University Faculty Details Page on DU Web-site

Title	Prof.	First Name	Sunil	Last Name	Sharma	Photograph
Designation		Professor				
Department		Chemistry				
Address (Campus)		North Campus, University of Delhi, Delhi - 110007				
(Residence)		5/20 University Road, Delhi University, Delhi - 110007				
Phone No (Campus)		91-011-2766 6646 Ext. 191				
(Residence) optional						
Mobile						
Fax		91-011-27666950				
Email		sk.sharma90@gmail.com				
Web-Page		http://www.du.ac.in/index.php?id=270&fmember=2645&cid=263				

Education

Subject	Institution	Year	Details
Ph. D.	University of Delhi	1992	Thesis topic: New Natural Products and their spectral studies
M. Sc.	University of Delhi	1986	Subjects: Organic Chemistry (Spl.)
B. Sc.	University of Delhi	1984	Subjects: Chemistry (Hons.)

Career Profile

Organisation / Institution	Designation	Duration	Role
University of Delhi	Professor	2010-present	Teaching and research
University of Delhi	Associate Professor	2004-2010	Teaching and research
University of Massachusetts Lowell, USA	Research Scientist	2002 - 2004	Carried research in the areas of Polymer Chemistry & Nanotechnology
Boston College, Boston, USA	Scientist	2000-2002	Synthesis of platinated oligo-nucleotides and peptide nucleic acid
University of Delhi	Scientist 'B'	1997-2000	Biotransformations and synthesis of bioactive compounds
Copenhagen University & University of Southern Denmark	Research Fellow	1996-1997	Synthesis of carbohydrate modified nucleosides & phytochemical investigation of plants
CSIC, Madrid, Spain	Post-Doctoral Fellow	1993-1995	Molecular recognition and glycophane synthesis

Research Interests / Specialization

Organic synthesis, Bio-catalysis, Chemistry of natural products, Nucleic acid chemistry, Polymer synthesis, and Nanotechnology.

Administrative Assignments

2011 – 2012: Convener, Organic Section, Department of Chemistry, University of Delhi.
Nov. 2011: Deputy Superintendent of Practical Examination, M.Sc. – Chemistry Examinations, University of Delhi.
Dec. 2010: Deputy Superintendent of Theory Examination, M.Sc. – Chemistry Examinations, University of Delhi.

Teaching Experience (Subjects/Courses Taught)

Spectroscopic techniques for identification of organic compounds, Chemistry of natural products, Chemistry of life processes, Photochemistry

Honors & Awards

2011 CREST Award by Department of Biotechnology, Government of India to visit University of Massachusetts Lowell, USA.
2007 Overseas Associate Award by Department of Biotechnology, Government of India to visit Massachusetts Institute of Technology (MIT, USA).
2000 Research associate fellowship by National Institute of Health, USA.
1999 International Authors Award from the Royal Society of Chemistry (UK).

1999 Travel grant award by International Union of Pure and Applied Chemistry (IUPAC).
1998 Best oral presentation award in National Seminar on "Perspectives in Interfacial Areas of Chemistry and Biology" held at University of Delhi, Delhi.
1996 Research Fellowship by Danish International Development Agency (DANIDA), Denmark.
1993 Postdoctoral Fellowship by Spanish Ministry of Education and Science, Spain.
1986 Qualified Graduate Aptitude Test in Engineering (GATE) of Indian Institute of Technology (IIT).
1986 Awarded Junior and Senior Research Fellowships; Qualified NET (University Grants Commission).

Publications (2013-2008): 36 of total 91 Avg. Impact: 3.67

1. K Chand, RK Tiwari, S Kumar, AN Shirazi, E Van der Eycken, VS Parmar, K Parang and **SK Sharma**. Synthesis, antiproliferative, and c-Src kinase inhibitory activities of chromone derivatives. ***J. Het. Chem.*** (accepted for publication, 2013). Impact Factor (IF): 1.224
2. A bifunctional nanocarrier based on amphiphilic hyperbranched polyglycerol derivatives. IN Kurniasih, H Liang, S Kumar, A Mohr, SK Sharma, JP Rabe, R Haag. ***J. Mat. Chem. B: Mat. for Biol. and Medicine*** **1**, 3569-3577 (2013). IF: 6.101
3. A Kumar, Z Li, **SK Sharma**, VS Parmar and E Van der Eycken. Switching the regioselectivity via indium (III) and gold (I) catalysis: a post-Ugi intramolecular hydroarylation to azepino- and azocino-[cd]indolones. ***Chem. Commun.*** 6803-05 (2013). IF: 6.378
4. A Kumar, Z Li, **SK Sharma**, VS Parmar and E Van der Eycken. An Expedient route to imidazo[1,4]diazepin-7-ones *via a* Post-Ugi gold-catalyzed heteroannulation. ***Org. Lett.*** **15 (8)**, 1874-77 (2013). IF: 6.142
5. K Chand, AN Shirazi, P Yadav, RK Tiwari, M Kumari, K Parang, **SK Sharma**. Synthesis, antiproliferative and c-Src kinase inhibitory activities of cinnamoyl- and pyranochromen-2-one derivatives. ***Canadian J. Chem.*** (2013, published online, doi: 10.1139/cjc-2013-0053). IF:1.177
6. A Kumar, DD Vachhani, SG Modha, **SK Sharma**, VS Parmar, EV Van der Eycken. Gold(I)-catalyzed Post-Ugi hydroarylation: An efficient approach to pyrrolopyridines and azepinoindoles. ***Eur. J. Org. Chem.*** 2288–2292 (2013**).** IF: 3.344
7. DD Vachhani, A Kumar, SG Modha, **SK Sharma**, VS Parmar, EV Van der Eycken. Diversely substituted triazolo[1,5-a][1,4]benzodiazepinones: A Post-Ugi copper-catalyzed tandem azide–alkyne cycloaddition/ullmann C–N coupling approach. ***Eur. J. Org. Chem.*** 1223-1227 (2013). IF: 3.344
8. S Gupta, B Schade, S Kumar, C Böttcher, **SK Sharma**, and R Haag. Dendronized multiamphiphilic polymers as non-ionic nanotransporters for biomedical applications: Synthesis, aggregation behavior and transport properties. ***Small 9*** (6), 894-904 (2013). IF: 7.823
9. SG Modha, A Kumar, DD Vachhani, **SK Sharma**, VS Parmar and EV Van der Eycken. Gold (I) and platinum (II) switch: A post-Ugi intramolecular hydroarylation to pyrrolopyridinones. ***Chem. Commun.*** **48**, 10916 – 10918 (2012). IF: 6.378
10. SG Modha, A Kumar, DD Vachhani, J Jacobs, **SK Sharma**, VS Parmar, LV Meervelt and EV Van der Eycken. Diversity-oriented approach to spiroindolines: Post-Ugi gold-catalyzed diastereoselective domino cyclization. ***Angew Chem. Int. Ed.*** **51**, 9572 – 9575 (2012). IF:13.734
11. S Gupta, S Jalal, S Kumar, R Haag and **SK Sharma**. A simple and convenient chemoenzymatic approach for the synthesis of valuable triacylglycerol-based dendritic building blocks. ***Indian J. Chem.*** **51B**, 1376-1387 (2012). IF: 0.648
12. S Singh, S Gupta, B Singh, **SK Sharma**; VK Gupta and GL Sharma. Proteomic characterization of *Aspergillus fumigatus* treated with an antifungal coumarin for identification of novel target molecules of key pathways. ***J. Prot. Res.*** **11**(6), 3259-3268 (2012). IF: 5.056
13. S Gupta, R Tyagi, VS Parmar, **SK Sharma** and R Haag. Polyether based amphiphiles for delivery of active components. ***Polymer*** **53**, 3053-3078 (2012). IF: 3.379
14. S Kumar, CS Reddy L, Y Kumar, A Kumar, BK Singh, V Kumar, S Malhotra, MK Pandey, R Jain, R Thimmulappa, **SK Sharma**, AK Prasad, S Biswal, EV Van der Eycken, A. L. DePass, SV Malhotra, B Ghosh and VS Parmar. Arylalkyl ketones, benzophenones, desoxybenzoins and chalcones inhibit TNF- induced expression of ICAM-1: Structure-activity analysis. ***Arch. der. Pharm.*** **345**, 368-77 (2012). IF 1.54
15. S Jalal, K Chand, A Kathuria, P Singh, N Priya, B Gupta, HG Raj and **SK Sharma**. Calreticulin transacetylase: A novel enzyme-mediating protein acetylation by acetoxy derivatives of 3-alkyl-4-methylcoumarins. ***Bioorg. Chem.*** **40**, 131–136 (2012). IF: 1.732
16. A Kathuria, N Priya, K Chand, P Singh, A Gupta, S Jalal, S Gupta, HG Raj and **SK Sharma**. Calreticulin mediated transacetylase activity utilizing derivatives of coumarin and quinolone as a substrate: Investigations on antiplatelet function ***Bioorg. Med. Chem.*** **20**, 1624-1638 (2012). IF: 2.903
17. S Gupta, S Singh, A Kathuria, M Kumar, S Sharma, R Kumar, V S Parmar, B Singh, A Gupta, E V der Eycken, G.L. Sharma and **SK Sharma**. Ammonium derivatives of chromenones and quinolinones as lead antimicrobial agents ***J. Chem. Sci.*** **124**, 437-449 (2012). IF: 1.298
18. **SK Sharma**, S Kumar and S Jalal. Glycerol and its Value-added products. ***Trends Carb. Res.*** **3** (4) 18-34 (2011). IF: Not cited yet, new journal
19. V Kumar, S Kumar, M Hassan, H Wu, RK Thimmulappa, A Kumar, **SK Sharma**, VS Parmar, S Biswal and SV Malhotra. Novel chalcone derivatives as potent Nrf2 activators in mice and human lung epithelial cells. ***J. Med. Chem.*** **54**, 4147 – 4159 (2011). IF: 5.614

20. A Kathuria, S Jalal, R Tiwari, AN Shirazi, S Gupta, S Kumar, K Parang, **SK Sharma**. Substituted coumarin derivatives: Synthesis and evaluation of antiproliferative and Src kinase inhibitory activities. ***Chem. Biol. Interface*** **1**, 279-296 (2011). IF: Not cited yet, new journal
21. Poonam, Raunak, G Kumar, CS Reddy L, R Jain, **SK Sharma**, AK Prasad, VS Parmar. Chemical constituents of the genus *Prunus* and their medicinal properties. ***Curr. Med. Chem.*** **18**, 3758 – 3824 (2011). IF: 4.07
22. HG Raj, **SK Sharma**, VS Parmar. Protein acyltransferase function of purified calreticulin: The exclusive role of P-domain in mediating protein acylation utilizing acyloxycoumarins and acetyl CoA as the acyl group donors. ***Prot. Pept. Lett.*** **18**, 507-517 (2011). IF:1.994
23. AS Baghel, R Tandon, G Gupta, A Kumar, RK Sharma, N Aggarwal, A Kathuria, NK Saini, M Bose, AK Prasad, **S. K. Sharma**, M Nath, VS Parmar, HG Raj. Characterization of protein acyltransferase function of recombinant purified GlnA1 from *Mycobacterium tuberculosis:* A moon lighting property. ***Microbiol. Res.*** **166** (8), 662-672 (2011). IF: 1.993
24. **SK Sharma**, S Kumar, K Chand, A Kathuria, A Gupta, R. Jain. An update on natural occurrence and biological activity of chromones. ***Curr. Med. Chem.*** **18**, 3825 – 3852 (2011). IF: 4.07
25. S Kumar, A Mohr, A Kumar, **SK Sharma**, R Haag. Synthesis of biodegradable amphiphilic nanocarriers by chemo-enzymatic transformations for the solubilization of hydrophobic compounds. ***Int. J. Art. Organ*** **34**, 84 - 92 (2011). IF: 1.759
26. V Kumar, B Gupta, A Khan, R Mosurkal, SK Sharma, VS Parmar, J Kumar, LA Samuelson, K Kumar, AC Watterson. Crosslinking of biocatalytically synthesized organosilicone copolymers for flame retardant applications. ***J. Macromol. Sci., Pure and Applied Chem. Pt. A*** **48**, 1055 - 1060 (2011). IF: 0.887
27. M Calderon, MA Quadir, **SK Sharma**,R Haag. Biomedical applications of dendritic polyglycerols. ***Advanced Materials*** **22**, 190-218 (2010). IF: 14.829
28. A Gupta, N Priya, S Jalal, K Chand, HG Raj, VS Parmar, AL DePass, **SK Sharma**. Specificities of calreticulin transacetylase to acetoxy derivatives of benzofurans: Effect on the activation of platelet nitric oxide synthase. ***Biochimie*** **92**, 1180-85 (2010). IF: 3.142
29. N Priya, A Gupta, K Chand, P Singh, A Kathuria, HG Raj, VS Parmar, **SK Sharma**. Characterization of 4-methyl-2-oxo-1,2-dihydroquinolin-6-yl acetate as an effective antiplatelet agent. ***Bioorg. Med. Chem.*** **18**, 4085-94 (2010). IF: 2.903
30. M Husain, V Kumar, R Kumar, NA Shakil, **SK Sharma**, AK Prasad, CE Olsen, SV Malhotra, EV Ven der Eckyen, K Levon, AL DePass, VS Parmar. Enantioselective biocatalytic reactions on (±)-aryl alkyl ketones by native and modified PPL. ***Biocat. Biotrans.*** **28**, 172-84 (2010). IF 0.895
31. VD Kancheva, L Saso, PV Boranova, A Khan, MK Saroj, MK Pandey, S Malhotra, JZ Nechev, **SK Sharma**, AK Prasad, MB Georgieva, C Joseph, AL DePass, RC Rastogi, VS Parmar. Structure - activity relationship of dihydroxy-4-methylcoumarins as powerful antioxidants: Correlation between experimental & theoretical data and synergistic effect. ***Biochimie*** **92**, 1089-1100 (2010). IF: 3.142
32. R Kumari, S Bansal, G Gupta, S Arora, A Kumar, S Goel, P Singh, P Ponnan, N Priya, T K Tyagi, AS Baghel, S Manral, R Tandon, R Joshi, V Rohil, M Gaspari, E Kohli, YK Tyagi, BS Dwarakanath, D Saluja, S Chatterji, **SK Sharma**, AK Prasad, RC Rastogi, HG Raj, VS Parmar. Calreticulin transacylase: Genesis, mechanism of action and biological applications. *Biochemie* **92**, 1173-79 (2010). IF: 3.142
33. S Gupta, MK Pandey, K Levon, R Haag, AC Watterson, VS Parmar, **SK Sharma**. Biocatalytic approach for the synthesis of glycerol-based nanomicellar self-assembly systems. ***Macromol. Chem. Phys.*** **211**, 239-244 (2010). IF: 2.386
34. A Kathuria, A Gupta, N Priya, P Singh, HG Raj, AK Prasad, VS Parmar, and **SK Sharma**. Specificities of acetoxy derivatives of 3-alkyl-4-methylcoumarins for acetoxy drug: Protein transacetylase and their role in activation of nitric oxide synthase. ***Bioorg. Med. Chem.*** **17**, 1550-1556 (2009). IF: 2.903
35. **SK Sharma**, S Kumar, R Tyagi, EF Barry, J Kumar, AC Watterson, DK Ryan and VS Parmar. Selective recognition of Ca^{2+} ions using novel polymeric phenols. ***Microchem. J.*** **90**, 89-92 (2008). IF: 2.879
36. MK Pandey, R Tyagi, VB Tucci, V Kumar, B Gupta, **SK Sharma**, J Kumar, VS Parmar and AC Watterson. Novel nanotechnology platform: Design and synthesis. ***Polymer Preprints*** **49(2)**, 1066-1067 (2008).

Articles

1. IUPAC International Conference on Biodiversity and Natural Products: Chemistry and Medical Applications. ***Natural Product Radiance* Vol 3(4), 273-277, July – August 2004.**
2. S. Gupta, B. Schade, S. Kumar, M. Kumari, S. Kumar, C. Böttcher, R. Haag, S. K. Sharma. Non-ionic dendronized multiamphiphilic polymers as nanocarriers for biomedical applications. ***NSTI-Nanotech 2013: TechConnect World 2013 Proceedings*, Vol. 3, 308-311 (2013).**

Patents:

1. VS Parmar, AK Prasad, HG Raj, M Bose, SK Sharma, R Tandon, A Baghel, A Kathuria, G Gupta, N Aggarwal. "Coumarin compounds for the treatment of mycobacterial infections". **International PCT Application No. PCT/IN2012/000242 dt. April 04, 2012.**

Organization of Conferences

Organizing Convener: Indo-German Workshop on "New Perspectives for Nano Carriers in Biomedical Applications" on 14th January 2013 at Department of Chemistry, University of Delhi.

Organizing Coordinator: 7th Indo – Italian workshop on "Chemistry and Biology of Antioxidants". 16th November 2010 – organized by Department of Chemistry, University of Delhi and Embassy of Italy.
Organizing Coordinator: 4th Indo – Italian Seminar on "Green Chemistry and Natural Products". 17 November 2010 – organized by Department of Chemistry, University of Delhi and Embassy of Italy.
Organizing Secretary: International Symposium on trends in drug discovery and development (T3D – 2010). 5 – 8 January 2009, organized by Department of Chemistry, University of Delhi.
Organizing Secretary: 6th Indo – Italian workshop on "Chemistry and Biology of Antioxidants". 10 - 11 December 2009 – Organized by Department of Chemistry, University of Delhi and Embassy of Italy.
Organizing Secretary: 3rd Indo – Italian Seminar on Green Chemistry. 9 December 2009 – organized by Department of Chemistry, University of Delhi and Embassy of Italy.
Secretary: IUPAC Sponsored Second International symposium on Green / Sustainable Chemistry on 10-13 January 2006 – organized by Department of Chemistry, University of Delhi and Embassy of Italy.

Total Publication Profile optional

In Indexed/ Peer Reviewed Journals
Articles published: 82
Review articles published: 10
Patents: 1

Complete list of papers published along with Impact factor (IF) Avg. Impact: 3.078

Journal [No. of papers published, Impact factor]: Publication details

Advanced Materials [1, IF: 14.829]: **22**, 190-218 (2010);
Angew Chem. Int. Ed. [1, IF:13.734]: **51**, 9572 – 9575 (2012);
J. Am. Chem. Soc. [3, IF: 10.677]: **126**, 70-71 (2004); **124**, 9658-9659 (2002); **117**, 11198-204 (1995);
Small [1, IF: 7.823]: **9**, 894-904 (2013);
Chem. Commun. [5, IF: 6.378]: **49**, 6803-05 (2013); **48**, 10916 (2012); 2616-2617 (2007); 2689-2691 (2004); 27-29 (1993);
J. Mat. Chem. B: Mat. for Biol. and Medicine [1, IF 6.101]: **1**, 3569-3577 (2013);
Org. Lett.[1, IF: 6.142]: **15**, 1874-77 (2013);
The FASEB Journal [1, IF: 5.704]: **14**, A1513 (2000);
J. Med. Chem. [1, IF: 5.614]: **54** (12), 4147 – 4159 (2011);
J. Proteome Res. [1, IF: 5.056] **11**(6), 3259-3268 (2012);
J. Org. Chem. [1, IF: 4.564]: **61**, 6790-6798 (1996);
Curr. Med. Chem. [2, IF: 4.07]: **18** (25), 3758 – 3824 (2011); **18** (25), 3825 – 3852 (2011);
Biochimica et Biophysica Acta [1, IF: 3.848]: **1698**, 55 - 66 (2004);
Org. Biomol. Chem. [1, IF: 3.568]: **5**, 3524-3530 (2007);
***J. Chem. Soc., Perkin Trans**.** [1, IF: 3.568]: **1**, 1409-1422 (1998);
Europ. J. Med. Chem. [1, IF: 3.499]: **42**, 447-455 (2007);
FEBS Letters [1, IF: 3.478]: **579**, 1665-1669 (2005);
Polymer [1, IF: 3.379]: **53**(15), 3053-3078 (2012);
Eur. J. Org. Chem. [2, IF: 3.344] 1223-27 & 2288–2292 (2013**);**
Org. Mass Spectrom.# [1, IF: 3.214]: **28**, 23-26 (1993);
J. Inorg. Biochem. [1, IF: 3.197]: **98**, 1570-1577 (2004);
Biochimie [3, IF: 3.142]: **92**, 1173-79 (2010); **92**, 1180-85 (2010); **92**, 1089-1100 (2010);
J. Pharm. Sci. [1, IF: 3.13]: **83**, 1217-1221 (1994);
Phytochemistry [1, IF: 3.050]: **36**, 507-511(1994);
Bioorg. Med. Chem. [13, IF: 2.903]: **20**, 1624-1638 (2012); **18**, 4085-94 (2010); **17**, 1550-1556 (2009); **15**, 2952-2962 (2007); **13**, 4300-4305 (2005); **11**, 913-929 (2003); **9**, 1345-1348 (2001); **9**, 2643-2652 (2001); **8**, 233-237 (2000); **8**, 1707-1712 (2000); **7**, 2091-2094 (1999); **5**, 1609-1619 (1997); **4**, 2225-2228 (1996);
Microchem. Journal [1, IF: 2.879]: **90**, 89-92 (2008);
Tetrahedron [2] [IF: 2.803]: **61**, 5687-5697 (2005); **53**, 2163-2176 (1997);
Pure and Applied Chemistry [4, IF: 2.789]: **77**, 209–226 (2005); **77**, 91-101 (2005); **77**, 201-208 (2005); **77**, 65–74 (2005);
Tet. Lett. [2, IF: 2.397]: **40**, 9145-9146 (1999); **36**, 5627-30 (1995);
Macromol. Chem. Phy. [1, IF: 2.386]: **211**, 239-244 (2010);
Bioorg. Med. Chem. Lett. [1, IF: 2.338]: **6**, 2269-2274 (1996);
Spectrochimica Acta [1, IF: 1.977]: **48A**, 617-620 (1992);
Prot. Pept. Lett. [1, IF: 1.994]: **18,** 507-517 (2011);
Microbiol. Res. [1**,** IF: 1.993]: **166** (8), 662-672 (2011);

Int. J. Art. Organ [1, IF: 1.759]: **34**, 84 - 92 (2011);
Bioorg. Chem. [1, IF: 1.732]: **40**, 131–136 (2012);
J. Het. Chem. [1, IF: 1.224]: accepted for publication (2013);
Archiv. der Pharm. [1, IF 1.54]: **345**, 368-77 (2012);
Mag. Reson. Chem.[#] [2, IF: 1.528]: **30**, 560-563 (1992); **28**, 470-474 (1990);
J. Chem. Sci. [1, IF: 1.298]: **124** (2), 437-449 (2012);
Canadian J. Chem. [1, IF:1.177] (2013, published online, doi: 10.1139/cjc-2013-0053);
Biocat. Biotrans. [1, IF: 0.895]: **28**, 172-84 (2010);
J. Macromol. Sci., Pt. A Pure and Applied Chemistry [2, IF: 0.887]: **48** (2), 1055 – 1060 (2011); **41,** 1459-66 (2004);
Indian J. Chem. [10] [IF: 0.648]: **51B**, 1376-87 (2012); **46B**, 1501-1510 (2007); **42B**, 1950-1957 (2003); **41B**, 360-367 (2002); **38B**, 1231-1233 (1999); **37B**, 628-643 (1998); **35B**, 220-232 (1996); **33B**, 17-26 (1994); **33B**, 305-308 (1994); **32B**, 244-256 (1993);
Russian J. Org. Chem. [1, IF: 0.513]: **31**, 1839-1848 (1995);
J. Sci. Ind. Res. [2, IF: 0.505]: **59**, 893-903 (2000); **57**, 873-890 (1998);
J. Indian Chem. Soc. [2, IF: 0.36]: **79**, 787-795 (2002); **67**, 207-209 (1990);
Polymer Preprints [2]: **49(2)**, 1066-1067 (2008); **44(2)**, 791-792 (2003);
Trends Carb. Res. [1, IF: Not cited yet, new journal] **3** (4), 18-34 (2011);
Chem. Biol. Interface [1, IF: Not cited yet, new journal] **1** (2), 279-296 (2011);
NSTI-Nanotech 2013 [1]: Tech. Connect World Proceedings Vol. 3, 308-11 (2013);
[*] Now published as Org. Biomol. Chem.
[#] Now published as J. Org. Spectrom.

Conference Participation: 62

1. **Nanotech-2013,** National Harbor, Washington DC, USA, 12-16 May 2013.
   Invited Lecture: Non-ionic Dendronized Multiamphiphilic Polymers as Nanocarriers for Biomedical Applications.
2. **KHOJ 13 A National Conference on "Emerging Trends in Chemical Science"** organized by Bharat Institute of Technology (BIT), Meerut, India, 6th April 2013.
   Oral paper presentations:
   1. Mr. Shiv Kumar: Synthesis, Anti-proliferative, and c-Src Kinase Inhibitory Activities of Chromone Derivatives.
   2. Mr. Abdullah Khan: Synthesis of Novel 2-Pyridone Derivatives and Evaluation of their Anti-proliferative Activity.
   3. Mr. Abhishek K. Singh: Chemo-enzymatic Synthesis of Amphiphilic Dendritic Polymers for Biomedical Applications.
      Awarded Best Presentation
3. **19th ISCB International Conference (ISCBC-2013)** on "Recent Advances and Current Trends in Chemical and Biological Sciences", jointly organized by Indian Society of Chemists and Biologists, Lucknow (UP) and Mohanlal Sukhadia University, Department of Chemistry, Udaipur (Rajasthan), 2-5th March 2013.
   Invited Talk: Bio-catalytic Synthesis of Amphiphilic Polymeric and Dendritic rchitectures for Biomedical Applications.
   Poster Presentations:
   1. Mr. Shiv Kumar and Ms. Meena Kumari: Synthesis, Anti-proliferative, and c-Src Kinase Inhibitory Activities of Chromone Derivatives.
   2. Ms. Preeti Yadav and Ms. Suchita Prasad: Synthesis, Antiproliferative, and c-Src kinase Inhibitory Activities of Chromen-2-one Derivatives.

   Participation: Mr. Atul K. Sharma, Mr. Badri Parshad, Mr. Abhishek K. Singh
4. **"Emerging Trends in Development of Drugs and Devices"** jointly organized by Department of Chemistry, University of Delhi, Delhi and three National Science Academies of India, 21-23rd January 2013.
   Poster Presentations:
   1. Ms. Meena Kumari and Mr. Abdullah Khan: Synthesis of Novel 2-Pyridone Derivatives and Evaluation of their Anti-proliferative Activity.
   2. Ms. Preeti Yadav: Two-photon active coumarin derivatives for high-contrast imaging of cancer cells.
   3. Ms. Suchita Prasad and Ms. Preeti Yadav: Synthesis, Antiproliferative, and c-Src kinase Inhibitory Activities of Chromen-2-ones.

   Participation: Mr. Shiv Kumar, Mr. Atul K. Sharma, Mr. Badri Parshad, Ms. Priyanka Manchanda, Mr. Abhishek K. Singh
5. **Indo-German Workshop** on "New Perspectives for Nano-Carriers in Biomedical Applications" organized by Department of Chemistry, University of Delhi, Delhi on 14th January 2013.
   Poster presentation by:
   Mr. Shiv Kumar, Ms. Meena Kumari and Mr. Abhishek K. Singh: Chemo-Enzymatic Synthesis of Amphiphilic Polymeric and Dendritic Architectures for Biomedical Applications.
   Participation: Mr. Abdullah Khan, Mr. Atul K. Sharma, Mr. Badri Parshad, Ms Preeti Yadav, Ms Suchita Prasad, Ms Priyanka Manchanda
6. **National Carbohydrate Conference** (CARBO-XXVII) at CFTRI Mysore, Karnataka, 13-15 December 2012.

Invited talk: Glycerol Based Polymeric and Dendritic Architectures for Biomedical Applications.

7. **2012 Sukant Tripathy Annual Memorial Symposium**. December 7, 2012 at the University of MA Lowell.
   Invited talk: Chemo-enzymatic Synthesis of Biocompatible Polymeric and Dendritic Architectures for Drug Delivery Applications.
8. **16th Sigma-Aldrich Organic Synthesis Meeting**, Spa, Belgium,6-7th December 2012.
   Poster Presentation:
   Mr. Amit Kumar: A Diversity-Oriented Approach to Spiroindolines: Post-Ugi Gold-catalyzed Diastereoselective Domino Cyclization.
9. **Salzberg Chemistry Seminar**. The City College of New York, NY, USA, 12 November 2012.
   Invited lecture: Bio-catalytic Synthesis of Amphiphilic Polymeric and Dendritic Architectures for Biomedical Applications.
10. **University of Rhode Island (URI) College of Pharmacy's International Conference**, "Frontiers in Pharmaceutical Sciences: Global Perspectives," Friday through Sunday, September 28-30, 2012.
    Invited talk: Ammonium Derivatives of Chromenones and Quinolinones as Lead Antimicrobial Agents.
11. **Organic Group Seminar**, University of Massachusetts Lowell, 14 September 2012.
    Invited lecture: Biocatalysts: Modern Tools of Organic Synthesis.
12. **13th Belgian Organic Synthesis Symposium (*BOSS XIII*)**, KU Leuven, Belgium 15-20th July 2012.
    Participation: Mr. Amit Kumar
13. **International Conference on Advances in Applied Chemical Sciences and Innovative Materials.** IIT, Delhi on 10-12 August 2011.
    Invited talk: "Novel Bio-catalytic Methods for the Synthesis of Biocompatible Polymeric / Dendritic Architectures".
14. **National Workshop on "Carbohydrate based Chemical Industry"**, in Hindi. At National Chemical Laboratory (NCL), Pune, on 17-18 August 2011.
    Invited talk: Biocatalytic Synthesis of Glycerol Based Novel Amphiphilic Polymers and Dendritic Architectures.
15. **Second International Conference on Holistic Medicine (ICHM-2011)**, Institute for Holistic Medical Sciences , Kottayam, Kerala, India on 10-13 September 2011.
    Invited Talk: Synthesis and evaluation of anticancer and Src kinase inhibitory activities of platinated nucleic acids and heterocyclic compounds.
16. **One day National Workshop on Recent Trends in Chemistry - 2011 (RTC-2011),** Department of Chemistry, Deenbandhu Chhotu Ram University of Science and Technology, Murthal (Haryana) on 29th September 2011.
    Invited talk: "Biocatalysts: Modern Tools of Organic Synthesis".
17. **"Conclave of Scientists"** Organized by Zaheer Science Foundation, Delhi, on 26-29 November 2010**.**
    Invited talk: Biocatalytic Synthesis of Polymeric Materials for Drug & Gene Delivery Applications.
18. **JAIST, Komatsu Japan**, 9th March 2010.
    Invited talk: Design and Synthesis of Polymeric and Dendritic Architectures for Drug Delivery Applications.
19. **CARBO XXV- Silver Jubilee Conference of Association of Carbohydrate Chemists and Technologists, India**. Organized by ACCTI and Himachal Pradesh University, Shimla on 11-13 November 2010.
    Invited lecture: Novel Bio-catalytic Methods for the Synthesis of Biocompatible Polymeric / Dendritic Architectures.
20. **Topics in Supramolecular Chemistry. O**rganized by Katholieke Universiteit Leuven, Belgium on 23-27 June 2010.
    Invited lecture: Design and development of novel biocatalytic method for the synthesis of polymeric/ dendrimeric architectures.
21. **UGC-SAP sponsored 'National Conference on Nanomaterials & Coordination Chemistry'. O**rganized by Department of Chemistry, Manipur University, Canchipur, Imphal on 26-27 March 2010.
    Invited lecture: Biocatalytic synthesis of polymeric materials for drug delivery applications.
22. **International Seminar on current trends in pharmaceutical research: focus on orphan diseases.** Organized in Patna by NIPER, Hajipur C/o Rmrims, Patna in collaboration with Department of Chemistry, University of Delhi on 10 January 2010.
    Invited lecture: Design and synthesis of polymeric materials for drug delivery Applications.
23. **T3D -2010** International Symposium on trends in drug discovery and development. Organized by Department of Chemistry, University of Delhi, on 5-8 January 2010.

    Poster Presentations:

    1. Ms. Anjali Gupta: Specificities of Calreticulin Transacetylase to acetoxy derivatives of benzofurans. **Awarded Best Poster**
    2. Mr. Karam Chand: Characterization of acetoxy quinolones as an effective antiplatelet agent.
    3. Ms. Abha Kathuria: Chromen-2-ones, quinolin-2-ones and chromen-4-ones as lead antimicrobial compounds.
    4. Ms. Shilpi Gupta: Biocatalytic synthesis of PEG based conjugated polymer dendrimer architectures for drug delivery applications.
    5. Ms. Sarah Jalal: Chemoenzymatic approach for the synthesis of valuable triacyl glycerol based dendritic blocks.

24. **University of Rhode Island, USA 5th May 2009.**
    Invited lecture: DNA Targeting to Control Abnormal Gene Activity.
25. **6th Indo -Italian workshop on "Chemistry and Biology of Antioxidants". O**rganized by Department of Chemistry, University

of Delhi and Embassy of Italy on 10-11 December 2009.
Poster Presentations:
1. Ms. Anjali Gupta: Specificities of Calreticulin Transacetylase to acetoxy derivatives of benzofurans.

2. Mr. Karam Chand: Characterization of acetoxy quinolones as an effective antiplatelet agent.

26. **3rd Indo - Italian Seminar on Green Chemistry**. Organized by Department of Chemistry, University of Delhi and Embassy of Italy on 9th December 2009.

Poster presentation:
Ms. Shilpi Gupta: Chemo-enzymatic method for the synthesis of polymer - dendrimer conjugates.

27. **5th International Conference on Biopesticides: Stakeholders Perspectives**. Organized by society for promotion and innovation of biopesticides and The Energy and Resource Institute, New Delhi on 26-30 April 2009.

28. **Indo-French Symposium on "Biomolecular Chemistry". O**rganized by Department of Chemistry, University of Delhi on 4 March 2009.
Poster Presentation:
Ms. Abha Kathuria: Specificities of acetoxy derivatives of 3-alkyl-4-methyl coumarin for acetoxy drug: Protein transacetylase and their role in activation of Nitric Oxide Synthase.

29. **Indo - German Symposium on "Supramolecular Chemisty"**. Organized by Department of Chemistry, University of Delhi on 3rd March 2009.

Invited Lecture: Biocatalytic synthesis of glycerol based novel amphiphilic polymers.
Poster Presentations:
1. Mr. Sumit Kumar: Polyglycerol - PEG based dendritic architectures for drug delivery applications.

2. Ms. Sarah Jalal: A novel synthesis of aliphatic monomers having ester/ ether linkage for the synthesis of dendritic polyglycerol. A new versatile biocompatible material, for industrial and biomedical application.

30. **Indo - Danish symposium on "Bioorganic Chemistry".** Organized by Department of Chemistry, University of Delhi on 2nd March 2009.

31. **DU - NERI (AU) workshop on Atmospheric Science and Climate change.** Organized by Department of Chemistry, University of Delhi on 27-28 February 2009.

32. **ISCBC – 2009,** 13th ISCB International Conference on Interplay of Chemical and Biological Sciences: Impact on health and Environment. Organized by Department of Chemistry, University of Delhi on 26 February - 1 March 2009.
Poster presentations:
1. Ms. Sarah Jalal: Design and synthesis of novel coumarin-3-carboxamide as potential bioactive compounds.
2. Ms. Anjali Gupta: Synthesis of novel quinolin-2-ones and evaluating their activity for acetoxy drug: Protein transacetylase and their role in activation of NOS platelet aggregation activity.
3. Ms. Abha Kathuria: Specificities of acetoxy derivatives of 3-alkyl-4-methyl coumarin for acetoxy drug: Protein transacetylase and their role in activation of Nitric Oxide Synthase.
4. Mr. Karam Chand: Synthesis of novel quinolin-2-ones as potential bioactive compounds.

33. **Indo-Japanese Seminar on Polymeric Advanced materials.** Organized by Department of Chemistry, University of Delhi on 26 February 2009.

34. **National Seminar on "Open Source Drug Discovery".** Organized by Department of Chemistry, University of Delhi and CSIR (India), on 26 February 2009.

35. **Indo-US Symposium on Trends in Chemical Biology.** Organized by Department of Chemistry, University of Delhi, on 25 February 2009.

36. **4th Indo-Italian workshop on Chemistry and Biology of Antioxidants.** Organized by Department of Chemistry, University of Delhi and Embassy of Italy on 7 December 2008.
Invited lecture: Antioxidant activitiy profile of various classes of organic Compounds.
Poster presentations:
1. Ms. Abha Kathuria: Specificities of acetoxy derivatives of 3-alkyl-4-methyl coumarin for acetoxy drug: Protein transacetylase an their role in activation of Nitric Oxide Synthase.
2. Mr. Sumit Kumar Chemoenzymatic route to polyglycerol - PEG based dendritic structures for drug delivery applications.
3. Ms. Anjali Gupta: Synthesis of novel quinolin-2-ones and evaluating their activity for acetoxy drug: Protein transacetylase and their role in activation of NOS platelet aggregation activity.
3. Mr. Karam Chand Synthesis of novel quinolin-2-ones as potential bioactive compounds.

37. **Indo-Italian Seminar on Green Chemistry and Natural Products.** Organized by Department of Chemistry, University of Delhi and Embassy of Italy, on 5-6 December 2008.

Poster presentation:
Ms. Shilpi Gupta and Mr. Sumit Kumar: Chemo - enzymatic synthesis of PEG - Glycerol based Amphiphillic Polymers.

38. **Recent advances in chemical sciences**. P.G. Department of Chemistry, Government Dungar College, University of Bikaner, Bikaner on 3-5 October 2008.
Invited lecture: Recent Trends in targeting DNA and controlling abnormal Gene Delivery.
Poster presentations:
Ms. Shilpi Gupta: Chemo - enzymatic synthesis of PEG - glycerol based amphiphillic polymers. – **Awarded Best Poster**
Ms. Anjali Gupta: Synthesis of analogs of benzofuran-3-ones and their potential as antioxidants.

39. **3rd Indo -Italian workshop on Chemistry and Biology of antioxidants**. Organized by Department of Chemistry, University of Delhi, Embassy of Italy and CSIR (India) on 28 -30 November 2007.
Poster presentations:
Mr. Karam Chand: Synthesis of novel thio coumarins.
Ms. Anjali Gupta: Synthesis of analogs of benzofuran-3-ones and their potential as antioxidants.
Ms. Abha Kathuria: Synthesis of novel C-3 substituted 4-methylcoumarins and evaluation of their Transacetylase activity.

40. **National Seminar on Green Chemistry and Natural Products**. Organized by Department of Chemistry, University of Delhi, on 26-27 Nov. 2007.
Main lecture -Design and synthesis of polymers as drug delivery agents: A green approach.
Poster presentations:
Mr. Sumit Kumar, Shilpi Gupta: Chemo -enzymatic synthesis of Peg -glycerol based amphiphillic polymers.
Ms. Sarah Jalal: Synthesis of dendritic polyglycerol : A new versatile biocompatible material for industrial and biomedical application.

41. **International seminar on Frontiers in Polymer Science and Technology**. Organized by Jadavpur University, Kolkatta and Tezpur University, Assam (India), on (POLY-2007) on 1-3 November 2007.
Oral Presentation -Design and development of polymer materials as drug delivery agents.

42. **National seminar on emerging trends in Supramolecular Research**. Organized by Department of Chemistry, Gujarat University (Ahmedabad).

Invited Lecture: Novel approaches to molecular recognition, on 30-31 March 2007.Poster Presentations:
Biocatalytic synthesis of novel flame retardants silicone based supramolecules.
Mr. Karam Chand: Design and synthesis of chromones and evaluation of their anti-inflammatory activity.
Ms. Sarah Jalal: Synthesis of Dendritic Polyglycerol : A new versatile Biocompatible material for Industrial and Biomedical application.

43. **International Conference on Advances in Drug Discovery Research**. Organized by CDRI and Department of Chemistry, Aurangabad on 24-26 February 2007.

Invited Lecture: Synthesis of some combinational heterocycles and their biological evaluation.
Poster Presentation:
Mr. Sumit Kumar: Design and synthesis of chromones and evaluation of their anti-inflammatory activity.

44. **International Symposium on Polymer Therapeutics** (ISPT -2007). Organized by Institute of Chemistry and Biochemistry Freie Universität, Berlin, on 19-20 February 2007.

45. **9th CRSI -National symposium in Chemistry (NSC-9).** Organized by Department of Chemistry, University of Delhi on 1-4 February 2007.
Poster presentations:

Mr. Sumit Kumar: Biocatalytic synthesis of novel copolymers and silicones - based advanced materials.

Microwave mediated synthesis spiro-(Indoline -Isooxazilidines) and their fluorinated analogs.

46. **Carbo XXI -Recent developments in Carbohydrate Chemistry**. Organized by Department of Chemistry, University of Delhi on 26-29 November 2006.
Poster presentations:
Ms. Sarah Jalal & Ms. Abha kathuria: Development of Biocatalytic routes towards efficient manipulation of hydroxyl groups in glycerol for commodity chemicals.

47. **SYRaCuSe Chemistry.** Organized by Department of Chemistry, Syracuse University, on 15 June 2006.

Invited Lecture: Triplex mediated delivery of Platinum complexes to specific DNA target site.

48. **IUPAC Sponsored Second International symposium on Green / sustainable Chemistry**. Organized by Department of Chemistry, University of Delhi, on 10-13 January 2006.

Poster Presentation:

Mr. Sumit Kumar: Development of synthetic methodology for the synthesis of *N*,*N*,*N*′,*N*′-dimethyl dioctyl hexyl ethoxy malonamide: A promising extractant in fuel reprocessing.

49. **Indo-Italian workshop on chemistry and Biology of Antioxidants**. Organized by Department of Chemistry, Embassy of Italy and CSIR (India) on 8-9 January 2006.

50. **XIX Carbohydrate Conference**. Organized by Chemistry Division - Forest Research Institute, Dehradun and ACCT (India) on 1-3 December 2004.

Invited lecture: Novel Carbohydrate Architectures and Applications.

51. **Biomolecular Chemistry -ISBOC -7**. Organized by University of Sheffield, UK on 27 June - 1 July 2004.
Symposium: Biothermodynamics encapsulation of hydrophobic drugs using polymeric nanospheres.

52. **ICOB - 4 and ISCNP – 24**. IUPAC International Conference on Biodiversity and Natural Products: Chemistry and Medical Applications. Organized by Department of Chemistry, University of Delhi on 26-31 January 2004.
Invited lecture: Biocatalytic routes towards pharmaceutically important precursors and drug delivery agents.

53. **National Meeting and Exposition Program, 226th ACS National Meeting, New York**. Organized by American Chemical Society, New York, on 7-11 september 2003.
General Paper on Polymer synthesis and characterization: Synthesis of amino functionalized amphiphillic copolymers as potential gene delivery Carriers.

54. **Fifth IUPAC International symposium on Bio -organic chemistry. ISBOC - 5**. Organized by NCL, Pune, on 30 January - 4 February 2000.
Poster Presentation: Novel diastereoselective acylation of 4-(-hydroxy-methyl-1,2-*o*-(1-methyl ethylidene)-3-*o*-(phenyl methyl)-α-D-pentofuranose.

55. **International Symposium on trends in medicinal Chemistry and Biocatalysis**. Organized by Department of Chemistry, University of Delhi, on 26-29 January 2000.
Short Lecture: Lipase: Modern tools of selective organic synthesis.

56. **Indo - Russian ILTP seminar on trends in chemical sciences**. Organized by DST, Department of Chemistry, (University of Delhi) and Russian Academy of Sciences (Moscow), on 24-25 January 2000.
Lecture title: Facile lipase-catalysed diastereoselective acylation of bis -hydroxylmethyl furano sugar in organic solvent.

57. **37th Iupac Congress -Frontiers in Chemistry: Molecular basis of the life Sciences**. 27th GDCH general meeting. Organized by Department of Chemistry, Berlin (Germany), on 14-19 August 1999.

58. **First University - Industry interaction meet on Lipase research: needs and components**. Organized by Department of Microbiology, University of Delhi, South campus on 20-21 May 1999.
Invited lecture: Lipase catalysed manipulation of hydroxyl groups of carbohydrates and synthesis of modified nucleosides.

59. **First National Symposium on Green Chemistry**. Organized by Department of Chemistry, University of Delhi, on 11-13 January 1999.

Poster presentations:

a) Resolution of a novel (±)-4-(1-chloroethyl)-7-hydroxy coumarin: The Green way.
b) Biocatalytic resolution of chroman-3-ols.
c) A Facile lipase-catalysed regioselective acetylation of bis -hydroxy methyl furano sugar in organic synthesis.

60. **XIII Carbohydrate conference**. Organized by Chemistry division -Forest Research Institute, Dehradun and ACCT (India) on 19-20 November 1998.
Invited Lecture: Chemo -enzymatic manipulations of hydroxyl groups of pentoses and polyols and synthesis of modified nucleosides.

61. **National seminar on perspective in Interfacial areas of Chemistry and Biology**. Organized by Department of Chemistry, University of Delhi on 20-22 January 1998,

62. **International symposium on recognition processes**. Organized by RSC, University of Birmingham on 24-29 July 1994.

Research Guidance

1. ***Supervision of awarded Doctoral Thesis – 6***

Mr. Sumit Kumar: Design and synthesis of 3-(3-chromonyl)acrylic acid derivatives & synthesis of PEG based amphiphillic polymers - April 2009

Ms. Anjali Gupta: Synthesis of nucleic acid building blocks & analogs of naturally occurring bio-active compounds - November 2009

Ms. Shilpi Gupta: Design and synthesis of benzopyrones, guanidinylated peptide nucleic acid building blocks, and chemoenzymatic synthesis of glycerol-based polymeric & dendritic architectures - May 2010

Ms. Abha Kathuria: Design and synthesis of oxygen and nitrogen containing heterocyclic compounds as potent anti-platelet and antimicrobial agents - December 2010

Ms. Sarah Jalal: Design & synthesis of novel pyridones & benzopyran-2-ones as potential bio-active compounds & synthesis of glycerol based mixed esters and dendrimer building blocks - March 2011

Mr. Karam Chand: Synthesis of novel pyridones, benzopyrones, and quinolones & SAR study of their anticancer and antiplatelet activities - January 2012.

2. ***Supervision of awarded M.Phil dissertations – 2***

Mr. Anil Kumar Pandey: Synthesis of novel benzopyran-4-ones (chromones) – November 2005

Ms. Abha Kathuria: Design and synthesis of novel C-3 substituted 4-methylcoumarins and evaluation of their biological activity - November 2007

3. ***Supervision of Doctoral Thesis, under progress – 8***
   Mr. Amit Kumar, Mr. Abdullah Khan, Mr. Atul K. Sharma, Ms. Meena Kumari, Mr. Shiv Kumar, Ms. Preeti Yadav, Mr. Badri Parsad, Ms. Suchita Prasad
4. **Supervision of Junior Research Fellow / Project Fellow – 2**
   Ms. Priyanka Manchanda, Mr. Abhishek Kumar Singh

Projects (Major Grants / Collaborations)

1. **Indo-German Science & Technology Center (IGSTC)**: April 2012 – March 2015. Rs. 142.208 lac. "Chemoenzymatic synthesis and development of biodegradable, structurally persistent core-shell nano-architectures for drug delivery applications"
1. **DRDO Grant**: June 2011 – June 2014. Rs. 46.0 lac. "Design and Synthesis of Lead Antimicrobial Compounds for Defense Applications".
2. **DU-DST Purse Grant**: December 2009 – March 2012. Rs. 37.142 lac. Studies on the synthesis of acyloxy polyphenols, the substrates for calreticulin transacylase: Molecular mechanisms of acylation of functional proteins by acyloxy polyphenols utilizing recombinant clones of C, P and N domains of Calreticulin.
3. **DBT Grant**: December 2005 – December 2010. Rs. 33.72 lac. Design and Synthesis of Novel Peptide Nucleic Acids With Improved Cell Permeability.
4. **DRDO Grant**: September 2007 – March 2010. 19.944 lac. Design and Synthesis of Glycerol Based Building Blocks for Flame Retardant Polymers".
5. **Polytechnic University**, New York, USA. 2006 – December 2009. US $ 53,000 Development of reactions and technologies in the generation of novel materials.
6. **DST Grant**: May 2007 – March 2009. 6.216 lac. Design of novel nanocarrier architectures for drug delivery.

Collaborators

Professor Rainer Haag, Freie Universitat Berlin, Germany
Professor AC Watterson, University of Massachusetts, Lowell, USA
Professor K. Parang, University of Rhode Island, USA
Professor GL Sharma, IGIB, Delhi, India
Professor Luciano Sasso, Institute of Pharmacology, Sapienza University, Rome, Italy
Dr. Praveen Vats, DIPAS, Lucknow Road, New Delhi

Other Details

Member Reviewers committee of, Elsevier, Wiley, ScholarOne, and many other journals.

(**Professor Sunil K. Sharma**)
Date: 4nd July 2013

(Signature & Stamp
of Head of the Department)