

Dr Ashish Kumar Tewari
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Marital Status- Married

Nationality- INDIAN

EDUCATIONAL QUALIFICATION

2000: Ph. D (Synthetic Organic Chemistry) Lucknow University, Lucknow, INDIA

1993: M. Sc (Organic Chemistry) Kanpur University (F. G. College Raebareli)

1991: B. Sc (Chemistry, Physics) Lucknow University (BSNV Degree College)

ACHIEVEMENTS

Summer Research Fellowship 2011 by Indian Academy of Science INDIA

SUMMARY OF RESEARCH WORK DONE

Present Interest:

Presently working as **Professor** in the **Department of Chemistry, Faculty of Science, Banaras Hindu University**, Varanasi, INDIA and our major field of research is Molecular Recognition and Medicinal Chemistry. Our research work mainly emphasis on the synthesis of bioactive molecules, flexible molecules with aromatic backbone, and synthesis of foldamers in order to study aromatic interactions. Since about 20% amino acids are aromatic in nature so aromatic interactions play an important role in drug-receptor interactions. Our efforts are to understand the mechanism of aromatic interactions which may be one of the major forces involved in biochemical host and guest interactions. Our research group is actively working in the synthesis of pyrazole, imidazole, pyridine, pyridazine system and received some interesting results like solid state eclipsed and

staggered stacked conformation. A lot of work is outlined in our publications; still a lot of work is to be published.

POSTDOCTORAL RESEARCH WORK

- **Central Drug Research Institute (CDRI), Lucknow, UP, INDIA**

Worked as **CSIR Research Associate** at CDRI, Lucknow on the project entitled “**Stereochemical control in aliphatic compounds by aromatic residues**”. Synthesis of Pyrazolo[3,4-*d*]pyrimidine, was done, which is isomeric to purine found in biological systems, analogous as models to investigate intra- and inter-molecular interactions which are of utmost importance in drug receptor interactions.

- **Indian Institute of Technology (IIT), Mumbai, INDIA**

Worked as **Research Associate** at the Department of Chemistry, IIT, Mumbai. We synthesized monomers triacytelene for preparing polydiacytelenes with aromatic back bone like quinoline etc. processing through Suzuki coupling reaction followed by hydrolysis. The conversion of monomer to polymer is a solid-state polymerization initiated thermally photochemically or by γ -irradiation. Some of the recent interest in PDA's is related to their large and fast non-linear optical response, making them good candidates for potential applications in ultrafast optical signal processing.

DOCTORAL WORK

- **Chemistry Department Lucknow University, Lucknow, INDIA**

Research Topic: “Synthesis and Mass spectral studies of nitrogen bicyclic and tricyclic heterocyclic compounds of biological importance”

This work deals with the synthesis of substituted annulated pyridazines showing certain biological responses like antiviral, antifungal, anticonvulsant, cardiovascular and anti-inflammatory activities. During the work some novel bicyclic and tricyclic heterocyclic rings have been synthesized and their mass fragmentation pattern has been studied.

TEACHING/PROFESSIONAL /RESEARCH EMPLOYMENT

Employer	Post Held	Pay Scale	Period of Employment		Nature of Duties/Work
			From	To	
Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi (Central University)	Professor	-	14.06.2019	Continue	
Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi (Central University)	Associate Professor	Rs. 3740067000/- + AGP Rs. 9000	14.06.2016	13.06.2019	Teaching (UG and PG classes) and Research
Department of Chemistry, Faculty of Science, Banaras Hindu University, Varanasi (Central University)	Assistant Professor (Senior Grade)	Rs. 1560039100/- + AGP Rs. 7000	14.06.2004	13.06.2016	Teaching (UG and PG classes) and Research
Lupin Research Park (Pharma Industry)	Research Scientist	-	3.09.2003	11.06.2004	Research
Medicinal Chemistry Division, CDRI, Lucknow (CSIR Lab)	Research Associate CSIR	Rs. 12000/- + HRA	20.09.2001	01.09.2003	Research
Department of Chemistry, Indian Institute of Technology Bombay, Mumbai (IIT Bombay)	Research Associate DST	Rs. 8000/- + HRA	29.01.2001	18.09.2001	Research
Department of Chemistry, Lucknow University, Lucknow	CSIR-SRF	Rs. 5600/ + HRA	1.10.1997	30.09.2000	Research
JLNMPG College, Barabanki (UP)	Lecturer	Rs. 2200/- fixed	25.02.1994	30.09.1997	Teaching (UG classes)

SUPPLEMENTARY INFORMATION

I. **1. 4th Refresher Course** in Environmental studies (Interdisciplinary) October 01 – October 21, 2011 held at – Academic Staff College, BHU Varanasi - 2221 005

2. 43rd Orientation Course (Theme: Earth & Environment) May 25 – June 21, 2006 held at UGC – Academic Staff College Varanasi – 221 005.

3. 7 Days Professional Development programme (UGC Sponsored Short Term Course) December 07 – December 13, 2015 held UGC-Human Resource Development Centre University of Allahabad

II. Research Projects Completed

1. Project entitled **“Molecular Recognition with aromatic interactions: Conformational properties of organic fleximers”** funded by Department of Science and Technology, New Delhi, INDIA under SERC Fast Track scheme (07.11.2005 – 06.11.2008). Total budget Rs. 10,50,000/-

2. Project entitled **“Design and synthesis of flexible models for studies on aromatic interactions”** funded by University Grant Commission, New Delhi, INDIA (01.05.2006 – 30.04.2009). Total budget Rs. 5,31,000/-

3. Project entitled **“Studies on aromatic π - π interactions by synthesizing flexible model and their application in material sciences and medicinal chemistry”** funded by University Grant Commission, New Delhi, INDIA (01.02.2010 – 31.01.2013) Total budget Rs. 5,01,800/-.

4. Project entitled **“Development of foldamers with suitable flexible organic molecules having aromatic backbone”** funded by Department of Science and Technology (DST), New Delhi INDIA (07/09/2013 – 07/08/2016) Total budget Rs. 27,000,00/-.

5. Project entitled **“Ruthenium catalyzed C-H activation on quinoline derived precursors”** funded by Department of Science and Technology (DST), New Delhi INDIA (27/09/2016 - 25/09/2019) Total budget Rs. 3717945/- (Likely to end on September 2019)

IV. Research Group

Research Guidance

S. No	Name of Candidate	Degree	Title of thesis	Award Date	Present Position
1	Dr Priyanka Srivastava	Ph. D	Design and synthesis of flexible models for studies on aromatic interactions	2008	Teaching in Hyderabad
2	Dr Rashmi Dubey	Ph. D	Synthesis of nitrogen heterocycles and their conformational studies	2009	Postdoc at G G D Central University Bilaspur
3	Dr Ved Prakash Singh	Ph. D	Molecular Recognition: Synthesis and studies on aromatic π - π interactions of organic fleximers.	2010	Professor at Mizoram Central University, Aizawl
4	Dr Pratima Yadav	Ph. D	Docking, synthesis and COX2 selective non-steroidal anti-inflammatory properties of heterocyclic compounds	2014	Assistant Professor, Govt. Polytechnic college Ballia
5	Dr Praveen Singh	Ph. D	Synthesis of heteroaromatic core based flexible models and their biological and material applications	2014	Assistant Professor, Degree College, Urai
6	Dr Sunil Kumar Rai	Ph. D	Synthesis of 2-pyridones and their structural and biological evaluation	2016	Assistant Professor, Lucknow University UP
7	Dr Shaziya Khanam	Ph. D	Design and synthesis of flexible dendrimers using Cu[I] Catalyst	2016	Nehru Fellowship CSIR, NCL Pune
8	Dr Ranjeet Kumar	Ph. D	Synthesis of flexible heterocyclic system and their conformational studies	2017	Assistant Professor, CMP College Allahabad

9	Dr Archana Gaurav	Ph. D	Synthesis of nitrogen containing heteroaromatic system for building up supramolecular architecture	2017	Rajeev Gandhi Fellowship
10	Dr Manisha Nidhar	Ph. D	Exploration of Bioactive Molecules as Inhibitors for Diabetes Mellitus Type-2	2022	Assistant professor, Amrita University Kerala
11	Dr Priyanka Yadav	Ph. D	Synthesis and Conformational Study of Poly-methylene Linker Heteroaromatic Systems	2022	
12	Dr Rashmi Singh	Ph. D	Synthesis of quinoline annulated compounds	2022	
13	Dr Akhilesh Kumar	Ph. D	Synthesis of flexible heterocyclic molecules for study of aromatic interactions	2023	Guest Faculty, Central University of Haryana
14	Dr Vishal Prasad Sharma	Ph. D	Development of Pyridazine precursor for applications in organic Synthesis	2023	
15	Dr Priyanka Sonkar	Ph. D	Synthesis of bioactive molecules and their antiproliferative efficacy in cancer cells	2023	Assistant professor, Gorakhpur University

6 students are pursuing for Ph. D degree.

List of Publications:

1. Vishal Prasad Sharma, Manisha Nidhar, Muhammad Sheraj, Vipin Kumar, Priyanka Sonker, Amit Patel, Suman Gill, S. Sooraj, and **Ashish Kumar Tewari**. "Ultrasound-Assisted Ring Opening of Epoxides in HFIP: THF: Synthesis, Characterization, Computational Studies and Molecular Docking of novel 2-hydroxy Dithiocarbamates." Journal of Molecular Structure (2024): 139212.
2. Priyanka Sonker, Rupen Tamang, Abhishesh K. Mehata, Manisha Nidhar, Vishal P. Sharma, Vipin Kumar, Madaswamy S. Muthu, Biplob Koch, and **Ashish Kumar**

- Tewari.** "PTSA-induced synthesis, in silico and nano study of novel ethylquinolinthiazolo–triazole in cervical cancer." *Future Medicinal Chemistry* (2024): 1-17.
3. Vishal Prasad Sharma, Vipin Kumar, Rashmi Singh, Priyanka Sonker, Priyanka Yadav, Mohammad Kashif, Archana Gaurav, and **Ashish Kumar Tewari.** "Synthesis, Crystal Structure, Hirshfeld Surface Analysis, DFT investigation, and Molecular Docking, of Novel Organic Dithiocarbamates obtained from Baylis-Hillman Adducts/Alcohols at Room Temperature." *Journal of Molecular Structure* (2024): 137715.
 4. Vishal Prasad Sharma, Vipin Kumar, Priyanka Sonker, Priyanka Yadav, Rashmi Singh, Ramachandran Gnanasekaran, and **Ashish Kumar Tewari.** "Utilizing Baylis-Hillman adducts followed by Michael addition/elimination reaction for the synthesis of unusual conformationally stable molecules governed by aromatic interactions." *European Journal of Organic Chemistry*: e202301109.
 5. Akhilesh Kumar, Ranjeet Kumar, Rashmi Dubey, Manisha Nidhar, Indresh Verma, Praveen Singh, and **Ashish Kumar Tewari.** "Quantitative intermolecular interactions analysis for amide-amide hydrogen-bonded synthons: Insilico studies for Cox-2 selective inhibitors." *Journal of Molecular Structure*, 1288, 2023: 135675.
 6. Akhilesh Kumar, Praveen Singh, Ranjeet Kumar, Priyanka Yadav, Amit Jaiswal, and **Ashish Kumar Tewari.** "An Experimental and Theoretical Study of the Conformational Stability of Triazinone Fleximers: Quantitative Analysis for Intermolecular Interactions." *Chemistry Select* 8, 5 2023: e202203862
 7. Manisha Nidhar, Vipin Kumar, Archisman Mahapatra, Priya Gupta, Priyanka Yadav, Priyanka Sonker, Akhilesh Kumar, Shweta Mishra, Rahul Kumar Singh, and **Ashish Kumar Tewari.** "Lead modification via computational studies: Synthesis of pyrazole-containing β -amino carbonyls for the treatment of type 2 diabetes." *Chemical Biology & Drug Design*, 101, 3, 2023: 638-649.
 8. Ved Prakash Singh, Manisha Nidhar, Pratima Yadav, Ranjeet Kumar, Priyanka Sonker, and **Ashish Kumar Tewari.** "Design, synthesis, and molecular modeling of heterodimer and inhibitors of α -amylase as hypoglycemic agents." *Molecular Diversity* 27, 1, 2023: 209-222.

9. Manisha Nidhar, Priyanka Sonker, Vishal Prasad Sharma, Sanjay Kumar, and **Ashish Kumar Tewari**. "Design, synthesis and in-silico & in vitro enzymatic inhibition assays of pyrazole-chalcone derivatives as dual inhibitors of α -amylase & DPP-4 enzyme." *Chemical Papers*, 76, 3, 2022: 1707-1720.
10. Priyanka Sonker, Mamata Singh, Manisha Nidhar, Vishal Prasad Sharma, Priyanka Yadav, Rashmi Singh, Biplob Koch, and **Ashish Kumar Tewari**. "Novel pyrimido-pyridazine derivatives: design, synthesis, anticancer evaluation and in silico studies." *Future Medicinal Chemistry* 14, 23, 2022: 1693-1704.
11. Manisha Nidhar, Vipin Kumar, Archisman Mahapatra, Priya Gupta, Brijesh Kumar Yadav, Rahul Kumar Singh, and **Ashish Kumar Tewari**. "Ligand-based designing of DPP-4 inhibitors via hybridization; synthesis, docking, and biological evaluation of pyridazine-acetohydrazides." *Molecular Diversity* 27, 6 2023: 2729-2740.
12. Priyanka Yadav, Abhineet Verma, Vishal Prasad Sharma, Rashmi Singh, Tarun Yadav, Ranjeet Kumar, Shiv Pal, Hariom Gupta, Satyen Saha, and **Ashish Kumar Tewari**. "The development of a robust folded scaffold as a fluorescent material using butylidene-linked pyridazinone-based systems via aromatic $\pi\cdots\pi$ stacking interactions." *New Journal of Chemistry* 46, 12, 2022: 5830-5838.
13. Archana Gaurav, Vishal Prasad Sharma, Priyanka Sonker, and **Ashish Kumar Tewari**. "Preparation, structure and dimerization of molecular tweezer: Cyanuric acid core based flexible symmetric linked pthalimide moiety as a heteroaromatic system." *Journal of Molecular Structure*, 1250, 2022: 131743.
14. Manisha Nidhar, Priyanka Sonker, Vishal Prasad Sharma, S Kumar, **Ashish Kumar Tewari**. "Design, synthesis and insilico & in vitro enzymatic inhibition assays of pyrazole-chalcone derivatives as dual inhibitors of α -amylase & DPP-4 enzyme." *Chemical Papers*, 2022, 1-14
15. Priyanka Yadav, Abhineet Verma, Priyanka Sonker, Vishal Prasad Sharma, Akhilesh Kumar, Tarun Yadav, Shiv Pal, Satyen Saha, and **Ashish Kumar Tewari**. "The enthralling effect of packing on the light emission of pyridazinone based luminophore: Crystallographic, electronic absorption and computational studies." *Journal of Molecular Structure*, 1267, 2022, 133513.

16. Manisha Nidhar, Shaziya Khanam, Priyanka Sonker, Priya Gupta, Archisman Mahapatra, Swaraj Patil, Brijesh Kumar Yadav, Rahul Kumar Singh, and **Ashish Kumar Tewari**. "Click inspired novel pyrazole-triazole-persulfonimide & pyrazole-triazole-aryl derivatives; Design, synthesis, DPP-4 inhibitor with potential anti-diabetic agents." *Bioorganic Chemistry*, 120 2022: 105586.
17. Rashmi Singh, Tanu Gupta, Ved Prakash Sharma, Radhe Mohan Singh, **Ashish Kumar Tewari**. "Na₂S· 9H₂O mediated facile synthesis of 1, 3-dihydrofuro [3, 4-b] quinoline derivatives via domino reduction approach." *Tetrahedron* 2021, 99, 132447
18. Ved Prakash Singh, Jayata Dowarah, BN Marak, BS Sran, **Ashish Kumar Tewari**. "Study of the structurebioactivity of fleximers: synthesis, crystal structure, Hirshfeld surface analysis, and anti-inflammatory assays." *Journal of Molecular Structure*, 2021, 1239, 130513
19. Rashmi Singh, Ved Prakash Sharma, Priyanka Yadav, Priyanka Sonker, Radhe Mohan Singh, **Ashish Kumar Tewari**. "Sodium sulphide promoted synthesis of fused quinoline at room temperature." *Organic & Biomolecular Chemistry* 2021, 19, 37, 8108-8112.
20. Ved Prakash Singh, Jayata Dowarah, Brilliant N. Marak and **Ashish Kumar Tewari**, "Design, synthesis, in silico analysis with PPAR- γ receptor and study of non-covalent interactions in unsymmetrical heterocyclic/phenyl fleximer." *Journal of the Chinese Chemical Society*, 2021, 68, 1, 150-158, 202.
21. Ved Prakash Singh, Jayata Dowarah, **Ashish Kumar Tewari** and David K. Geiger. "Structural Chemistry and anti-inflammatory activity of flexible/ restricted phenyl dimmers." *Journal of the Iranian Chemical Society*, 2020, 17 6, 1289-1303.
22. Ranjeet Kumar, Pratima Yadav, Mallikarjuna Rao Gedda, Neeraj Tiwari, Rakesh Kumar Singh and **Ashish Kumar Tewari**. "Molecular Docking Motivated, Synthesis of Triazole Based Propylene Bridged Heteroaromatic System for In-Vitro Antileishmanial Activity." *Russian Journal of Bioorganic Chemistry*, 2020, 46 6, 1148-1155.

23. Praveen Singh, Ranjeet Kumar, and **Ashish Kumar Tewari**. "Hydrogen bonding framework in imidazole derivatives: Crystal structure and Hirshfeld surface analysis." *European Journal of Chemistry*, 2020, 11 1, 50-59.
24. Sunil Kumar Rai, Tomasz Sieran ski, Shazia Khanam, Krishnan Ravi Kumar, Balasubramanian Sridhar and **Ashish Kumar Tewari**. "Quantitative analysis of intermolecular interactions in 3-cyano-2-pyridones: Evaluation through single crystal x-ray diffraction and density functional theory." *Chemistry Select*, 2018, 3, 5864 – 5873.
25. Praveen Singh, Ranjeet Kumar, Ajeet K. Singh, Priyanka Yadav, Ranjana S. Khanna, Manjula Vinayak, **Ashish Kumar Tewari**. "Synthesis and crystal structure of quinolinium salt: Assignment on nonsteroidal anti-inflammatory activity and DNA cleavage activity." *Journal of Molecular Structure*, 1163 2018, 262-269
26. Sunil Kumar Rai, Shaziya Khanam and **Ashish Kumar Tewari**. "Study of conformational and supramolecular structural stability of propylene-bridged 2-pyridone dimmers." *Chemistry Select*, 2018, 3, 214 – 219.
27. Shaziya Khanam, Sunil Kumar Pandey, Sunil Kumar Rai, Deepshikha Verma, Jerry P. Jasinski, Seema Pratap and **Ashish Kumar Tewari**. "Synthesis of N, N-bissulfonylated and N-alkyl-N-sulfonylated G1 dendrimers via click reaction: application of thiocarbamide based Cu¹ catalysts." *Chemistry Select*, 2017, 2, 6370 – 6374.
28. Ranjeet Kumar, Praveen Singh, Simon Parsons and **Ashish Kumar Tewari**. "Experimental and theoretical studies for the assessment of the conformational analysis of pyrazolone derivatives: Employing quantitative analysis for intermolecular interactions." *Chemistry Select*, 2017, 2, 6331 – 6337.
29. Shaziya Khanam, Sunil Kumar Rai and **Ashish Kumar Tewari**. "Advancement in the sulphone-based dendrimers: From synthesis to application." *Advanced Materials Letters*. 2017.
30. Ranjeet Kumar, Pratima Yadav, Shiv Pal, Krishnan R. Kumar, Balasubramanian Sridhar, and **Ashish Kumar Tewari** "Conformational studies of triazole based flexible

molecules: A Comparative Analysis of Crystal Structure and Optimized Structure for DNA Binding Ability.” *Chemistry Select*, 2017, 2, 3444 – 3451

31. Ranjeet Kumar, Archana Gaurav, Shiv Pal, Krishnan R. Kumar, Balasubramanian Sridhar and **Ashish Kumar Tewari**. “Reverse Intramolecular Stacking in o-Xylene Bridge Symmetrical Dimers of 2-thiopyridine derivative: Assessment of the Conformational Stability.” *Chemistry Select*, 2017, 2, 3249 – 3255.
32. Ranjana Singh, Sunil Kumar Rai, Manish Kumar Tiwari, Anurag Mishra, **Ashish Kumar Tewari**, “Phool Chand Mishra and Ranjan K. Singh, An excellent stable fluorescent probe: selective and sensitive detection of trace amounts of Hg⁺² ions in natural source of water.” *Chemical physics letters*, 2017, 676, 39-45.
33. Ranjeet Kumar, Archana Gaurav, Shiv Pal, and **Ashish Kumar Tewari**, “A Case of Folding Pattern in Flexible Tripodal of N-Substituted Bisethylenamine Bridged Pyridazinone Dimers.” *Chemistry Select*, 2017, 2, 1479 – 1483.
34. Archana Gaurav, Ranjeet Kumar, Hariom Gupta, K. Ravikumar, B. Sridhar, **Ashish Kumar Tewari**, “Un-precedented folding in linker based flexible tripodal molecule and their conformational analysis.” *Journal of Molecular Structure*, 1134, 2017, 781-788.
35. Shaziya Khanam, Sunil K. Rai, Deepshikha Verma, Ranjana S. Khanna, and Ashish K. Tewari. “An efficient and controlled synthesis of persulfonylated G1 dendrimers via click reaction.” *RSC advances* 6, 62 2016: 56952-56962.
36. Sunil K. Rai, Praveen Singh, Shaziya Khanam and Ashish K. Tewari, “Polymorphic study and anti-inflammatory activit of a 3-cyano-2-pyridone based flexible model.” *New J of Chemistry*, 2016, 40, 55775587.
37. Ranjeet Kumar, Praveen Singh, Archana Gaurav, Pratima Yadav, Ranjana S. Khanna, and **Ashish Kumar Tewari**. “Synthesis of Diphenyl Pyridazinone-based flexible system for conformational studies through weak noncovalent interactions: Application in DNA binding.” *Journal of Chemical Sciences* 128 2016: 555-564.
38. Sunil Kumar Rai, Praveen Singh, Ranjeet Kumar, Ashish Kumar. Tewari, Jiří Hostaš, Ramachandran Gnanasekaran, and Pavel Hobza. “Experimental and theoretical study

for the assessment of the conformational stability of polymethylene-bridged heteroaromatic dimers: a case of unprecedented folding.” *Crystal Growth & Design*, 16, 3 2016: 1176-1180.

39. Avasthi, Kamlakar, Ruchir Kant, Sangeeta Aswal, Ashish K. Tewari, U. Yadav, Umesh D. Misra, and Prakas R. Maulik. “An unusual conformational change in the folded trimethylene/leonard linker pyrazolo [3, 4-d] pyrimidine analogue of the theophylline compound due to structural changes.” *Journal of Structural Chemistry*, 56, 2015: 1437-1440.
40. Ranjeet Kumar, Sunil K. Rai, Praveen Singh, Archana Gaurav, Pratima Yadav, Ranjana S. Khanna, Hariom Gupta and **Ashish K. Tewari**, “Face-to-face stacking in sulfonamide based bisethylene bridged heteroaromatic dimmers.” *RSC Adv.*, 2015, 5, 97205.
41. Praveen Singh, Ranjeet Kumar, Shachi Tiwari, Ranjana S. Khanna, **Ashish Kumar Tewari** and Hari Dev Khanna Docking, “Synthesis and Evaluation of Antioxidant activity of 2,4,5-triaryl imidazole.” *Clinical and medical biochemistry*, Accepted 2015.
42. Sunil K. Rai, Shazia Khanam, Ranjana S. Khanna and **Ashish Kumar Tewari**, “Design and synthesis of 2-pyridone based flexible dimmers and their conformational study through X-ray diffraction and density functional theory: Perspective of cyclooxygenase-2 inhibition.” *Crystal Growth and Design*, 2015, 153, 1430-1439.
43. Punita Mourya, Praveen Singh, **Ashish Kumar Tewari**, R. B. Rastogi and M. M. Singh, “Relationship between structure and inhibition behavior of quinolinium salt for mild steel corrosion: Experimental and theoretical approach.” *Corrosion Science*, 2015, 95, 71-87.
44. Sunil Kumar Rai, Priyanka Srivastava, Hariom Gupta, Maria del C. Puerta, Pedro Valerga, **Ashish Kumar Tewari**, “Unusual reverse face-to-face stacking in propylene linked pyrazole system: perspective of organic materials.” *Struct Chem*, 2015, 26, 555-563.
45. Sunil K. Rai, Shaziya Khanam, Ranjana S. Khanna and **Ashish K. Tewari**, “Cascade synthesis of 2-pyridones using acrylamides and ketones.” *RSC Adv.*, 2014, 4, 44141–44145.

46. Praveen Singh, Ranjeet Kumar, Brijesh Kumar Yadav, Ranjana S. Khanna, **Ashish Kumar Tewari**, "CCSO nano catalyzed solid phase synthesis of 3-oxo-5,6-disubstituted-2,3dihydropyridazine-4-carbonitrile." *RSC Advances*, 2014, 4, 5123951243.
47. **Ashish Kumar Tewari**, Priyanka Srivastava, Ved P. Singh, Praveen Singh, Ranjeet Kumar, Ranjana S. Khanna, Pankaj Srivastava, Ramachandran Gnanasekaran and Pavel Hobza, "Selective induced polarization through electron transfer in acetone and pyrazole ester derivatives via C-H $\cdots$ O=C interaction." *New Journal of Chemistry*, 2014, 38, 4885-4892.
48. Praveen Singh, Rashmi Dubey, Shachi Tiwari, Ranjana S. Khanna, **Ashish Kumar Tewari**, "Triaryl imidazoles as potent Antiwear agents: Eco-friendly synthesis and materialistic Approach." *Scientia Iranica, Transection C: Chemistry and Chemical Engineering* Ref.: SCIENTIA-D-12-00422.
49. **Ashish Kumar Tewari**, Ved Prakash Singh, Pratima Yadav, Garima Gupta, Amit Singh, Raj Kumar Goel, Pravin Shinde, C. Gopi Mohan "Synthesis, biological evaluation and molecular modeling studyof pyrazole derivatives as selective COX-2 inhibitorsand anti-inflammatory agents." *Bioorganic Chemistry* 56 2014 8-15.
50. Pratima Yadav, Praveen Singh, **Ashish Kumar Tewari**, "Design, synthesis, docking and anti-inflammatory evaluation of novel series of benzofuran based prodrugs." *Bioorganic & Medicinal Chemistry Letters*, 24, 2014, 2251-2255.
51. Rashmi Dubey, Praveen Singh, Ajeet K. Singh, Manoj K. Yadav, D. Swati, Manjula Vinayak, Carmen Puerta, Pedro Valerga, K. Ravi Kumar, B. Sridhar and **Ashish K. Tewari**, "Polymorphic Signature of the Anti-inflammatory Activity of 2,2'-2-[[1,2Phenylenebismethylene]bissulfanediyl}bis4,6-3 dimethylnicotinonitrile." *Cryst. Growth Des.*, 2014, 14 3, 1347-1356.
52. Vinay Jaiswal, Rashmi B. Rastogi, Jiya L. Maurya, Praveen Singh, **Ashish K. Tewari**, "Quantum Chemical Calculation studies for interactions of antiwear lubricant additives with metal surface." *RSC Advances*, 2014, 4, 13438-13445.
53. Rashmi Dubey, **Ashish Kumar Tewari**, Ved Prakash Singh, Praveen Singh, Jawahar Singh Dangi, Carmen Puerta, Pedro Valerga and Rajni Kant, "Molecular Docking

Study of Conformational Polymorph: Building Block of Crystal Chemistry.” *The Scientific World Journal*, Volume 2013, Article ID 309710, 6pages.

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55. Priyanka Srivastava, Ved Prakash Singh, **Ashish Kumar Tewari**, Carmen Puerta, Pedro Valerga; “Water mediated self-assembly of 5-(2-benzimidazole-1-yl-ethoxy)-3-methyl-1-phenyl-1H-pyrazole-4-carboxylic acid methyl ester through C-H...O and O-H...N interactions.” *J. Molecular Struct.*, 2012 1007, 20.
56. Priyanka Shrivastava, Praveen Singh and **Ashish Kumar Tewari**, “Synthesis of pyrazole based 1,5-diaryl compounds as potent anti-inflammatory agents.” *Medicinal Chem. Research*. 2012 21, 2465.
57. **Ashish Kumar Tewari**, Ved Prakash Singh, Rashmi Dubey, Carmen Puerta, Pedro Valerga, Rajnikant Verma, “Importance of weak interactions in developing 1,3-bis(4,6-1H-nicotinonitrile-1-yl)-1,3-dioxy propane polymorphs.” *Spectrochimica Acta Part A: Molecular and biomolecular spectroscopy*. 2011 795 1267.
58. Rashmi Dubey, **Ashish Kumar Tewari**, K. Ravikumar and B. Sridhar; “Weak interactions: Potency for stabilization of molecule in solid state.” *J Heterocyclic Chem*. 2011 48, 691.
59. Rashmi Dubey, **Ashish Kumar Tewari**, K. Ravikumar and B. Sridhar; “Conformation of 1,3-Bis(4,6-dimethyl-1H-nicotinonitrile-1-yl)-1,3-dithioxypropane Stabilized via Intra/Intermolecular Weak Interactions.” *J Chem Crystallogr*. 2011 41, 886.
60. **Ashish Kumar Tewari**, Rashmi Dubey and Anil Mishra; “2-Substituted-8-methyl-3,6-dihydroimidazo [4, 5-c] pyrazolo [3, 4-e] pyridazine as an Anti-inflammatory agent.” *Medicinal Chemistry Research*, 2011, 20 1, 130.
61. **Ashish Kumar Tewari**, Priyanka Srivastava, Ved P. Singh, Carmen Puerta and Pedro Valerga, “Condensed phase conformational isomerisation of 5- [3-(1,3-Dioxo1,4-dihydro-indol-2-yl-propoxy)]-3-methyl-1H-pyrazole-4-carboxylic acid methyl ester.” *ARKIVOC*, 2010, 127-136.

62. Rashmi Dubey, **Ashish Kumar Tewari**, K. Ravikumar, and B. Sridhar; "Studies of Inter/intramolecular Weak Interactions with CH...S and S...arene Interaction in Symmetrical and Dissymmetrical Models." *Bull. Korean Chem. Soc.* 2010, 31, 13261330.
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64. Rashmi Dubey and **Ashish Kumar Tewari** "N- vs O-alkylation on 4,6-dimethyl-2oxo/thio-nicotinonitrile." *J. Korean Chem. Soc.* 2010, 54, 174-176.
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