzed C-H Functionalization of N-Heterocycles.	<a href="#">The Chemical Records</a> , 2022, e202100271.
127	Madhu Thapliyal, Sachin Panwar, Deepak Rana, Manu Pant, Prabhakar Semwal, Upendra Sharma, Suktilang Majaw, Vinay Nautiyal, Sanjay Kumar, Rajendra Dobhal and Ashish Thapliyal*	Biochemical Analysis of Curcumin Content of Turmeric ( <i>Curcuma Longa</i> ) from Himalayan Region of Uttarakhand and Its Economic Potential.	<a href="#">Biochem. Cell. Arch.</a> 2022, 22, 1509-1514.
126	Devesh Chandra, Nikunj Kumar, Sumit, Diksha Parmar, Puneet Gupta,* and Upendra Sharma*  <b>Highlighted on Front Cover Page</b> , 2021, 57, 11567-11568.	Co(III)-catalysed regioselective linear C(8)-H olefination of isoquinolone with terminal aromatic and aliphatic alkynes.	<a href="#">Chemical Communications</a> , 2021, 57, 11613-11616.
125	Shiv Shankar Gupta, Manisha, Rakesh Kumar, Ankit Kumar Dhiman, and Upendra Sharma*	Predictable Site-Selective Functionalization: Promoter Group Assisted para-Halogenation of N-Substituted (Hetero)Aromatics under Metal-Free Condition.	<a href="#">Organic &amp; Biomolecular Chemistry</a> , 2021, 19, 9675-9687.



124	Sumit, Devesh Chandra, Ankita Thakur, Ankit Kumar Dhiman, and Upendra Sharma*	Cp*Rh(III)-Catalyzed Regioselective C(sp <sup>3</sup> )-H Electrophilic Trifluoromethylthiolation of 8-Methylquinolines.	<a href="#">The Journal of Organic Chemistry</a> , 2021, 86, 13754-13761.
123	Manisha, Shiv Shankar Gupta, Ankit Kumar Dhiman, and Upendra Sharma*	Rh(III)-Catalyzed Selective C7 Halogenation of Indolines.	<a href="#">European Journal of Organic Chemistry</a> , 2021, 2021, 5443-5448.
122	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.	<a href="#">The Journal of Organic Chemistry</a> , 2021, 86, 6612-6621.
121	Inder Kumar, Rakesh Kumar, Shiv Shankar Gupta, and Upendra Sharma*	C70 Fullerene Catalyzed Photo-induced Aerobic Oxidation of Benzylamines to Imines and Aldehydes.	<a href="#">The Journal of Organic Chemistry</a> , 2021, 86, 6449-6457.
120	Inder Kumar, Ankita Thakur, Manisha and Upendra Sharma *	$\alpha$ -Oxygenation of N-Aryl/Alky Heterocyclic Compounds via Ruthenium-Photocatalysis.	<a href="#">Reaction Chemistry &amp; Engineering</a> , 2021, 6, 2087-2091.
119	Ankit Kumar Dhiman, Rohit Kumar and Upendra Sharma*	Catalyst and Additive-Free Synthesis of Fluoroalkoxyquinolines.	<a href="#">Synthesis</a> , 2021, 53, 4124-4130.
118	Sumit, Devesh Chandra, and Upendra Sharma*	Merging Kinetic Resolution with C-H Activation: An Efficient Approach for Enantioselective Synthesis.	<a href="#">Organic &amp; Biomolecular Chemistry</a> , 2021, 19, 4014-4026.
117	Patil Shivprasad Suresh, Krishan Gopal Thakur,* and Upendra Sharma*	Molecular Docking and Dynamic Simulation Approach to Decipher Steroidal Sapogenins (Genus <i>Trillium</i> ) Derived Agonists for Glucocorticoid Receptor.	<a href="#">Journal of Biomolecular Structure and Dynamics</a> , 2021, DOI: 10.1080/07391102.2021.2003864.
116	Shivani Puri, Dinkar Sahal*, Upendra Sharma,*	A Conversation Between Hyphenated Spectroscopic Techniques and Phytometabolites from Medicinal Plants.	<a href="#">Analytical Science Advance</a> , 2021, 2, 579-593.
115	Madiha Haider, Dhvani Dholakia, Aleksha Panwar, Parth Garg, Atish Gheware, Dayanidhi Singh, Khushboo Singh, Shaunak A Burse, Surekha Kumari, Anmol, Arjun Ray, Guruprasad R. Medigeshi, Upendra Sharma, Bhavana Prasher* and Mitali Mukerji*	Transcriptome Analysis and Connectivity Mapping of <i>Cissampelos pareira</i> L. Provides Molecular Links of ESR1 Modulation to Viral Inhibition.	<a href="#">Scientific Reports</a> , 2021, 20095.

114	Patil Shivprasad Suresh, Prithvi Pal Singh, Anamika Sharma, Yogendra S Padwad,* and Upendra Sharma*	Steroidal Saponins of <i>Trillium govanianum</i> : Quality Control, Pharmacokinetic Analysis, and Anti-inflammatory Activity.	<a href="#">Biocatalysis and Agricultural Biotechnology</a> , 2021, 35, 102071.
113	Shiv Shankar Gupta, Ashwani Kumar, Ravi Shankar,* Upendra Sharma*	<i>In Silico</i> Approach for Identifying Natural Lead Molecules Against SARS-COV-2.	<a href="#">Journal of Molecular Graphics and Modelling</a> , 2021, 106, 107916.
112	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.	<a href="#">Journal of Ethanopharmacology</a> , 2021, 274, 113850.
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35	Tuhin Patra, Arghau. Deb, Srimanta Manna, Upendra Sharma, Debabrata Maiti <b>(Highlighted in Organic Process Research &amp; Development 2013, 17, 1369-1379)</b>	Iron-Mediated Decarboxylative Trifluoromethylation of $\alpha,\beta$ -Unsaturated Carboxylic Acids with Trifluoromethanesulfinate.	<i>European Journal of Organic Chemistry</i> , 2013, 24, 5257.
34	Manju Bala, Praveen Kumar Verma, Upendra Sharma, Neeraj Kumar, Bikram Singh	Iron Phthalocyanine as an Efficient and Versatile Catalyst for N-alkylation of Heterocyclic Amines with Alcohols: One-pot Synthesis of 2-Substituted Benzimidazoles, Benzothiazoles and Benzoxazoles.	<i>Green Chemistry</i> 2013, 15, 1687.
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31	Manoj Kumar, Upendra Sharma, Sushila Sharma, Vishal Kumar, Bikram Singh, Neeraj Kumar	Catalyst-Free Water Mediated Reduction of Nitroarenes Using Glucose as Hydrogen Source.	<i>RSC Advance</i> , 2013, 3, 4894.
30	Manju Bala, Praveen Kumar Verma, Neeraj Kumar, Upendra Sharma, Bikram Singh	Highly Efficient Iron Phthalocyanine Catalysed Oxidative Synthesis of Imines	<i>Canadian Journal of Chemistry</i> , 2013, 91, 732.

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28	Upendra Sharma, Neeraj Kumar, Bikram Singh, Renuka K. Munshi and Supriya. Bhalerao	Immunomodulatory Active Steroidal Saponins from <i>Asparagus racemosus</i> .	<a href="#">Medicinal Chemistry Research</a> , 2013, 22, 573.
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25	Upendra Sharma, Deepali. Katoch, Swati. Sood, Neeraj Kumar, Bikram Singh, Archana Thakur, Arvind Gulati	Synthesis, Antibacterial and Antifungal activity of 2-Amino-1,4-Naphthoquinones Using Silica-Supported Perchloric Acid (HClO <sub>4</sub> -SiO <sub>2</sub> ) as a Mild, Recyclable and Highly Efficient Heterogeneous Catalyst.	<a href="#">Indian Journal of Chemistry Section –B</a> , 2013, 52B, 1431.
24	Chitra Singh, Vishal Kumar, Upendra Sharma, Neeraj Kumar, Bikram Singh	Recent Advances in the Synthesis of Amide.	<a href="#">Current Organic Synthesis</a> , 2013, 10, 241.
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22	Upendra Sharma, Manju Bala, Neeraj Kumar, Bikram Singh, Renuka K. Munshi, Supriya Bhalerao	Immunomodulatory Active Compounds from <i>Tinospora cordifolia</i> .	<a href="#">Journal of Ethnopharmacology</a> , 2012, 141, 918.
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18	Vishal Kumar, Upendra Sharma, Praveen K. Verma, Neeraj Kumar, Bikram Singh	Cobalt(II) Phthalocyanine Catalyzed Highly Chemoselective Reductive Amination of Carbonyl Compounds in a Green Solvent.	<a href="#">Advanced Synthesis &amp; Catalysis</a> , 2012, 354, 870.
17	Ashun Chaudhary, Geetanjali Rampal, Upendra Sharma,	Anticancer, antioxidant activities and GC-MS analysis of	<a href="#">Medicinal Chemistry &amp; Drug Discovery</a> 2012, 2,

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16	Madhu Chandel, Upendra Sharma, Neeraj Kumar, Bikram Singh, Satwinderjeet Kaur	Antioxidant Activity and Identification of Bioactive Compounds from Leaves of <i>Anthocephalus cadamba</i> by Ultra-Performance Liquid Chromatography/Electrospray Ionization Quadrupole Time of Flight Mass Spectrometry.	<a href="#">Asian Pacific Journal of Tropical Medicine</a> , 2012, 977.
15	Vishal Kumar, Upendra Sharma, Bikram Singh, Neeraj Kumar	Direct One-Pot Cobalt(II) Phthalocyanine Catalyzed Synthesis of <i>N</i> -Substituted Isoindolinones.	<a href="#">Australian Journal of Chemistry</a> , 2012, 65, 1594.
14	Praveen Kumar Verma, Upendra Sharma, Neeraj Kumar, Manju Bala, Vishal Kumar, Bikram Singh	Nickel Phthalocyanine Assisted Highly Efficient and Selective Carbonyl Reduction in Polyethylene Glycol-400.	<a href="#">Catalysis Letter</a> , 2012, 142, 907.
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12	Upendra Sharma, Praveen Kumar Verma, Neeraj Kumar, Vishal Kumar, Manju Bala, Bikram Singh	Phosphane-Free Green Protocol for Selective Nitro Reduction with Iron Based Catalyst.	<a href="#">Chemistry: A European Journal</a> , 2011, 17, 5903.
11	Vishal Kumar, Upendra Sharma, Praveen Kumar, Neeraj Kumar, Bikram Singh	Silica-Supported Boric Acid with Ionic Liquid: A Recyclable and Green Catalytic System for One-Pot Three-Component Mannich Reaction.	<a href="#">Chemical &amp; Pharmaceutical Bulletin</a> , 2011, 59, 639.
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9	Rajbir Kaur, Upendra Sharma, Bikram Singh Saroj Arora	Antimutagenic Potential of Chickrassy ( <i>Chukrasia tabularis</i> A. Juss) bark.	<a href="#">Journal of Medicinal Plants Research</a> , 2011, 5, 5021.
8	Upendra Sharma, Praveen K. Verma, Neeraj Kumar, Vishal Kumar, Bikram Singh	Highly Chemo- and Regioselective Reduction of Aromatic Nitro Compounds Catalyzed by Recyclable Copper(II) as well as Cobalt(II) Phthalocyanine.	<a href="#">Advanced Synthesis &amp; Catalysis</a> , 2010, 352, 1834.
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6	Upendra Sharma, Pamita Bhandari, Neeraj Kumar, Bikram Singh	Simultaneous Determination of Ten Sugars in <i>Tinospora cordifolia</i> by Ultrasonic Assisted Extraction and HPLC-ELSD Method.	<a href="#">Chromatographia</a> , 2010, 71, 633.
5	Upendra Sharma, Manju Bala, Praveen K Verma, Geetanji. Rampal, Neeraj Kumar, Bikram	Antimutagenic Extract from <i>Tinospora cordifolia</i> and its Chemical Composition.	<a href="#">Journal of Medicinal Plants Research</a> , 2010, 4, 2488.

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4	Upendra Sharma*	Silica Supported Perchloric Acid (HClO <sub>4</sub> -SiO <sub>2</sub> ): A Versatile Reagent in Organic Synthesis.	<i>Synlett</i> , No. 2009, 19, 3219.
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2	Ritu Bala, Raj Pal Sharma, Upendra Sharma, Andrew D. Burrows, Kevin Cassar	Hexaamminecobalt(III) Complexes as Multiple Hydrogen Bond Donors: Synthesis, Characterization and X-ray Structural Study of Mixed Anion Complexes [Co(NH <sub>3</sub> ) <sub>6</sub> ]Br <sub>2</sub> (BF <sub>4</sub> ) and [Co(NH <sub>3</sub> ) <sub>6</sub> ]Cl <sub>2</sub> (HC <sub>2</sub> O <sub>4</sub> ).H <sub>2</sub> O.	<i>Journal of Molecular Structure</i> , 2007, 832, 156.
1	Ritu Bala, Raj Pal Sharma, Upendra Sharma, Veleria Ferretti	The First X-ray Structure of a Hexaamminecobalt(III) Salt with Two Different Complex Chlorocadmium Anions: Synthesis, Characterization and Crystal Structure of [Co(NH <sub>3</sub> ) <sub>6</sub> ] <sub>4</sub> [CdCl <sub>6</sub> ][CdCl <sub>4</sub> (SCN)(H <sub>2</sub> O)] <sub>2</sub> Cl <sub>2</sub> .2H <sub>2</sub> O.	<i>Acta crystallographica. Section C</i> , 2006, 62, m 628.

#### BOOK CHAPTER

1. U. Sharma,\* R. Kumar, S. S. Gupta, D. Chandra. Quinolines (Update 2022), Science of Synthesis Knowledge Updates (*Thieme*), 2022, 2, 63-327.
2. A. K. Dhiman, and U. Sharma.\* Rhodium-Catalysed C-H Halogenation. Maiti D. (eds.) Handbook of CH-Functionalization (CHF), *Wiley*, 2021, accepted.
3. Manisha, and U. Sharma.\* Rhodium and Iridium-Catalyzed Benzylic C-H Functionalization. Maiti D. (eds.) Handbook of CH-Functionalization (CHF), *Wiley*, 2021, accepted.
4. D. Parmar, and U. Sharma.\* Manganese-catalyzed Regioselective C-H Allylation, Allenylation, Halogenation, Dehydrogenative Annulation, and Amidation. Maiti D. (eds.) Handbook of CH-Functionalization (CHF), 2021, *Wiley*, accepted.
5. P. S. Suresh, S. S. Gupta, Anmol, and U. Sharma.\* Insight into Coronaviruses and Natural Products-based Approach for COVID-19 Treatment. *Studies in Natural Product Chemistry (Elsevier)*, 2022, Vo. 74, Chapter 12; pp 443-469; doi: 10.1016/B978-0-323-91099-6.00005-0 .
6. P. S. Bora, P. S. Suresh, S. Kumari, Anmol, S. Puri, and U. Sharma.\* Integrated Approach for the Quality Assurance of Commercially Important Himalayan Medicinal Plants. In: Ekiert H.M., Ramawat K.G., Arora J. (eds) Medicinal Plants. Sustainable Development and Biodiversity, vol 28. Springer, Cham. [https://doi.org/10.1007/978-3-030-74779-4\\_22](https://doi.org/10.1007/978-3-030-74779-4_22)
7. 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.
8. 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.
9. 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.  
Ref. No.: 202011034404  
Date of Filing: 11-08-2020.

### Granted: 02

1. B. Singh, S. Chattergi, N. Kumar and U. Sharma.  
Benzothiazole Substituted Phthalimide Analogues as Potential Angiogenesis Inhibitors. Indian Patent No.: 318680  
Date of Grant: 22-08-2019.
2. D. Maiti, U. Sharma, N. Tagoti.  
Palladium-Catalyzed Synthesis of Benzofurans and Coumarins from Phenols and Olefins. Indian Patent No.: 299110  
Date of Grant: 13-07-2018.

## PAPER PRESENTED IN CONFERENCE

### Invited/Oral Presentations (National/International)

#### 2022

1. **"Transition Metal Catalyzed Functionalization of N-Containing Heterocycles via C-H Activation"** in Webcheminar on Innovation in Organic Synthesis in India – presented by SynOpen and SoS, 14 July 2022.
2. **"Herbal Material: Source of Bioactive Molecules 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, 08-17 June 2022.
3. **"Structure Elucidation of Natural Products Isolated from Industrially Relevant Medicinal Plants"** in Chemical Science Symposium at IIT, Mandi, Himachal Pradesh, India on 23-24 May, 2022.
4. **"Traditional Knowledge-Driven Discovery of Bioactive Molecules from Medicinal Plants"** in BioX Annual Conference by IIT, Mandi, Himachal Pradesh, India on 13-14 May, 2022.
5. **"Systematic Study for Discovering Bioactive Natural Products from Medicinal Plants"** in Webinar on Role of Natural Products in Drug Discovery and Development by NIPER, Ahmedabad, Gujrat, India on 29<sup>th</sup> April, 2022.



## 2021

6. **"Medicinal Plant-Traditional Knowledge-Bioactive Molecules"** in Webinar on Socioeconomic Improvement through cultivation of medicinal and aromatic plants under covid-19 Pandemic organized by Department of Chemistry, Soban Singh Jeena University, Almora, Uttarakhand, India on 8<sup>th</sup> July, 2021.
7. **"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, Gujrat, India on 5-6 February, 2021.

## 2020

8. **"Utilizing Plant Traditional Knowledge for the Discovery of Bioactives"** in Young Scientist Conference, IISF-2020 on 22-25<sup>th</sup> Decemebr, 2020.
9. **"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 6<sup>th</sup> August, 2020.
10. **"Regioselective C(sp<sup>3</sup>)-Methylation, Alkylation and Arylation via C(sp<sup>3</sup>)-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

11. **"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.
12. **"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.
13. **"Innovative Approaches for the Synthesis of Antimalarial Quinolines"** in Natural Product Based Therapeutics in Drug Development, NIPER-Raebareli, Lucknow, 14-15 Feb. 2019.

## 2018

14. **"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.
15. **"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

16. **"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.
17. **"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.

18. **“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.
19. **“Future Affordable Medicines: Efforts Towards Novel Bioactive Molecules”** in Multidisciplinary National Conference on Innovative Trends in Science, Technology and Management-IV on 24<sup>th</sup> August, 2017 Organised by Sri Sai University, Palampur, Himachal Pradesh.
20. **“Efforts Towards Characterization of Bioactive Molecules from Medicinal Plants”** 4<sup>th</sup> 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

21. **“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

## 2022

1. A. Thakur, and U. Sharma\*. Regioselective C(sp<sup>2</sup>)-H Alkylation of Quinoline *N*-Oxides. Chemical Research Society of India 28th National Symposium in Chemistry (CRSI NSC-28), March 25-27, 2022, IIT Guwahati.
2. D. Parmar, and U. Sharma\*. C(sp<sup>3</sup>)-H Monoarylation of 8-Methylquinolines through Ru(II)-Catalysed C-H Activation. Chemical Research Society of India 28th National Symposium in Chemistry (CRSI NSC-28), March 25-27, 2022, IIT Guwahati.
3. Manisha, and U. Sharma\*. Selective C(7)-H Halogenation of *N*-Pyrimidylindolines. Chemical Research Society of India 28th National Symposium in Chemistry (CRSI NSC-28), March 25-27, 2022, IIT Guwahati.
4. R. Kumar, and U. Sharma\*. Transient Directing Group Assisted Atropeselective Olefination of Biaryls. Chemical Research Society of India 28th National Symposium in Chemistry (CRSI NSC-28), March 25-27, 2022, IIT Guwahati.
5. Sumit, and U. Sharma\*. Regioselective C(sp<sup>3</sup>)-H Trifluoromethylthiolation of 8-Methylquinoline. Chemical Research Society of India 28th National Symposium in Chemistry (CRSI NSC-28), March 25-27, 2022, IIT Guwahati.

## 2020

6. 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.

## 2019

7. R. Kumar and U. Sharma.\* New Bioactive Molecules through C-H Bond Functionalization and [3+2] Cyclization of N-Heterocyclic Compounds in New Frontiers in Chemistry - From Fundamentals to Applications (NFCFA2019), Department of Chemistry, BITS Pilani, KK Birla, Goa Campus, 20-22 December, 2019. **(Third Prize for this Poster)**
8. R. Kumar and U. Sharma.\* Employing C-H activation for the synthesis of quinoline containing antimalarials in New Frontiers in Chemistry From Fundamentals to Applications (NFCFA2019), Department of Chemistry, BITS Pilani, KK Birla Goa Campus, 20-22 December, 2019.
9. S.S. Gupta and U. Sharma.\* Derivatization of N-Heterocyclic Scaffolds to Bioactive Molecules Through C-H Activation Strategy in New Frontiers in Chemistry - From Fundamentals to Applications (NFCFA2019), Department of Chemistry, BITS Pilani, KK Birla Goa Campus, 20-22 December, 2019.
10. A.K. Dhiman and U. Sharma.\* Design and Synthesis of Quinoline based Bioactive Heterocyclic Molecules through C-H Functionalization in New Frontiers in Chemistry - From Fundamentals to Applications (NFCFA2019), Department of Chemistry, BITS Pilani, KK Birla Goa Campus, 20-22 December, 2019.
11. I. Kumar and U. Sharma.\* Photocatalyzed Metal/Oxidant-free ipso-Hydroxylation of Boronic Acids: Direct Synthesis of Phenols in New Frontiers in Chemistry - From Fundamentals to Applications (NFCFA2019), Department of Chemistry, BITS Pilani, KK Birla Goa Campus, 20-22 December, 2019.
12. A. K. Dhiman and U. Sharma.\* Microwave-Assisted Metal-Free Three Component Reaction for Direct Synthesis of 2-Anilinoquinolines and 3-Hydroxyquinolines. In 25<sup>th</sup> CRSI National Symposium in Chemistry and CRSI-ACS 18-21 July, 2019, IIT Kanpur.
13. R. Kumar and U. Sharma.\* Cobalt(III)-Catalyzed Alkylation of C(sp<sup>3</sup>)-H Bonds of 8-Alkylquinolines with Maleimides. In 25<sup>th</sup> CRSI National Symposium in Chemistry and CRSI-ACS 18-21 July, 2019, IIT Kanpur.
14. D. Chandra and U. Sharma.\* Rapid Synthesis of Quinoline by Organic Acid Mediated Povarov Type Multicomponent Reaction. In 25<sup>th</sup> CRSI National Symposium in Chemistry and CRSI-ACS 18-21 July, 2019, IIT Kanpur.

## 2017

15. A. K. Dhiman, S. Chaudhary, R. Kumare, R. Kumar and U. Sharma.\* Synthesis of 2-substituted-3-(2-hydroxyaryl)quinolines and 4-(2-hydroxyaryl)acridines. in Contemporary Facets in Organic Chemistry Synthesis (CFOS) 2017, IIT Roorkee, Uttarakhand, 22-24 December, 2017.
16. R. Sharma, R. Kumar, I. Kumar and U. Sharma.\* [Cp\*RhCl<sub>2</sub>]<sub>2</sub> Catalyzed Remote Functionalization of Quinolines and their Mechanistic Understanding. **Indo-US Bilateral Workshop** Organised by IISc Bangalore, IISER Kolkata and IIT Mumbai at Rhythm Lonavala, Lonavala, Maharashtra, India during December 7-10, 2017.
17. R. Kumar, A. K. Dhiman and U. Sharma.\* Metal-free C-2 Arylation of Quinoline N-Oxides with Aryldiazonium Salts/Anilines. **21<sup>st</sup> CRSI National Symposium in Chemistry** n organised by CSIR-IICT, Tarnaka Hyderabad-500007 on 2017.
18. R. Sharma, I. Kumar, R. Kumar and U. Sharma.\* Rhodium (III)-Catalyzed Remote C-H Activation/functionalization of Quinolines. **21<sup>st</sup> CRSI National Symposium in Chemistry** organised by CSIR-IICT, Tarnaka Hyderabad-500007 on 2017.
19. Onkar S Nayal, M S Thakur, N. Kumar, U. Sharma\* and B. Singh.\* Novel Approches for the Synthesis of Tertiary Amines via Carbocationic Pathway. **VI National Symposium on Advances in Chemical Science** at GNDU, Amritsar, Punjab, India on 5-6 March, 2017. **(Best Poster Award)**

## 2016

20. R. Sharma, I. Kumar and U. Sharma.\* Rhodium-catalyzed remote C-H activation using traceless directing group. **21<sup>st</sup> International Conference on Organic Chemistry**, IIT Bombay, Bombay, India on 11-16 December, 2016.
21. Rakesh Kumar, Ankit Kumar Dhiman and Upendra Sharma. Catalyst and Solvent Free Access to Bioactive Quinoline Derivatives. **21<sup>st</sup> International Conference on Organic Chemistry**, IIT Bombay, Bombay, India on 11-16 December, 2016.
22. M. Kumar, N. Kumar, B. Singh and U. Sharma.\* Harnessing bio-based reagents for C-N bond formation reactions. **21<sup>st</sup> International Conference on Organic Chemistry**, IIT Bombay, Bombay, India on 11-16 December, 2016.
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