



Dr. Gita Rani

Associate Professor, Department of Chemistry, Faculty of Physical Sciences

Qualification

Degree/Certificate	University/Board	Subject/Specialization
Ph.D	CDLU, SIRSA	Organic Chemistry
M.Phil	Annamalai University, Chennai	Organic Chemistry
M.Sc.	MDU, Rohtak	Organic Chemistry
B.Sc.	MDU, Rohtak	Chemistry
B.Ed	MDU, Rohtak	Sciences

Contact Info:

Dr. Gita Rani

Email:

gtcdlu@gmail.com, gitarani@cdu.ac.in

Department of Chemistry

M. No. 9991000646

Experience

Teaching Experience: 17 years

Research Area

Nanotechnology, Biosensors, Nanocomposites Films, Conducting Polymers.

Total Publications: 30



Ms Ravita

Assistant Professor (Contract), Department of Chemistry

Degree/Certificate	University/Board	Subject/Specialization
B.Ed.	M. R. Naunty College of Education, Kherka Gurjjar, Jhajjar	Life science and Chemical Science
M.Sc.	M. D. University Rohtak	Physical Chemistry
B.Sc.	Pandit Nekiram Sharma College, Rohtak	Chemistry(Hons)

Qualification

Contact Info:

Ms Ravita

Email: ravitaapc@cdu.ac.in

Department of Chemistry

M.No. 9306561174

Teaching Experience: 10 years



Contact Info
Deepika Rani

Email:

deepikaraniapc@cdlu.ac.in

Department Of Chemistry

Mob:+91-9914602983

Deepika Rani

Assistant professor (Contract), Department of Chemistry

Qualification:

Degree/Certificate	University/Board	Specialisation
NET	---	Chemical Sciences
M.Sc	Guru Nanak Dev University, Amritsar	Industrial Chemistry
B.Sc	Punjab University	Non-Medical

Teaching Experience: 10 years



Dr. Neelam

**Assistant Professor (Contract), Department of Chemistry,
Faculty of Physical Sciences**

Qualification

Degree/Certificate	University/Board	Subject/Specialization
Ph.D	CDLU, SIRSA	Physical Chemistry
M.Sc.	CDLU, SIRSA	Physical Chemistry
B.Sc.	Panjab University Chandigarh	Chemistry, Botany, Zoology

Contact Info:

Dr. Neelam

Email:

neelamcdlu@gmail.com

neelamchemistry@cdlu.ac.in

Department of Chemistry

Mb. 9467681693

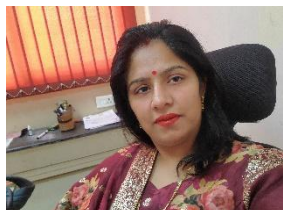
Experience

Teaching Experience: 8years

Research Area

Nanotechnology, Electrochemical Biosensors, Polymers.

Total Publications: 06



Ms Deepika
Assistant Professor (Contract),
Department of Chemistry,
Faculty of Physical Sciences

Qualification

Degree/Certificate	University/Board	Subject/Specialization
B.Ed	CDLU, SIRSA	Science
M.Sc.	KUK	Organic Chemistry
B.Sc.	KUK	Chemistry, Botany, Zoology

Contact Info:

Ms. Deepika

Email:

deepikachem@cdu.ac.in

Department of Chemistry

Mobile: +91-9466002929

Teaching Experience: 8 years



Dr. Varsha Kherwa
Part Time Teacher,
Department of Chemistry,
Faculty of Physical Sciences.

Degree/Certificate	University/Board	Subject/Specialization
Ph.D.	J.N.V.U., Jodhpur	Chemistry
M.Sc.	J.N.V.U., Jodhpur	Applied Chemistry
B.Sc.	J.N.V.U., Jodhpur	Chemistry

Qualification

Contact Info:

Dr. Varsha Kherwa

Email: varshaptt122@cdlu.ac.in

Department of Chemistry

Mb. 9460810703

Experience

Teaching Experience: 8 years

Research Area

Analytical Chemistry (Instrumentation)

Total Publications: 05



Dr. Monika
Part Time Teacher, Department of
Chemistry

Faculty of Sciences.

Qualification

Degree/ Certificate	University/Board	Subject/ Specialization
Ph.D.	CDLU, Sirsa	Organic chemistry
M.Sc.	CDLU, Sirsa	Organic chemistry
B.Sc.	KU, Kurukshetra	Chemistry

Mrs. Monika

Assistant

professor

Email: -

monikachemistry@cdu.ac.in

sinwermonika@gmail.com

Experience

Teaching Experience: 06 years

Research Area

Conducting Polymers

Total Publications: 05



Dr Sumitra Godara

Part Time Teacher,

Department of Chemistry

Degree/Certificate	University/Board	Subject/Specialization
Ph.D.	Indian Institute of Technology Jodhpur	Theoretical and Computational Chemistry
B.Ed.	SK TT College, Kota	General Sciences
M.Sc.	Kota University, Kota	Organic Chemistry
B.Sc.	Kota University	Phys, Chem, Maths

Qualification

Contact Info:

Dr Sumitra Godara

Email: Godara.1@iitj.ac.in

Department of Chemistry

Mb. 8963011426

Experience

Teaching Experience: 5 years

Research Area:

- Theoretical and Computational Chemistry
- Direct dynamics simulation of organic uni-molecular and bi-molecular chemical reactions
- Electronic Structure Calculations using DFT and *ab initio* methods
- Chemical reaction dynamics and rate theories

Total Publications: 04

2. Research Thrust Area

Nanotechnology, Chemical Biosensor, Conducting Polymer, Corrosion, Nanocomposites Films, PU Foam, Laser materials and Paints/coatings and their characterization.

1. List of books published by Faculty

1. **Gita Rani**, published a book “**Conducting Plastics**”, ISBN No. 978-81-8329-845-2, Shree Publishers & Distributors, New Delhi-110002, 2017.
2. **Gita Rani**, Published a book “**General Organic Chemistry**”, ISBN No. 978-93-86677-77-8, Manekin Press, New Delhi-110002, 2022.
3. **Harish Kumar**, Published a book “**Text Book of Physical Chemistry**” by Prentice Hall India, New Delhi. (1st edition 2010 ISBN no. 978-81-203-4088-6, 2nd edition 2015)
4. **Harish Kumar**, Published a book “**Antiscalant & Corrosion Inhibitor for Cooling Water System**” , ISBN No. 978-3-659-35199-0 by LAP, Lambert Academic Publishing, Germany. Year 2013.

2. List of Research Papers by Faculty/ Scholar

1. Lakshmi, G.; Siddiqui, A. M.; **Ali, V.**; Kulriya, P. K.; Zulfeqar, M. Effects of 60 MeV C^{5+} ion irradiation on PmT–PVC and p-TSA doped PoT–PVC blends. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms* **2008**, 266 (8), 1685-1691.
2. Lakshmi, G.; **Ali, V.**; Siddiqui, A. M.; Kulriya, P.; Husain, M.; Zulfeqar, M. 60-MeV C^{5+} ion irradiation effects on conducting poly (o-toluidine)–poly vinyl chloride blend films. *Radiation Effects & Defects in Solids* **2008**, 163 (2), 115-122.
3. Ameen, S.; **Ali, V.**; Zulfeqar, M.; Haq, M. M.; Husain, M. Electrical and spectroscopic characterization of polyaniline–polyvinyl chloride (PANI–PVC) blends doped with sodium thiosulphate. *Physica B: Condensed Matter* **2008**, 403 (17), 2861-2866.
4. **Moudgil, H. K.**; Yadav, S.; Chaudhary, R.; **Kumar, D.** Synergistic effect of some antiscalants as corrosion inhibitor for industrial cooling water system. *Journal of applied electrochemistry* **2009**, 39 (8), 1339-1347.

5. Kaur, K.; **Malik, A. K.**; Singh, B.; Godarzi, M. Simultaneous spectrophotometric determination of carbidopa and levodopa by partial least squares regression, principal component regression and least squares support vector machine methods. *Thai Journal of Pharmaceutical Sciences* **2009**, *33* (4).
6. Hooda, V.; Gahlaut, A.; **Kumar, H.**; Pundir, C. S. Biosensor based on enzyme coupled PVC reaction cell for electrochemical measurement of serum total cholesterol. *Sensors and Actuators B: Chemical* **2009**, *136* (1), 235-241.
7. Ameen, S.; **Ali, V.**; Zulfequar, M.; Haq, M. M.; Husain, M. Preparation and measurements of electrical and spectroscopic properties of sodium thiosulphate doped polyaniline. *Current Applied Physics* **2009**, *9* (2), 478-483.
8. Singh, R.; Puri, J. K.; Sharma, R. P.; **Malik, A. K.**; Ferretti, V. Synthesis, characterization and structural aspects of 3-azidopropylsilatrane. *Journal of Molecular Structure* **2010**, *982* (1-3), 107-112.
9. **Malik, A. K.**; Blasco, C.; Picó, Y. Liquid chromatography–mass spectrometry in food safety. *Journal of Chromatography A* **2010**, *1217* (25), 4018-4040.
10. **Kumar, H.**; Chaudhary, R. Influence of sodium hexa metaphosphate antiscalant on the corrosion of carbon steel in industrial cooling water system. **2010**.
11. Kumar, A.; **Malik, A. K.**; Picó, Y. Sample preparation methods for the determination of pesticides in foods using CE-UV/MS. *Electrophoresis* **2010**, *31* (13), 2115-2125.
12. Kaur, K.; Singh, B.; **Malik, A. K.** Micelle enhanced spectrofluorimetric method for the determination of ofloxacin and lomefloxacin in human urine and serum. *Thai Journal of Pharmaceutical Sciences* **2010**, *34* (2).
13. Kumari, K.; **Ali, V.**; **Rani, G.**; Kumar, S.; Lakshmi, G.; Zulfequar, M. DC conductivity and spectroscopic characterization of poly (o-toluidine) doped with binary dopant $ZrOCl_2/AgI$. *Mater Sci Appl* **2011**, *2*, 1049-1057.
14. **Kumar, H.**; Chahal, S. Studies of some thermodynamic properties of binary mixtures of acrylonitrile with aromatic ketones at $T= 308.15$ K. *Journal of solution chemistry* **2011**, *40* (2), 165-181.
15. Monika, C.; **Vazid, A.**; Sushil, K. Spectral Investigations of Kiton Red-620 Doped Polymethylmethacrylate. *Materials Sciences and Applications* **2012**.
16. **Kumar, H.**; **Saini, V.** Corrosion characteristics of vapour phase inhibitors for mild steel under different atmospheric condition. *Journal of Corrosion Science and Engineering* **2012**, *14*.
17. **Kumar, H.**; Rajan, S.; Shukla, A. K. Development of lithium-ion batteries from micro-structured to nanostructured materials: its issues and challenges. *Science progress* **2012**, *95* (3), 283-314.
18. **Kumar, H.**; Kumar, D.; Yadav, S. Thermodynamic study of binary liquid mixtures of xylene and 1, 2-dichloroethane at $T= 303.15$ K. *Journal of Pure Applied and Industrial Physics Vol* **2012**, *2* (3), 142-285.
19. **Kumar, H.**; Deepika. Thermodynamic study of binary liquid mixture of water and DMSO at $T= 308.15$ K. *Int J Chem Sci Technol* **2012**, *2* (1), 1-8.
20. Gill, D.; Lakshmi, G.; **Ali, V.**; **Rani, G.**; Prakash, J.; Zulfequar, M. Interaction of Cu^{+1} Salt and Polyaniline: Study of Optical Properties. *Advanced Science, Engineering and Medicine* **2012**, *4* (1), 71-76.

21. Chahal, V. K.; Singh, R.; **Malik, A. K.**; Matysik, F.-M.; Puri, J. K. Preconcentration method on modified silica fiber for chromium speciation. *Journal of chromatographic science* **2012**, *50* (1), 26-32.
22. **Rani, G.; Kumar, H.**; Rani, R. Synthesis and Characterization of Magnesium Perchlorate Doped Polyaniline-PVC Films. *American Journal of Materials Science and Technology* **2013**, *2*, 50-55.
23. **Moudgil, H.** Thermodynamic study of binary liquid mixtures of Benzene and 1, 2-dichloroethane at T= 303.15 K. *International Journal of Thermodynamics* **2013**, *16* (3), 123-131.
24. **Kumar, H.**; Yadav, V. Corrosion characteristics of mild steel under different atmospheric conditions by vapour phase corrosion inhibitors. *American Journal of Materials Science and Engineering* **2013**, *1* (3), 34-39.
25. **Kumar, H.**; Yadav, V. CHA, BA, BTA and TEA as Vapour Phase Corrosion Inhibitors for Mild Steel under different Atmospheric Conditions. *Journal of Corrosion Science and Engineering* **2013**, *16*.
26. **Kumar, H.**; Shukla, A. Fabrication Fe/Fe₃O₄/graphene nanocomposite electrode material for rechargeable Ni/Fe batteries in hybrid electric vehicles. *International Letters of Chemistry, Physics and Astronomy* **2013**, *14*.
27. **Kumar, H.; Saini, V.**; Yadav, V. Study of vapour phase corrosion inhibitors for mild steel under different atmospheric conditions. *International Journal of Engineering and Innovative Technology* **2013**, *3* (3), 206-211.
28. **Kumar, H.**; Rani, R. Development of biosensors for the detection of biological warfare agents: its issues and challenges. *Science Progress* **2013**, *96* (3), 294-308.
29. **Kherwa, V.**; Dubey, S. A simple method for voltammetric determination of trace amounts of selenium in diverse matrices. *Res. J. Recent Sci* **2013**, *2*, 51-54.
30. Dubey, S.; **Kherwa, V.** Development of sensitive voltammetric method for determination of thorium in waste waters. *Res. J. Recent Sci* **2013**, *2*, 47-50.
31. Anju, B.; **Gita, R.** Assessment of ground water quality of Rohtak district of Haryana. *Environment and Ecology* **2013**, *31* (2C), 1007-1010.
32. Sharma, P.; Dubey, S.; **Kherwa, V.** Micro level differential pulse polarographic determination of zirconium in soil samples. *Journal of the Indian Chemical Society* **2014**, *91* (1), 19-23.
33. **Saini, V.; Kumar, H.** DAA, 1-BIZ and 5-ATZ as Vapour Phase Corrosion Inhibitors for Mild Steel under Different Aggressive Atmospheric Conditions at High Temperature. *International Letters of Chemistry, Physics and Astronomy* **2014**, *17* (2), 174--192.
34. **Saini, V.; Kumar, H.** N, N, N, N-Tetramethylethylenediamine (TMEDA) and 1, 3-Diaminopropane (DAP) as Vapour Phase Corrosion Inhibitor (VPCI) for mild steel under Atmospheric conditions. *Res. J. Chem. Sci* **2014**, *4* (6), 45-53.
35. **Saini, V.; Kumar, H.** Study of amine as vapor phase corrosion inhibitors for mild steel under different aggressive atmospheric conditions at high temperature. *Int. J. Eng. Inn. Tech* **2014**, *3*, 248-256.
36. Rani, R.; **Kumar, H.**; Salar, R.; Purewal, S. Antibacterial activity of copper oxide nanoparticles against gram negative bacterial strain synthesized by reverse micelle technique. *Int. J. Pharm. Res. Dev* **2014**, *6* (1), 72-78.

37. **Mahiya, K.;** Kumar, R.; Lloret, F.; Mathur, P. Oxidation of substituted phenols using copper (II) metallatriangles formed through ligand sharing. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2014**, *133*, 663-668.
38. **Kumar, H.;** **Yadav, V.** BIA, DPA, MBTA and DMA as Vapour Phase Corrosion Inhibitors for Mild Steel under different Atmospheric Conditions. *International Letters of Chemistry, Physics and Astronomy* **2014**, *1*, 52-66.
39. Kumar, R.; Kumar, R.; **Mahiya, K.;** Mathur, P. Oxidation of substituted benzyl amines using a phenoxo-bridged dimeric nickel (II) complex: synthesis, crystal structure and catalytic activity. *Transition Metal Chemistry* **2015**, *40* (2), 189-195.
40. Kumar, R.; Yadav, A.; **Mahiya, K.;** Mathur, P. Copper (II) complexes with box or flower type morphology: Sustainability versus perishability upon catalytic recycling. *Inorganica Chimica Acta* **2016**, *450*, 279-284.
41. **Kumar, H.;** **Yadav, V.** Citrus sinensis peels as a green corrosion inhibitor for mild steel in 5.0 M hydrochloric acid solution. *Research Journal of Chemical Sciences* **2016**, *6* (1), 53-60.
42. **Kumar, H.;** **Neelam, R.** Enzyme-based electrochemical biosensors for food safety: A review. *Nanobiosens. Dis. Diagn* **2016**, *5*, 29-39.
43. **Kumar, H.;** Gupta, B. Development of amperometric biosensor for the detection of *Vibrio vulnificus* as biological weapon. *Indian Journal of Advances in Chemical Sciences* **2016**, *4* (2), 130-137.
44. Hariom, K.; Pradeep, **H.;** Bala, A. Corrosion inhibition of mild steel by using hexylamine as corrosion inhibitor in acidic medium. *Der Pharma Chemica* **2016**, *8*, 268-278.
45. Devi, N. S.; Singh, S. J.; **Mahiya, K.;** Singh, O. M.; Choi, H.; Lee, S. G. Novel Synthesis of Tryptamine Derived 4-Hydroxy-4-arylthiazolidine-2-thiones and 4-Arylthiazole-2 (3 H)-thiones by Multicomponent Reactions. *Bulletin of the Korean Chemical Society* **2016**, *37* (9), 1472-1477.
46. Veer, D.; Singh, R.; **Kumar, H.** Structural and optical characterization of ZnO-TiO₂-SiO₂ nanocomposites synthesized by sol-gel technique. *Asian J. Chem.* **2017**, *29* (11), 2391-2395.
47. Sangwan, P.; **Kumar, H.** Synthesis, characterization, and antibacterial activities of chromium oxide nanoparticles against *Klebsiella pneumoniae*. *Asian Journal of Pharmaceutical and Clinical Research* **2017**, *10* (2), 206-209.
48. Sangeeta, D.; **Rani, G.** A study of concentration of sugar mill effluents on properties of soil and types of microorganisms present in the soil. *Current Botany* **2017**, *8*, 159-162.
49. Kumar, P.; Kalia, V.; **Kumar, H.;** Dahiya, H. Corrosion inhibition for mild steel in acidic medium by using hexadecylamine as corrosion inhibitor. *Chem. Sci. Trans.* **2017**, *6*, 497-512.
50. **Kumar, H.;** Kumari, N. Fabrication of Novel Amperometric Sensor for the Detection of Zinc Metal as an Environment Pollutant. *Sensors & Transducers* **2017**, *216* (9/10), 8-14.
51. **Kumar, H.;** **Kumari, M.** Synthesis, characterization, and antibacterial study of zinc oxide-graphene nanocomposites. *Synthesis* **2017**, *10* (9).
52. **Godara, S.;** Verma, P.; Paranjothy, M. Dissociation chemistry of 3-oxetanone in the gas phase. *The Journal of Physical Chemistry A* **2017**, *121* (36), 6679-6686.

53. **Rani, N.; Rani, G.;** Kumar, M. Green synthesis, characterization and optical properties of cobalt oxide nanoparticles by co-precipitation method. *International Journal of Advanced Research and Development* **2018**, 3 (2), 1195-1198.
54. **Rani, N.; Rani, G.;** Kumar, M. Amperometric Determination of Hydrazine Based on Copper Oxide Modified Screen Printed Electrode. *Sensors & Transducers* **2018**, 223 (7), 22-25.
55. Naz, E. G.; **Godara, S.;** Paranjothy, M. Direct chemical dynamics simulations of H^{3++} CO bimolecular reaction. *The Journal of Physical Chemistry A* **2018**, 122 (43), 8497-8504.
56. **Kumar, H.;** **Yadav, V.** Aloe vera L. as Green corrosion inhibitor for mild steel in 5.0 M hydrochloric acid solution. *Asian Journal of Chemistry* **2018**, 30 (3), 474-478.
57. **Kumar, H.;** Veer, D.; Singh, R. Synthesis and Characterization of Pure CoO and Ni-doped CoO-NiO-SiO₂ Nanocomposites Using Sol-Gel. *Chemical Science* **2018**, 7 (1), 95-100.
58. Sangwan, P.; **Kumar, H.;** **Rani, R.** Wet chemical synthesis, characterization, and antibacterial activity of Molybdenum oxide nanoparticles against Staphylococcus epidermidis and Enterobacter aerogenes. *Asian J Pharm Clin Res* **2019**, 12 (4), 59-63.
59. **Godara, S.;** Paranjothy, M. Competing Molecular and Radical Pathways in the Dissociation of Halons via Direct Chemical Dynamics Simulations. *The Journal of Physical Chemistry A* **2019**, 123 (40), 8527-8535.
60. Singh, S.; Tanwar, V.; Simantilleke, A. P.; **Kumar, H.;** Singh, D. Structural and spectroscopic properties of CaMgSi₂O₆: RE³⁺ (Eu³⁺ and Tb³⁺) nanophosphors under UV-illumination. *Optik* **2020**, 221, 165364.
61. **Kumar, H.;** **Yadav, V.** Musa acuminata (Green corrosion inhibitor) as anti-pit and anti-cracking agent for mild steel in 5M hydrochloric acid solution. *Chemical Data Collections* **2020**, 29, 100500.
62. Kumar, H.; Kumari, R.; Yadav, A.; Sharma, R.; **Dhanda, T.** Trisodium phosphate an efficient anti-pitting and anti-cracking agent for mild steel in 0.1 N sulphuric acid: Experimental & Molecular dynamics study. *Chemical Data Collections* **2020**, 30, 100575.
63. Kumar, H.; **Kumari, N.;** Sharma, R. Nanocomposites (conducting polymer and nanoparticles) based electrochemical biosensor for the detection of environment pollutant: Its issues and challenges. *Environmental Impact Assessment Review* **2020**, 85, 106438.
64. Kumar, H.; **Gupta, B.** Development of novel electrochemical sensor for the detection of biological warfare agents: enzyme, antibody, and DNA free. *SN Applied Sciences* **2020**, 2 (12), 1-14.
65. Kumar, H.; **Dhanda, T.** Cetyl trimethyl ammonium bromide as anti-pit agent for mild steel in sulfuric acid medium. *Current Physical Chemistry* **2020**, 10 (3), 164-177.
66. **Godara, S.;** Radhakrishnan, A.; Paranjothy, M. Chemical Dynamics Simulations of Curtius Reaction of Acetyl-and Fluorocarbonyl Azides. *The Journal of Physical Chemistry A* **2020**, 124 (32), 6438-6444.
67. **Bala, A.;** **Rani, G.** A review on phytosynthesis, affecting factors and characterization techniques of silver nanoparticles designed by green approach. *International Nano Letters* **2020**, 10 (3), 159-176.
68. Kumar, H.; **Kumari, M.** Experimental and theoretical investigation of 3, 3'-diamino dipropyl amine: Highly efficient corrosion inhibitor for carbon steel in 2 N HCl at normal and elevated temperatures. *Journal of Molecular Structure* **2021**, 1229, 129598.

69. Kumar, H.; **Dhanda, T.** Cyclohexylamine an effective corrosion inhibitor for mild steel in 0.1 N H₂SO₄: Experimental and theoretical (molecular dynamics simulation and FMO) study. *Journal of Molecular Liquids* **2021**, 327, 114847.

5. Information of Session (2015-2016)

(a) Placements of Students

S.No	Name of Student	Programe	Placement
1	Devi Lal	M.Phil Chemistry	PGT (Chemistry), Education Department, Haryana Government
2	Nagma Mehta	M.Sc Chemistry	TGT Natural Science (Guest Teacher), Govt. of NCT of Delhi.
3	Anjali	M.Sc Chemistry	Supervisor, Women & Child Development Department, Govt. of Haryana.
4	Dinesh	M.Sc Chemistry	PGT, Dig Vijay Memorial School, Hisar
5	Sanjay	M.Sc Chemistry	Asstt. Prof., Shah Satnam Ji boys College, Sirsa
6	Narender Kumar	M.Sc Chemistry	TGT, Govt. of NCT of Delhi.
7	Tilak	Ph.D	Asistant Prof. PDM University

(b) Research Project (2015-2016)

NIL

(c) Seminars and Conferences (2015-2016)

Conference organised on “**National Conference on Emerging trends in chemical science and technology**” dated **25.02.2015**.