Curriculum Vitae

1 Name: Dr. ALOK CHATURVEDI

2 Designation: Professor

3 Department: Chemistry

4 Educational Qualification: M.Sc., Ph.D.



Level	Name of University	Year	Subjects/Title
B.Sc.	Uni.of Rajasthan	1986	Physics, Chemistry and Biology
M.Sc	M.D.S. Uni. of Ajmer	1988	Organic Chemistry
Ph.D.	Uni.of Rajasthan	1992	Organophosphates, Thiophosphates and Allied Derivatives of Nontransition Elements.
P.G.Diploma	Uni.of Rajasthan	1992	Management of Small Scale and Agro- Industries

5 Teaching / Research Experience:

UG 27 PG 27 Research 22

6 Membership (Academic Bodies)

- I. Member of B.O.S. of MDS Uni. from 2010-2016.
- II. Member of B.O.S of Sophia College from 2015-2022.
- **7. M.O.O.C. (Developed By Faculty):** Many e-contents and videos have been developed by me at NCERT (New Delhi), Regional Institute of Ajmer and Directorate of College Education, Rajasthan.

8. Academic Courses Attended:

Course	Place	Sponsoring Agency	Duration
Refresher	Uni.of Raj,	UGC	Jan. 3 to Jan. 23, 1997
	Uni.of Raj	UGC	Jan. 10 to Jan. 29, 1998.
	MDS Uni.	UGC	Sep 30 th to Oct. 10, 2004.
	MDS Uni.	UGC	Oct. 5 th to Oct. 25 th , 2005.

9. Seminar/ Conference attended

	Intern	ational		
S.No.	Name of Seminar/ Conference	Attended/ Paper Presented	Title of Paper	Date
1.	International Symposium on "Metallo- Organic Chemistry" at URO. Jaipur on	Attended		16-18 March, 1998.
2.	IIIrd International Conference on "Council of Surface Science and Catalysis" at MDSU, Ajmer	Attended		8-9 th Dec. 2003.
3.	International conference on "Emerging Trends in Chemical Sciences" ICETCS-07 at Mumbai University	Presented paper	Synthesis elemenets	23 rd to 25 th January, 2007.
4.	International conference on "Emerging Technologies in Environment Science and Engineering", at AMU Aligarh,	Presented paper	Synthesis Tin (iv)	26-28 th Oct. 2009.
5.	International Conference on "Climate Change on Sustainable Management of Natural Resources", at ITM University Gwalior.	Attended		10-12 th Nov. 2009
6.	International Conference on "Multidisciplinary Approaches to Diabetes Research & Health" at Jaipur.	Participated		14-16 th Nov., 2010
7.	II nd International Conference on "Climate Change and Sustainable Management of Natural Resources" at Gwalior.	Presented paper	Synthesis of Environm ent	5-7 th Dec., 2010
8.	Professor Ram Chandra Paul International Conference on "Emering Trends in Chemistry" at Chandigarh	Presented paper	Study of	11-12 th Feb., 2011.
9.	I st "International Science Congress" at Maharaja Ranjit Singh College Indore,	Presented paper	Microwav e Derivative s	24-25 Dec, 2011.
10.	International Interdisciplinary Conference on "Human Resource Development in South Asia" sponsored by ICSSR at Govt. College Ajmer on	Attended		19-21 th Dec. 2013.
11.	International Conference on "Frontiers at the Chemistry – Allied Sciences Interface" at University of Rajasthan, Jaipur.	Presented paper		22-23 July, 2017
12	International conference on "Gandhi: The Eternal Truth Relevance for Future Generation" at SPC Government College, Ajmer.	Participated		18-19 Sept., 2019

13.	International webinar on "Empowering Diversity in Science" organised by Department of Chemistry Kamla Nehru Mahavidyalay, Nagpur and Association of Chemistry Teachers Homi Bhabha Centre for Scientific Education Mumbai in collaboration with international Union of Pure and Applied Chemistry.	Participated		February 9th, 2021
13.	International Conference on "Effects of Covid 19 on Human Health Present and Future Therapeutic Landscapes" at SS Subodh Jain PG College Jaipur.	Participated		11 th -12th August 2021
14.	International conference on "Emerging Issues and Challenges in Energy and Environment for Sustainable Development" at Government College Rajgarh, Alwar.	Key note speaker		20th - 21st January 2023
15.	International Conference on "Emerging Issues and Challenges in Energy and Environment for Sustainable Development" organised by IQAC and R&D cell, Government COLLEGE, Rajgarh, Alwar.	Presented paper		20th-21st January 2023
16.	International Conference in "Sustainable Development Goals for Environment Conservation" at RR College, Alwar.	Presented paper		12-14 July, 2023
	Nati	onal		,
1.	National Workshop on "Radio-Chemistry and Application of Radio Isotopes" Sponsored by IANCAS, BARC, UGC and UOR. During Feb.	Participated		24 to March 15, 1992.
2.	National seminar on "Desert Women and Environment" organized by Vedic Kanya P.G. College, Jaipur	Attended		on 25 to 27 Nov., 1999.
3.	National Seminar on "Potable Water" Sponsored by PHED Regional Laboratory", Ajmer	Presented paper	Toxic Sanganer town	9-10 Jan. 2003
4.	National Seminar of "Element Organic Chemistry" at Vikram Univesity, Ujjain"	Attended		27-28 th Jan. 2003.
5.	National conference on "Recent Trends in Surface Sciences" at Guru Jambeshwar University, Hisar,.	Participated		13-14 March, 2005
6.	National conference on "Environment Vocabulary in Present Perspective" organized by Scientific and Technical Vocabulary bureau H.R.D. Ministry, New Delhi.	Participated		23-24 Aug. 2005
7.	National workshop on "Dissemination of Census Data" organized by Department of Population Studies, M.D.S. University,.	Participate		29 th Sept., 2006

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8.	National symposium on "Modern Trends		Synthesis	6-7, Oct.
	in Chemical Sciences" organized by	paper	and	2006
	Kurukshetra University, Kurukshetra		tin(iv)	
9.	National Seminar on "Environment	Participated		2 nd April,
	Challenges" organized by Chemistry			2010.
	Alumni M.L.V. Government College,			
	Bhilwara			
10.	National Conference on "Role of Green	Presented	Study of	18 th Dec.,
	Chemistry for Risk Free Environment" at	paper	multi	2010
	Jaipur	r r	Acid media	
11.	National conference on "Management	Presented	- 2.13.	8-9, Jan.
	and Accountability in Higher Education"	paper		2011.
	sponsored by UGC, Government College	Paper		2011.
	Ajmer			
12.	National Seminar on "Multi-brand FDI in	Participated	1	1-2, March.
12.	Organized Retail in India" sponsored by	1 articipated		2012.
	UGC, Government College Ajmer,			ZU1Z.
12	National Seminar on " Chemistry of	Attondad	+	Nov 29-30 th
<i>13.</i>	1	Attended		NOV 29-30*** 2012.
	Primates: Green Chemistry" sponsored			2012.
	by UGC, at Dayanand College Ajmer,	D. A		245 84
14.	National Seminar on "Innovative	Participated	[21 st March
	Teaching Methodology for 2D NMR			2013.
	Spectroscopy" at MDS University Ajmer	D	1	a -th
<i>15.</i>	National workshop on "Research	Participated	[24 th March
	Methodology and design" at Govt.]	2013.
	College Ajmer		<u> </u>	
<i>16.</i>	National Conference on "Emerging	Presented	Science	9-10 November
	Trends in Engineering and Sciences" at	paper		2013.
	Gurukul Kangari University, Haridwar			
17.	Workshop and Training Programme on	Coordinator		8 Jan.,
	"ICT" Sponsored by Directorate of			2014
	College Education and Spoken Tutorial,		[
	IIT Mumbai at Government College,		[
	Ajmer			
18.	National Workshop on "Technical	Participated		14-15 May
	Terminology in Engineering and	_	[2014.
	Science" at Arya College of Engineering		[
	and I.T. College		<u> </u>	
19.	National Workshop on "Technical	Participated	1	14-15 July
	Terminology in Engineering and	1	[2014.
	Science" at College of Technology and		[
	Engineering , M.L.S.U. Udaipur.		[
20.	National Seminar on "Technical	Subject		12-13 Aug
	Terminology in Science" at Government	~	[2014
	College, Ajmer.	Convener	[- ·
	3-,3			
21.	National Workshop on "Achieving			16 th February
	Excellence through E-Governance in		[2015.
	Higher Education" at Samrat 16 th		[,
	February 2015. Prithviraj Chauhan			
	Government College, Ajmer		[
22.	National Workshop on "Technical	Subject	†	2-3 March
~~.	Terminology and Science Education" at	Expert and		2-3 March 2015
	Mahila P.G. Mahavidyalaya Jodhpur.	Resource	[2013
	iviaima i .G. ivianaviuyalaya Jounpur.		[
		Person		
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23.	National Workshop on "Use of Technical Terminology in Engineering" at NHPCL Parbati III Power Station Bihali, Kullu (Himachal Pradesh).	Subject Expert and Resource Person	17-18 June 2015.
24.	National Workshop on "Recent Innovations of Technical Terminology in Engineering" at Bal Krishna Institute of Technology, Kota (Raj.).	Subject Expert and Resource Person	21-22 July 2015.
25.	National Workshop on "Recent Innovations of Technical Terminology and Biodiversity" at DRC Zoological Survey of India, Jodhpur (Raj.).	Subject Expert and Resource Person	11-12 Aug 2015.
26.	National Workshop on "National Policy of India in International System" at Nehru Study Centre, University of Rajasthan, Jaipur.	Subject Expert and Resource Person	28-19 Nov. 2015.
27.	National Workshop on "Recent Innovations in Science and Engineering Terminology" at Chartered Institute of Technology, Abu Road, Sirohi (Raj.).	Subject Expert and Resource Person	9-10 Dec., 2015.
28.	National Workshop on "Green Chemistry and Sustainable Technologies for Society, 2016" at Government Women Engineering College, Ajmer (Raj.).	Chair Person	11-12 Jan., 2016.
29.	National Workshop on "Scientific and Technical Terminology in Engineering and Chemical Sciences" at SRKP Government College, Kishangarh (Raj.)	Subject Expert and Resource Person	8-9 Feb., 2016.
30.	National Workshop on "Use of Technical Terminology in Science Teaching" at Dayanand College, Ajmer (Raj.)	Subject Expert and Resource Person	12-13 Aug., 2016.
31.	National Workshop on "Scientific and Technical Terminology in Environmental Science" at SGG Government College, Banswara (Raj.)	Subject Expert and Resource Person	16-17 Sept., 2016.
32.	National Workshop on "Scientific and Technical Terminology" at TGLE, Port Blair (Andaman and Nicobar Islands.)	Subject Expert and Resource Person	15-16 Nov., 2016
33.	National Workshop on "Technical Terminology and Science Teaching" at Zakir Husain College, University of Delhi (Delhi)	Subject Expert and Resource Person	22-23 Feb., 2017.
34.	National Workshop on "Scientific and Technical Terminology in Teaching of Science" at Aggarwal College, Ballabgarh (Haryana)	Subject Expert and Resource Person	3-4 March, 2017

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35.	National Workshop on "Instrumentation Techniques for Research in Chemical Sciences" at Canodia P.G. Mahavidyalaya, Jaipur (Raj.)	Co- Chairperson and Presented Paper		22-23 Dec., 2017.
36.	National Workshop on "Nuclear and Applications of Radio Isotopes" at Regional Institute of Education, Ajmer (Raj.)	Participated		12-13 March, 2018
37.	National Conference on "Advances in Science and Technology-an Interdisciplinary Approach" at Sophia Girls College, Ajmer (Raj.)	Chairperson and Invited Speaker	Environ- Economic Trithio- phosphate	15-16 Oct, 2018
38.	National Workshop on "Capacity Building of KRP's in Science Education at Secondary level for the Resource Centre OF Jharkhand" at RIE Bhubaneswar.	Resource Person and Invited Speaker		22-23 Nov, 2018
39.	National Workshop on "Development of Training Package on Learning Outcomes in Science and Mathematics at Elementary level" at Regional Institute of Education, Ajmer (Raj.)	Resource Person		21-25 Jan, 2019
40.	National Workshop on "Instrumentation Techniques For Research in Chemical Sciences" at Sophia Girls College, Ajmer (Raj.)	Invited Speaker	NMR: An Important TOOL	6-7 Sept, 2019
41.	National seminar on "Green chemistry and Commission for Scientific and Technical Terminology:- Today's necessity" at Pacific University Udaipur.	Invited Speaker		3rd and 4th November, 2019
42.	National Webinar on "Novel techniques and Advancements in Chemical and Physical Sciences" at Department of Chemistry, Samrat Prithviraj Chauhan Government College, Ajmer.	Participated		21st July 2020
43.	National Webinar on "Restructuring Geography to Meet a New Challenges" at Samrat Prithviraj Chauhan Government College, Ajmer.	Participated		July 24th 2020
44.	National Webinar on "Recent Trends in Physics" at Samrat Prithviraj Chauhan Government COLLEGE, Ajmer.	Participated		30th July 2020
45.	3 days Workshop Certificate course on "Essential Practice of heartfulness Meditation for Self Learning and Development" by heartfullnet education online.	Participated		10th September 2020

46.	National Webinar on "Standards and Procedures for NAAC Evaluation" organised by Department of Postgraduate Studies and Departments of Chemistry Pacific Academy of Higher Education and Research Pacific University Udaipur.	Participated	September 4th 2021
47.	National Webinar on "Spectroscopic Techniques:- A Tool for Structure Elucidation" organised by department of chemistry, Sophia Girls College(Autonomous), Ajmer.	Resource Person	October 21 st -22 nd 2021
48.	Training and Placements Officers Meet on "Enhancing Campus Placements Stating up the game", sponsored by ICFAI Business Schools.	Participated	9th September 2022

10. Organizing Sec./Convener of conference/Seminar/Webinar:

- 1. Organizing Secretary of National Conference sponsored by Commission for Scientific and Technical Terminology of Physics, Chemistry and Mathematics subjects, held at SPC Government College, Ajmer in August 2014.
- 2. Organizing Secretary of National Conference sponsored by Commission for Scientific and Technical Terminology of Botany, Zoology and Geography subjects, held at SPC Government College, Ajmer in September 2015.
- 3. Coordinator of Microsoft Office Specialist Training Program for College Lectures and Students Sponsored by Directorate of College Education, Jaipur and Microsoft from 8 Oct -15 Dec., 2018.
- 4. Organising secretary in the State Level online one week Gyan Ganga Faculty Development Program Initiative for Teaching Learning Excellence in Chemistry conducted by SPC Government College, Ajmer from 11 to 16th January 2022.

11. Member/Subject Expert in Selection Committee

- 1. Member of selection committee of Assistant Professor in Chemistry at Regional Institute of Education on 5th June 2018.
- 2. Member of selection committee of PGT Chemistry as subject expert on 28th may, 2018 at Region Institute of Education on 28th may, 2018.
- 3. Member of Selection Committee for Assistant Professor in Chemistry at Regional Institute of Education on 25th February 2021.
- 4. Member of Selection Committee as Subject Expert for Assistant Professor in Chemistry at Region Institute of Education on 7th April, 2022.

12. Resource Person/ Subject Expert In Selection Committees, Various Teachers Training & Extension Program

- 1. Worked as subject expert in various Teacher's Traning Programme at Sec. and Sr. Sec. Stage Organized by T.T. College Ajmer Since 1996.
- 2. Worked as subject expert in various Teacher's Traning programme at Sec. and Sr. Sec. Stage Organized by Shri Agrasen P.G. College of Education (CTE), Keshav Vidyapeeth Jamdoli Jaipur Since 1996.
- 3. Worked as Subject Expert in Science Text Book Writing Workshop Organised by Lok Jumbish Parishad Raj. & Vidya Bhawan Society, Udaipur from 08th to 13th May 1999.
- 4. Worked as Resource Person in Science Teachers Tranning Programme Organised by Lok Jumbish Parishad Raj. & Vidya Bhawan Society, Udaipur from 14th to 24th Jun. 1999.
- 5. Participated in one day User's meeting for "Latest Development in Spectroscopic Methods of Analysis" on 27th Sep. 2007 at CDRI Lucknow.
- Worked as resource Person for Development of work book of Science at Upper Primary Level,
 Organised by SSA, Raj. from 22nd April to 25th April 2008 at DIET, Goner, Jaipur.
- 7. Worked as resource person in Training of MT's of science of Bavan District for classes VI to VIII at Baran under joint venture of Digantar; and Vidya Bhavan Society Udaipur from 14th to 22nd June 2008.
- 8. Worked as resource person for program entitled "Training of KRP s of Chemistry at Sr. Sec. Level" for the states of Uttarakhand and J& K. on 22nd July 2008 at RIE, Ajmer.
- 9. Worked as Subject Expert to Analyse VCD's of Science on 29th &30th Sep. 2008, Organised by Raj. Edu. Initiated, SSA Raj. & Edu. Dev. Centre, Banglore.
- 10. Worked as resource person for program entitled "Training of KRP s of Chemistry at Sr. Sec. Level" for the states of Uttarakhand and J& K. on 22nd Sep. to 26th Sep. 2008 at RIE, Ajmer.
- 11. Worked as resource person in Training of Science Teachers in School run by Digantar , Jaipur from 22^{nd} June 2009.
- 12. Worked as resource person for a Teachers training program entitled "Training of KRP s in Teaching of Science in the Light of NCF-2005 at Secondry Level" for the states of Uttarakhand on 16th Nov. to 20th Nov. 2009 at RIE, Ajmer.
- 13. Worked as subject expert in "Workshop on Development of Training Module for Teaching of Science at UPS Level Using Science Kit" conducted by UNICEF and Rajasthan Council of Elementary Education, Jaipur from 19th to 28 May 2010.
- 14. Worked as resource person in Training Programme for "Effective Use of Science Kit in Teaching in Science at UPS Level" organized by UNICEF, CERP, SSA Raj. 16th to 25th June 2010.
- 15. Worked as Subject Expert in "5-Days Nurturance Programme for National Talent Scholarship (NTS) Awardees" from 27th to 31th Jan. 2011 at RIE Ajmer.
- 16. Worked as subject expert in "Workshop on Development of Training Module for Teaching of Science at UPS Level Using Science Kit" conducted by UNICEF and Rajasthan Council of Elementary Education, Jaipur from June 2011.

- 17. Worked as resource person in training programme for effective use of science kit in teaching in science at UPS level organized by SSA Raj. 16th to 25th Aug 2011.
- 18. Worked as subject expert in development of Teachers Tranning Module for Kasturba Gandhi Balika Vidyalaya (KGBV) organized by UNICEF, CERP on April-May, 2012.
- 19. Worked as Resource Person in Teachers Tranning For KGBV at UPS Level Organised by UNICEF, CERP, SSA Raj May –June 2012.
- 20. Subject Expert in The Interview for empanelment of Guest Faculty in the Department of Chemistry at Government Women Engineering College Ajmer on 31st July 2014.
- 21. Worked as Resource Person in "10 days content Enrichment Programme for PGTs in Chemistry" at RIE Ajmer on 10th October 2014.
- 22. Subject Expert in the meeting of Selection committee for selection of PGT Chemistry on Contract bases at RIE Ajmer on 25th October 2016.
- 23. Subject Expert in the meeting of Selection committee for selection of Teachers in DMS on Contract bases at RIE Ajmer on 22nd May, 2017.
- 24. Subject Expert in the meeting of Selection Committee for selection of Assistant Professor Chemistry on Contract bases at RIE Ajmer on 9th June, 2017.
- 25. Resource Person in National Conference on "Advances in Science and Technology-an Interdisciplinary Approach" at Sophia Girls College, Ajmer (Raj.) on 15-16 Oct, 2018.
- 26. Resource Person in National Workshop on "Capacity Building of KRP's in Science Education at Secondary level for the Resource Centre OF Jharkhand" at RIE Bhubaneswar on 22-23 Nov,2018
- 27. Resource Person in National Workshop on "Development of Training Package on Learning Outcomes in Science and Mathematics at Elementary level" at Regional Institute of Education, Ajmer on 21-25 Jan, 2019
- 28. Resource Person in National Workshop on "Instrumentation Techniques For Research in Chemical Sciences" at Sophia Girls College, Ajmer (Raj.) on 6-7 Sept, 2019.
- 29. Resource Person in the Program under PAC project and titled "Development and Production of e Resources for School and Teacher Education Curriculum" at Regional Institute of Education, Ajmer from February 27th to March 23rd March 2023.

13. Research Publications

S.No.	Title of Paper	Name of Journal with Impact factor & ISSN No.	Volume and No. with Year	Citation Index
1.	Synthesis and properties of mixed ligand complexes of diorganotin (IV): Part-I. β-diketonato diorganotin dialkyl (or aryl) dithiophosphates and 1-β-diketonato-3-dialkyl dithiophosphato tetrabutyl distannoxanes;	Phosphorus, Sulfur and Silicon, (IF-0.716, ISSN-1042-6507).	70,303 (1992).	12
2.	Synthesis and properties of mixed ligand complexes of diorganotin (IV): Part-II, Acetato diorganotin (IV) β-diketonates and 1-acetato-3-β- diketonato tetraorgano distannoxanes;	Main Group Metal Chemistry, (IF-0.207, ISSN-0334-7575)	16, 1 (1993).	18

3.	Synthesis and properties of mixed ligand complexes of diorganotin (IV): Part-III, β-diketonato diorganotin alkylene	Main Group Metal Chemistry. (IF-0.207, ISSN- 0334-7575)	16, 45 (1993).	6
4.	dithiophosphates. Synthesis and properties of mixed ligand complexes of diorganotin (IV): Part-IV, Isopropoxydibutyltin β -diketonates and β -ketoesters;	Bol. Soc. Chil. (ISSN:0366- 1644)	38,265 (1993).	-
5.	Synthesis of spectroscopic studies of 2-alkylene dithiophosphato-1,3,2-dioxarsolanes and – arsenanes;	Phosphorus, Sulfur and Silicon, (IF-0.716, ISSN-1042- 6507).	80, 141 (1993).	25
6.	Boron spirochelates derived from isopropoxy- 4H-1,3,2-benzodioxaborin;	Synth, React, Inorg. Met Org. Chem.; . (IF-0.504,ISSN- 0094-5714)	23, 1599 (1993).	7
7.	Metal and organmetal complexes of oxy and thiophosphorus acids; Part IX; O,O'-Alkylene dithiophophates of zinc and cadmium	Phosphorus, Sulfur and Silicon; (IF-0.716, ISSN-1042-6507).	82, 31 (1993).	14
8.	Metal and organometal complexes of oxy and thiophosphorus acids; Part – X, Mercury (II) and organomercury (II) alkylene dithiophosphates,	Main Group Metal Chem; (IF-0.207, ISSN-0334-7575)	16, 235 (1993).	19
9.	Synthesis and spectroscopic studies of O,O'-dialkyl (alkylene) ditiophosphates of trimethylamino boranes.	Phosphorus, Sulfur and Silicon; (IF-0.716, ISSN-1042-6507).	90, 229 (1994).	16
10.	Synthesis and spectroscopic studies of diphenyl phosphinato derivatives of boron;	Monatshefte Fur Chemie; (IF-0.441, ISSN:1505-2249)	125, 607 (1994)	10
11.	Cleavage reaction of triphenylantimony with dialkyl (or alkylene) dithiophosphoric acids;	Synth. React. Inorg. Met. Org. Chem.; (IF-0.504,ISSN-0094-5714)	26, 1025 (1996).	13
12.	Synthesis and spectroscopic studies of diorganotin (IV) bis-O-alkyl phosphonates;	Phosphorous, Sulfur and Silicon (IF-0.716, ISSN-1042-6507).	112, 179 (1996).	16
13.	Triphenylphosphonium and arsonium salts of alkylene dithiophosphato moieties;	Phosphorous, Sulfur and Silicon (IF-0.716, ISSN-1042-6507).	122, 167 (1997)	21
14.	O,O'-Dialkyl and alkylene dithiophosphates derivatives of silver (I), X-ray crystal structure of [Ag(S ₂ POCH ₂ CMe ₂ CH ₂)PPh ₃] ₂ ,	Trans. Met. Chem (IF-1.01, ISSN-1572-901X)	27, 651, 2002	32
15.	O-Alkyl trithiophosphate derivatives of triorganotin (IV) and S-alkyl trithiophosphate derivatives of diorganation (IV) Chloride	Phosphorous Sulfur and Silicon; (IF-0.716, ISSN-1042-6507).	178(9), 1923-29 (2003).	8
16.	Complexation behavior of 5(2'-Hydroxy phenyl)- 3-Phenyl pryazoline with some metallic moieties,	Polish J. Chem. (IF-0.441, ISSN:1505-2249)	77, 109 (2003).	6
17.	Corrosion inhibitory effect of some Schiff's bases on mild steel in acid media	J. Chil. Chem. Soc., (2007). (IF-0.532,ISSN: 0717-9707)	52 (3), 1206, (2007)	5
18.	Synthesis and properties of mixed ligand complexes of diorganotin (IV): Part (V), synthesis and characterization of antifungal acetylacetonato diorganotin (IV) O- alkyl trithiophosphates,	Phosphorous, Sulfur and Silicon, (IF-0.716, ISSN-1042-6507).	182, 2821 (2007).	14
19.	Inhibition effect of nitrogen containing ligands on corrosion of aluminium in acid media with or without KCI.	Polish J. Chem (IF-0.441, ISSN:1505-2249)	82, 591 (2008).	7
20.	Study of corrosion inhibition efficiency of naturally occurring Argemone maxicana on aluminium in HCl solution,	J. of Tech. and Res. in Chem., (ISSN:0971-6408)	15(1), 21 (2008).	-
21.	Synthesis and characterization of antibacterial benzoylacetonato diorganotin (IV) –O- alkyl	Main Group Met. Chem. (IF- 0.207, ISSN-0334-7575)	31(6), 319 (2008).	14

	trithiophosphates			
22.	p-nitrophenyl and p- nitrobenzoyl derivatives of O,O' alkylene dithiophosphates,	J. Chill. Chem. Soc., (IF-0.532, ISSN-0717-9707)	54(3), 1565 (2008).	
23.	Synergistic inhibition between Schiff's bases and sulphate ion on corrosion of Al in sulphuric acid,	Protections of Metals, (IF-0.466, ISSN-2070-2051)	45(4), 1-6 (2009).	5
24.	Synthesis and characterization some Antibacterial Dibenzoylmethanato Diorganotin (IV) –O- alkyltrithiophosphates,	J. Chienese Chem. Soc., (IF- 0.678, ISSN-0009-4536)	56, 636 (2009).	7
25.	A comparative study of corrosion inhibition efficiency of stem and leaves extract of ocimum sanctum for mild steel in HCl,	Protection of Metals, (IF- 0.466, ISSN-2070-2051)	46(2), 267 (2010).	3
26.	Study of corrosion inhibition efficiency of some Schiff's bases on Al in trichloroacetate acid solution,	Rev. Roam. Chem , (IF-0.311, ISSN-0035-3930)	55(4), 227 (2010).	4
27.	A comparative study of corrosion inhibitive efficiency of some newly synthesized Mannic bases with their parent amine for Al in HCl solution,	Research Journal of Chemical Sciences, (ISSN:2231-606)	1(5), 1-7 (2011).	-
28.	Corrosion inhibitory effect of different varieties of holy basil on tin in acid media,	J.Electrochem. Soc. India, (2011). (ISSN:0013-466)	60(1/2), 69-72 (2011)	11
29.	Inhibition effect of substituted thiourea on corrosion of Al in acid media with and without NaCl	J. Electrochem. Soc. India (2011). (ISSN:0013-466)	60(1/2), 73-80 (2011)	12
<i>30.</i>	Synthesis and spectroscopic characterization of Lead(II) bis {O,O'-ditolyldithiophosphates} and their adducts with 2,2'-bipyridyl and 1,10-phenanthroline	E-Journal of Chemistry , (IF-0.76, ISSN:0973-4945)	8(S1), S113-S118 (2011).	-
31.	Corrosion Inhibitive effect of <i>Withania Somnifera</i> (A medicinal plant) on Aluminium in HCl solution,	Research Journal of Recent Sciences, (ISSN:2277-2502)	1(ISC-2011), 73-78 (2012).	2
32.	Study of corrosion inhibition efficiency of newly synthesized Schiff's bases on Aluminium in HCl solution,	Elixir, (ISSN:2279-712)	44, 7444-7448 (2012).	6
<i>33.</i>	Microwave assisted synthesis, characterization and antibacterial activity of some Arsenic(III) derivatives of O-alkyl or O-aryl trithiophosphates,	Research Journal of Chemical Sciences, (ISSN:2231-606)	2(5), 57-65 (May, 2012).	2
34.	Corrosion inhibitory effects of some substituted thiourea on mild steel in acid media	Research Journal of Chemical Sciences, (ISSN:2231-606)	2(2), 18-27 (Feb, 2012).	3
<i>35.</i>	Corrosion inhibition of mild steel by alkaloid extract of <i>Ocimum Sanctum</i> in HCl and HNO ₃ solution,	Research Journal of Chemical Sciences, (ISSN:2231-606)	2(5), 51-56 (May, 2012).	-
36.	Synthesis, spectroscopic studies and antifungal activity of O-alkyl or O-aryl trithiophosphate derivatives of trimethylaminoborane,	Phosphorous, Sulfur and Silicon, (IF-0.716, ISSN-1042-6507).	187, 1236-1242 (2012).	17
<i>37</i> .	Efficacy of some newly synthesized mannich bases as corrosion inhibitor on aluminium in HCl solution	Elixir , (ISSN:2279-712)	46, 8382-8385 (2012).	2
38.	Synthesis, Properties and Spectroscopic Characterization of some diorganotin (IV) dithiocarbamate complexes	Research Journal of Pharmaceutical Biological and Chemical Sciences, (ISSN:0975-8585)	3(3), 1311-1318, 2012.	-
<i>39</i> .	Study on corrosion inhibition efficiency of stem alkaloid extract of different varieties of holy basil on Aluminium in HCl solution	The Korean Chemical Society (ISSN:1017-2548)	56 (4), 1 (2012).	5

40.	Synthesis and characterization of some antifungal O-alkyl (O-aryl) trithiophosphato derivatives of 1,3,2-dioxaborinanes,	Research Journal of Pharmaceutical Biological and Chemical Sciences, (ISSN:0975-8585)	3(4), 223-230, (2012).	6
41.	Enviro-economic synthessis of some Antimony (III) derivatives of O-alkyl or O-aryl trithiophosphates and studies of their antibacterial activity	International Journal of Chem Tech Research, (IF- 2.168, ISSN:0974-4290)	4(4), 1329-1338, 2012	2
42.	Comparative study of corrosion inhibition effiency of naturally occurring ecofriendly varieties of holy basil for tin in HNO ₃ solution,	Open J. of Metal, (IF- 1.14, ISSN:2234-7593)	2, 68-73, (2012).	6
43.	Synthesis, spectroscopic studies and antifungal activity of Tris (O-alkyl or O-aryl Trithiophosphato) Aluminium (III)	Phosphorous, Sulfur and Silicon(IF-0.716, ISSN-1042-6507).	188, 1427-1432, (2013).	14
44.	Corrosion Inhibitory effect of some Mannich Bases on mild steel in acid media,	J. Indian Chem. Soc., . (IF-0.207, ISSN: 0334-7575)	90, 325-328, (2013)	7
45.	A Comparative study for Corrosion Combating Effects of Newly Synthesized Schiff's Base Derivatives in 2.5 M Nitric Acid, Hydrochloric Acid and in their Binary Mixture on Aluminium.	International Journal of Recent Scientific Research, (ISSN: 0976-3031)	4 (10), 1562-1566 (2013)	
46.	Efficiency of some newly synthesized Mannich bases as corrosion inhibitor for mild steel in HNO ₃ solution, Asian.	Asian J. of Adv.Basic Science,	3(1), 67, (2014).	-
47.	Synthesis and Spectroscopic studies of some biologically important esters of O-alkyl Trithiophophate	International. J. of Sci.Res.and Edu	3(8), 4244 (2015).	-
48.	Comparative Study of Corrosion Inhibition Efficiency of <i>Phyllanthus Niruri</i> for Tin in Different Solutions of HCl and H ₂ SO ₄ .	IOSR of Journal of Pharmacy (ISSN: 2319-4219)	7(7), 40-46 (2017)	2
49.	Corrosion Inhibition Effect of flower of Euphorbia Caducifolia for Iron in Acid Media.	IOSR of Journal of Pharmacy (ISSN : 2319-4219)	7(8), 30-37(2017)	7
50.	Corrosion Inhibitive Effects of <i>Tylophora Indica</i> (A Medicinal Plant) on Tin in Acidic media	IOSR of Journal of Pharmacy (ISSN: 2319-4219)	7(9), 13-19 (2017)	15
51.	Synthesis and Characterization of O-Alkyl or O-Aryl Trithiophophate Derivatives of Chromium (III)	International Journal of Recent Scientific Research (ISSN: 0976-3031)	8(9), 19894-19896 (2017)	3
52.	Microwave Assisted synthesis and Characterization of O-Alkyl or O-Aryl Trithiophosphates Derivatives of Iron.	International Journal of Recent Scientific Research (ISSN: 0976-3031)	8(9), 20235-20237 (2017)	6
<i>53.</i>	Corrosion Inhibition Effect of Arial Parts of Euphorbia Caducifolia for Aluminium in HCl.	Elixir (Corrosion and Dye) (ISSN: 2229-712X)	113, 49203-49208 (2017)	18
54.	Synthesis Characterization and Antibacterial Activity of O-Alkyl/O-Aryl Trithiophosphates of Mn(II)	International Journal of Recent Research Aspects (IF: 1.235, ISSN: 2349-7688)	4(3), 183-187 (2017)	5
55.	Corrosion Inhibitive Effects of Leaves of Tylophora Indica on Aluminium in HCl.	Elixir (Corrosion and Dye) (ISSN: 2229-712X)	115, 49782-49786 (2018)	15
56.	Corrosion Inhibitive Effects of Tin by Alkaloid Extract of Aerial Parts of <i>Phyllanthus Niruri</i> in HCl and H ₂ SO ₄ .	Elixir (Corrosion and Dye) (ISSN: 2229-712X)	116, 49989-49993 (2018)	13
57.	Synthesis Characterization of O-Alkyl or O-Aryl Trithiophosphates of Zinc	International Journal of Innovative Research in Science, Engineering and Technology. (ISSN: 2319-8753)	7(1), 546 (2018)	6

58.	Corrosion Inhibition Effect of Arial Parts of Euphorbia Caducifolia for Aluminium in HNO ₃ .	Elixir (Corrosion and Dye) (ISSN: 2229-712X)	116, 50101-50106 (2018)	4
<i>59.</i>	Synthesis Characterization and Antibacterial Activity of O-Alkyl/O-Aryl Trithiophosphates derivatives of Vanadium(III)	International Journal of Recent Research Aspects (IF: 1.235, ISSN: 2349-7688)	9(4A),25584-25587 (2018)	5
60.	Microwave Assisted synthesis and Characterization of O-Alkyl or O-Aryl Trithiophosphates Derivatives of Ruthenium.	International Journal of Engineering Science Invention (ISSN: 2319-6734)	7(2),1-5 2018	-
61.	Corrosion Inhibitive Effects of Leaves of <i>Tylophora Indica</i> for Iron in Acid Media.	International Journal of Green and Herbal Chemistry. (ISSN: 2278-3229)	7(4) 885-896, 2018	10
<i>62.</i>	Corrosion Inhibition Effect of Arial Parts of Euphorbia Neriifolia Linn on Aluminium in Nitric Acid Solution.	International Journal of Green and Herbal Chemistry. (ISSN: 2278-3229)	8(4) 801-814, 2019	3
<i>63</i> .	Microwave Assisted synthesis and Characterization of O-Alkyl or O-Aryl Trithiophosphates Derivatives of Nickel.	Journal of Advance Scientific research (ISSN: 0976-9595)	11(1) 353-357,2020	5
64.	Enviro-economic synthesis, Characterization and Antibacterial study of O-Alkyl or O-Aryl Trithiophosphates of Cadmium.	Applied Ecology and Environmental Sciences (DOI:10.12691/aees-8-4-5)	8(4) 174-778, 2020	6
65.	Phytochemistry and Ethanomedical Efficiency of Nyctanthes arbortristis: A review.	Journal of interdisciplinary Cycle Research ISO: 7021-2008 UGC-CARE ISSN: 0022-1945	15(4), 210-241, 2023	11
66.	Sulphuric acid Catalyzed Corrosion Inhibitory Activity of Aerial Parts of Phyllanthus neruri on Aluminium.	International Journal of Green and Herbal Chemistry DOI: 10.24214/IJGHC ISSN: 2278-3229	12(3),142-154, 2023	9
67.	Study of Corrosion Inhibitory Effects of Alcoholic Extract on metal Tin in Acidic Media HCl with or without additives KCl	Journal of Scientific Research ISSN: 2070-0237	15(2),519-529 2023	6
68.	Corrosion Inhibition Effect of Tin metal by Ethanolic Extract of Tinospora Cordifolia Plant (stem/leaf) in H ₂ SO ₄ acid using Additives and its Antibacterial Properties	IOSR Journal of Applied Chemistry ISSN: 2278-5736	16(3), 51- 64, 2023	5
69.	Corrosion Inhibition of Copper Metal by Ethanolic Extract of Tinospora Cordifolia Plant in Sulphuric acid and Hydrochloric Acid of Varying Strength (0.5N - 3N) and using Additives.	International Journal for Research in Applied Science Engineering and Technology. ISSN: 2321-9653	11(6) 352-372, 2023	11

14. Research Projects

	Title of the Project	Year	Name of	Fund	Present
			funding	available/	status
			agency	utilized	
1.	Research Associate from C.S.I.R. New Delhi,	Jan 1 st 1995 to	CSIR	RA Ship	Completed
	Sanction No. 9/149/(191)/94-EMR-I,	Feb 29 th 1996.		_	_
2.	Minor Research Project from U.G.C. Sanction No.	Jan 2007 to Jan	UGC	65000	Completed
	4S-87/2006-07 (MRP/CRO) Dated 12-12-06	2009	Bhopal		_
3.	UGC Minor Research Project of Rs. 1,60,000/-	2010-2012.	UGC	1,60,000	Completed

Sanction letter No. 111/302027/09-10/CRO	Bhopal	

15.Research Supervision

• Basic Field of specialization:

❖ Ph.D.

S.No.	Name of Student	Title of thesis	Present status	Date and Year
				of Award, if so
1.	Dr. Taruna Sethi:	Studies on nitrogen containing ligands	Awarded	2009
		as potential corrosion inhibitor and effect of		
		additives upon corrosion inhibition Activity"		
2.	Dr. Leena Chordia	Synthetic, structural and biochemical	Awarded	2010
		aspects of thiophosphates of some metallic		
		and organo metallic moieties.		
<i>3.</i>	Dr. Richa Tripathi	: Studies of pyridyl substituted thioureas as	Awarded	2013
		corrosion inhibitor and effect of additives		
		on different metal ions,		
4.	Dr. Kiran Sankhala:	Synthesis, characterization and	Awarded	2013
		antibacterial activity of thiophosphates of		
		some organometallic moieties		
<i>5.</i>	Dr. Nutan Kumpawat:	Study and analysis of aerial parts of	Awarded	2014
		ocimum sanctum as antibacterial,		
		antifungal and anti potential corrosion		
		inhibitor		
<i>6</i> .	Dr. Neelam Jeengar:,	Studies on some Schiff's bases derivatives	Awarded	2014
		as corrosion combating materials in		
		mineral acids		
7.	Dr. Sudhanshu Khichi:,	Synthesis and antimicrobial activities of O'	Awarded	2016
		alkyl Trithiophosphates		
<i>8.</i>	Ms. Reena Sharma	Study and Analysis of Corrosion Inhibitory	Awarded	2019
		Effect of Aerial parts of Euphorbia		
		Caducifolia		2020
9.	Ms. Suman Bhatti	Synthesis Characterization and	Awarded	2020
		Antibacterial Activity of O-Alkyl/O-Aryl		
		Trithiophosphates of Gp-5 (V, Nb, Ta) and		
10	M . O D M	Gp-7 (Mn, Tc, Re) elements.	A	2020
<i>10.</i>	Mr. O.P. Meena	Study and Analysis of aerial parts	Awarded	2020
		Phyllanthus Niruri and Euphorbia Nerifolia		
		as antibacterial, antifungal and Potential		
11	Ma Dhauti Chatumadi	corrosion inhibitor.	A	2021
11.	Ms. Bharti Chaturvedi	Microwave Assisted synthesis and	Awarded	2021
		Characterization of O-Alkyl or O-Aryl		
		Trithiophosphates of same transition elements.		
12.	Mc Kamua Mundra	Enviro-Economic Synthesis,	Awarded	2022
12.	Ms. Kamya Mundra	Characterization and Antibacterial study of	Awaiueu	2022
		Metal derivatives of O-Alkyl or O-Aryl		
		Trithiophophate.		
13.	Mr. Mahendra Kumar	Synthesis Characterization and	Awarded	2023
13.	Rana	Antimicrobial studies of metal derivatives	Awaiucu	2023
	Ivalia	of O-Alkyl or O-Aryl Trithiophosphates.		
14.	Ms. Vineeta Mandawara	Study and Analysis of corrosion Inhibitory	Registered	_
14.	ivis. Villecta ividiluawala	Effect of aerial parts of <i>Tinospora</i>	wegisteren	=
		Cordifolia.		
		Cordijolia.		

<i>15.</i>	Ms. Chitransh Sisodia	Study and Analysis of corrosion Inhibitory	Registered	
		Effect of aerial parts of Ailanthus excelsa.		

* M.Phil.

S.No.	Name of Student	Title of Dissertation	Present status	Date and Year of Award, if so
1.	Mr. Charan Singh	Corrosion inhibition effect of Taramera for mild steel in hydrochloric acid	Awarded	2007
2.	Ms. Pratibha Sharma	: Study of cooling water treatment and control of scaling fouling and corrosion in thermal power plant of Shree Cement, Beawar.	Awarded	2007
3.	Mr. Sukumal Jain:	Synthesis and characterization of metal complexes of O-alkyl trithiophosphate.	Awarded	2007
4.	Ms. Nutan Kumpawat:	Corrosion inhibition of Holy Basil (ocimum sanctum) for mild steel in acid media.	Awarded	2008
5.	Ms. Sandeep Gill:	Synthesis and characterization of O-alkyl trithiophosphato derivatives of tin.	Awarded	2008
6.	Ms. Anupama:	Synthesis of some noble antibacterial organic esters of O'alkyl trithiophosphates.	Awarded	2009
7.	Ms. Anita Khiyani	Synthesis and characterization of some antifungal thio esters of O' alkyl trithiophosphates.	Awarded	2009
8.	Ms. Neetu Detwal:	Organic esters of O' alkyl (aryl) trithiophosphates "Synthesis, characterization and their antimicrobial activity.	Awarded	2009
9.	Ms. Pinki Goyal:	Chemical analysis study of various vegetable oil.	Awarded	2010
10.	Mr. Tinkoo Jain:	Analysis of cooling water, controle of scaling fouling and corrosion of a thermal power plant.	Awarded	2010

16. Book / Chapter Writing

• Book (Single Author/ multi-author)

Title of Chapter	Authors / Editors	Name of the Book with ISBN/ ISSN No.	Publisher with Place	Year of Publication
B.Sc. Part III Organic Chemistry (Hindi)	Author		CBH Jaipur	1998
B.Sc. Part II Organic Chemistry (Hindi)	Author		CBH Jaipur	1999
B.Sc. Part I Organic Chemistry (Hindi)	Author		CBH Jaipur	1999
B.Sc. Part III Organic Chemistry (english)	Author		CBH Jaipur	2000
B.Sc. Part II Organic Chemistry (english)	Author		CBH Jaipur	2000
B.Sc. Part I Organic Chemistry (english)	Author		CBH Jaipur	2000
Class XII Chemistry Part-I (Hindi)	Author		CBH Jaipur	1999
Class XII Chemistry Part-II (Hindi)	Author		CBH Jaipur	1999
Class XI Chemistry Part-I (Hindi)	Author		CBH Jaipur	1998

Class XI Chemistry Part-II (Hindi)	Author	CBH Jaipur	1998
Chemistry Practical Class XII	Author	CBH Jaipur	1999
Chemistry Practical Class XI	Author	CBH Jaipur	1998

17. Recognition, if any:

As Reviewer

- Journals of Chemical Engineering Communications (CEC), An International Journal published from Berkeley University, USA.
- 2. Journal of Phosphorous, Sulfur and Silicon, An International Journal published from Taylor & Francis, USA.
- 3. European Journal of Chemistry, An International Journal.
- 4. British Journal of Applied and Technology.xsd
- 5. Journal of Scientific Research and Reports.

As Member of National Advisory Board

- 1. 3rd International Conference on *"Recent advances in chemical and environmental science at ITM University, Gwalior from 25 to 26 September 2014.*
- 2. National Seminar on Recent Trends in Chemical Sciences at SGG Government College Banswara from 18 to 19 January 2016.

18. Member of Board Studies

- 1. Working as member of Board of studies in **Chemistry** by M.D.S. University Ajmer for the season 2012-13, 2013-14. 2015-16,2016-17
- 2. Working as member of Board of studies in **Applied Chemistry** by M.D.S. University Ajmer for the season 2012-13, 2013-14.
- 3. Working as member of Board of studies in **Chemistry** by Sophia College Ajmer for the season 2015-16, 2016-17

19. Participation in Other Programmes:

- Attended Refresher Course in ENVIRONMENT under Academic Staff Orientation Scheme of UGC from Jan. 3 to Jan. 23, 1997.
- Attended Refresher Course in ENVIRONMENT, sponsored by UGC, New Delhi and A.S.C. University of Rajasthan from Jan. 10 to Jan. 29, 1998.
- Attended PATENT AWARENESS WORKSHOP organized by P.I.C., DST, GOR & MDSU on 27th March 2003.
- 4. Participated in **FDP** sponsored by DST New Delhi and GOVT. of India from 10 to 20th March 2004.
- 5. Attended Refresher Course in **ENVIRONMENT**, sponsored by UGC, New Delhi and A.S.C. M.D.S. University Ajmer from Sep 30th to Oct. 10, 2004.
- 6. Attended Refresher Course in **CHEMISTRY**, sponsored by U.G.C., New Delhi and A.S.C. M.D.S. University Ajmer from Oct. 5th to Oct. 25th, 2005.

- 7. Participated in two days personality development programme sponsored by Higher Education Department 18-19 Feb, 2008.
- 8. Participated in training programme on **NSS Orientation Programme** sponsored by Ministry of Youth Affairs and Sports, Government of India at HCM RIPA, Jaipur from July 15-24th, 2008.
- 9. Attended "National Service Scheme Workshop" on 15-16th Jan., 2009.
- 10. Attended "National Service Scheme Workshop" on 18-19th Jan., 2009.
- 11. Attended Workshop on "Innovative and Facile Teaching Methods and Aids Better Understanding of Science Subjects in Students" 23-24th March, 2009.
- 12. Participated in three days training Workshop on "Sensitization of Urban Youth" on 23-25th Sep., 2009.
- 13. Attended Workshop on "Techniques in Biotechnology", Jaipur on 27th Nov., 2009.
- 14. Attended "Computer Training Programme", organized by ICT from Ajmer Jan. 12 to 19th, 2010.
- 15. Participated in "Youth & Self Employment Workshop" on 20-21th Feb, 2010.
- 16. Participated in "Youth & Self Employment Workshop" on 22nd Feb, 2010.
- 17. Participated in conference on "**Technical Vocabulary in Indian Languages**" sponsored by HRD Ministry, New Delhi, on 27-29th April, 2011.

20. Resource Person/ Subject Expert In Development of Text Books

- Participated in four days work shop to review chemistry text book class XI (Hindi Version) From 16th to 19th Jan. 2006 at DESM, NCERT, New Delhi.
- Participated in four days work shop to edit chemistry text book class XI (Hindi Version) From 28th to 31th Jan. 2006 at DESM, NCERT, New Delhi.
 - 3. Worked as resource person for program entitled "Training of KRP s on Improvement of Content Competence in Chemistry at Sr. Sec. Level" on 7th & 8th Feb 2006 at RIE, Ajmer.
 - 4. Participated in five days work shop to review chemistry text book class XII (Hindi Version) From 8th to 13th Dec. 2006 at DESM, NCERT, New Delhi.
- 5. Participated in four days work shop to edit "Development of Text book in Chemistry Class XII (Hindi Version) from 26th to 29th Dec. 2006 at DESM, NCERT, New Delhi.
- 6. Participated in three days work shop to edit "Development of Laboratory Manual in Chemistry for Higher Sec. Stage" from 12th to 14th Mar. 2008 at DESM, NCERT, New Delhi.
- 7. Participated in Five days work shop to edit "Development of Laboratory Manual of Science Particles at Secondary Stage' from 26th to 30th May. 2008 at DESM, NCERT, New Delhi.
- 8. Participated in Five days work shop to review "Environmental Education Materials For Classes VI to XII" from 05th to 09th Jan. 2009 at DESM, NCERT, New Delhi.
- 9. Participated in Four days work shop to edit "Environmental Education Materials For Classes VI to XII" from 27th to 30th Jan. 2009 at DESM, NCERT, New Delhi.
- 10. Participated in Five days work shop to review "Development of Exemplar Problems in Chemistry for Class XI (Hindi Version))" from 02nd to 06th Feb. 2009 at DESM, NCERT, New Delhi.

- 11. Participated in Five days work shop to edit "Development of Exemplar Problems in Science for Class IX (Hindi Version))" from 09th to 13th Feb. 2009 at DESM, NCERT, New Delhi.
- 12. Participated in Five days work shop to edit "Development of Exemplar Problems in Chemistry for Class XI (Hindi Version))" from 02nd to 06th Mar. 2009 at DESM, NCERT, New Delhi.
- 13. Participated in Five days work shop to review "Development of Exemplar Problems in Science for Class X Based on NCF-2005 (Hindi Version))" from 20th to 24th July. 2009 at DESM, NCERT, New Delhi.
- 14. Participated in three days work shop to edit "Development of Exemplar Problems in Science for Class X Based on NCF-2005 (Hindi Version))" from 17th to 19th Aug. 2009 at DESM, NCERT, New Delhi.
- 15. Participated in Five days work shop to review "Development of Exemplar Problems in Chemistry for Class XII (Hindi Version))" from 05th to 09th Oct. 2009 at DESM, NCERT, New Delhi.
- 16. Participated in Five days work shop to review "Development of Exemplar Problems in Science for Class VI to VIII (Hindi Version))" from 02nd to 06th Dec. 2010 at NIE, NCERT, New Delhi.
- 17. Participated in Five days work shop to review "Development of Exemplar Problems in Science for Class VIII (English Version)" from 07th to 11th Feb. 2011 at NIE, NCERT, New Delhi.
- 18. Participated in Five days programme entitled "Development of Source Book on Assesment in Science at Upper Primary Stage" from 08th to 12th Aug. 2011 at DESM, NCERT, New Delhi.
- 19. Participated in Two days Programme entitled "Development of ICT Based Support to Higher Secondary Curriculum in Chemistry" from 08th and 09th Dec. 2011 at NIE, NCERT, New Delhi.
 - 20. Worked as Resource Person in content enrichment Programme in Chemistry for PGT of Jawahar Navodaya Vidhyalaya at Regional Institute of Education Ajmer from 28th June 2013 to 7th July 2013.
- 21. Participated in four days workshop on "Translation of Items for National Achievement Survey of MHRD Project for secondary stage under RMSA from 7th to 10th oct. 2013 at EDS, NCERT, New Delhi.
- 22. Participated in two days workshop on "Training Package in Science and Mathematics at secondary stage" on 30-31st Jan 2014, at DESM, NCERT, New Delhi.
- 23. Participated in five days programme on "Development of Modules on different themes in Science for Lateral entry at upper primary stage" from 17th Feb to 21st Feb 2014.
- 24. Participated in five days programme entitled *"Translation of Science and Mathematics Package in Hindi"*, at NCERT, New Delhi from 26th to 29th September 2014.
- 25. Participated in two days programme "Manuscript Writing for M.Sc. Classes in Hindi Midum" at Atal Bihari Vajpayee Hindi Vishvavidyalaya, Bhopal from 29th- 30th Oct., 2014.
- 26. Participated in workshop entitled "Workshop on Vetting of Items Test Booklets Formation and Translations in Hindi Language for National Achievement Survey at the end of Class VIII (Cycle 4)" at ESD, NCERT, New Delhi from 5th to 9th January 2015.
- 27. Participated in workshop on "Pilot Testing of Certificate Programme for Teaching of Elementary Science (CTES)" at DESM, NCERT, New Delhi from 2nd to 6th February 2015.

- 28. Participated in workshop on "Training Package of Science and Mathematics at Secondary stage (Under RMSA)" at NCERT, New Delhi from 17thto 20th February 2015.
- 29. Participated as Resource Person in the workshop entitled "Development of Green Chemistry Lab in the Institute" at RIE, Ajmer from 23rdto 27th March, 2015.
- 30. Participated in workshop on "Analysis of Concepts in Science and Mathematics in Items of Learning Performance at Upper Primary Stage" at DESM, NCERT, New Delhi from 21st to 24th September 2015.
- 31. Participated as Resource Person in the programme entitled "Development of Laboratory Manual in Science at Upper Primary Stage (Hindi Version)" at NCERT New Delhi from 7th to 9th October, 2015.
- 32. Participated as Resource Person in the workshop entitled "Development of Hindi Version of Upper Primary and Secondary Science Kit" at NCERT New Delhi from 26th to 29th October, 2015.
- 33. Participated as Resource Person in the workshop entitled "Development of Multimedia package in Chemistry for improving learning outcomes of the students at Senior Secondary Level" at RIE, NCERT Ajmer from 7th to 11th December 2015.
- 34. Participated as Resource Person in the workshop entitled "Development of Laboratory Manual in Science at Upper Primary Stage (Hindi Version)" at NCERT, New Delhi from 28th December 2015 to 1st January 2016.
- 35. Participated as Resource Person in the workshop entitled "Capacity Building of KRPs of SC dominated areas for the promotion of ICT in teaching of Science at Elementary Level" at RIE, Ajmer from 11th to 15th January, 2016.
- 36. Participated as Resource Person in the workshop entitled "Development of Laboratory Manual in Science at Upper Primary Stage (Hindi Version)" at NCERT, New Delhi from 10th to 12st February, 2016.
- 37. Participated as Resource Person in the workshop on "Development of Lab Manual on Microscale Chemistry Experiments for Under Graduate Level" at Regional Institute of Education, Ajmer, from 23th 27th March, 2016.
- 38. Participated as an Expert in a workshop on "Revision of Syllabus of B.Sc. B.Ed. Programme in the light of NCTE Norms and UGC Regulations" at RIE Ajmer from 19th to 20th May, 2016.
- 39. Participated as Resource Person in the workshop entitled "A Study of Use of Micro Scale Chemistry Kit Developed by NCERT for Higher Secondary Schools of Delhi" at NCERT New Delhi from 20th to 24th June, 2016.
- 40. Participated as Resource Person in the workshop entitled "Development of Audio Video Materials on Experiments/Activities in Science at Secondary Stage" at NCERT New Delhi form 5th to 8th September, 2016.
- 41. Participated as Resource Person in the workshop entitled "Development of ICT Integrated Resource Modules on Science Concepts for Teaching of Science at Secondary Level" 7th to 11th November, 2016.

- 42. Participated as Resource Person in the workshop entitled "Capacity Building of KRPs of SC dominated areas of the states of UP, Punjab and Haryana for the promotion of ICT in teaching of Science at Secondary Level" at RIE, Ajmer from 14th December, 2016.
- 43. Participated as Resource Person in the workshop entitled "Recording of Audio Video Under PAC approved programme Development of Multimedia Package in Chemistry" at RIE, NCERT, Ajmer from 2nd to 6th January, 2017.
- 44. Participated as Resource Person in the workshop entitled "Screening and Reviewing of e-content script and further development of media corresponding to e-content." at RIE Ajmer from 9th to 13th January, 2017.
- 45. Participated as Resource Person in the workshop entitled "Development of Audio Video Materials on Experiments/Activities in Science at Secondary Stage" at NCERT New Delhi form 29th May to 2th June, 2017.
- 46. Participated as Resource Person in the workshop entitled "Development of Audio Video Materials on Experiments/Activities in Science at Secondary Stage" at NCERT New Delhi form 4th to 8th September, 2017.
- 47. Participated as Resource Person in the workshop entitled "Workshop on Development of e-content in Science Text Book of Class X" at RIE Ajmer from 11th to 15th September, 2017.
- 48. Participated as Resource Person in the workshop entitled "A Study of Laboratory Practices used in Teaching of Chemistry at Senior Secondary level In ST Dominated areas." at RIE Ajmer from 18th to 22nd September 2017.
- 49. Participated as Resource Person in the workshop entitled "Script writing Under the PAC Approved Programme Development of Multimedia Package in Chemistry in Hindi at Senior Secondary Level" at RIE NCERT Ajmer from 23rd to 27th October, 2017.