

Meenu

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Academic Qualification ; **M. Sc., Ph.D**
Nationality : **Indian**

- **Research Experience:** 11 years
- **Teaching Experience:** **PG:** 9 Years **UG:** 2 ½ Years
- **Publications :** 9
- **Conferences/Science Fair Conducted :** 7
- **Conference/Seminar/Symposiums Presentation:** 6
- **Refresher Courses Attended:** 01 **Orientation Program Attended:** 01
- **Teaching Interest:** Inorganic Chemistry on topics like Group Theory, Coordination Chemistry, Ligand Field Theory, Inorganic Spectroscopy

Research Contributions

Ph.D. Dissertation Title: Synthesis and Structures of some metal-ligand based self-assembled materials

List of Publications

Articles Published :8 (All International Journals)

- **Syntheses and crystal structures of three novel Cu(II) coordination polymers of different dimensionality constructed from Cu(II) carboxylates (carboxylate = malonate (mal), 2 acetate (ac), fumarate (fum)) and conformationally flexible 1,4-bis(imidazole-1-yl-methylene)benzene (IX).**
S.K. Chawla, M. Arora, Kalle Nättinen, K. Rissanen and J.V. Yakhmi,
Polyhedron, 23 (2004) 3007. (IF = 2.108)
- **Unique copper ion catalyzed hydrolytic cleavage of C–N(2) bond of thiosemicarbazide.**
S.K. Chawla, M. Arora, K. Nättinen and K. Rissanen,
Polyhedron, 25(2006) 627. (IF = 2.108)
- **Reversible dehydration polymerization of terephthalate bridged $[\{Cu_2(2,2'-bpy)_2(tp)(H_2O)_3(NO_3)\} \cdot H_2O \cdot NO_3]_2$**
Sukhvinder K Chawla, Meenu Arora, Kalle Nättinen, Kari Rissanen, Jatinder V Yakhmi
Mendelevov Communications, 16, (2006) 20. (IF =1.405)
- **A new isomer of $[\{Zn(IX)_2(NO_3)_2\} \cdot 2.5H_2O]_n$ [IX = 1,4-bis(imidazole-1-methylene)benzene] as a rare example of topological isomerism in coordination polymers.**
Sukhvinder K Chawla, Meenu Arora, Kalle Nättinen, Kari Rissanen
Mendelevov Communications, 16, (2006) 88. (IF =1.405)
- **Role of soil physicochemical characteristics on the present state of arsenic and its adsorption in alluvial soils of two agri-intensive region of Bathinda, Punjab, India.** Kumar, R., Kumar, R., Mittal, S., Arora, M. and **Babu, J.N.** *Journal of Soils and Sediments*, (2015). pp.1-16. (IF=2.14)
- **In situ reductive regeneration of zerovalent iron nanoparticles immobilized on cellulose for atom efficient Cr (vi) adsorption.** A.K. Sharma, R. Kumar, S. Mittal, S. Hussain, M. Arora, R.C. Sharma, and **J.N. Babu**, (2015). *RSC Advances*, 5(109), pp.89441-89446. (IF=3.84)
- **Synthesis, crystal structure determination of two-dimensional supramolecular co-ordination polymer of silver(I) with 1,2-Bis(phenylthio)ethane and its Hirshfeld surface analysis**
Journal of Chemical Sciences 127, 849–856, 2015. (IF=1.298)
- **1, 3-Bis (cyanomethoxy) calix [4] arene capped CdSe quantum dots for fluorogenic sensing of fluorine R.** Kumar, M. Arora, A. K. Jain and J. N. Babu *RSC Advances*, 2017, 7, 14015–14020. (IF=3.84)
- **Biochar- Fly ash Composite from Pyrolysis of Rice Straw for Cu(II) ion Adsorption for Aqueous Solution** S. Nag, A. Bhardwaj, R. Kumar, R. C. Sharma, A. K. Sharma, **M. Arora** and J. N. Babu (2017) *International Journal of Advanced Research*, Accepted

Paper Accepted in Conferences

1. Synthesis and characterization of complexes of 5,7-dimethyl 3-thio-1, 2, 4-triazine with MX_2 .
S. K. Chawla and M. Arora
Presented at National Bioorganic Symposium-7, 2001, G.N.D.U, Amritsar, India.
2. Synthesis and characterization of new terephthalate bridged hydrogen bonded polymer.
S. K. Chawla and M. Arora
Presented at 38th Annual Convention of Chemists 2001, J. N. V. University, Jodhpur, India.
3. X- ray crystal structure of 1,4-bis(imidazole-1-yl) methylene benzene based molecular rods and tubes in crystalline polymeric metal complexes.
S. K. Chawla, M. Arora, K. Nattinen and K. Rissanen
Presented at Euro Conference of Molecular Rods, Wires and Switches, 2002, San Feliu De Umols, Spain.
4. Unique copper ion catalysed hydrolytic cleavage of C-N(2) bond of thiosemicarbazide.
S. K. Chawla and M. Arora
Presented at 6th CRSI National Symposium, 2004, IIT, Kanpur, India.
5. A rare example of topological isomerism in coordination polymers-A new isomer of $[\{\text{Zn}(\text{IX})_2(\text{NO}_3)_2\} \cdot 2.5\text{H}_2\text{O}]_n$ [IX = 1,4-bis(imidazole-1-yl methylene)benzene].
S. K. Chawla and M. Arora
Presented at National Symposium on new challenges in Chemistry, 2006 G.N.D.U, Amritsar, India.
- 6 Study of role of Zn (II) species of different rigidity and dimensionality in organizing the conformationally flexible non-chelating bifunctional 1, 4 bis(imidazole-1-methylene) benzene (IX).
S. K. Chawla and M. Arora
Presented at National Symposium on Green Chemistry: Applications in science and engineering" GCSE-07, 2007 SLIET, Longowal, Sangrur

Work Experience

S. No.	Institution Served	Time Served
1.	DAV College Bathinda.	4 months
2.	K.M.V Jalandhar	4 Months
3.	Bhutta College of Engineering and Technology, Ludhiana	1Year 6 Months
4.	Multani Mal Modi College, Patiala	9 Years 4 Months

Contributions to Institution

- Organized four two **Science Fair in 2010, 2011, 2014 and 2015**
- Member of Organizing Committee of National Level Seminars **RACES-2009 (PRO)**
- Member of Organizing Committee of National Level Seminars **RACES-2012(Organizing Secretary)**
- Member of the Organizing Committee of National Level Seminar **RACES-2013 (Organizing Secretary)**