

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF RAJASTHAN, JAIPUR

- Name & Qualification : **Dr. JYOTI SHARMA**
M.Sc., Ph.D.
- Designation : **Professor**
- Correspondence Address : **79, Shanti Vihar,**
Behind Morani motors
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- Contact No. : **(R) 0141 2724989**
; 09829460149 (M)
- Email id: **dr_jyoti_sharma@yahoo.co.in**
- Major areas of Research: **Synthetic Inorganic and Organometallic**
Chemistry
- No. of Research Publications: **41 (Forty- one) Paper published (List enclosed)**
02 Communicated.
- Research experience: **23 Years**
- Post-doctoral experience: **02 years**
As a Research Associate in Department of
Chemistry, Rajasthan University, Jaipur.
(From Sep, 1997-9th Nov 2000)
- Teaching experience: **Under Graduate – 21 + 2 years**
Post Graduate – 21 years
- No. of Ph.D. awardees : **07 (Seven) Students awarded Ph.D. degree**
03 (Three) Students presently registered/ working
for Ph.D. degree .



- No. of Conferences/Seminars/Symposiums/Workshops participated:
 - a. National: **18**
 - b. International: **07**

- R & D Project Title of the research project: **02 (Two) UGC minor research projects.**
 - (1). Title of the research project :

**“Synthesis and characterization of some Homobinuclear mixed valency derivatives of organo antimony with nitrogen, oxygen and sulphur containing ligands.
U.G.C.F. No. 45-15/2005–06 (MRP/CRO) /304028 dated 7 Feb. 2006 for the grant of Rs. 80,000/-**
 - (2) Title of the research project :

**Synthesis, spectral characterization and bioactivity of some organometallic and metalloorganic derivatives of arsenic, antimony and bismuth in+3 and +5 oxidation state with oxygen, nitrogen, and sulphur containing ligands.
U.G.C.F. No. 45-15 / 2010-11 (MRP/CRO) /304028 dated 11 March. 2011 for the grant of Rs. 1,60,000/-
Maharaja’s College, Rajasthan University, Jaipur.**

- Member of various Academic Professional Bodies/Societies :

Membership in:

 - 1. **Chemical Research Society of India (CRSI)**
 - 2. **Indian society of Chemists and Biologists, Medicinal and Process (CDRI)**
 - 3. **The Indian Science Congress Association(L-37027)**

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

- Trainings / Teaching-Learning Courses attended :
 - 1. **Refresher course (02)**
 - 2. **Orientation course (01)**

3. Organized Refresher course as Deputy-coordinator in the session 2017-18

4.*Currently elected as member in Board of Studies 2021-22

- 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 Department for the session 2018-18.**
 - *Worked as Convener in PG admissions for the sessions 2017 and 2019**
 - *Worked as a member / convener in various functional committees at the departmental level**

**Dr. JYOTI SHARMA
PROFESSOR
UOR, JAIPUR-302005.**

LIST OF PUBLICATIONS (from 1994 -2023)

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)
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)
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)
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) (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).
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)

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)
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)
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)
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)
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)
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)
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).
16. 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)

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)

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).

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).

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).

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.

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).

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)

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).

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).

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).

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).

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).

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).

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).**

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).**

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).**

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.*, DOI;10.1002/5068. **2019 (IF: 3.58)**

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)**

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)**

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)**

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; e225812020. (IF: 3.60)**

40. Triphenyl Arsenic(V) Mixed Ligand Derivatives along with Antimicrobial, Antioxidant and Cytotoxic Studies ; Savita Beniwal, Reena Sangwan, Jaya Rai and **Jyoti Sharma** ; **Chemistry Select** **2022,7,e202200488(1 of 9). <https://doi.org/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** **2022,75,NOS 19-24, 3000-3014., <https://doi.org/10.1080/00958972.2022.2156787>.**