

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF RAJASTHAN, JAIPUR

- Name & Qualification : **Prof (Dr.) JYOTI SHARMA**
M.Sc., Ph.D.
- Designation : **Professor**
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- Email id: **dr_jyoti_sharma@yahoo.co.in**
- Institutional id: **drjyotisharma@uniraj.ac.in**
- Major areas of Research: **Synthetic Inorganic and Organometallic Chemistry**
- Webpage Link <https://scholar.google.co.in/citations?user=uL7ih9oAAAAJ&hl=en>
- No. of Research Publications: **42 (Fourty-two) Paper published (List enclosed)**
02 Communicated.



Publication Quality Metrics	Google Scholar
<i>h</i> -index	6
Citations	227

- Research experience: **24 Years**
- Post-doctoral experience: **02 years**
As a Research Associate in Department of
Chemistry, Rajasthan University, Jaipur.
(From Sep, 1997-9th Nov 2000)

2. Indian society of Chemists and Biologists, Medicinal and Process (CDRI)

3. The Indian Science Congress Association(L-37027)

4. Society For Materials Chemistry (SMC)

- Achievements/Awards/Honors : ----
- Authored Book Chapters/Books /Books Edited by you (details with Title, Publisher, Place, Year) : ----
- Trainings / Teaching-Learning Courses attended :

- 1. Attended (02) refresher courses**
- 2. Attended (01) orientation course**
- 3. Organized Refresher course as Deputy coordinator in the session 2017-18**
- 4. Elected as Member in Board of Studies (BOS) in the year 2021-22**
- 5. At Present Working as “Convener” of BOS in Chemistry**

Contribution in University Corporate services : - NA-

- * Any other information(s) :
 - * Worked as proctor**
 - 02 years in Maharaja’s College, UOR, Jaipur**
 - 04 years in Chemistry Department UOR, Jaipur**
 - *Worked as Proctor in the chemistry Department for the session 2018-19.**
 - *Worked as Convener in PG admissions for the sessions 2017 & 2019**
 - *Worked as a member / convener in various functional committees at the departmental level.**

Prof (Dr.) JYOTI SHARMA
PROFESSOR, UOR, JAIPUR-302005.

LIST OF PUBLICATIONS (from 1994 -2024)

1. Synthesis and characterization of some diphenylantimony(III) complexes of cyclic-dithiocarbamates. **Jyoti Sharma**, Y. P. Singh and A. K. Rai, *Phosphorous, Sulfur, Silicon*; **86**, 197 (1994) (IF 0.827) DOI:[10.1080/10426509408018404](https://doi.org/10.1080/10426509408018404)
2. Phenylarsenic (III) derivatives of heterocyclic-dithiocarbamates; synthesis and Characterization. **Jyoti Sharma**, Y. P. Singh and A. K. Rai, *Phosphorous, Sulfur, Silicon*; **107**, 13 (1995) (IF 0.827) DOI:<https://doi.org/10.1080/10426509508027916>
3. Synthesis and characterization of some diphenylantimony (III) complexes of heterocyclic- β -diketones. **Jyoti Sharma**, Y. P. Singh and A. K. Rai, *Indian J.Chem.*; **35** (A), 243 (1996) (IF 0.628)
4. Synthesis and characterization of phenylarsenic (III) complexes of heterocyclic- β -diketones. **Jyoti Sharma**, Y. P. Singh and A. K. Rai, *Indian J. Chem*; **36** (A), 717 (1997) (IF 0.628)
5. Synthesis and characterization of some new monophenyl arsenic (III) derivatives of methyl 4 (4-substituted phenyl) 2-oxy-4-oxo-2-butenates. **Jyoti Sharma**, Y. P. Singh and A. K. Rai, *Synth. React. Inorg. Met. -Org. Chem*; **28** (9) 1551(1998) (IF 0.680) DOI: <https://doi.org/10.1080/00945719809351697>
6. Some new diorganoantimony (III) derivatives of methyl 4-(4-Substituted phenyl)-2-oxy-4-oxo-2-butenates. **Jyoti Sharma**, Y. P. Singh and A. K. Rai, *Synth. React. Inorg. Met.Org. Chem.*; **29** (8), 1475 (1999) <https://doi.org/10.1080/00945719909351712> (IF 0.680)
7. Synthesis and characterization of a new class of benothiazoline. D. Shanker, R. K. Sharma, **J. Sharma**, A. K. Rai and Y. P. Singh, *Phosphorus. Sulfur and Silicon*, **180**, 141 (2005). <https://doi.org/10.1080/104265090508055>
8. Synthesis and Characterization of additional products of Phenylarsenic (III) Dimethoxide with Substituted Benzothiazolines, R. Rathore, **J. Sharma**, A. K. Rai,

and Y. P. Singh, *Phosphorus, Sulfur and Silicon*, **180**, 1921 (2005) (IF-0.820)
<https://doi.org/10.1080/104265090889639>

9. Metal - Induced Rearrangement of Benzothiazoline Ring; Synthesis and characterization of some new organoantimony (V) derivatives of N-, O- and S-Atom containing schiff base ligands. D. Shankar, R. K. Sharma, **J. Sharma**, A. K. Rai and Y. P. Singh, *Heteroatom Chemistry*, **18**, 1 (2007) (IF 1.257)
<https://doi.org/10.1002/hc.20260>
10. Synthesis and characterization of Chlorodiorganotin (IV) derivatives of O, O'-alkylene dithiophosphates. Gajendra Kumar Rustagi, **Jyoti Sharma**, Ghanshyam Srivastava and Yashpal Singh, *Journal of Coordination chemistry*, **63**, 2, 353 (2010) (IF 2.212) <https://doi.org/10.1080/00958970903370191>
11. Mixed chloro Bis (alkylene dithiophosphato) antimony (III) and their Heterobinuclear derivatives with Boron tetraisopropoxide; synthesis and characterization. Reena Agarwal, **Jyoti Sharma**, Yashpal Singh, Durgesh Nandani and Amla Batra, *Phosphorus, Sulfur and Silicon*; **185**, 516(2010) (IF 0.820)
<https://doi.org/10.1080/10426500902839848>
12. Synthesis and spectroscopic structural elucidation of new class of mono and heterobinuclear derivatives of arsenic and aluminium derived from bifunctional tridentate Schiff base ligands. Reena Agrawal, **Jyoti Sharma**, Yashpal Singh, *Main Group Met. Chem.*; **33**, 59 (2010) (IF 0.561)
<https://doi.org/10.1515/MGMC.2010.33.1-2.59>
13. Syntheses and Characterization of a New Class of Mono- and Hetero Dinuclear Derivatives of Boron Derived from Schiff Base. Priyanka Sharma, Vaishali Vajpayee, **Jyoti Sharma** and Yashpal Singh, *Applied Organometallic Chemistry*; **24**, 774-778 (2010) (IF 2.017) <https://doi.org/10.1002/aoc.1697>
14. Syntheses, Reactions, Characterization and Antifungal Activities of Chloro Bis(2,2-Dithio-1,3,2-Dioxaphospholane/Dioxaphosphorinanes) Bismuth(III) . Reena Agrawal, **Jyoti Sharma**, Durgesh Nandani, Amala Batra and Yashpal Singh; *Phosphorus, Sulfur and Silicon*, **186**, 554 (2010).(IF 0.820) <https://doi.org/10.1080/10426507.2010.503979>

15. Mono – and heterobinuclear derivative of antimony (III) Containing Schiff bases; syntheses, characterization and microbial activities. Reena Agrawal, **Jyoti Sharma**, and Yashpal Singh; *Main Group Chemistry*, **33**, 265, (2010) (IF 0.561). <https://doi.org/10.1515/MGMC.2010.33.6.265>
16. Mono – and heterodinuclear indium compounds of multidentate Schiff bases; syntheses, characterization and their antibacterial activity. Priyanka Sharma, **Jyoti Sharma** and Yashpal Singh; *Main Group Metal Chemistry*, **10**, 265 (2011) (IF 0.561) <https://doi.org/10.3233/MGC-2011-0054>
17. Syntheses, characterization and antifungal activities of some heteroleptic homodinuclear derivatives of aluminium, Priyanka Sharma, **Jyoti Sharma**, Yashpal Singh, Ramavatar Sharma, Babita Sharma; *Synth. React. Inorg. Met. Org. Chem.*; **41**, 4(2011) (IF 0.680) <https://doi.org/10.1080/15533174.2010.522675>
18. Triphenyl arsenic (V) and antimony (V) derivatives of multidentate Schiff bases; Synthesis, characterization and antimicrobial activities. Reena Agrawal, **Jyoti Sharma**, Durgesh Nandani, Amala Batra and Yashpal Singh; *Journal of Coordination chemistry*; **64**, 554, (2011) (IF 2.212). <https://doi.org/10.1080/00958972.2010.550915>
19. Organo-and metalloorganic derivatives of some group 15 elements. **Jyoti Sharma** and Yashpal Singh; *Chem. News Lett.* **1**, 103 (2012).
20. Schiff base ligands bridged homo-and heterodinuclear compounds of arsenic (III) Vaishali Vajpayee, **Jyoti Sharma** and Yashpal Singh; *Chem. News Lett.* **2**, 31 (2012).
21. Monophenyl antimony (III) derivatives of Cyclic dithiocarbamate; Synthesis, Spectral characterization and antimicrobial study. Deepak Kumar Sharma, Yashpal Singh, and **Jyoti Sharma**; *Phosphorus. Sulfur, Silicon, Relat. Elem* ,**188**, 1194 (2013); (IF 0.827). <https://doi.org/10.1080/10426507.2012.740695>
22. Coordination Chemistry of Trivalent and Pentavalent Organoarsenic Heterocyclic. Dithiocarbamate Derivatives; Synthesis and Characterization. Deepak Kumar Sharma, Rita gupta, Yashpal Singh and **Jyoti Sharma**; *J. Coordination Chemistry*, **67**(8), 1478, 2014 (IF 2.212). <https://doi.org/10.1080/00958972.2014.916794>

23. Phenylarsenic(III) derivatives of Schiff bases ;Synthesis, characterization Rita gupta, **Jyoti Sharma** , Mudit kumar gupta , Yashpal singh; *International Journal of Recent Trends in Science and Technology*, 9(3)315,2014. https://www.statperson.com/Journal/ScienceAndTechnology/Article/Volume9Issue3/9_3_2.pdf
24. Synthesis, characterization and antibacterial activity of some new mono- and heterodinuclear indium compounds. Priyanka Sharma, Vinita Jangir, **Jyoti Sharma** and Yashpal Singh; *Synth. React. Inorg. Met. Org. Chem*, 45, 804, 2015. (IF 0.670) DOI:[10.1080/15533174.2013.862647](https://doi.org/10.1080/15533174.2013.862647)
25. Synthesis, characterization and antimicrobial activity of diorganotin(IV) derivatives of some bioactive bifunctional tridentate schiff base ligands, Pooja bhatra, Ramavatar Sharma, **Jyoti Sharma** and Yashpal Singh; *Main Group Met. Chem.* 39,01,2016 (IF 0.5) DOI:[10.1515/mgmc-2015-0022](https://doi.org/10.1515/mgmc-2015-0022)
26. Synthesis and characterization of gallium (III) derivatives of sterically hindered heterocyclic β -diketone, Jyoti Bhomia, **Jyoti Sharma** Yashpal Singh, *International journal of recent trends in science and technology* ,18, 74, 2016. (IF 1.2068). <http://www.statperson.com> (accessed 06 February 2016)
27. Synthesis and characterization of asymmetric dimeric compounds of aluminium with sterically hindered heterocyclic β -diketones, Jyoti Bhomia, **Jyoti Sharma** and Yashpal Singh, *Main Group Metal Chemistry* 39, 151, 2016 (I.F.: 0.56). DOI:[10.1515/mgmc-2015-0035](https://doi.org/10.1515/mgmc-2015-0035)
28. Synthesis and pharmacological activity of diorganoantimony(III) and triorganoantimony(V) derivatives of Schiff bases derived from amino acids, Rita gupta, Manas mathur, Ajit kumar swami, Yashpal singh and **Jyoti Sharma**; *J. Saudi Chem. Soc.* 21, 67, 2017. (IF 2.523) DOI:[10.1016/j.jscs.2014.09.003](https://doi.org/10.1016/j.jscs.2014.09.003)
29. Synthesis, characterization and antimicrobial activity of triorganotin(IV) derivatives of some bioactive Schiff base ligands, Pooja Bhatra, R.A. Sharma, **Jyoti Sharma** and Yashpal Singh ,*Appl. Organomet. Chem.* 31, 01, 2017. (IF: 3.58) DOI:[10.1007/s11696-017-0213-9](https://doi.org/10.1007/s11696-017-0213-9)
30. Syntheses, characterization, antibacterial activity and molecular modelling of phenyl antimony (III) heteroleptic derivatives containing substituted oximes and piperidine dithiocarbamate, *Appl. Organomet. Chem.* 31, 01, 2017, Savita Beniwal,

Sunil Chhimpa, Deepti Gaur, P. J. John, Yashpal Singh and **Jyoti Sharma** (IF: 3.58). <https://doi.org/10.1002/aoc.3725>

31. Syntheses, Silylation, characterization, antimicrobial and antifertility activities of organoboron derivatives of some bioactive monofunctional bidentate Semicarbazones. *Appl. Organomet. Chem.*, **32**: e3983. 2018. Jyoti Bhomia, **Jyoti Sharma**, Rucha Lakhne, Rachana Sharma, R.S Gupta, Ram Avatar Sharma and Yashpal Singh, DOI; 10.1002/AOC3983. (IF: 3.58). DOI; [10.1002/AOC3983](https://doi.org/10.1002/AOC3983)
32. Some boron compounds of semicarbazones: antimicrobial activity and precursor for the sol–gel transformation to nanosized boron oxide. Jyoti Bhomia, **Jyoti Sharma**, Ram Avatar Sharma and Yashpal Singh. *New J. Chem.* **12**, 2018, (IF: 3.20). DOI: [10.1039/C8NJ00683K](https://doi.org/10.1039/C8NJ00683K)
33. Syntheses, characterization, powder XRD, antibacterial and antioxidant activities of triphenylantimony(V) heteroleptic derivatives containing substituted oximes and morpholine dithiocarbamate, Savita Beniwal, Sunil Chhimpa, Ashok Kumar, P. J. John, Yashpal Singh and **Jyoti Sharma**, *Appl. Organomet. Chem.* **33** (3), e4712. 2019. (IF: 3.58). DOI: [10.1002/aoc.4712](https://doi.org/10.1002/aoc.4712)
34. Synthesis and characterization of antimony(III) heteroleptic derivatives having oxygen, nitrogen and sulfur containing organic moieties with their antibacterial and antioxidant activities, Savita Beniwal, Sunil Chhimpa, Ashok Kumar, Jaya Rai, P. J. John, Yashpal Singh and **Jyoti Sharma**. *Phosphorus, Sulfur, Silicon Relat. Elem.*, DOI: 10.1080/1046507.2018.1528254. 2019 (IF: 0.67). DOI: [10.1080/1046507.2018.1528254](https://doi.org/10.1080/1046507.2018.1528254)
35. Some Novel Dinuclear phenylboronates having biologically potent β -enamino esters: Synthesis, Spectroscopic characterization, antimicrobial activity and their antiandrogenic effect. Vinita Jangir, Rajesh shaharan, Ramavatar, **Jyoti Sharma** and Yashpal Singh. *Appl. Organomet. Chem.*, 2019 (IF: 3.58) DOI; [10.1002/5068](https://doi.org/10.1002/5068).
36. Some heterocyclic N, S and O chelated chloro antimony (III) derivatives; synthesis, spectral characterization and antimicrobial studies ;Deepak Kumar Sharma, **Jyoti Sharma**, Ramavatar; *International Journal of Research and Analytical reviews*; **6** (2), 649, 2019. (IF: 5.75). DOI: [10.1080/10426507.2018.1528254](https://doi.org/10.1080/10426507.2018.1528254)

37. Synthesis and characterization and antimicrobial activity of triphenyl antimony(V) derivatives of heterocyclic dithiocarbamate. Deepak Kumar Sharma, **Jyoti Sharma**, Ramavatar sharma; **International Journal of Science and Research**; 8(7) 2019. (IF: 7.803) <https://www.ijsr.net/articlerating.php?paperid=ART20199902>
38. Synthesis, characterization, spectral studies and antimicrobial study of mixed ligand complexes of chloro arsenic (III) derived from β -ketiminates & piperidine dithiocarbamate ligand moiety. Deepak Kumar Sharma, **Jyoti Sharma**, Ramavatar sharma; **Asian Journal of Chemical Sciences**; 6(4),1, 2019(IF: 4.056). DOI:[10.9734/ajocs/2019/v6i419002](https://doi.org/10.9734/ajocs/2019/v6i419002)
39. Arsenic (III) mixed derivative having oximes and morpholinedithiocarbamate along with their cytotoxic, antimicrobial and antioxidant studies; Savita Beniwal, Reena Sangwan, Yashpal singh and **Jyoti Sharma**; **J Biochem. Mol. Toxicol.**; 2020; e22581. 2020. (IF: 3.60). DOI: <https://doi.org/10.1002/jbt.22581>
40. Triphenyl arsenic(V) mixed ligand derivatives along with antimicrobial, antioxidant and cytotoxic studies, Savita Beniwal, Reena Sangwan, Yashpal and **Jyoti Sharma**; **Chemistry Select / volume 7, Issue 21/e 202200488** /<https://10.1002/slct.202200488>.
41. Syntheses and characterization of some novel homodimer of Bismuth (III) having Bi.....Bi linkage along with molecular modelling, antimicrobial, antioxidant and cytotoxic studies. Savita Beniwal, Seema Gaur and **Jyoti Sharma**, Journal of Coordination Chemistry/ <https://doi.org/10.1080/00958972.2022.2156787>
42. Syntheses and characterisation of novel antimony (III) and bismuth (III) derivatives containing β - enamino ester along with antimicrobial evaluation, DFT calculation and cytotoxic study. Reena Sangwan, Savita Beniwal, Seema Gaur, Phulwanti Sharma, Megha Mittal, Priyanka Sharma and **Jyoti Sharma**; **J Bio chem. Mol. Toxicol**;2023 e23548/ <https://doi.org/10.1002/jbt.23548>.
43. Syntheses, spectral characterization, computational study of some novel oxime bridged symmetric and asymmetric aluminium dimers containing diols along with antimicrobial and anticancer activities. Priyanka Sharma^a, Megha Mittal^a, Reena Sangwan^a, Seema Gaur^b, **Jyoti Sharma^{a*}**; **Under Communication for publication in the Journal of Appl. Organomet. Chem (2024).**

- 44.** A fresh perspective to synthesize thermally resistive antitumor and antimicrobial agents: Pointing towards novel antimony (III) complexes having heterocyclic and N-alkyl-N-phenyl substituted dithiocarbamates assisted with computational study. Megha Mittal^a, Priyanka Sharma^a, Reena Sangwan^a, Seema Gaur^b, **Jyoti Sharma**; *Under Communication for publication in the journal of Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (2024).*

List of Publications From 2019 -2024 Prof.(Dr.) Jyoti Sharma)

1. Syntheses, characterization, powder XRD, antibacterial and antioxidant activities of triphenylantimony(V) heteroleptic derivatives containing substituted oximes and morpholine dithiocarbamate, Savita Beniwal, Sunil Chhimpa, Ashok Kumar, P. J. John, Yashpal Singh and **Jyoti Sharma**, *Appl. Organomet. Chem.* **33** (3), e4712. 2019. (IF: 3.58). DOI:[10.1002/aoc.4712](https://doi.org/10.1002/aoc.4712)
2. Synthesis and characterization of antimony(III) heteroleptic derivatives having oxygen, nitrogen and sulfur containing organic moieties with their antibacterial and antioxidant activities, Savita Beniwal, Sunil Chhimpa, Ashok Kumar, Jaya Rai, P. J. John, Yashpal Singh and **Jyoti Sharma**. *Phosphorus, Sulfur, Silicon Relat. Elem.*, DOI: 10.1080/1046507.2018.1528254. 2019 (IF: 0.67). DOI: [10.1080/1046507.2018.1528254](https://doi.org/10.1080/1046507.2018.1528254)
3. Some Novel Dinuclear phenylboronates having biologically potent β -enamino esters: Synthesis, Spectroscopic characterization, antimicrobial activity and their antiandrogenic effect. Vinita Jangir, Rajesh shaharan, Ramavatar, **Jyoti Sharma** and Yashpal Singh. *Appl.Organomet.Chem.*, 2019 (IF: 3.58) DOI;[10.1002/5068](https://doi.org/10.1002/5068)
4. Some heterocyclic N, S and O chelated chloro antimony (III) derivatives; synthesis, spectral characterization and antimicrobial studies ;Deepak Kumar Sharma, **Jyoti Sharma**, Ramavatar; *International Journal of Research and Analytical reviews*; **6** (2),649, 2019.(IF:5.75). DOI:[10.1080/10426507.2018.1528254](https://doi.org/10.1080/10426507.2018.1528254)
5. Synthesis and characterization and antimicrobial activity of triphenyl antimony(V) derivatives of heterocyclic dithiocarbamate. Deepak Kumar Sharma, **Jyoti Sharma**, Ramavatar sharma; *International Journal of Science and Research*; **8**(7) 2019. (IF: 7.803) <https://www.ijsr.net/articlerating.php?paperid=ART20199902>
6. Synthesis, characterization, spectral studies and antimicrobial study of mixed ligand complexes of chloro arsenic (III) derived from β -ketimines & piperidine dithiocarbamate ligand moiety. Deepak Kumar Sharma, **Jyoti Sharma**, Ramavatar

sharma; **Asian Journal of Chemical Sciences**; 6(4),1, 2019(IF: 4.056).
DOI:[10.9734/ajocs/2019/v6i419002](https://doi.org/10.9734/ajocs/2019/v6i419002)

7. Arsenic (III) mixed derivative having oximes and morpholinedithiocarbamate along with their cytotoxic, antimicrobial and antioxidant studies; Savita Beniwal, Reena Sangwan, Yashpal singh and **Jyoti Sharma**; **J Biochem. Mol. Toxicol.**; 2020; e22581. 2020. (IF: 3.60). DOI: <https://doi.org/10.1002/jbt.22581>
8. Triphenyl arsenic(V) mixed ligand derivatives along with antimicrobial, antioxidant and cytotoxic studies, Savita Beniwal, Reena Sangwan, Yashpal and **Jyoti Sharma**; **Chemistry Select / volume 7, Issue 21/e 202200488** /<https://10.1002/slct.202200488>.
9. Syntheses and characterization of some novel homodimer of Bismuth (III) having Bi.....Bi linkage along with molecular modelling, antimicrobial, antioxidant and cytotoxic studies. Savita Beniwal, Seema Gaur and **Jyoti Sharma**, **Journal of Coordination Chemistry**/ <https://doi.org/10.1080/00958972.2022.2156787>
10. Syntheses and characterisation of novel antimony (III) and bismuth (III) derivatives containing β - enamino ester along with antimicrobial evaluation, DFT calculation and cytotoxic study. Reena Sangwan, Savita Beniwal, Seema Gaur, Phulwanti Sharma, Megha Mittal, Priyanka Sharma and **Jyoti Sharma**; **J Bio chem. Mol. Toxicol**;2023 e23548/ <https://doi.org/10.1002/jbt.23548>.
11. Syntheses, spectral characterization, computational study of some novel oxime bridged symmetric and asymmetric aluminium dimers containing diols along with antimicrobial and anticancer activities. Priyanka Sharma^a, Megha Mittal^a, Reena Sangwan^a, Seema Gaur^b, **Jyoti Sharma^{a*}**; ***Under Communication for publication in the Journal of Appl. Organomet. Chem (2024).***
12. A fresh perspective to synthesize thermally resistive antitumor and antimicrobial agents: Pointing towards novel antimony (III) complexes having heterocyclic and N-alkyl-N-phenyl substituted dithiocarbamates assisted with computational study. Megha Mittal^a, Priyanka Sharma^a, Reena Sangwan^a, Seema Gaur^b, **Jyoti Sharma**; ***Under Communication for publication in the journal of Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (2024).***

