

# Faculty Details proforma for DU College Web-site



Title	Dr.	First Name	Manisha	Last Name	Jain	Photograph
Design	ation	Associate Professor	(Chemistry)			
Addres	S	Acharya Narendra Dev College,				
		Govindpuri, Kalkaji,				
		New Delhi -110019, II				Man 1-
Phone	No	+ 91 11 2641 2547, +9	01 11 2629 32	24, +91 11 262	94542	1000
Office						
		-				
Reside	nce					
		-				
Mobile						
Email/		manishajain@andc.d			<u>gmail.com</u>	
Web-P	-	www.wikieducator.o	rg/User:Mani	<u>g1</u>		
	ional Qua					
Degree	2	Institution				Year
Ph.D.		Department of Chei	mistry, Unive	ersity of Delhi	, Delhi,	2002
(Inorga	anic	India.				
Chemis	stry)					
M.Sc.		Hindu College (Univ	ersity of Del	hi). Delhi. Ind	ia.	1997
(Chemi	istry)		,	,, ,		
<u> </u>						
B.Sc. (H	•	Gargi College (Unive	rsity of Delhi),	Delhi, India.		1995
Chemis	try					
10+2		GGSSS, Sriniwaspur	i, New Delhi			1992
		(CBSE, Delhi, India)				
Career	Profile					
1	Associate	weekeener laarmener	) in Ashamia A	Iononduo Dour		sity of Dolhi) since 16 07 2002
1.						sity of Delhi) since 16.07.2003
2.	Lecturer	(Temporary) in St. Step	hen's College	(University of	Delhi) from 15	.07.2001 to 15.07.2003

3. Lecturer (adhoc) in Acharya Narendra Dev College (University of Delhi) since 23.10.2000 to 14.07.2001

Administrative Assignments

• Contribution in corporate life of Institution

- Member, Selection Committee for selection of Adhoc Assistant Professors in Chemistry, ANDC (May 2018- April 2020)
- Teacher-in-Charge of the chemistry Department from 01.04.2012 31.12.2013 and 13.02.2014 31.03.2014.
- Officiating Teacher-in-Charge of Chemistry Department from 01.01.2012 to 31.01.2012
- (b) Sports/Community and extension Service
  - Coordinator, Unnat Bharat Abhiyan (UBA @ ANDC) (January 2020-August 2020)
  - Member, Unnat Bharat Abhiyan (UBA@ANDC) (September 2021-May 2022)
  - Programme Officer, NSS Unit of ANDC (May 2018- August 2020)
  - Convener, Women Empowerment Cell of ANDC (SASHAKT) (2016-2018)
  - Member, Equal Opportunity Cell, (2018-2020)

### (c) Administrative Assignments:

- Convener, Garden Committee (2022- till date)
- Convener, Alumni Affairs Committee (2022-till date)
- Member, Picfie, Photographic Society (2022 till date)
- Member, SPICMACAY (2022- till date)
- Convener, Picfie, Photographic Society (2021-2022)
- Convener, Fellowship Committee (2020-2022)
- Convener/Nodal Officer, ECA Admissions (Undergraduate), (2020-2022)
- Member, Committee for Mentorship and Counselling (2020-2022)
- Presiding Officer, Internal Complaints Committee at ANDC, (2016 2019)
- Convener of Editorial Committee (Magazine and Annual Report) (2014-16).
- **Coordinator** of Remedial Coaching Classes for SC/ST/OBC /Minorities students ---Merged scheme under UGC XI th plan (20010-2012)
- Convener of Centre for Foreign Language Studies in ANDC (2004-2006)
- **Convener** of Chemistry Society ABHIKRIYA ((2004-2006). Published first issue of departmental magazine, **OZEIN**.
- Member of Professional Development Committee (2008-2010)
- Member of College Development Committee (2008-2009)

- Member of Committee for College with Potential for Excellence (2008- 2010)
- Member of Prospectus and Editorial Committee (2004-2006).
- Member of Fellowship Committee (2004-2006).

### d) Cultural/ Extra- Curricular Activities

- Member, NSS Unit of ANDC (May 2016- 2018)
- Member, Garden Committee (2016-18)
- Member, Alumni Affairs Committee (2015-16)
- Member, Environment Society (2014-2016)
- Member, Academic Events Management Committee (2014-2016)
- Member, Editorial Committee (2010-2012)
- Member, Annual Events Management Committee (2008-2010)
- Member, website development Committee (2006-2008)
- Member, Alumni Affairs Committee (2006-2008).

### Areas of Interest / Specialization

Bioinorganic Chemistry, Environmental Chemistry, Analytical Chemistry, Green Chemistry

### Subjects Taught

Inorganic Chemistry, Analytical chemistry, Green Chemistry, Instrumentation, Research methodology in Chemistry

#### **Research Guidance**

Detai	Details of Summer Projects and students trained				
S.No.	Title of Summer Project	Mentors	Student	Course	
	Summer 2011				
1	Synthesis of 2-aminomethylbenzimidazole and	Dr Manisha	Manorama Kumari	B.Sc (H) Chem III	
	1,2-Bis (benzimidozoyl)ethylamine and their	Jain			
	copper complexes				
2	Synthesis and characterization of copper complex	Dr Manisha	Priya Bhadana	B.Sc (H) Chem III	
	with 1,5-Bis (2-benzimidezolyl)-3- hydroxy-	Jain			
	3-carboxylic acid				
3	Synthesis and characterization of copper	Dr Manisha	Sneha	B.Sc (H) Chem III	
	complex with 1,4-Bis (2-benzimidazolyl)-1,2-	Jain			
	Dihydroxyethane				

4	Synthesis of lab cleansing reagent.	Dr. Seema	Ravi Kumar	B.Sc (H) Chem III
	, , , , , , , , , , , , , , , , , , , ,	Gupta		., -
		Dr Manisha		
		Jain		
	Summer 20	)12		
5	Isolation of crude extracts from medicinal plants	Dr. Manisha	Raj Kumar Saha	B.Sc. (H) BMS II
		Jain	Mukesh Kumar	
		Dr. Meenu	Simran Suri	B.Sc. (H) BMS I
		Aggarwal	Piyush Sarraf,	
			Mamta,	B.Sc. (Life Sc.) II
			Subodh	
	Summer 20	013		
6	Extraction of crude natural product from	Dr. Manisha	Akash Kumar	B.Sc.(H)BMS II
	plant Syzygium cumini(jamun)	Jain		
7	Synthesis of a heterocyclic Schiff base and its	Dr. Manisha	Himadri Shekhar	B.Sc.(H)BMS II
	copper complex and checking its antibacterial	Jain	Roy	
	properties	Dr Pankaj		
		Khanna		
8	Extraction of toxic metal ions from waste water	Dr. Manisha	Simran Suri	B.Sc.(H)BMS II
	using kitchen waste like vegetable and fruit peels	Jain		
9	Synthesis of thiourea based Copper (I) complex	Dr. Manisha	Arpita Guha	B.Sc.(H)BMS II
	and checking its biological activity	Jain		
10	Estimation of hardness and concentration of As	Dr. Manisha	Chandan Kumar	B.Sc.(H)LS II
	in ground water of Delhi and NCR and hence	Jain		
	compare the quality of ground water			
11	Redesigning undergraduate organic lab	Dr. Manisha	Gayaprasad	B.Sc. LS II
	experiments through a greener and economic	Jain		
	pathway.			
12	Survey based study to assess the decision making	Dr. Manisha	Sarika	B.Sc.(H)BMS I
		2	Gupta Lucky	2.00.(.1)2.0001
	ability of Class XII students for chosing subjects of	Jain	Mathur	
	higher education	Dr Seema		

		Gupta			
	Summer 2015				
13	Greener Approachto Synthesis and Characterisation of Oxalamide derivative of 2-aminobenzothiazole	Dr. Manisha Jain	Pankaj Kushwaha	B.Sc. (H) Chemistry II yr	
14	Exploring Synthetic Routes to Prepare Hetero- cyclic Compounds and their Derivatives	Dr. Manisha Jain	Suraj Singh	B.Sc. (H) Chemistry II yr	
15	Exploring Copper Coordination Chemistry	Dr. Manisha Jain	Sumit Tiwari Prashant Singh	B.Sc. (H) Chemistry I yr	
16	Peptide Chemistry: An attempt to explore Solid Phase Peptide Synthesis	Dr. Manisha Jain Ms. Swarndeep Kaur	Sundaram Maurya	B.Sc. (H) Chemistry II yr	
	Summer 2	.022			
17	Extraction of essential oils by Green methods	Dr Manisha Jain	Anjali	B.Sc.(H) Chemistry II yr	
18	Computational Studies on some Inorganic Compounds Using Avogadro and Gaussian Softwares	Dr Manisha Jain Dr Neeti Misra	Aditi Kandari Somya Singh	B.Sc.(H) Chemistry II yr	

**Publications Profile** 

In Indexed/ Peer Reviewed Journals

# • Subject Expert for enriching the manual for Microscale Chemistry Laboratory Kit for class XII, published in Year 2018

http://ncert.nic.in/departments/nie/niew/school\_kits/sr\_sec\_level/Manual\_01.pdf

<u>Year of</u> Publication	Title	<u>Journal</u>	<u>Co-Author/s</u>
2022 (accepted)	Copper-Bisbenzimidazole Complexes as Biomimetic Catalysts in Organic Transformations	Mini-Reviews in Organic Chemistry (DOI: 10.2174/1570193X2 0666230102105854 )	Manisha Jain, Shilpa Yadav, Mansi, Neeti Misra, Pankaj Khanna and Leena Khanna
2015	An Explorative Study on Knowledge and Awareness of Health Problems Related to Usage of Fabric Dyes by Road Side Dyers in Delhi, India	DU Journal of Undergraduate Research and	G. Dhawan, S. Gupta, U. Dhawan , Deepika , P.

		Innovation, 2015, 1(3), 20-25	Dungriyal , Z. Zaidi , Y. Singh , J. Thakur , Dharmendra , A. Chauhan and K. Sharma
2008	Oxidation of electron deficient olefins using a Copper (II) complex based on a bis benzimidazole diamide ligand	Transition Metal Chemistry 2008, 33(2), 175-182	Manisha Singla, Pavan Mathur* M.S. Hundal
2006	Oxidative Dealkylation of hindered phenol catalyzed by Copper (II) Bis Benzimidazole diamide complex	Inorganica Chimica Acta, 359 (13), p.4360-4366, Oct 2006	M.A. Sridhar, Pavan Mathur*
2003	Synthesis, Crystal Structure and Spectral Studies of Cu (II) / Cu (I) Complexes derived from Diamide Bisbenzimidazole Ligand	Inorganica Chimica Acta, 2003, 353, 197-205.	Sanjib K Das, Pavan Mathur* and A.Wally Cordes
2001	Synthesis, Crystal Structure, Spectral Studies and Catechol Oxidase activity of Trigonal Bipyramidal Cu(II) Complexes derived from a Tetradentate Diamide Bis-Benzimidazole ligands	Inorganic Chemistry, 2001, 40, 878-88.	Pavan Mathur* & Ray J. Butcher
2001	Synthesis and Characterisation of Dicopper (II) complexes with N, N, N', N', N"- Pentakis (benzimidazol-2-yl-methyl) diethylenetriamine	Indian Journal of Chemistry, 2001, 40A, 316-319.	Lata Nohria, Pavan Mathur*
2001	Synthesis and Characterization of Nickel (II) Complexes with 1,5-Bis(benzimidazol-2- yl) -3- thiapentane	Indian Journal of Chemistry, 2001, 40A, 247-251.	Lata Nohria, and Pavan Mathur
1999	Synthesis, Characterisation, EPR and Magnetic Measurements of Manganese (II) Complexes with Bis(2-benzimidazolyl)propane and bis(2- benzimidazolyl)butane ligands	Indian Journal of Chemistry, 1999, 38A, 1219-1222.	Veena Arora, & Pavan Mathur

## **Conference / Presentations /Workshops**

- Participated in Online Workshop on Exploring and Understanding Computational Chemistry using Gaussian: Molecular builder and Visualiser tool, Organised by Acharya Narendra Dev College from March 07-10, 2022
- Participated in the international conference on ' Mitigating Environmental Issues by Sustainable Approaches (ICMCESA -2022)' organized by Acharya Narendra Dev College from February 22-28, 2022.

- Participated in a 4-day online workshop on 'Exploring and Understanding Computational Chemistry using Gaussian: Molecular builder and Visualisation Tool' organized by Acharya Narendra Dev College on March 7-10, 2022.
- **Participated** in a **workshop** for formulation of questions/items for written examination by Haryana Public service Commission on October 28-30, 2021 at IIC Delhi.
- Participated in a Webinar on 'Role of Technologies in rural areas for skill development, livelihood for Atmnirbhar Bharat' organized by Dr. A P J Abdul Kalam Technical university, Lucknow, State Project Implementation Unit -UP and Institution of Engineers on June 16, 2020.
- Reviewed the Educational e-content (Video lectures) for the Chemistry-04 for the MOOCs running on *Swayam* platform, in a workshop organized by CIET, NCERT Delhi from February 17-21, 2020.
- Organised a 5-day Workshop on Empowering Teachers: Current Technology Based Educational Contents Creation and Delivery" (Using Open Source, Free software) from December 2-6, 2019.
- **Resource Person** in **Professional Development Program for science teachers** (PGT, Chemistry) organized by Salwan Educational Trust in Salwan Public School, Mayur Delhi on May 21, 2019.
- Subject Expert to conduct Interviews for selection of chemistry PGTs in Air Force Bal Bharti School, Lodhi Road on February 22, 2019.
- Member of Organising Committee for 'Education Conclave 2018' organised by Acharya Narendra Dev College on November 02, 2018 in ANDC Campus.
- **Reviewer of Training Modules developed by NCERT** for Chemistry Teachers teaching at Senior secondary level in a workshop organized by DESM, NCERT, Delhi from August 27-31, 2018.
- **Participated in a Workshop** on "Sexual Harassment of Women at Workplace" (Prevention, Prohibition and Redressal) Act, 2013, organized by Internal Complaints Committee, Jawahar Lal Nehru University, Delhi on May 1–2, 2018.
- **Course Coordinator** of a two months **Add-on course on 'Legal Awareness'** for ANDC students in January 2018 in coordination with Delhi State Legal Services Authority, South-East District.
- **Participated** in a workshop on 'Accessible Cinema Through Audio Description and Subtitles' organized by Dyal Singh College on September 15, 2017.
- **Organized a two-day workshop** on 'Gender Sensitisation amongst Youth' for scecond and third year students of ANDC on January 24-25, 2017,
- Resource Person for one full session in School Teacher's Training Workshop entitled Science Pedagogy: Laboratory Learning to Classroom Teaching, Organised by Acharya Narendra Dev College (University of Delhi) on January 20-21, 2016.
- **Steward (Observer)** for the Guinness World Record Break Attempt of the event 'The Largest Practical Session' with 2000 students by Vijnana Bharati, conducted on 07 Decemeber 2015 at IIT Campus, New Delhi. The Record has made an entry in the Guiness Book of World Records.
- Organised a three days workshop entitled Basic Chemistry Experimentation Skills and Lab Ethics for undergraduate chemistry students at Acharya Narendra Dev College, University of Delhi from May 25-27, 2015.

- **Resource Person** in **'Teacher's Training Workshop for Bal Bharti School Teachers'** for the session on 'Investigatory Projects' Organised by BBPS Training Centre empanelled by CBSE on May 20, 2015.
- Content developer in Chemistry for UDAAN CBSE -2014 a project to provide free online resources to disadvantaged girl students of Class XI and XII for preparation of admission test for the premier engineering colleges in the country.
- Oral Presentation on 'Environment Management by Chemical Waste Treatment and Recycling at the source' by Pooja Rawat, Neha Kumari, Sweta Sharma, Shubham Biswas, Seema Gupta and Manisha Jain at international Conference on Harnessing Engineering Technology and Innovation for Sustainable Development held at Dr S S B University of Chemical Engineering and Technology, Punjab University, Chandigarh, India on 19-20 September 2014 under Technical Education Quality Improvement Program.
- Resource person in a Workshop entitled Review and Development of Microscale Chemistry Kit for Higher Secondary Stage', organized by NCERT from 23<sup>rd</sup> July to 25<sup>th</sup> July 2014, in Division of Educational Kits, NCERT, Delhi.
- Resource person in a Workshop entitled Review and Development of Microscale Chemistry Kit for Higher Secondary Stage', organized by NCERT from 9<sup>th</sup> to 13<sup>th</sup> June 2014, in Division of Educational Kits, NCERT, Delhi.
- Participated in Ist International Conference on Emerging Trends of Nanotechnology in Drug Discovery (INDD 2014) jointly organized by Sri Venkateswara College, University of Delhi and Department of Biochemistry, University of Delhi, South Campus on May 26-27, 2014.
- Participated in **The Academic Congress Enabling the Young: Redefining Education,** organized by University of Delhi on September 6-7, 2012.
- **Participated** in workshop on **Research in UG Science and Mathematics Education**, organised by Acharya Narendra Dev College in collaboration with Vidya Bhawan Society from May 14-18, 2012.
- A **member of organising committee** of One day National Seminar on Teaching Redefined: Open Access to Education, sponsored by INASP, UK, held at ANDC on 1<sup>st</sup> Nov 2011.
- A member of the organising committee of International Conference on Open Paradigms in Education, OPEN 2011, Organised by Acharya Narendra Dev College on 31 Jan-02 Feb 2011.
- Resource person in Workshop on Multimedia Content Development using Easy Now Techniques, Organised by Acharya Narendra Dev College from May 4-7, 2010.
- Participated in Workshop on Application of Free/Open Source Software in Science Teaching and Research from 14-15 April, 2010, organized by Acharya Narendra Dev College in collaboration with NRCFOSS, Anna University, Chennai
- A member of the organising Committee of National Symposium on Chemistry in Biology: The Future of Life Sciences, Organised by Acharya Narendra Dev College on 12 -13 Feb 2010
- Participated in workshop on Educational e- content preparation through Easy Now techniques from 04-09 October 2009, organised by Acharya Narendra Dev College in collaboration with CEMCA.

- Participated in Wikieducator workshop on open educational resources WIKIED 2008 on 3, 4 and 6 of october 2008 held at Acharya Narendra Dev College in collaboration with Gandhi Bhavan with support from Commonwealth of Learning.
- Participated in the Second International Symposium on Green/Sustainable Chemistry, Organised by Department of Chemistry, University of Delhi, on January 10-13, 2006.
- <u>Presented a poster</u> in National Symposium on Innovative Methods in Chemistry Education IMCE -2005 organised by Indian Association of Chemistry Teachers held on **22 October 2005** at CDRI, Lucknow, India
- **Participated** in **Fifth National Conference of Chemistry Teachers** organised by Indian Association of Chemistry Teachers held on **21 October**, **2005** at CDRI, Lucknow, India
- **Participated** in **National Symposium on Emerging Areas of Forensic Science** held on **4-6 December 2004**, at Sri Guru Tegh Bahadur Khalsa College (University of Delhi) Delhi, India.
- <u>Presented poster</u> in International Conference on Chemistry Biology Interface: Synergistic New Frontiers 2004, organized by Dr. B. R. Ambedkar Centre for Biomedical Research, held at Vigyan Bhavan, New Delhi on 21-26 November 2004.
- Attended Seminar on Latest Developments and Application of X Ray Fluorescence Technique in Petrochemical Industry organized by Indian Society of Analytical Scientists (ISAS) – Delhi Chapter, held in Hotel Le- Meridian, New Delhi on 15 December 2003.
- Participated in ANDC Series of Science Lectures- National Symposium on Biotechnology: Expanding Horizons organized by Acharya Narendra Dev College and held at INSA Auditorium, New Delhi on 17-18 October 2003.
- **Participated** in workshop on **Friendly Approach to Undergraduate Chemistry Laboratory** organized by Zakir Hussain College (University of Delhi), Delhi on **09 October 2003.**
- Presented poster in International Symposium on Trends in Medicinal Chemistry and Bio Catalysis held at Department of Chemistry, University of Delhi, Delhi from 26-29 January 2000.
- Presented poster in Indo Russian Seminar on Trends in Chemical Sciences held at Department of Chemistry, University of Delhi, Delhi from 24-25 January 2000.
- Attended First National Symposium on Green Chemistry held at Department of Chemistry, University of Delhi, Delhi from 11-13 January 1999.

Research Projects (Major Grants/Research Collaboration)

Details of Externally Funded Projects Undertaken and Completed

1. Title of the project : Formulation of biodegradable and low-cost Liquid detergent for laboratory glassware

Name of the Mentors : Dr. Seema Gupta, Dr. Manisha Jain Funding Agency : **IEDC, NEDB (DST)** Grant: Rs. One lakh only Duration and year: 1 yr (2011-12)

Students : Ravi K	Kumar (B.Sc (H) Chemistry III yr), Namrata Chakraborty and Akash (B.Sc (H) Chemistry III yr)
	: Survey-based study to identify the health hazards associated with occupational
	exposure of textile dyes used by dyers to color the fabrics
Name of the Mento Funding Agency Grant:	<ul> <li>brs : Dr. Seema Gupta, Dr. Manisha Jain (Chemistry Deptt), Dr Gagan Dhawan (BMS Deptt)</li> <li>University of Delhi (Innovation Projects Scheme)</li> <li>Rs. Ten lakh only</li> </ul>
Duration and ye	ear: 1 yr (2012-13)
, Students:	Priya, Deepika, Zaineb Zaidi, Yashaswi Singh, Jyoti Thakur (B.Sc (H) BMS, II), Keshav
Shar	ma (B.Sc (H) Chemistry II), Aayush, Dharmender (B.Sc (H) Chemistry III)
3. Title of the project :	Environment Management by waste treatment at source
Name of the Mentor Funding agency :	s: Dr. Manisha Jain , Dr. Seema Gupta (Chemistry Deptt) IEDC, NEDB (DST)
Grant:	Rs. Fifty two thousand only
Duration:	1 yr ( 2013-14)
Students :	Shweta Sharma, Pooja Rawat, Neha Kumari, Shubham Biswas B.Sc (H) Chemistry II yr
<ol> <li>Title of the project : Sensing</li> </ol>	Design and Development of Gold Nanoparticle based Optical Biosensor for Protease
Name of the Mentor: Funding agency :	s: Dr. Manisha Jain , Dr. Seema Gupta (Chemistry Deptt), Dr Gagan Dhawan (BMS Deptt) IEDC, NEDB (DST)
Grant:	Rs. Ninety thousand only
Duration:	1 yr ( <b>2014-15</b> )
Students :	Divyansh Mittal, Eshant Bhatia, Nitish Malhotra B.Sc (H) BMS III and II yr
5. Title of the project :	Analysis of the efficacy of plant sources recommended as brain tonics
Name of the Mentor	rs : Dr. Manisha Jain, Dr. Geetika Kalra, Dr. Saumya Saxena
Funding agency :	University of Delhi under DU Innovation Project Scheme (2015-16).
Grant:	Rs. Four Lakhs
Duration:	One year
Students:	Sandeep Kumar, Rammehar Singh, Jyoti, Chingripem Shangjam, Nirupama Soni Annu Chandra, Kajol B.M Singh, Raghuveer Verma, Sonu Kumar, Suraj Singh B.Sc. (H) Botany II Sem, B.Sc.(H) Chem IV sem.
<b>6.</b> Title of the project :	Extraction of microbial enzymes from kitchen waste and development of Biological
Detergent	
Funding agency :	IEDC, NEDB (DST)
Grant:	Rs. Ninety thousand only
Duration:	1 yr ( <b>2015-16</b> )
Students:	Nitish Malhotra, Shiwani Katiyar, Rahul Shah B.Sc (H) BMS II and I yr

### Awards and Distinctions

- 1. Received Letter of Appreciation from Sambandh foundation for Leading NSS Volunteers in 'Spit Free India Movement' under Pledge for Life Programme in October 2020.
- 2. QUALIFIED Joint CSIR-UGC National Eligibility Test for JRF and Eligibility for Lectureship in 1997.
- 3. Received Prof. R. P. Mitra Memorial Gold Medal for first rank in M.Sc. (Chemistry), University of Delhi in 1997.
- 4. Received Prof. K. N. Johry Memorial Gold Medal for first rank in M.Sc. (Chemistry) Inorganic Chemistry Specialisation, University of Delhi in 1997.
- 5. Secured First Position in South Campus, University of Delhi and overall Fifth position in University of Delhi in B. Sc. (H) Chemistry in 1995.
- 6. Received Dr. Chandrakanta Khurana Memorial award for first rank in B. Sc. (H) Chemistry Part II in 1994.
- 7. Secured Fifth position in South Campus University of Delhi in B.Sc.(H) Chemistry II yr, 1994.

Association With Professional Bodies

- 1. Life member of Indian Society of Analytical Scientists Delhi Chapter (LM -1871), India
- 2. Life member of Association of Chemistry Teachers (LM 226), Promoting Excellence in Chemistry Education c/o Homi Bhabha Centre for Science Education (TIFR), India.
- 3. Life member (ID 28065) of Vijnana Bharati (VIBHA).

### Other Activities

Involvement in Activities at University level

Curriculum Development:

- Member, Committee for formulation of 'Undergraduate Curriculum Framework (UGCF) based on National Education Policy (NEP) 2020' for B.Sc.(H) Chemistry (April 2023)
- Member, Committee for formulation of 'Undergraduate Curriculum Framework (UGCF) based on National Education Policy (NEP) 2020' for B.Sc. Physical Science and B.Sc. Life Sc. (April 2022)
- A working group member of Chemistry Undergraduate Syllabi Revision 2019, in the light of UGC's Learning Outcome-Based Curriculum Framework (UGC-LOCF) to revise the Generic Elective Course titled 'Atomic Structure, Bonding, General Organic Chemistry (Theory + Practical)' in <u>c</u>. life Science (CBCS).
- Member of Analytical Techniques team of Courses Restructuring Committee, of University of Delhi, meant for developing curriculum for new B.Sc. Program in Delhi University Implemented in 2005.

Academic work outside the Parent Institution.

NCERT, NTA, HSSC, and UPSC

### **Contribution in e-Content Development**

- **Developed Virtual Lab on Redox titrations** hosted on V-lab@ANDC https://www.vlab.andcollege.du.ac.in/chSc/titration/redox-titration.html in Year 2022.
- **Prepared a video lecture** on' Study of pH dependence of UV- Vis spectra of aqueous potassium dichromate solution' which is uploaded on YouTube (**October 2020**) <u>https://youtu.be/XCf6IZq4XEE</u>
- Developed a Demonstration Video for Undergraduate Chemistry Students on (Preparation of Copper(II) sulphate monohydrate' which is uploaded on YouTube (June 2020). <u>https://youtu.be/TWYu4d6-xj8</u>
- Developed an e-content on Redox titrations for first year students. The content is uploaded on Youtube and linked to <u>ANDC's</u> webpage <u>http://andcollege.du.ac.in/?q=departments/chemistry/faculty/3</u> (<u>https://www.youtube.com/watch?v=6IQfpNgVzyU</u>, <u>https://www.youtube.com/watch?v=EP6nROfAQH8</u> <u>https://www.youtube.com/watch?v=1oH4JGLzx-8</u>, https://www.youtube.com/watch?v=bV7vdzi6MxE)
- Developed assignments for second year students ... http://wikieducator.org/Inorganic\_chemistry
- Article ---<u>http://wikieducator.org/How to make Chemistry lab an efficient place of learning</u> <u>while working</u>
- Presentation---- <u>https://www.slideshare.net/mani\_g1</u>
- Practical Chemistry--- <u>http://wikieducator.org/Chemistry\_lab</u>

Literary, cultural or other activities (e.g. attainment in sports etc.) in which the applicant is interested and distinctions obtained:

- 1. Published Hindi Poetry on Amar Ujala Kavya online https://www.amarujala.com/user/manisha-jain-117xzZq
- 2. Published English Poetry online on Poetizer.com https://poetizer.com/author/267384

### Signature of Faculty Member

• You are also requested to also give your complete resume as a DOC and PDF file to be attached as a link on your faculty page.