University Faculty Details Page on DU Web-site (July 2016)

Title	Prof./Dr./Mr./Ms. Prof.	First Name	Jitender	Last Name	Khurana	Photograph

Designation	**Professor**
Department	**Chemistry**
Address (Campus)	**Department of Chemistry, Universsity of Delhi, Delhi-110007**
(Residence)	**A-II/8, Third Floor, Maurice Nagar, Delhi-110007**
Phone No (Campus)	**27667725 ext. 1384**
(Residence)	**27662913**
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Email	**jmkhurana@chemistry.du.ac.in; jmkhurana1@yahoo.co.in**

Education

Subject	Institution	Year	Details
Ph. D.	**I I T, Kanpur**	**1982**	Thesis topic: *"Novel Mechanistic Pathways in Organic Transformations"*
M. Sc.	**University of Delhi, Delhi**	**1975**	Subjects: Chemistry
B. Sc. (Hons.) Chemistry	**University of Delhi, Delhi**	**1973**	Subjects: Chemistry

Career Profile

Organisation / Institution	Designation	Duration	Role
University of Delhi, Delhi,	**Professor**	May 2003 - to date	**Teaching & Research**
University of Delhi, Delhi,	**Reader**	Oct. 1997 - Apr. 2003	**Teaching & Research**
University of Delhi, Delhi,	**Lecturer & Sr. Lecturer**	Jan. 1986 - Oct. 1997*	**Teaching & Research**

Research Interests / Specialization

Research experience in development of synthetic methodologies; reaction mechanism; Synthesis of novel heterocyclic compounds; Sonochemistry, Application of microwaves in organic synthesis; Synthesis, characterization and applications of ionic liquids in organic synthesis; Preparation, characterization and applications of metal nanoparticles in organic synthesis; Multi-component reactions.

Teaching Experience (Subjects/Courses Taught)

Teaching experience as RA and SRA at I.I.T., Kanpur and Lecturer, Senior Lecturer, Reader and Professor at University of Delhi. At University of Delhi.
I have taught following courses in M. Sc. At University of Delhi:
Organic Stereochemistry

Study of Reactive Intermediates
Organic Spectroscopy
Methods in Organic Synthesis
Photochemistry & Pericyclic Reactions
Chemistry of Life Processes
Newer Synthetic Reactions and Reagents
Heterocyclic Chemistry
Proteins and Lipids
Nucleic Acids and Carbohydrates
Medicinal Chemistry
Bioactive Compounds

Honors & Awards

*Jan. 1995 - Oct. 1997	International Fellow, SRI (Stanford Research Institute) International, Menlo Park, CA, USA (on study leave)
July 1985 - Nov. 1985	Research Associate, Department of Chemistry, Lehigh University, Bethelhem, PA, USA.
Oct. 1983 - June 1985	Research Associate, Department of Chemistry, Marquette University, Milwaukee, WI, USA.
Oct. 1982 - Sept. 1983	Post-Doctoral Fellow, Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada
April 1982 - Sept. 1982	Post-Doctoral Fellowship, Department of Chemistry, I.I.T., Kanpur, INDIA
Aug. 1975 - April 1982	Research Fellowship, and Research and Senior Research Assistantships, Department of Chemistry, I.I.T., Kanpur, INDA

December 2003 Prof D P Chakraborty 60th Birthday Anniversary Award

Publications (LAST FIVE YEARS)

List of Publications

64. Shruti Gupta, Pooja Saluja and **Jitender M. Khurana,** ***Tetrahedron,*** 72, 3986-3993 (2016). "DBU mediated confluent approach for the one pot synthesis of novel 5-hydroxy pyrazolo[1,2-*a*][1,2,4] triazoles and their dehydration to novel pyrazolo[1,2-a][1,2,4]triazole derivatives**"**

63. Sudesh Kumari, Harjinder Singh and **Jitender M. Khurana**, ***Tetrahedron Lett.,*** 57, 3081-3085 (2016). "An efficient green approach for the synthesis of novel triazolyl spirocyclic oxindole derivatives *via* one-pot five component protocol using DBU as catalyst in PEG-400"

62. Rajeswari M., Sudesh Kumari and **Jitender M. Khurana**, ***RSc Advances*** **6,** 9297-9303 (2016). "One-pot four-component domino strategy for the synthesis of novel spirooxindole pyrrolizine linked 1,2,3-triazoles *via* stereo- and regioselective 1,3-dipolar cycloaddition reaction in acidic medium"

61. **J. M. Khurana,** Devanshi Magoo and kiran Dawra**,** ***Monatsch. Chemie,*** *147, 1113-1116 (2016).* "Nickel boride mediated cleavage of 1,3-oxathiolanes – A convenient approach to deprotection and reduction"

60. Rajeshwari M., Pooja Saluja and **J. M. Khurana**, ***RSc Advances***, 6, 1307-1312, 2016.

"A facile and green approach for the synthesis of spiro[naphthalene-2,5'-pyrimidine]-4-carbonitrile via one-pot three-component condensation reaction using DBU as catalyst"

59. B. Nand, A. Chaudhary, A. Lumb and **J. M. Khurana**, ***Cogent Chemistry,*** 1:1071227 (2015). Synthesis and characterization of hybrid chloroquinoline–xanthene derivatives

58. H. Singh, J. Sindhu, and **J. M. Khurana**, ***Journal of Luminescence*** 158, 340-350 (2015)**.** "synthesis and photophysical properties of novel chloroquinoline based chalconederivatescontaining1,2,3-triazolemoiety"

57. K. Aggarwal and **J. M. Khurana,** ***Journal of Luminescence*** 167, 146-155 (2015)**.** "Phenazine containing indeno-furan based colorimetric and "On-Off" fluorescent sensor for the detection of Cu^{2+} and Pb^{2+} "

56. S. Kumari, J. Sindhu and **J. M. Khurana**, ***Synth. Commun.,*** 45, 1101-1113 (2015). "An efficient green approach for the synthesis of spiro[indoline-3,4′-pyrazolo[3,4-b]quinoline]diones using $[NMP]H_2PO_4$ and their photophysical studies"

55. Rajeswari M., G. Khanna, A. Chaudhary and **J. M. Khurana**, ***Synth. Commun.,*** 45, 1426-1432 (2015). "Multicomponent domino process for the synthesis of some novel benzo[*a*]chromeno phenazine fused ring systems using h_2so_4, phosphotungstic acid and $[nmp]H_2PO_4$"

54. Garima Khanna, K. Aggarwal and J. M. Khurana, ***RSC Advances***, 5, 46448-46454 (2015)."an efficient and confluent approach for the synthesis of novel-3,4-dihydro-2*h*-naphtho[2,3-*e*][1,3]oxazine-5,10-dione derivatives by a three component reaction in ionic liquid"

53. Sneha Yadav and **J. M. Khurana**, ***Chin. J. Catal,*** 36, 1042-1046 (2015). "*Cinnamomum tamala* leaf extract mediated green synthesis of silver nanoparticles: competent catalyst for the synthesis of pyranopyrazole"

52. B. Nand, G. Khanna, A. Chaudhary, A. Lumb and J. M. Khurana, ***Curr. Org. Chem.,*** 19, 790-812 (2015). "1,8-Diazabicyclo[5.4.0]undec-7-ene (DBU): A versatile catalyst in organic synthesis"

51. M. Rajeshwari and J. M. Khurana, ***RSC Advances***, 5, 39686 – 39691 (2015). "An efficient, green synthesis of novel regioselective and stereoselective indan-1,3-diones grafted spirooxindolopyrrolizidines linked 1,2,3-triazoles *via* one-pot five-component using PEG-400"

50. **J. M. Khurana**, K. Dawra and P. Sharma, ***RSC Advances*** 5, 12048-12051, (2015)**.** "Chemoselective deprotection and deprotection with concomitant reduction on 1,3-dioxolanes, acetals and ketals using nickel boride"

49. H. Singh, J. Sindhu and **J. M. Khurana**, ***Optical Materials,*** 42, 449-457 (2015). "Synthesis of novel fluorescence xanthene-aminoquinoline conjugates, determination of dipole moment and selective fluorescence chemosensor for th^{+4} ions"

48. K. Aggarwal and **J. M. Khurana**, ***J. Photochem. Photobio, A: Chemistry,*** 307-308, 23-29 (2015). "Indeno-furan based colorimetric and on-off fluorescent pH sensors"

47. K. Aggarwal and **J. M. Khurana**, ***Spectrochimica Acta Part A: Molecular and biomolecular spectroscopy,*** 143, 288-297 (2015). "Synthesis, photophysical studies, solvatochromic analysis and tddft calculations of diazaspiro compounds"

46. G. Khanna, A. Chaudhary and **J. M. Khurana**, ***Tetrahedron Lett.***, 55, 6652-6654 **(2014).** "An efficient catalyst free synthesis of novel benzo[*a*][1,3]oxazino[6,5-*c*]phenazine derivatives *via* one pot four component domino protocol in water"

45. A. Lumb, Rajeswari M. And **J. M. Khurana**, ***RSC advances,*** 4, 47677-47689 (2014). "A simple, mild and environmentally benign procedure for the cleavage of carbon-nitrogen double bonds using $nabro_3$ in the presence of $[bmim]HSO_4$.

44. K. Aggarwal and **J. M. Khurana**, ***J. Mol. Stru.,*** 1079, 21–34 (2015). "x-Ray diffraction, spectroscopic characterization and quantum chemical calculations by dft and hf of novel2-hydroxy-12-(4-hydroxyphenyl)-9,9-dimethyl-9,10-dihydro-8*H*-benzo[*a*]xanthene-11-one"

43. J. Sindhu, H. Singh, **J. M. Khurana**, C. Sharma, K. R. Aneja, "***Chinese Chem. Lett.,*** 26, 50-54 **(2015).** "Multicomponent Domino process for the synthesis of some novel (Z)-5-(arylidene)-3-((1-aryl-1*H*-1,2,3-triazol-4-yl)methyl)thiazolidine-2,4-diones using peg-400 as an efficient and green media and their antimicrobial evaluation"

42. J. Sindhu, H. Singh and **J. M. Khurana,** ***Synth. Commun.,*** **45,** 202-210 (2015). "Efficient synthesis of spiro[diindenopyridine-indoline]triones catalysed by $pegoso_3h$-h_2o and $[nmp]H_2PO_4$"

41. J. M. Khurana, B. M. Kandpal, P. Sharma and M. Gupta, ***Monatsh. Chem.,*** 146, 187-190 **(**2015). A novel method of reduction of C=N group in hydrazones, phenylhydrazones, azines and tosyl hydrazones with mg-methanol"

40. H. Singh, S. Kumari, **J. M. Khurana**, ***Chinese Chem. Lett.,*** 25, 1336-1340 (2014). "A new green approach for the synthesis of 12-aryl-8,9,10,12-tetrahydrobenzo[*a*]xanthene-11-one derivatives using task specific acidic ionic liquid $[nmp]H_2PO_4$"

39. Sneha, **J. M. Khurana**, C. Sharma, K. R. Aneja, ***Med. Chem. Res.,*** 23, 4595–4606 (2014). "Chemoselective n-benzylation of 2-thiohydantoins and 2-thiobarbituric acids catalyzed by peg-stabilized ni nanoparticles and their antimicrobial activities"

38. P. Saluja, A. Chaudhary, **J. M. Khurana**, ***Tetrahedron lett.,*** 55, 3431-3435 (2014).

"Synthesis of novel fluorescent benzo[*a*]pyrano[2,3-*c*]phenazine and benzo[*a*]chromeno [2,3-*c*]phenazine derivatives *via* facile four-component domino protocol",

37. A. Chaudhary, P. Saluja, K. Aggarwal and **J. M. Khurana**, ***J. Ind. Chem. Soc.,*** 91, 1393-1398 (2014). "Applications of acidic and basic TSIL in multicomponent reactions"

36. P. Saluja, **J. M. Khurana**, N. kumar and P. Roy, ***RSC advances***, 4, 34594-34603 (2014). "Task-specific ionic liquid catalyzed synthesis of novel naphthoquinone-urazole hybrids and evaluation of their antioxidant and *in vitro* anticancer activity"

35. K. Aggarwal, K. Vij and **J. M. Khurana**, *RSC* ***advances,*** 4, 13313-13321 (2014)**.** "An efficient catalyst free synthesis of nitrogen containing spiro heterocycles *via* [5 + 1] double michael addition reaction"

34. H. Singh, B. Nand, J. Sindhu, **J. M. Khurana**, C. Sharma, K. R. Aneja, ***J. Braz. Chem. Soc.,*** 7, 1178-1193 (2014)**.** "Efficient one pot synthesis of xanthene-triazole-quinoline/phenyl conjugates and evaluation of their antimicrobial activity"

33. **J. M. Khurana,** B. Nand and P. Saluja, ***J. Heterocyclic Chem***. 51, 618–624 (2014). "DBU: A highly efficient catalyst for one-pot synthesis of substituted tetrahydo-4*H*-chromenes, tetrahydro[*b*]pyrans, pyrano[*d*]pyrimidines and 4*h*-pyrans in aqueous medium"

32. **J. M. Khurana**, A. Lumb, A. Chaudhary and B. Nand, ***J. Heterocyclic Chem***., doi 10.1002/jhet 1871 (2014)**.** "Acid catalyzed efficient syntheses of aryl-5h-dibenzo[b,i]xanthene-5,7,12,14-(13h)-tetraones, 3,3-(arylmethylene)bis(2-hydroxynaphthalene-1,4-diones) and *in vitro* evaluation of their antioxidant activity"

31. H. Singh, J. Sandhu, **J. M. Khurana**, C. Sharma and K. R. Aneja, ***Eur. J. Med. Chem.*** 77, 145-154 (2014). "Ultrasound promoted one pot synthesis of novel fluorescent triazolyl spirocyclic oxindoles using DBU based task specific ionic liquids and their antimicrobial activity"

35. P. Saluja, **J. M. Khurana**, C. Sharma and K. R. Aneja, ***Aust. J. Chem.*** 67, 867-874 (2014). "An efficient and convenient approach for the synthesis of novel pyrazolo[1,2-*a*]triazole-triones and evaluation of their anti-microbial activities"

30. J. Sindhu, H. Singh and **J. M. Khurana**, ***Mol. Diversity,*** 18, 345-355 (2014). "A green, multicomponent, regio- and stereoselective 1,3-dipolar cycloaddition, of azides and azomethine ylides generated *in situ* with bifunctional dipolarophiles using, PEG-400"

29. H. Singh, J. Sindhu, **J. M. Khurana**, ***Sens. Actuat. B: Chemical*** 192, 536-542 (2014). Determination of dipole moment, solvatochromic studies and application as turn off fluorescence chemosensor of new 3-(4-(dimethylamino)phenyl)-1-(5-methyl-1-(naphthalen-1-yl)-1h-1,2,3-triazol-4-yl)prop-2-en-1-on.

28. H. Singh, J. Sandhu, J**. M. Khurana**, C. Sharma, K. R. Aneja, ***rsc Advances*** 4, 5915-

5926 (2014). "Synthesis, biological evaluation and photophysical studies of novel 1,2,3-triazole linked azo dyes"

27. V. Sharma, **J. M. Khurana** and K. Muralidhar, *Proc. Indian Natn Sci. Acad.* 79, 1-6, 2013. "Spectrophotometric determination of urea in urine samples by using bispyrazolone method"

26. K. Aggarwal, **J. M. Khurana**, ***J. Photochem. and Photobio. A:Chem.***, 276, 71-82 (2013). "Effect of hydroxyl group on the photophysical properties of benzo[a]xanthenes - solvatachromic studies and estimation of dipole moment"

25. P. Saluja, D. Magoo, J. M. Khurana, ***Synth. Commun.***, 44, 800-806 (2014). "Lanthanum triflate catalyzed rapid oxidation of secondary alcohols using hydrogen peroxide urea adduct (UHP) in ionic liquid"

24. H. Singh, J. Sindhu**, J. M. Khurana,** C. Sharma, K. R. Aneja**, *Aust. J. Chem.*** 66, 1088-1096 (2013). 'A facile eco–friendly one pot five component syntheses of novel 1,2,3-triazole linked pentasubstituted 1,4-dihydropyridines and their biological and photophysical studies'.

23. N. Aggarwal**,** R. Kumar**,** P. Dureja, C. Srivastava and **J M Khurana,** ***Pest Management Science***, doi 10.1002/ps3650 (2013). "Synthesis, biological activities and SAR studies of novel 1-Ethyl-7-methyl-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxylic acid based diacyl and sulfonyl acyl hydrazines"

22. H. Singh, J. Sindhu, **J. M. Khurana**, ***Rsc Advances***, 3, 22360-22366 (2013). Synthesis of biologically as well industrially important 1,4,5-trisubstituted-1,2,3-triazoles using highly efficient, green and recyclable DBU-H_2O catalytic system."

21. J. Sindhu , H. Singh , **J. M. Khurana**, C. Sharma, K. R. Aneja ***Aust. J. Chem.*** 66, 710-717 (2013). Multicomponent synthesis of novel 2-aryl-5-((1-aryl-1*H*-1,2,3-triazol-4-yl)methylthio)-1,3,4-oxadiazoles using Cu(I) as catalyst and their antimicrobial evaluation.

20. **J. M. Khurana**, Sneha and Bhaskara Nand. ***Can. J. Chem.*** 91, 698-703 (2013).
Novel Mono- and Bis(tetrahydrobenzo[*a*]xanthen-11-ones): pTSA-Catalyzed cyclocondensation of 2,6-dihydroxynaphthalene, aldehydes and dimedone in ionic Liquid [bmim]BF_4

19. **J. M. Khurana**, A. Chaudhary and S. Kumar, ***Org. Prep. Proced. Int.*** 45, 241-245 (2013). "Rapid oxidation of 1,2-diols, α-hydroxyketones and alcohols using *N*-bromosuccinimide (NBS) in ionic liquid"

18. H. Singh, J. sindhu and **J M Khurana**, ***J. Iran Chem Soc.*** 10, 883 – 888 (2013). Efficient green and regioselective synthesis of 1,4,5-trisubstituted-1,2.3-triazoles in ionic liquid [bmim]BF_4 and in basic task specific ionic liquid [bmim]OH

17. P. Saluja, K. Aggarwal and **J. M. Khurana**, ***Synth. Commun****., 43, 3239-3246 (2013).* 'One-pot synthesis of biologically important spiro-2-amino-4*H*-pyrans, spiroacenaphthylenes and spirooxindoles using DBU as a green and recyclable catalyst in aqueous medium'

16**.** **J. M. Khurana**, A. Lumb, A. Chaudhary and B. Nand, ***RSC, Synthetic advances,*** *3, 1844-1854 (2013).* Synthesis and in vitro Evaluation of Antioxidant Activity of Diverse Napthopyranopyrimidines, Diazaanthra[2,3-d][1,3]dioxole-7,9-dione and

Tetrahydrobenzo[a]xanthen-11-ones

15. **J. M. Khurana**, K. Vij, ***Synth. Commun.,*** 43, 2294-2304 (2013). 'Nickel nanoparticles as Semi-heterogeneous Catalyst for One-pot Three-Component Synthesis of 2-amino-4*H*-pyrans and Pyran Annulated Heterocyclic Moieties'

14. **J. M. Khurana**, D. Magoo , K. Aggarwal , N. Aggarwal, R. Kumar and C. Srivastava, ***Eur. J. Med. Chem.,*** 58, 470-477 (2012). "Synthesis of novel 12-aryl-8,9,10,12-tetrahydrobenzo[a]xanthene-11-thiones and evaluation of their biocidal effects"

13. **J. M. Khurana**, A. Chaudhary, A. Lumb and B. Nand, ***Can. J. Chem.*** 90, 739-746 (2012). "Efficient one-pot syntheses of dibenzo[*a,i*]xanthene-diones and evaluation of their antioxidant activities"

12. **J. M. Khurana**, A. Lumb, A. Chaudhary and Bhaskara Nand, ***Synth. Commun***., 43, 2147-2154, (2013). Efficient and Green Syntheses of 12-aryl-2,3,4,12-tetrahydrobenzo[*b*]xanthene-1,6,11-triones in water and task specific ionic liquid.

11. **J. M. Khurana** and Ankita Chaudhary, ***Green Chem. Lett. Rev.,*** 5, 633-638 (2012). Efficient and green synthesis 4*H*-pyrans and 4H-pyrano[2,3-c]pyrazole derivatives catalysed by TSIL [bmim]OH under solvent free conditions.

10. **J. M. Khurana,** D. Magoo and A. Chaudhary, "Efficient and green approaches for the synthesis of 4*H*-benzo[*g*]chromenes in water, neat conditions and using task-specific ionic liquid" ***Synth. Commun.*** 42, 3211–3219, 2012.

9. **J. M. Khurana** and Kanika Vij, Nickel nanoparticles: A highly efficient catalyst for one pot synthesis of tetraketones and biscoumarins, ***J. Chem. Sci.,*** 124, 907-912 (2012).

8. **J. M. Khurana**, Ankita Chaudhary, Anshika Lumb, Bhaskar Nand, *G**reen Chem.,*** 14, 2321 – 2327 (2012). "An expedient four-component domino protocol for the synthesis of novel benzo[a]phenazine annulated heterocycles and their photophysical studies".

7. **J. M. Khurana** and Sneha, ***Aust. J Chem.*** 65, 314-319 (2012). "Ni nanoparticles catalyzed facile and efficient one-pot three component synthesis of spiropyrans**"**

6. N. Aggarwal**,** R. Kumar**,** P. Dureja, C. Srivastava and **J M Khurana, *Chem. Biol. Drug Des., 79, 384-397, 2012.*** "Synthesis of novel nalidixic acid based 1,3,4-thiadiazole and 1,3,4-oxadiazolederivatives as potent antibacterial agents"

5**. J. M. Khurana,** A. Chaudhary, Bhaskara Nand and A. Lumb**, *Tetrahedron Lett.,*** 53, 3018-3022, (2012). "Aqua mediated indium (III) chloride catalysed synthesis of fused pyrimidines and pyrazoles"

4. **J. M. Khurana,** Sneha and Kanika Vij, "Ni nanoparticles: Mild and efficient catalyst for the chemoselective synthesis of 2-arylbenzimidazoles, 2-arylbenzothiazoles and azomethines" ***Synth Commun.*** 42, 2606-2616 (2012).

3. **J. M. Khurana** and Sanjay Kumar, ***Green Chem. Lett. Rev.*** 4, 321-325 (2011). "An Efficient, Catalyst Free Synthesis of 3-(2'-Benzothiazolyl)-2,3-dihydroquinazolin-4(1*H*)-ones in Aqueous

Medium"

2. **J. M. Khurana** and A. Lumb, "Facile Deoxygenation of Telluroxides, Tellurones and Selenones with Nickel Boride at Ambient Temperature" ***Org. Prep. Proced. Intl.,*** *44, 96–101, 2012.*

1. **J. M. Khurana**, A. Lumb, A. Pandey and D. Magoo, ***Synth. Commun***. 42, 1796–1803 (2012). Green approaches for the synthesis of 12-aryl-8,9,10,12-tetrahydrobenzo[*a*]xanthen-11-ones in aqueous media and under microwave irradiation in solvent-less conditions"

Public Service / University Service / Consulting Activity

Administrative/Academic Duties

Dean, Students Welfare March 2011 to date

Provost, International Students House (June. 2005 – February 2016)
Warden, International Students House (Nov. 2000 – Oct. 2004)
Member, Governing Body, Shivaji College, July 2003-June 2005
Member, Governing Body, Moti Lal Nehru College, July 2003-June 2005
Member, Governing Body, Maulana Azad Medical College, Oct.2003- 2005
Member, Undergraduate Committee of Courses, M. D. University, Rohtak,
Member, Post-graduate Committee of Courses, Kurukshetra University, Kurukshetra (2003-2005)
Member, Board of Research Studies, Jammu University, Jammu (2003 – 2006)
Chief Returning Officer, DUSU Elections, 2008-2009, 2009-2010, 2010-2011.
Member, Board of Research Studies, Himachal Pradesh University, Shimla (2008 – 2010)
Member, Board of Research Studies, Ch. Charan Singh University, Meerut (2008 – 2011)
Member, Departmental Research Committee, M D University, Rohtak (2008 – 2010)
Member, Governing Body, Deshbandhu College, August 2009-August 2011
Member, Selection Committee for JRF's /Project Assistants, Deptt. of Chemistry, DU 2009-2010
Subject Expert, Faculty of Applied Sciences, GNDU, 01.072010---30.06.2012
Chairman, Central Pool Grievance Committee (Non-academic staff, Central pool) March 2010-
Coordinator, Team of Observers, Annual Examinations, University of Delhi-2010
Member, Advisory Committee, DUSU Elections, 2010-2011
External Expert, Doctoral Committee, Ph. D. Programme in Chemistry, IGNOU, 2010
Member, DRC, Department of Pharmacy, university of Delhi, Aug. 2010-2012

Professional Societies Memberships

Life member, Chemical Research Society of India
Life member, Indian Chemical Society
Life member, National Science Congress Association
Life member, Indian Council of Chemists

Projects (Major Grants / Collaborations)

Current research Grant

"One Time Research Grants" University of Delhi