

Dr. SANGEETA SHARMA

Associate Professor in Chemistry

Department of Applied Science  
Shaheed Bhagat Singh State Technical Campus  
Ferozepur 152004, Punjab  
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### EDUCATIONAL QUALIFICATIONS

- Ph.D Kurukshetra University, Kurukshetra in Jan1995.
- M.SC (Org. Chem) Kurukshetra University, Kurukshetra with First Class in 1990.
- B.Sc (Med) Kurukshetra University, Kurukshetra with First class in 1988.
- Matric H.S.E.B., Bhiwani with Distinction in 1984.

### TITLE OF THESIS

“Synthesis & Characterization of lower valent compounds of Niobium.”

### AREA OF SPECIALIZATION

Inorganic Chemistry, Organometallic chemistry, Environmental Chemistry

### TEACHING EXPERIENCE

Position Held	Institution	Period	Teaching Level
Associate Professor	SBSSTC, Ferozepur	01.08 2008 till Date	UG & PG
Assistant Professor	-Do-	01.08 2005 to 31-07-2008	UG & PG
Lecturer	-Do-	01-08-1996 to 31-07-2005	UG & PG
Lecturer (On Contract)	Govt. Polytechnic, Batala	29-12-1995 to 31-07-1996	Diploma Level
Guest Lecturer	University College, Kurukshetra	13-10-1995 to 28-12-1995	UG

## LANGUAGES KNOWN

Hindi, English, Punjabi, Sanskrit & Urdu

## RESEARCH EXPERIENCE

20 Years

- Research work at Doctoral level mainly includes Organo-metallic Chemistry of Tin, Hafnium & Zirconium and lower valent chemistry of Niobium & Tantalum
- Research work at Post Doctoral level mainly includes Environmental Chemistry and some work is going on in the emerging field of nano materials. Characterization techniques like  $^1\text{H}$  NMR,  $^{13}\text{C}$  NMR, FT-IR,  $^{119}\text{Sn}$  NMR, SEM etc have been used.

## RESEARCH PROJECTS

Title of project	Cost	Funding agency	Duration
Investigations on molecular chemistry of Pentamethylcyclopentadiene derivatives of Zr and Hf in lower oxidation states	6.00 Lakh	AICTE	2000-2003 As Principal Investigator
Processing of Solid Electrolytes for ITSOFC by Microwave Energy	20.00 Lakh	AICTE	2005-2008 As Co-principal investigator

## PH.D / M.PHIL / M.TECH SUPERVISION

Sr . no.	Name of student	Title of thesis	level	Year of completion	Supervisor/co supervisor
1	Savinder Kaur	Study of material for fabrication of inter mediate temp . solid oxide fuel cell electrolyte using microwave energy	Ph.D	2011	Co supervisor
2	Amit Dhir	Root zone bio tech plant: present prospective.  Studies on decolourisation of dye effluents using advanced oxidation systems	M.Tech (minor project)  M.Tech Thesis	2006	Supervisor
3	Sunita Rani	Assessment of drinking water quality at Moga . (punjab) . a mathematical approach	M .Phil	2008	Supervisor
4	Anchal Sood	Environmental consideration for planning of industrial area in Ludhiana city.	M. Tech.	2009	Supervisor
5	Navneet Kaur	Removal of synthetic dyes from aqueous streams. Employing adsorption and advanced oxidation systems	M..Tech.	2010	Supervisor
6	Bhajan Dass	Environmental Assessment and Remediation strategies for the treatment of effluents of	M.Tech.	2010	Supervisor

		recycled paper mills			
7	Sarabjit Singh	Analysis and treatment of effluents released from agro based paper mills.	M.Tech	2012	Supervisor
8	Rakesh Punia	A comparative study of Mango seed with wood stalks as a small scale downdraft Gasifier feed stock	M.Tech.	2013	Co-supervisor
9	Davinder Kumar	Assessment of heavy metal contents in vegetables grown in the vicinity of Sirsa and their effects on human health.	M.Tech.	2014	Supervisor

### SHORT TERM COURSES CONDUCTED

Sr No.	From	To	Institute	Sponsored by	Duration	Name of the short term course
1.	16/12/2013	27/12/2013	SBSSTC, Ferozepur	TEQIP-II	2 weeks	Analytical Techniques for Detection of Environmental pollutants (As co-ordinator)
8.	17/12/2012	21/12/2012	SBSSTC ,Ferozepur	TEQIP-II	1 Week	Engineering Materials (As co-cordinator)

## SHORT TERM COURSES ATTENDED

Sr No.	From	To	Institute	Sponsored by	Duration	Name of the short term course
1.	25/05/2015	5/6/2015	SBSSTC, Ferozpur	AICTE	2 weeks	Research Techniques
2.	16/12/2013	27/12/2013	SBSSTC, Ferozpur	TEQIP-II	2 weeks	Analytical Techniques for Detection of Environmental pollutants
3.	21/10/2013	25/10/2013		HRM	1 Week	Conflict Resolution & Problem solving
4..	16/09/2013	20/09/2013	SBSSTC, Ferozpur	TEQIP-II	1 Week	Recent trends in polymers, composites & their engineering applications
5.	09/09/2013	13/09/2013	SBSSTC ,Ferozpur	TEQIP-II	1 Week	Managerial Skills
6.	02/09/2013	06/09/2013	SBSSTC ,Ferozpur	TEQIP-II	1 Week	Soft skills for technical teachers
7.	26/08/2013	30/08/2013	SBSSTC ,Ferozpur	TEQIP-II	1 Week	New computing & Emerging technologies in ICT
8.	06/05/2013	17/05/2013	SBSSTC ,Ferozpur	TEQIP-II	Two Weeks	Nature Inspired Computational Intelligence
9.	17/12/2012	21/12/2012	SBSSTC ,Ferozpur	TEQIP-II	1 Week	Engineering Materials
10.	03/12/2012	07/12/2012	SBSSTC ,Ferozpur	TEQIP-II	1 Week	Research Methodology: Tools

						& Techniques
11.	26/11/2012	30/11/2012	SBSSTC, Ferozepur	TEQIP-II	1 Week	Applied Soft Computing
12.	21/05/2012	01/06/2012	SBSCET, Ferozepur	AICTE	Two Weeks	SDP on Multicriteria Optimization Tools in Research
13.	16/07/2011	30/07/2011	ISF College of Pharmacy, Moga	AICTE	Two Weeks	Modern Sophisticated Analytical Techniques and their Applications
14.	04/07/2011	15/07/2011	SBSCET, Ferozepur	AICTE	Two Weeks	SDP on Intelligent Computational Techniques
15.	05/06/2011	09/06/2011	NIT, Jalandhar	AICTE	One week	Environment Management in Process Industries.
16.	22/12/2008	26/12/2008	SBSCET, Ferozepur	AICTE	One week	Material Degradation and Their Protection
17.	30/1/2006	3/2/2006	SBSCET, Ferozepur	NITTTR, Chandigarh	One week	Matlab Prog. (MATLAB)
18.	18/4/2005	22/4/2005	SBSCET, Ferozepur	NITTTR, Chandigarh	One week	Autocad
19.	19/7/2004	23/7/2004	SBSCET, Ferozepur	AICTE	One week	Inculcating Entrepreneurial Attitude
20.	8/3/2004	12/3/2004	NITTTR, Chandigarh	MHRD	One week	Improving Industry Institute Interaction
21.	1/7/2002	12/7/2002	SBSCET, Ferozepur	AICTE	Two Weeks	TQM AND ISO-9000 quality systems

**LIST OF PUBLICATIONS IN NATIONAL / INTERNATIONAL JOURNALS**

S. No	Title of Research Paper	Authors	DOI ISSN no.	I.F	Journal name (Publisher)	M / Yr (Vol., Pg.)
1.	Treatment Strategies for the effluents of recycled waste paper mills of Punjab.	Bhajan Das, sangeeta Sharma & Dhiraj Sud	2141- 7016	I.F 1.157	Journal of emerging trends in Engg & Applied Sciences	4(3),522- 526 (2013)
2.	Study of effect of various oxidants on decolourisation & COD reduction of dye effluents	Amit Dhir, Sangeeta Sharma & Dhiraj Sood	ISSN No.2229- 712X	Yet to be finalised	Elixir Chem.	53,11983- 11987 (2012)
3.	Decolourization of Methylene Blue Based on The Surface of Biomass Adsorbent	Navneet Kaur, Sangeeta Sharma	ISSN:025 7-8050	H.Index: 14	Pollution Research	31(4):1-6 (2012)
4.	Environmental Assessment and Remedial Strategies for Treatment of Effluents of Recycled Waste Paper Mills.	Bhajan Dass, Sangeeta Sharma & Dheeraj Sood	ISSN: 09702083	H.Index: 08	Journal of Industrial Pollution Control	26(2), 2011, 185-189
5.	Ground Water Quality in Residential Colonies of Moga(Punjab)	Sunita Mittal & Sangeeta Sharma	ISSN: 0970- 0420	-	Environment & Ecology	29(2), 2011, 658-662
6.	Assessment of Drinking Ground Water Quality in Residential Colonies of Moga, Punjab(India) : An overall Approach	Sunita Mittal & Sangeeta Sharma	ISSN:097 3-6921	I.F: 0.157	Journal of Environmental Research & Development	3(1), 2008, 129-135
7.	Treatment of Domestic Effluent by Root Zone Process.	Amit Kumar, Sangeeta Sharma & Dhiraj Sood	ISSN: 02537141	H.Index: 10	Indian Journal of Environmental Protection	27(4), April 2007, 357-361

8.	Biologically Active Heterocarboxylates of Bimetallic Sn (IV) & Al (III) –u- oxoisopropoxide.	Sonika, R.Malhotra, Sunil Kumar & Sangeeta Sharma	ISSN: 0970-1907	-	Agricultural Biological Research	22, 2006, 43-58
9	Synthesis and Characterization of Monotertiary Phosphino Complexes of Niobium (III) and Ta(III) Chloride.	Shamma Gupta, Sangeeta Sharma, O.P. Virmani & A.K.Narula	ISSN:0376-4710	I.F: 0.891	Indian Journal of Chemistry	36A, 1997, 232-234
10.	Synthesis and Structural studies of Complexes of Niobium (III) Chloride with Ditertiary Phosphines,	A.K.Narula, Sangeeta Sharma, Shamma Gupta and Sonika Chhabra	ISSN: 0376-4710	I.F: 0.891	Indian Journal of Chemistry	35A, 1996, 60-62
11.	Synthesis and Structural Studies of Four and Six Coordinated Complexes of Phenyl(ethyl/butyl) Tin dichloride.	A.K.Narula, Sonika and Sangeeta Sharma	ISSN:0792-1241	I.F.: 0.225	Main group metal Chemistry	18(8), 1995, 399
12.	Synthesis and Characterization of 3-Indole Carboxylates of Niobocene Dichloride	A.K.Narula, Sangeeta Sharma, Shamma Gupta & Sonika	ISSN: 0376-4710	I.F: 0.891	Indian Journal of Chemistry	34A,1995, 908-910
13.	Synthesis of monoligate ditertiary phosphino complexes of Niobium(IV) chloride and their bonding interaction with Mo(CO) <sub>6</sub> .	A.K.Narula, Sangeeta Sharma, Shamma Gupta & Sonika	ISSN: 0376-4710	I.F: 0.891	Indian Journal of Chemistry	34A, 1995, 883-887



14.	Synthesis and characterization of some thiophene carboxylates of bis (cyclopentadienyl) Hafnium (IV) chloride	Sangeeta Sharma, P.Lukose, O.P. Virmani and A.K.Narula	ISSN:009 4-5714	I.F: 0.50	Synthesis and Reactivity in Inorganic met.org. chemistry	24(8),1994, 1411-1421
15.	Structural studies on 5 and 6 coordinated unsymmetrical diorganotin (IV) complexes.	Sangeeta Sharma, Shamma Gupta, Sonika and A.K. Narula	ISSN: 0376-4710	I.F: 0.891	Indian Journal of Chemistry	33A,1994, 1119
16.	Synthesis and characterization of dinuclear niobium(IV) complexes with symmetrical and unsymmetrical ditertiary phosphines.	Sangeeta Sharma, Shamma Gupta, O.P.Virmani, P.N.Kapoor and A.K. Narula	ISSN: 0376-4710	I.F: 0.891	Indian Journal of Chemistry	34A,1995, 6-69
17.	Synthesis and characterization of dinuclear complexes of niobocene dichloride with some B-diketonates.	Sangeeta Sharma, Shamma Gupta Sonika, A.K. Narula	ISSN: 0376-4710	I.F: 0.891	Indian Journal of Chemistry	33A,1994,1 116
18	Heterocarboxylates of unsymmetrical diorganotin (IV) dichloride.	Sonika, Shamma Gupta, Sangeeta Sharma & A.K.Narula	ISSN:174 75198	I.F: 0.622	Journal Chemical Research (S) Journal Chemical Research (M)	1994, 406, 1994, 2244
19	Synthesis of organomagnesium B-diketonates and alkoxides.	Shamma Gupta, Sangeeta Sharma & A.K.Narula	ISSN: 0022-328X	I.F.: 2.08	Journal of organometallic Chemistry	452, 1993, 1-4

PAPERS PRESENTED IN NATIONAL / INTERNATIONAL CONFERENCES / SEMINARS

Sr. No	Title of paper	Authors	Name of seminar/ conference	Date and year
1.	Investigation and treatment of effluent from agrobased paper industries in Punjab	Sangeeta Sharma & Sarabjit Singh	International Conference of Technology And Science at University of London, London	3-6 Nov.2016
2.	Removal of colour from effluent of Agro based pulp & paper Industries	Sangeeta Sharma & Sarbjit Singh	National Conference on recent developments in chemical sciences at GJ University, Hisar	25-26 Feb ,2014
3.	An alternative pretreatment for surface planarization prior to anodisation	Harleen Kaur,Prabhjot, M.K. Kushwaha, S.Sharma & L.Sharma	DAV National congress on science and Technology at DAV institute of Engg. & Tech., Jalandhar	30-31 May,2013
4.	Study of treatment strategies for effluents of recycled waste paper mills of Malwa region of Punjab	Bhajan Dass, Dhiraj Sood, Sangeeta Sharma	National conference on Technological advancements in Chemical and Environmental Engg.at BITS, Pilani	23-24 March,2012
5.	Conversion of Biomass into Biofuels	Amit Arora, Rajeev Garg, Sangeeta Sharma	National Conference on Material Science at DAV College,Jalandhar	2-3 March,2012
6.	Removal of fluoride from water of Muktsar Region of unjab using Rice	Amit Arora, Sangeeta Sharma	National Seminar on Environmental Degradation at	28 Feb.,2012

	Husk Ash.		Dayanand Post graduate College, Hisar	
7..	Treatment of waste water by using green Technology	Amit Dhir, Dhiraj Sood, Sangeeta Sharma	National Symposium on Frontiers in Chemical Sciences at P.U. Chandigarh	24-25 Feb.,2012
8.	Removal of Arsenic(III) from contaminated ground water by Iron nanoparticles.	Sangeeta Sharma	National Seminar on Chemistry at Punjabi University, Patiala	15-16 Feb.2012
9	Electrochemical Fabrication of Zerovalent Iron nanowires for removal of Ground water contaminants.	Sangeeta Sharma	National Conference on Recent Advances in chemistry at Arya Postgraduate College, Panipat	4-5 Feb.,2012
10.	Investigations of the Effluents of Recycled Waste Paper Industries in Punjab	Bhajan Dass, Dhiraj Sood, Sangeeta Sharma	International Conference on Innovations in Chemistry at P.U. Chandigarh	1-3 Dec.,2011
11.	Study of effect of various oxidants on Decolourization and COD Reduction of Dye Effluents	Amir Dhir, Dhiraj Sood, Sangeeta Sharma	National Conference on Thermodynamics at M.D.U. Rohtak	2-4 Nov,2011
12.	Synthesis of some Novel Iron and Iron alloys nanowires by anodisation and electrodeposition method	Sangeeta Sharma	National Seminar on Ecological Crisis at Punjabi University, Patiala	8-9 Sept.,2011

13.	“Role of microbes and herbs in the management of water pollution	Anuj Kumar, Sangeeta Sharma	National seminar on Science and technology in present prospective held at SBSCET, Ferozepur	Oct 26,2002
14.	Clean technology: An integral part in promotion of concepts of sustainable development and conservation of resources.	Anuj Kumar, Sangeeta Sharma	National Seminar on Science and Technology in present prospective at SBSCET, Ferozepur	Oct 26,2002

#### INVITED TALKS:

1. Delivered an expert talk on “Nuclear Magnetic Resonance Spectroscopy” on March 14,2014 at GZS PTU Campus, Bathinda.
2. Delivered an expert talk on “ Green Chemistry” on Sept. 11,2013 at RSD College, Ferozepur.
3. Delivered a talk on ‘ ‘ <sup>1</sup> H NMR Spectroscopy for detection of Environmental Pollutants’’ on Dec.25, 2013 in National level two week FDP on Analytical Techniques For Detection of Environmental Pollutants under TEQIP at SBSSTC, Ferozepur.
4. Delivered a talk on ”Fabrication, characterisation and Environmental applications of nanowires” on Oct 3, 2013 in National level one week FDP on Futuristic Materials under TEQIP at SBSSTC, Ferozepur.
5. Delivered a talk on ‘ ‘ Analytical Techniques for materials’’ on Dec.19, 2012 in National level one week FDP on Engineering Materials under TEQIP at SBSSTC, Ferozepur.
6. Delivered an expert talk on “ Water Treatment” on Nov.26,2010 in two days national science seminar at Dev Smaj College for Women, Ferozepur.

7. Delivered an expert talk on “ Corrosion and its Control” on Nov.26,2009 in two days national science seminar at Dev Smaj College for Women, Ferozepur.

#### ADMINISTRATIVE / OTHER RESPONSIBILITIES

S. No.	From	To	Position Held	Assignment
1.	Aug. 1996	Feb. 2000	Warden Girls Hostel	To establish complete set up of Girls Hostel since beginning
2.	Aug. 2001	2002	Warden Girls Hostel	To look after hostel affairs.
3.	Sept.2002	Dec. 2007	Office In-Charge Academics / Dean Academic	To look after all the academics affairs of College / PTU / AICTE
4.	Sept. 2002	April. 2009	Chairperson Women Grievance cell	To solve problems of women of our institute
5.	April. 2012	Till Date	In Charge (Reprographic Section)	Day to day administrative work.
6.	Nov.,2013	Till date	Co-ordinator, Research Projects	To look after research projects.

#### PERSONAL INFORMATION

D.O.B. : 26-04-1970  
 Place of Birth : Yamuna Nagar  
 Father's name : Sh. Jagdish Mitter  
 Husband's Name : Sh. Anuj Kumar Sharma  
 Sex : Female  
 Marital status : Married  
 Nationality : Indian

### (SCHOLARSHIP / AWARD)

- State Govt. Merit Scholarship from 1985-1990
- 1<sup>st</sup> & 2<sup>nd</sup> Position in B.Sc (III) & B.Sc (II) in the College.
- JRF from DST, New Delhi w.e.f. 1991-1993.
- SRF from CSIR, New Delhi w.e.f. 1994-1995

### MEMBERSHIP

- Life Member, ISTE
- Member of Board of Studies (Chemistry) PTU, Jalandhar w.e.f. 2008 till date.

### EXTRA CURRICULAR ACTIVITIES

- Active member of NSS & Attended two Inter-College N.S.S Camps from 05-05-1986 to 15-05-1986 & 14-12-1985 to 24-12-1985.
- Member of University Yoga Team & bagged First Position in Yoga Competition at University Level.
- Organized Various Hostel Functions.

### DECLARATION

I hereby declare that all this information given above is true to the best of my knowledge and belief.

Date :

Place :

*Dr. SANGEETA SHARMA*