




Title	Prof.	First Name	Sunil	Last Name	Sharma	Photograph
Designation		Professor				
Department		Chemistry				
Address (Campus)		North Campus, University of Delhi, Delhi - 110007				
(Residence)						
Phone No (Campus)		91-11-2766 6646 Ext. 191				
Fax		-				
Email		Sk.sharma90@gmail.com ; sksharma@chemistry.du.ac.in				
Web-Page		http://work.du.ac.in/mrsd/uploads/faculty_cv/sksharma@chemistry.du.ac.in_Resume_SKS_Nov_17.pdf				
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						
Organization / 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 glycochane synthesis
Research Interests / Specialization						
Organic synthesis, Bio-catalysis, Chemistry of natural products, Nucleic acid chemistry, Polymer synthesis, and Nanotechnology						
Administrative Assignments						
Feb. 2019 – Feb. 2020: Treasurer & Member, Governing Body of Rajdhani College, University of Delhi, Delhi.						
Feb. 2019 – Feb. 2020: Treasurer & Member, Governing Body of Shyama Prasad Mukherji College, University of Delhi, Delhi.						
Dec. 2014: Deputy Superintendent, Centralized Evaluation of M.Sc. Theory Examination – Department of Chemistry, University of Delhi.						
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, Reaction mechanisms, Chemistry of natural products, Chemistry of life processes, Photochemistry						
Honors & Awards						
2017 C.G. Merchant Memorial Award-2017 for contribution to Carbohydrate research.						
2016 An article entitled 'Biomedical applications of dendritic polyglycerols' published in the journal <i>Advanced Materials</i> 22 , 190-218 (2010), has been listed among the top ten most cited articles from India in the ' <i>International Comparative Performance of India's Research Base (2009-2014)</i> ', published by National Science and Technology Management Information System (NSTMIS), Department of Science & Technology (DST), Ministry of Science & Technology, Government of India, New Delhi in December 2015 (Table 6.9, p. 119).						
2015 DST-SERB International Travel Grant Award.						
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 overview: Cumulative Impact = 484.379; Avg. Impact: 3.3405; Citations: 3431; h-Index: 30; i10-Index: 84

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

Chem. Soc. Rev. [1, IF: 40.182]: **45**, 6855 (2016);

Advanced Materials [1, IF: 21.950]: **22**, 190-218 (2010);

J. Am. Chem. Soc. [3, IF: 14.357]: **126**, 70-71 (2004); **124**, 9658-9659 (2002); **117**, 11198-204 (1995);

Angew Chem. Int. Ed. [1, IF: 12.102]: **51**, 9572 - 9575 (2012);

Small [2, IF: 9.958]: **9**, 894-904 (2013); 2018 (accepted for publication)

ChemSusChem [1, IF: 7.411]: **7**, 379-390 (2014);

Org. Lett. [1, IF: 6.492]: **15**, 1874-77 (2013);

Chem. Commun. [5, IF: 6.290]: **49**, 6803-05 (2013); **48**, 10916-18 (2012); 2616-2617 (2007); 2689-2691 (2004); 27-29 (1993);

J. Med. Chem. [1, IF: 6.253]: **54** (12), 4147 – 4159 (2011);

The FASEB Journal [1, IF: 5.595]: **14**, A1513 (2000);

Polymer Chem. [1, IF: 4.927]: **7** (4), 887-898 (2016);

Biochimica et Biophysica Acta [1, IF: 4.651]: **1698**, 55 - 66 (2004);

J. Org. Chem. [1, IF: 4.805]: **61**, 6790-6798 (1996);

Macromol. Rapid Communications [1, IF: 4.441]: **36**, 254-261 (2015);

J. Mat. Chem. B [1, IF 4.543]: **1**, 3569-3577 (2013);

Eur. J. Med. Chem. [1, IF: 4.519]: **42**, 447-455 (2007);

J. Proteome Res. [1, IF: 4.268] **11**(6), 3259-3268 (2012);

Chemistry – An Asian Journal [1, IF 4.083]: **12**, 1796-1806 (2017);

Catalysts [1, IF: 3.444]: **7**, 123 - (2017);

The Chemical Record [1, IF: 3.855]: **16** (1), 73-83 (2016);

Macromol. Biosci. [1, IF: 3.85]: 1800019 (2018). DOI: 10.1002/mabi.201800019.

Polymer [1, IF: 3.684]: **53**(15), 3053-3078 (2012);

FEBS Letters [1, IF: 3.623]: **579**, 1665-1669 (2005);

Microchem. Journal [1, IF: 3.583]: **90**, 89-92 (2008);

Org. Biomol. Chem. [2, IF: 3.423]: **14**, 4073-4076 (2019); **5**, 3524-3530 (2007);

*J. Chem. Soc., Perkin Trans**. [1, IF: 3.564]: **1**, 1409-1422 (1998);

Eur. Polymer Journal [2, IF: 3.741] **69**, 416-428 (2015); **80**, 158-168 (2016)

Polymers (MDPI) [1, IF: 3.483] **8**, 311 (2016);

J. Inorg. Biochem. [1, IF: 3.063]: **98**, 1570-1577 (2004);

Microbiol. Res. [1, IF: 3.037]: **166** (8), 662-672 (2011);

Curr. Med. Chem. [2, IF: 3.469]: **18** (25), 3758 – 3824 (2011); **18** (25), 3825 – 3852 (2011);

Bioorg. Chem. [2, IF: 3.929]: **40**, 131–136 (2012); **53**, 75-82 (2014);

Appl. Organomet. Chem. [1, IF: 3.259]: e5362. [https://doi.org/ 10.1002/aoc.5362](https://doi.org/10.1002/aoc.5362) (2019)

Phytochemistry [1, IF: 3.186]: **36**, 507-511(1994);

New J. Chem [1, IF: 3.201]: **43**, 11984 – 11993 (2019);

Biochimie [3, IF: 3.362]: **92**, 1173-79 (2010); **92**, 1180-85 (2010); **92**, 1089-1100 (2010);

RSC Advances [3, IF: 3.049] **5**, 48301-310 (2015); **7**, 22121 - 22132 (2017); **7**, 37534 - 37541 (2017);

PLOS One [1, IF: 2.766]: **9**, e103039 (2014);

Bioorg. Med. Chem. [13, IF: 2.442]: **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);

Molecules [1, IF: 3.098]: **21**, 1038 (2016);

Eur. J. Org. Chem. [3, IF: 2.882] 1223-27 & 2288–2292 (2013); 2084-2091 (2014);

Catalysis Letters [1, IF: 2.911]: **145 (3)**, 919-929 (2015);
Sensors [1, IF: 2.475]: **15**, 31987-98 (2015)
Tetrahedron [3] [IF: 2.377]: **71** (21), 3333-3342 (2015); **61**, 5687-5697 (2005); **53**, 2163-2176 (1997);
Synthesis [2, IF: 2.65]: **45**, 2571-82 (2013); **47** (9), 1337-1347 (2015);
Pure and Applied Chemistry [4, IF: 5.294]: **77**, 209-226 (2005); **77**, 91-101 (2005); **77**, 201-208 (2005); **77**, 65-74 (2005);
J. Photochem. Photobiol. A: Chemistry [1, IF: 2.891] **280**, 39-45 (2014);
Current Topics Med. Chem. [1, IF: 3.374]: **14**, 2552-2575 (2014);
Spectrochimica Acta [1, IF: 2.880]: **48A**, 617-620 (1992);
J. Pharm. Sci. [1, IF: 2.575]: **83**, 1217-1221 (1994);
Macromol. Chem. Phy. [1, IF: 2.492]: **211**, 239-244 (2010);
Bioorg. Med. Chem. Lett. [1, IF: 2.442]: **6**, 2269-2274 (1996);
Org. Mass Spectrom.[#] [1, IF: 2.422]: **28**, 23-26 (1993);
Beilstein J. Org. Chem. [1, IF: 2.330]: **9**, 2097-2102 (2013);
Tet. Lett. [3, IF: 2.125]: **40**, 9145-9146 (1999); **36**, 5627-30 (1995); **55**, 2070-74 (2014);
Archiv. der Pharm. [3, IF: 1.994]: **345**, 368-77 (2012); **350**, e1600390 (2017); **350**, e1700076 (2017);
Polymer Adv. Tech. [2, IF: 1.907]: **25**, 1208-1215 (2014); DOI: 10.1002/pat.4851 (2020)
ChemistrySelect [1, IF: 1.716]: **4**, 10828-37 (2019)
Mag. Reson. Chem.[#] [3, IF: 1.601]: **30**, 560-563 (1992); **28**, 470-474 (1990); **54**, 91-102 (2016);
Adv. Poly. Tech [2, IF: 2.073]: 1-9 (2017, DOI: 10.1002/adv.21839);
Indian J. Microbiol. [1, IF: 1.310]: **57** (4), 499-502 (2017)
Med. Chem. Res. [3, IF: 1.277]: **23**, 4907-4914 (2014); **24**, 2297-2313 (2015); **25 (6)**, 1057-1073 (2016)
J. Chem. Sci. [2, IF: 1.235]: **124** (2), 437-449 (2012); **129** (2), 211-222 (2017);
Int. J. Art. Organ [1, IF: 1.169]: **34**, 84 - 92 (2011);
Pharmaceutical Biology [1, IF: 1.918]: **54** (1), 105-110 (2016);
Biol. Pharm. Bulletin [1, IF: 1.26]: **39** 1544-1548 (2016)
Synth. Commun. [1, IF: 1.134]: **47**, 1854-1863 (2017);
Med. Chem. (OMICS International, Los Angeles) [1, IF: 2.631]: **6** (7), 506-514 (2016);
Canadian J. Chem. [1, IF: 1.084]: 91, 741-754 (2013);
Prot. Pept. Lett. [1, IF: 0.964]: **18**, 507-517 (2011);
J. Macromol. Sci., Pt. A Pure and Applied Chemistry [2, IF: 0.963]: **48** (2), 1055 - 1060 (2011); **41**, 1459-66 (2004);
J. Het. Chem. [2, IF: 0.893]: **52**, 562-572 (2015); **53**, 1264-75 (2016);
Biotat. Biotrans. [1, IF: 0.836]: **28**, 172-84 (2010);
Russian J. Org. Chem. [1, IF: 0.655]: **31**, 1839-1848 (1995);
Trends Carb. Res. [2, IF: 0.562] **3**, 18-34 (2011); **8**, 1-8 (2016);
Indian J. Chem. [13, IF: 0.525]: **58B**, 482-496 (2019); **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); **55B**, 492-500 (2016); **56B**, 1243-1250 (2017).
J. Sci. Ind. Res. [2, IF: 0.385]: **59**, 893-903 (2000); **57**, 873-890 (1998);
J. Indian Chem. Soc. [2, IF: 0.204]: **79**, 787-795 (2002); **67**, 207-209 (1990);
Polymer Preprints [2]: **49(2)**, 1066-1067 (2008); **44(2)**, 791-792 (2003);
Chem. Biol. Interface [1, IF: Not cited] **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. Mass. Spectrom.

Publication Details	Total: 145	Avg. Impact: 3.2689	Citations: 3431	h-Index: 30	i10-Index: 84
---------------------	------------	---------------------	-----------------	-------------	---------------

- | | |
|----|---|
| 1. | Fabrication of oligo-glycerol based hydrolase responsive amphiphilic nanocarriers. Ayushi Mittal, Abhishek K. Singh, Anoop Kumar, Parmanand, Katharina Achazi, Rainer Haag, Sunil K. Sharma. <i>Poly. Adv. Tech.</i> , DOI: 10.1002/pat.4851 (2020). (IF: 1.907) |
| 2. | A new copper complex on graphene oxide: A heterogeneous catalyst for N-arylation and C-H activation. Ayushi Mittal, Shweta Kumari, Parmanand, Deepak Yadav, Sunil K. Sharma. <i>Appl. Organomet. Chem.</i> ; e5362. https://doi.org/10.1002/aoc.5362 (2019). (IF: 3.259) |

3. Palladium nanoparticles immobilized on Schiff base-functionalized graphene-oxide: Application in carbon-carbon cross coupling reactions. Parmanad, Shweta Kumari, Ayushi Mittal, Anoop Kumar, Krishna, and Sunil K. Sharma. **ChemistrySelect** **4**, 10828-37 (2019); doi.org/10.1002/slct.201902242. (IF: 1.716)
4. Dendrimer-based micelles as cyto-compatible nanocarriers. Badri Parshad, Preeti Yadav, Yannick Kerkhoff, Ayushi Mittal, Katharina Achazi, Rainer Haag, Sunil K. Sharma. **New J. Chem.** **43**, 11984 – 11993 (2019); ISSN: 1144-0546, DOI: 10.1039/c9nj02612f. (IF:3.201)
5. Facile synthesis of biarylmethanes and tetrasubstituted arenes via base-mediated [3+3] benzannulation reaction of Morita-Baylis Hillman adducts and unsaturated sulfones, Deepak Yadav, S K Sharma and R Menon, **Org. Biomol. Chem.**, ISSN: 1477-0520, (2019), **14**, 4073-4076, DOI: 10.1039/C9OB00214F. (IF: 3.423)
6. Synthesis of novel acrylyl pyranochromen-2-one derivatives and their antibacterial activity evaluation, Suchita Prasad, Ayushi Mittal, S K Sharma, **Indian J. Chem.**, ISSN: 0376-4699, (2019), **58B**, 482-496. (IF: 0.56)
7. Synthesis of non-ionic and enzyme-responsive bolaamphiphiles for drug delivery applications, Suchita Prasad, K Achazi, B Schade, R Haag, S K Sharma, **Eur. Poly. J.**, ISSN: 0014-3057, (2018), **109**, 506-522, DOI: 10.1016/j.eurpolymj.2018.10.007. (IF: 3.741)
8. Nonionic Dendritic and Carbohydrate Based Amphiphiles: Self-Assembly and Transport Behavior, Suchita Prasad, K Achazi, B Schade, R Haag, S K Sharma, **Macromol. Bioscience**, ISSN: 1616-5187, (2018), **18**, 1800019, DOI: 10.1002/mabi.201800019. (IF: 3.85)
9. Synthesis of non-ionic bolaamphiphiles and study of their self-assembly and transport behaviour for drug delivery applications, Rashmi, Abhishek K Singh, K Achazi, B Schade, C Böttcher, R Haag, S K Sharma, **RSC Advances**, ISSN: 2046-2069, (2018), **8**, 31777-31782, DOI: 10.1039/C8RA05921G. (IF: 2.936)
10. Synthesis and characterization of fluorescent polymer - single-walled carbon nanotube complexes with charged and noncharged dendronized perylene bisimides for bioimaging studies, K Huth, M Gläske, K Achazi, G Gordeev, Shiv Kumar, R Arenal, S K Sharma, M Adeli, A Setaro, S Reich, R Haag, **Small**, ISSN: 1613-6810, (2018), **14**, 1800796. DOI: 10.1002/sml.201800796. (IF: 9.958)
11. Aggregation behaviour of non-ionic twinned amphiphiles and their application as biomedical nanocarriers, Abhishek K Singh, BNS Thota, B Schade, K Achazi, Abdullah Khan, C Böttcher, S K Sharma, R Haag, **Chemistry – An Asian Journal**, ISSN:1861-471X,(2017),**12**, 1796-1806, DOI: 10.1002/asia.201700450R1. (IF: 4.083)
12. Antimicrobial efficacy of synthetic pyranochromenones and (coumarinyloxy)acetamides, Abhishek K Singh, Suchita Prasad, B Kumar, Shiv Kumar, A Anand, S S Kamble, S K Sharma, H K Gautam, **Indian J. Microbiol**, ISSN: 0046-8991, (2017), **57** (4), 499-502 (DOI 10.1007/s12088-017-0675-z. (IF: 1.310)
13. Synthesis and antibacterial activity screening of *N*- & *O*- substituted quinolin-2-one acetamide derivatives, Karam Chand, Preeti Yadav, Suchita Prasad, S K Sharma, **Indian J. Chem.**, ISSN: 0376-4699, (2017), **56B**, 1243-1250 (IF: 0.471)
14. V Khatri, S Bhatia, K Achazi, S Deep, E Kohli, S K Sharma, R Haag, A K Prasad. Lipase-mediated synthesis of sugar-PEG-based amphiphiles for encapsulation and stabilization of indocyanine green. **RSC Advances**, ISSN: 2046-2069, (2017), **7**, 37534 - 37541, DOI: 10.1039/c7ra04994c. (IF: 3.049)
15. Acetamide Derivatives of Chromen-2-ones as Potent Cholinesterase Inhibitors, Suchita Prasad, B Kumar, Shiv Kumar, Karam Chand, S S Kamble, H K Gautam, S K Sharma, **Archiv der Pharmazie**, ISSN:1521-4184, (2017) **350**, e1700076, DOI 10.1002/ardp.201700076. (IF: 1.994)
16. Synthesis and Characterization of Novel Benzoxazine based Arylidinyl Succinimide Derivatives, Atul K Sharma, Suchita Prasad, S K Sharma, **Synthetic Communications**, ISSN: 0039-7911, (2017), **47**, 1854-1863 (DOI: 10.1080/00397911.2017.1354027. (IF: 1.134)
17. Fabrication of Nanostructures Through Self-assembly of Non-ionic Amphiphiles for Biomedical Applications, Suchita Prasad, K Achazi, C Böttcher, R Haag, S K Sharma **RSC Advances**, ISSN: 2046-2069, (2017), **7**, 22121 – 22132, DOI: 10.1039/c6ra28654b. (IF: 3.049)
18. A Simple and Efficient Process for Large Scale Glycerol Oligomerization by Microwave Irradiation, R Nguyen, N Galy, Abhishek K Singh, F Paulus, D Stöbener, C Schlesener, S K Sharma, R Haag, C Len. **Catalysts**, ISSN: 2073-4344, (2017), **7**, 123, doi:10.3390/catal7040123. (IF: 3.444)
19. Chemo-enzymatic Synthesis of Dendronized Polymers for Cyanine dye Encapsulation, Shiv Kumar, K Achazi, K Licha, Priyanka Manchanda, R Haag, S K Sharma, **Adv. Polymer Tech.**, ISSN: 0730-6679, (2017), **1-9** , DOI: 10.1002/adv.21839. (IF: 2.073)
20. Design, Synthesis and Evaluation of Kinase Inhibition Potential of Pyridylpyrimidinylaminophenyl Derivatives, Priyanka Manchanda, Badri Parshad, Amit Kumar, R K Tiwari, A Nasrolahi Shirazi, K Parang, S K Sharma, **Archiv der Pharmazie**, ISSN:1521-4184, (2017), **350**, e1600390. (DOI: 10.1002/ardp.201600390. (IF: 1.994)
21. Synthesis and Antibacterial Activity Screening of Quaternary Ammonium Derivatives of Triazolyl pyranochromenones, Preeti Yadav, B Kumar, H K Gautam, S K Sharma **J. Chem. Sci.**, ISSN: 0974-3626, (2017), **129** (2), 211-222, DOI 10.1007/s12039-016-1214-x. (IF: 1.235)
22. Synthesis of Macromolecular Systems via Lipase Catalyzed Biocatalytic Reactions: Applications and Future Perspectives, Amit Kumar, Abdullah Khan, S Malhotra, R Mosurkul, A Dhawan, M K Pandey, B K Singh, R Kumar, A K Prasad, S K Sharma, L Samuelson, A L Cholli, C Len, J Kumar, R Haag, AC Watterson, VS Parmar, **Chem. Soc. Rev.**, ISSN: 0306-0012, (2016), **45**, 6855, (DOI: 10.1039/c6cs00147e. (IF: 40.182)
23. Synthesis and SAR study of antioxidant potential of polyhydroxy coumarin derivatives, Badri Parshad, A J Duraisamy, S

- Saini, Preeti Yadav, P Vats, and S K Sharma. *Med. Chem.*, ISSN 0022-2623, (2016) (OMICS International, Los Angeles) 6 (7), 506-514. (IF: 2.631)
24. Enzyme-triggered drug release from perfluoroalkyl-functionalized dendronized polymers for Drug Delivery Applications, Badri Parshad, Meena Kumari, K Achazi, C Böttcher, R Haag, S K Sharma, *Polymers* (MDPI), ISSN: 2073-4360, (2016), 8, 311, DOI: 10.3390/polym8080311. (IF: 3.483)
 25. Chemo-Enzymatic Synthesis of Oligoglycerol Derivatives, A Singh, R Nguyen, N Galy, R Haag, S K Sharma, C Len, *Molecules*, ISSN 1420-3049, (2016) 21, 1038, DOI: 10.3390/molecules21081038. (IF: 3.098)
 26. Neuroprotective and Antioxidant Activities of 4-Methylcoumarins: Development of Structure–Activity Relationships, S Malhotra, M Tavakkoli, N Edraki, R Miri, S K Sharma, A K Prasad, L Saso, C Len, V S Parmar, O Firuzi, *Biol. Pharm. Bulletin*, ISSN: 0918-6158, (2016), 39 1544-1548, DOI: 10.1248/bpb.b16-00005. (IF: 1.26)
 27. Core-shell Nanocarriers Based on PEGylated Hydrophobic Hyperbranched Polyesters, S Stefani, P Servin, S K Sharma, R Haag, *Eur. Polymer Journal*, ISSN: 0014-3057, (2016), 80, 158-168, DOI: 10.1016/j.eurpolymj.2016.05.005. (IF: 3.741)
 28. Gold-Catalyzed Cyclization Processes: Pivotal Avenues for Organic Synthesis, Amit Kumar, S Singh, S K Sharma, V S Parmar, E V Van der Eycken, *The Chemical Record*, ISSN:1528-0691, (2016),16(1), 73-83, DOI: 10.1002/tcr.201500230. (IF: 3.855)
 29. Triglycerol-based Hyperbranched Polyesters with an Amphiphilic Branched Shell as Novel Biodegradable drug delivery systems, S Stefani, I Nurita, S K Sharma, C Böttcher, P Servin, R Haag, *Polymer Chem.*, ISSN: 1759-9954, (2016), 7 (4), 887-898, DOI: 10.1039/C5PY01314C. (IF: 4.927)
 30. Structure-activity relationship study of 4-methylcoumarin derivatives as anticancer agents, R Miri, M Nejati, L Saso, F Khakdan, Badri Parshad, D Mathur, V S Parmar, ME Bracke, A K Prasad, S K Sharma, O Firuzi, *Pharmaceutical Biology*, ISSN: 1388-0209, (2016), 54 (1), 105-110, DOI: 10.3109/13880209.2015.1016183. (IF: 1.918)
 31. Karam Chand, Atul K Sharma, S K Sharma. Synthesis, ¹H and ¹³C NMR Assignment of novel Pyridin-2(1H)-one Derivatives. *Magn. Res. Chem.*, ISSN: 0749-1581, (2016), 54, 91-102, DOI: 10.1002/mrc.4321. (IF: 1.601)
 32. Design and synthesis of novel triazolyl benzoxazine derivatives and evaluation of their antiproliferative & antibacterial activity, Abdullah Khan, Suchita Prasad, VS Parmar, S K Sharma, *J. Het. Chem.*, ISSN: 0022-152X, (2016), 53, 1264-75, DOI: 10.1002/jhet.2387. (IF: 0.893)
 33. Synthesis of Novel Triazolyl Pyranochromen-2(1H)-ones and their Antibacterial Activity Evaluation, Shiv Kumar, Suchita Prasad, B Kumar, H K Gautam, S K Sharma, *Med. Chem. Res.*, ISSN: 1054-2523, (2016), 25 (6), 1057-1073, DOI: 10.1007/s00044-016-1549-3. (IF: 1.277)
 34. Synthesis and characterization of new N-alkylated pyridin-2(1H)-ones, Atul K Sharma, Preeti Yadav, Karam Chand, S K Sharma, *Indian J. Chem.*, ISSN: 0376-4699, (2016), 55B, 492-500, DOI: 10.1002/chin.201640162. (IF: 0.471)
 35. Carbohydrate based bolaamphiphiles and their biomedical applications, Rashmi, SK Sharma, *Trends Carb. Res.*, ISSN: 0975-0304, (2016), 8 (4), 1-8. (IF: 0.562)
 36. Synthesis and Sensing Applications of Fluorescent 3-Cinnamoyl Coumarins, Preeti Yadav, H S Gill, K Chand, Lian Li, J Kumar, S K Sharma, *Sensors*, ISSN 1424-8220, (2015), 15, 31987-98, DOI: 10.3390/s151229902. (IF: 2.475)
 37. Encapsulation and cellular internalization of cyanine dye using amphiphilic dendronized polymers, Shiv Kumar, K Achazi, C Böttcher, K Licha, R Haag, S K Sharma, *Eur. Polymer Journal*, ISSN: 0014-3057, (2015), 69, 416-428, DOI: 10.1016/j.eurpolymj.2015.06.017. (IF: 3.741)
 38. Self-assembly, Photoresponsive Behavior and Transport Potential of Azobenzene Grafted Dendronized Polymeric Amphiphiles, Meena Kumari, M Billamboz, E Leonard, C Len, C Böttcher, A K Prasad, R Haag, S K Sharma, *RSC Advances*, ISSN: 2046-2069, (2015), 5, 48301-310, DOI: 10.1039/C5RA08047A. (IF: 3.049)
 39. Quaternary Ammonium and Amido Derivatives of Pyranochromenones and Chromenones: Synthesis and Antimicrobial Activity Evaluation, Suchita Prasad, Shiv Kumar, B Kumar, Abhishek K Singh, H K Gautam, S K Sharma, *Med. Chem. Res.*, ISSN: 1054-2523, (2015), 24, 2297-2313, DOI: 10.1007/s00044-014-1294-4. (IF: 1.277)
 40. Catalyst-controlled *exo/endo* selectivity in a post-Ugi intramolecular hydroarylation: synthesis of pyrrolopyridinones, pyrroloazepinones and benzothienopyridines, Z Li, Amit Kumar, S K Sharma, V S Parmar, E V Van der Eycken, *Tetrahedron*, ISSN: 0040-4020, (2015), 71 (21), 3333-3342, DOI: 10.1016/j.tet.2015.03.103 (IF: 2.377)
 41. Diversely Substituted Indoloazepinones and Indoloazocinones: A Post-Ugi Gold-Catalyzed Regioselective Carbocyclization Approach, D D Vachhani, Amit Kumar, S G Modha, S K Sharma, V S Parmar, E V Van der Eycken, *Synthesis*, ISSN : 0039-7881, (2015), 47 (9), 1337-1347, DOI: 10.1055/s-0034-1379894. (IF: 2.65)
 42. Highly Selective Biocatalytic Transesterification Reactions on: Aryl 3-Hydroxy-2-(hydroxymethyl)-2-methylpropanoates, G Kumar, A Dhawan, B K Singh, N K Sharma, S K Sharma, A K Prasad, E V Van der Eycken, C Len, A C Watterson, V S Parmar, *Catalysis Letters*, ISSN: 1011-372X, (2015), 145 (3), 919-929, DOI: 10.1007/s10562-014-1447-6. (IF: 2.911)
 43. Synthesis, Antiproliferative, and c-Src Kinase Inhibitory Activities of Chromone Derivatives, Karam Chand, R K Tiwari, Sumit Kumar, A N Shirazi, E V Van der Eycken, V S Parmar, K Parang, S K Sharma, *J. Het. Chem.*, ISSN: 0022152X, (2015), 52, 562-572 DOI: 10.1002/jhet.2106. (IF: 0.893)
 44. Dendronized Multifunctional Amphiphilic Polymers as Efficient Nanocarriers for Biomedical Applications, Meena Kumari, Shilpi Gupta, K Achazi, C Böttcher, J Khandare, S K Sharma, R Haag, *Macromol. Rapid Commun.*, ISSN: 1022-1336, (2015), 36, 254-261, DOI: 10.1002/marc.201400467. (IF: 4.608)
 45. Chromones and their Derivatives as Radical Scavengers: A Remedy for Cell Impairment, Preeti Yadav, Badri Parshad, Priyanka Manchanda, S K Sharma, *Current Topics in Medicinal Chemistry*, ISSN: 1568-0266, (2014), 14, 2552-2575, DOI:

- 10.3109/13880209.2015.1016183. (IF: 3.374)
46. *In vivo* Efficacy of a Synthetic Coumarin Derivative in a Murine Model of Aspergillosis, S Singh, R Dabur, M M Gatne, B Singh, Shilpi Gupta, S Pawar, S K Sharma, G L Sharma, *PLOS One*, ISSN: 1932-6203, (2014), 9 (8), DOI:10.1371/journal.pone.0103039. (IF: 2.766)
 47. Chromenone and Quinolinone derivatives as potent antioxidant agents, P Vats, V Hadjimitova, K Yoncheva, Abha Kathuria, A Sharma, Karam Chand, A J Duraisamy, Atul K Sharma, A K Sharma, L Saso, S K Sharma, *Med. Chem. Res.*, ISSN: 1054-2523, (2014), 23, 4907-4914, (DOI:10.1007/s00044-014-1054-5. (IF: 1.277)
 48. "Greener and Sustainable" Novozym 435 Catalyzed Syntheses of Polyesters and Polyamides of Medicinal and Industrial Relevance, Abdullah Khan, S K Sharma, Amit Kumar, A C Watterson, J Kumar, V S Parmar, *ChemSusChem.*, ISSN:1864-564X, (2014),7, 379-390, DOI: 10.1002/cssc.201300459 (IF: 7.411)
 49. Synthesis of two-photon active cinnamoyl coumarins for high-contrast imaging of cancer cells and their photophysical characterization, Preeti Yadav, S Satapathi, Meena Kumari, A Chaturvedi, L Li, L A Samuelson, J Kumar, S K Sharma, *J. Photochem. Photobiol. A: Chemistry*, ISSN: 1010-6030, (2014), 280, 39-45, DOI: 10.1016/j.jphotochem.2014.02.005. (IF: 2.891)
 50. Synthesis of amphiphilic dendronized polymers to study their self-assembly and transport behavior, M Kumari, Abhishek K Singh, Shiv Kumar, K Achazi, Shilpi Gupta, R Haag, SK Sharma, *Polymer Adv. Tech.*, ISSN: 1042-7147, (2014), 25, 1208-1215, (DOI: 10.1002/pat.3293. (IF: 1.907)
 51. Microwave-assisted synthesis of 4*H*-benzo[*f*]imidazo[1,4]diazepin-6-ones via a post-Ugi copper-catalyzed intramolecular Ullmann coupling, Z Li, L Legras, Amit Kumar, DD Vachhani, S K Sharma, V S Parmar, EV Van der Eycken, *Tetrahedron Letters*, ISSN: 0040-4039, (2014), 55, 2070-74, DOI: 10.1016/j.tetlet.2014.02.023. (IF: 2.193)
 52. Synthesis and Evaluation of c-Src Kinase Inhibitory Activity of Pyridin-2(1*H*)-one Derivatives, Karam Chand, Suchita Prasad, R K Tiwari, A N Shirazi, Sumit Kumar, K Parang and S K Sharma, *Bioorg. Chem.*, ISSN, 0045-2068, (2014), 53, 75-82, DOI: 10.1016/j.bioorg.2014.02.001. (IF: 3.929)
 53. Regioselective Synthesis of Diversely Substituted Diazoninones via A Post-Ugi Gold-Catalyzed Intramolecular Hydroarylation Process, Z Li, Amit Kumar, D D Vachhani, S K Sharma, V S Parmar, E V Van der Eycken. *Eur. J. Org. Chem.* ISSN: 1434-193X, (2014), 2084-2091 DOI:10.1002/ejoc.201301507. (IF: 2.882)
 54. Post-Ugi gold-catalyzed diastereoselective domino cyclization for the synthesis of diversely substituted spiroindolines, Amit Kumar, D D Vachhani, S G Modha, S K Sharma, V S Parmar, E V Van der Eycken, *Beilstein J. Org. Chem.* ISSN · 1860-5397, (2013), 9, 2097-2102, DOI:10.3762/bjoc.9.246. (IF: 2.330)
 55. Post-Ugi gold (I)- and platinum (II) -catalyzed alkyne activation: Synthesis of diversely substituted fused azepinones and pyridinones, Amit Kumar, D D Vachhani, S G Modha, S K Sharma, V S Parmar, E V Van der Eycken, *Synthesis*, ISSN: 0039-7881, (2013), 45, 2571-82, DOI: 10.1055/s-0033-1339474., (IF: 2.65)
 56. A bifunctional nanocarrier based on amphiphilic hyperbranched polyglycerol derivatives, IN Kurniasih, H Liang, Sumit Kumar, A Mohr, S K Sharma, J P Rabe, R Haag, *J. Mat. Chem. B*, ISSN: 2050-7518, (2013), 1, 3569-3577, DOI: 10.1039/C3TB20366B. (IF: 4.543)
 57. Switching the regioselectivity via indium (III) and gold (I) catalysis: a post-Ugi intramolecular hydroarylation to azepino- and azocino-[*cd*]indolones, Amit Kumar, Z Li, S K Sharma, V S Parmar, E V Van der Eycken, *Chem. Commun.*, ISSN: 1359-7345, (2013), 6803-05, DOI: 10.1039/C3CC42704H. (IF: 6.290)
 58. An Expedient route to imidazo[1,4]diazepin-7-ones via a Post-Ugi gold-catalyzed heteroannulation, Amit Kumar, Z Li, S K Sharma, V S Parmar, E V Van der Eycken, *Org. Lett.*, ISSN: 1523-7060, (2013),15 (8), 1874-77, DOI: 10.1021/ol400526a. (IF: 6.492)
 59. Synthesis, antiproliferative and c-Src kinase inhibitory activities of cinnamoyl- and pyranochromen-2-one derivatives, K Chand, A N Shirazi, Preeti Yadav, R K Tiwari, Meena Kumari, K Parang, S K Sharma, *Canadian J. Chem.*, ISSN: 0008-4042, (2013), 91, 741-754, DOI: 10.1139/cjc-2012-0499. (IF:1.066)
 60. Gold(I)-catalyzed Post-Ugi hydroarylation: An efficient approach to pyrrolopyridines and azepinoindoles, Amit Kumar, DD Vachhani, S G Modha, S K Sharma, V S Parmar, E V Van der Eycken *Eur. J. Org. Chem.*, ISSN: 1434-193X, (2013), 2288–2292, DOI: 10.1002/ejoc.201300132. (IF: 2.882)
 61. Diversely substituted triazolo[1,5-*a*][1,4]benzodiazepinones: A Post-Ugi copper-catalyzed tandem azide–alkyne cycloaddition/ullmann C–N coupling approach, D D Vachhani, Amit Kumar, S G Modha, S K Sharma, V S Parmar, E V Van der Eycken, *Eur. J. Org. Chem.*, ISSN: 1434-193X, (2013), 1223-1227, DOI: 10.1002/ejoc.201201587. (IF: 2.882)
 62. Dendronized multi-amphiphilic polymers as non-ionic nanotransporters for biomedical applications: Synthesis, aggregation behavior and transport properties, Shilpi Gupta, B Schade, Sumit Kumar, C Böttcher, S K Sharma, R Haag, *Small*, ISSN: 1613-6810, (2013), 9 (6), 894-904, DOI: 10.1002/smll.201201253. (IF: 9.958)
 63. Gold (I) and platinum (II) switch: A post-Ugi intramolecular hydroarylation to pyrrolopyridinones S G Modha, Amit Kumar, D D Vachhani, S K Sharma, V S Parmar, E V Van der Eycken, *Chem. Commun.*, ISSN 1359-7345, 48, (2012), 10916 – 10918, DOI: 10.1039/C2CC35900F) (IF: 6.290)
 64. Diversity-oriented approach to spiroindolines: Post-Ugi gold-catalyzed diastereoselective domino cyclization, S G Modha, Amit Kumar, D D Vachhani, J Jacobs, SK Sharma, V S Parmar, L V Meervelt and E V Van der Eycken, *Angew Chem. Int. Ed.* ISSN: 1433-7851, (2012), 51, 9572 – 9575, DOI:10.1002/anie.201205052. (IF: 12.102)
 65. A simple and convenient chemoenzymatic approach for the synthesis of valuable triacylglycerol-based dendritic building blocks, Shilpi Gupta, Sarah Jalal, Sumit Kumar, R Haag, S K Sharma, *Indian J. Chem.*, ISSN: 0376-4699, (2012), 51B, 1376-

1387. (IF: 0.729)
66. Proteomic characterization of *Aspergillus fumigatus* treated with an antifungal coumarin for identification of novel target molecules of key pathways, S Singh, Shilpi Gupta, B Singh, S K Sharma; V K Gupta, G L Sharma, **J. Prot. Res.**, ISSN 1535-3893, (2012),11, 3259-3268, DOI: 10.1021/pr300006j. (IF: 4.268)
 67. Polyether based amphiphiles for delivery of active components, Shilpi Gupta, R Tyagi, V S Parmar, S K Sharma, R Haag, **Polymer**, ISSN 2073-4360, (2012), 53, 3053-3078, DOI: 10.1016/j.polymer.2012.04.047. (IF: 3.483)
 68. Arylalkyl ketones, benzophenones, desoxybenzoin and chalcones inhibit TNF- induced expression of ICAM-1: Structure-activity analysis, Shiv Kumar, C S Reddy L, Y Kumar, A Kumar, B K Singh, V Kumar, S Malhotra, MK Pandey, R Jain, R Thimmulappa, S K Sharma, A K Prasad, S Biswal, E V Van der Eycken, AL DePass, S V Malhotra, B Ghosh, V S Parmar, **Arch. der. Pharm.**, ISSN:1521-4184, (2012), 345, 368-77, DOI: 10.1002/ardp.201100279. (IF 1.994)
 69. Calreticulin transacetylase: A novel enzyme-mediating protein acetylation by acetoxy derivatives of 3-alkyl-4-methylcoumarins, Sarah Jalal, Karam Chand, Abha Kathuria, Preeti Singh, N Priya, B Gupta, H G Raj, S K Sharma, **Bioorg. Chem.**, ISSN: 0045-2068, (2012), 40, 131–136, DOI: 10.1016/j.bioorg.2011.10.005 (IF: 3.929)
 70. Calreticulin mediated transacetylase activity utilizing derivatives of coumarin and quinolone as a substrate: Investigations on antiplatelet function, Abha Kathuria, N Priya, Karam Chand, P Singh, Anjali Gupta, Sarah Jalal, Shilpi Gupta, H G Raj, S K Sharma, **Bioorg. Med. Chem.**, ISSN: 0968-0896, (2012), 20, 1624-1638, DOI:10.1016/j.bmc.2011.11.016. (IF: 2.442)
 71. Ammonium derivatives of chromenones and quinolinones as lead antimicrobial agents, Shilpi Gupta, S Singh, Abha Kathuria, M Kumar, S Sharma, R Kumar, V S Parmar, B Singh, Anjali Gupta, E V Van der Eycken, G L Sharma, S K Sharma, **J. Chem. Sci.**, ISSN: 0974-3626, (2012), 124, 437-449, DOI:10.1007/s12039-011-0147-7. (IF: 1.235)
 72. Glycerol and its Value-added products, S K Sharma, Shiv Kumar, Sarah Jalal, **Trends Carb. Res.**, ISSN, 09750304, (2011), 3 (4) 18-34. (IF: 0.562)
 73. Novel chalcone derivatives as potent Nrf2 activators in mice and human lung epithelial cells, V Kumar, S Kumar, M Hassan, H Wu, R K Thimmulappa, A Kumar, S K Sharma, V S Parmar, S Biswal, S V Malhotra, **J. Med. Chem.**, ISSN 0022-2623, (2011), 54, 4147 – 4159, DOI: 10.1021/jm2002348. (IF: 6.253)
 74. Substituted coumarin derivatives: Synthesis and evaluation of antiproliferative and Src kinase inhibitory activities, Abha Kathuria, Sarah Jalal, R Tiwari, A N Shirazi, Shilpi Gupta, S Kumar, K Parang, S K Sharma, **Chem. Biol. Interface**, ISSN: 2249 – 4820, (2011),1, 279-296. (IF: Not cited)
 75. Chemical constituents of the genus *Prunus* and their medicinal properties, Poonam, Raunak, G Kumar, CS Reddy L R Jain, S K Sharma, A K Prasad, V S Parmar, **Curr. Med. Chem.**, ISSN: 0929-8673, (2011), 18, 3758 – 3824, DOI: 10.2174/092986711803414386. (IF: 3.469)
 76. 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, H G Raj, S K Sharma, V S Parmar, **Prot. Pept. Lett.** ISSN: 1875-5305, (2011), 18, 507-517, DOI: 10.2174/092986611794927938. (IF: 0.964)
 77. Characterization of protein acyltransferase function of recombinant purified GlnA1 from *Mycobacterium tuberculosis*: A moon lighting property, A S Baghel, R Tandon, G Gupta, A Kumar, R K Sharma, N Aggarwal, Abha Kathuria, N K Saini, M Bose, A K Prasad, S K Sharma, M Nath, V S Parmar, H G Raj, **Microbiol. Res.** ISSN: 0944-5013, (2011), 166 (8), 662-672, DOI: 10.1016/j.micres.2011.02.001. (IF: 3.037)
 78. An update on natural occurrence and biological activity of chromones, S K Sharma, Sumit Kumar, Karam Chand, Abha Kathuria, Anjali Gupta, R. Jain, **Curr. Med. Chem.**, ISSN: 0929-8673, (2011), 18, 3825 – 3852, DOI: 10.2174/092986711803414359. (IF: 3.469)
 79. Synthesis of biodegradable amphiphilic nanocarriers by chemo-enzymatic transformations for the solubilization of hydrophobic compounds, Shiv Kumar, A Mohr, A Kumar, S K Sharma, R Haag, **Int. J. Art. Organ**, ISSN: 1724-6040, (2011), 34, 84 – 92, doi.org/10.5301/IJAO.2011.6423. (IF: 1.169)
 80. Crosslinking of biocatalytically synthesized organosilicone copolymers for flame retardant applications, V Kumar, B Gupta, Abdullah Khan, R Mosurkal, S K Sharma, V S Parmar, J Kumar, L A Samuelson, K Kumar, A C Watterson, **J. Macromol. Sci., Pure and Applied Chem. Pt. A**, ISSN 1060-1325, (2011), 48, 1055 – 1060, DOI: 10.1080/10601325.2011.620455. (IF: 0.963)
 81. Biomedical applications of dendritic polyglycerols, M Calderon, M A Quadir, S K Sharma, R Haag, **Advanced Materials**, ISSN: 0935-9648, (2010), 22, 190-218, DOI: 10.1002/adma.200902144. (IF: 21.950)
 82. Specificities of calreticulin transacetylase to acetoxy derivatives of benzofurans: Effect on the activation of platelet nitric oxide synthase, Anjali Gupta, N Priya, Sarah Jalal, Karan Chand, H G Raj, V S Parmar, A L DePass, S K Sharma. **Biochimie**, ISSN: 0300-9084, (2010), 92, 1180-85, DOI: 10.1016/j.biochi.2010.06.011. (IF: 3.362)
 83. Characterization of 4-methyl-2-oxo-1,2-dihydroquinolin-6-yl acetate as an effective antiplatelet agent, N Priya, Anjali Gupta, Karam Chand, P Singh, Abha Kathuria, H G Raj, V S Parmar, S K Sharma, **Bioorg. Med. Chem.**, ISSN: 0968-0896, (2010), 18, 4085-94, DOI: 10.1016/j.bmc.2010.04.011. (IF: 2.442)
 84. Enantioselective biocatalytic reactions on (±)-aryl alkyl ketones by native and modified PPL, M Husain, V Kumar, R Kumar, NA Shakil, S K Sharma, A K Prasad, C E Olsen, S V Malhotra, E V Ven der Ecky, K Levon, AL DePass, V S Parmar, **Biotrans.**, ISSN: 1029-2446, (2010), 28, 172-84, doi.org/10.3109/10242421003734704. (IF 0.836)
 85. Structure - activity relationship of dihydroxy-4-methylcoumarins as powerful antioxidants: Correlation between experimental & theoretical data and synergistic effect, VD Kancheva, L Saso, PV Boranova, Abdullah Khan, M K Saroj, M

- K Pandey, S Malhotra, J Z Nechev, S K Sharma, A K Prasad, M B Georgieva, C Joseph, A L DePass, R C Rastogi, V S Parmar, *Biochimie*, ISSN: 0300-9084, (2010), 92, 1089-1100, DOI: 10.1016/j.biochi.2010.06.012. (IF: 3.362)
86. Calreticulin transacylase: Genesis, mechanism of action and biological applications, R Kumari, S Bansal, G Gupta, S Arora, A Kumar, S Goel, P Singh, P Ponnann, N Priya, T K Tyagi, A S Baghel, S Manral, R Tandon, R Joshi, V Rohil, M Gaspari, E Kohli, Y K Tyagi, BS Dwarakanath, D Saluja, S Chatterji, S K Sharma, A K Prasad, R C Rastogi, H G Raj, V S Parmar. *Biochimie*, ISSN: 0300-9084, (2010), 92, 1173-79, DOI: 10.1016/j.biochi.2010.01.016. (IF: 3.362)
 87. Biocatalytic approach for the synthesis of glycerol-based nanomicellar self-assembly systems, Shilpi Gupta, MK Pandey, K Levon, R Haag, A C Watterson, V S Parmar, S K Sharma, *Macromol. Chem. Phys.*, ISSN: 1022-1352, (2010), 211, 239-244, DOI: 10.1002/macp.200900391. (IF: 2.492)
 88. Specificities of acetoxy derivatives of 3-alkyl-4-methylcoumarins for acetoxy drug: Protein transacetylase and their role in activation of nitric oxide synthase, Abha Kathuria, Anjali Gupta, N Priya, P Singh, H G Raj, A K Prasad, V S Parmar, and S K Sharma, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (2009), 17, 1550-1556, DOI: 10.1016/j.bmc.2009.01.003. (IF: 2.442)
 89. Selective recognition of Ca²⁺ ions using novel polymeric phenols, S K Sharma, Sumit Kumar, R Tyagi, E F Barry, J Kumar, A C Watterson, D K Ryan, V S Parmar, *Microchem. J.*, ISSN: 0026-265X, (2008), 90, 89-92, DOI:10.1016/j.microc.2008.03.012 (IF: 3.583)
 90. Novel nanotechnology platform: Design and synthesis, M K Pandey, R Tyagi, VB Tucci, V Kumar, B Gupta, SK Sharma, J Kumar, V S Parmar, A C Watterson, *Polymer Preprints*, ISSN: 0032-3934, (2008), 49(2), 1066-1067.
 91. Selective biocatalytic deacylation studies on furanose triesters: a novel and efficient approach towards bicyclonucleosides, A K Prasad, N Kalra, Y Yadav, S K Singh, S K Sharma, S Patkar, L Lange, CE Olsen, J Wengel, V S Parmar, *Org. Biomol. Chem.*, ISSN: 1477-0520, (2007), 5, 3524-3530, DOI: 10.1039/b711455a. (IF: 3.564)
 92. Deacylation studies on furanose triesters using an immobilized lipase: Synthesis of a key precursor for bicyclonucleosides, AK Prasad, N Kalra, Y Yadav, R Kumar, SK Sharma, S Patkar, L Lange, J Wengel, VS Parmar, *Chemical Communications*, ISSN: 1359-7345, (2007), 2616-2617, DOI: 10.1039/b618426j. (IF: 6.290)
 93. Biocatalytic acylation studies on novel 3-aryl-3-hydroxymethyl-2,3-dihydro-4H-1-benzopyran -4-ones, V Kumar, R Kumar, Raunak, Poonam, SK Sharma, AK Prasad, AL Chollu, CE Olsen, VS Parmar, *Indian J. Chem.*, ISSN: 0376-4699, (2007), 46B, 1501-1510. (IF: 0.729)
 94. Specificities of acetoxy derivatives of coumarins, biscoumarins, flavones, isoflavones and xanthenes for acetoxy drug: protein transacetylase, A Kumar, B K Singh, N K Sharma, K Gyanda, S K Jain, Y K Tyagi, A S Baghel, M Pandey, S K Sharma, A K Prasad, S C Jain, R C Rastogi, H G Raj, A C Watterson, V S Parmar, *Eur. J. Med. Chem.*, ISSN: 0223-5234, (2007), 42, 447-455, DOI: 10.1016/j.ejmech.2006.09.008. (IF: 4.519)
 95. A chromone analog inhibits TNF- α induced expression of cell adhesion molecules on human endothelial cells via blocking TNF- α activation, S Kumar, BK Singh, A K Panday, A Kumar, S K Sharma, H G Raj, A K Prasad, E Van der Eycken, V S Parmar, B Ghosh, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (2007), 15, 2952-2962, DOI: 10.1016/j.bmc.2007.02.004. (IF: 2.442)
 96. Tangeretin inhibits extracellular-signal-regulated kinase (ERK) phosphorylation, S V Slambrouck, V S Parmar, S K Sharma, B. De Bondt, F Fore, P Coopman, B W Vanhoecke, T Boterberg, H T Depypere, G Leclercq, M E Bracke, *FEBS Letters*, ISSN: 0014-5793, (2005), 579, 1665-1669, DOI: 10.1016/j.febslet.2004.10.114. (IF: 3.623)
 97. Biocatalytic routes towards pharmaceutically important precursors and novel polymeric systems, S K Sharma, M Husain, R Kumar, L A Samuelson, J Kumar, A C Watterson, V S Parmar, *Pure and Applied Chemistry*, ISSN: 1365-3075, (2005), 77, 209-226, DOI: 10.1002/chin.200537254. (IF: 5.294)
 98. Biopolyphenolics as antioxidants: Studies under an Indo-Italian CSIR-CNR project, M C Foti, S K Sharma, G Shakya, A K Prasad, G Nicolosi, P Bovicelli, B Ghosh, H G Raj, R C Rastogi, V S Parmar, *Pure and Applied Chemistry*, ISSN: 1365-3075, (2005), 77, 91-101, DOI: 10.1351/pac200577010091. (IF: 5.294)
 99. Mechanism of biochemical action of substituted 4-methylcoumarins. Part 11: Comparison of the specificities of acetoxy derivatives of 4-methylcoumarin and 4-phenylcoumarin to acetoxy coumarins: protein transacetylase, A Kumar, B K Singh, R Tyagi, S K Jain, S K Sharma, A K Prasad, H G Raj, R C Rastogi, A C Watterson, VS Parmar, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (2005), 13, 4300-4305, DOI: 10.1016/j.bmc.2005.04.023. (IF: 2.442)
 100. Indo-U.S. collaborative studies on biocatalytic generation of novel molecular architectures, A C Watterson, V S Parmar, R Kumar, S K Sharma, N A Shakil, R Tyagi, A K Sharma, L A Samuelson, J Kumar, R Nicolosi, T Shea, *Pure and Applied Chemistry*, ISSN: 1365-3075, (2005), 77, 201-208, DOI: 10.1351/pac200577010201. (IF: 5.294)
 101. New anti-invasive compounds: Results from the Indo-Belgian screening program, BW Vanhoecke, H T Depypere, A D Beyter, S K Sharma, V S Parmar, D D Keukeleire, M E Bracke, *Pure and Applied Chemistry*, ISSN: 1365-3075, (2005), 77, 65-74, doi.org/10.1351/pac200577010065. (IF: 5.294)
 102. Microwave Mediated Synthesis of Spiro-(indoline-isoxazolidines): Mechanistic Study and Biological Activity Evaluation, Raunak, V Kumar, S Mukherjee, Poonam, A K Prasad, C E Olsen, S J C Schäffer, S K Sharma, A C Watterson, W Errington, V S Parmar, *Tetrahedron*, ISSN: 0040-4020, (2005), 61, 5687-5697, doi:10.1016/j.tet.2005.03.027. (IF: 2.377)
 103. Influence of EDA- α interactions in drug encapsulation using nanospheres, SK Sharma, R Kumar, Sumit Kumar, R Mosurkal, VS Parmar, LA Samuelson, AC Watterson, J Kumar, *Chemical Communications*, ISSN 1359-7345, (2004), 2689-2691, DOI: 10.1039/b408993f. (IF: 6.290)
 104. Synthesis of Amphiphilic Guanlylated Polymers as Potential Gene Delivery Carriers, S K Sharma, A K Sharma, L A Samuelson, J Kumar, A C Watterson, V S Parmar, *J. Macromol. Sci. (A), Pure & Applied Chemistry*, ISSN: 1060-1325,

- (2004), 41, 1459–1466, doi.org/10.1081/MA-200035410. (IF: 0.963)
105. Triplex Mediated Delivery of a Platinum Complex to a Specific DNA Target Site, S K Sharma, L W McLaughlin, *J. Inorg. Biochem.*, ISSN: 0162-0134, (2004), 98, 1570-1577, DOI: 10.1016/j.jinorgbio.2004.05.001. (IF: 3.063)
 106. Formation and Stability of a Janus-Wedge Type of DNA Triplex, D Chen, Meena, S K Sharma, L W McLaughlin, *J. Am. Chem. Soc.*, ISSN: 0002-7863, (2004), 126, 70-71, DOI: 10.1021/ja038081x. (IF: 14.357)
 107. Acetoxy drug: protein transacetylase of buffalo liver - characterization and mass spectrometry of the acetylated protein product, E Kohli, M Gaspari, H G Raj, V S Parmar, S K Sharma, J van der Greef, R Kumari, G Gupta, Seema, P Khurana, YK Tyagi, A C Watterson and C E Olsen, *Biochimica et Biophysica Acta*, ISSN: 0304-4165, (2004), 1698, 55 – 66, DOI: 10.1016/j.bbapap.2003.10.004. (IF: 4.651)
 108. Synthesis, characterization and in vitro anti-invasive activity screening of polyphenolic and heterocyclic compounds, VS Parmar, NK Sharma, M Husain, AC Watterson, J Kumar, L A Samuelson, A L Cholli, A K Prasad, A Kumar, S Malhotra, N Kumar, A Jha, A Singh, I Singh, Himanshu, A Vats, N A Shakil, S Trikha, S Mukherjee, SK Sharma, S K Singh, A Kumar, H N Jha, C E Olsen, C P Stove, M E Bracke, M M Mareel, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (2003), 11, 913-929, DOI: 10.1016/S0968-0896(02)00539-4. (IF: 2.442)
 109. Synthesis of novel heterocyclic compounds: Routes to pyrazolyl 1,2,3-triazoles and their biological activity evaluation, A Kumar, M Husain, AK Prasad, I Singh, A Vats, N K Sharma, S K Sharma, R K Gupta, C E Olsen, M E Bracke, R A Gross, VS Parmar, *Indian J. Chem.*, ISSN: 0376-4699, (2003), 42B, 1950-1957. (IF: 0.729)
 110. Synthesis of amino functionalized amphiphilic copolymers as potential gene delivery carriers, S K Sharma, A K Sharma, R Kumar, V S Parmar, L A Samuelson, J Kumar, A C Watterson, *Polymer Preprints*, ISSN: 0032-3934, (2003), 44(2), 791-792.
 111. Oligonucleotide Directed Triplex Formation for the Delivery of a *cis*-Bifunctional Platinated Complex to Dinucleotide Targets, S K Sharma, L W McLaughlin, *J. Am. Chem. Soc.*, ISSN: 0002-7863, (2002), 124, 9658-9659. (IF: 14.357)
 112. Chemical transformations on 6-aryl-3-cyano-4-methylthio-pyran-2(*H*)-ones: Synthetic and structural studies on novel N-phenylpyrazoles and N-phenylpyrazolylcoumarins, A Kumar, S Malhotra, A Vats, Himanshu, S K Singh, S K Sharma, A K Prasad, W Errington, C E Olsen, S C Jain, V S Parmar, *Indian J. Chem.*, ISSN: 0376-4699, (2002), 41B, 360-367, (IF: 0.729)
 113. Chemical constituents of *Cephalotaxus* species, A Bhattacharya, VS Parmar, SK Sharma, S Trikha, SK Singh, AK Prasad, *J. Indian Chem. Soc.*, ISSN: 0019-4522, (2002), 79, 787-795, DOI: 10.1002/chin.200324237. (IF: 0.204)
 114. Lipase catalyzed synthesis of optically enriched α -haloamides, A Azim, S K Sharma, C E Olsen, V S Parmar, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (2001), 9, 1345-1348. (IF: 2.442)
 115. Lipase-catalysed chemo- and enantioselective acetylation of 2-alkyl/aryl-3-hydroxypropiophenones, R Kumar, A Azim, V Kumar, S K Sharma, A K Prasad, O W Howarth, C E Olsen, S C Jain, V S Parmar, *Bioorg. Med. Chem.* ISSN: 0968-0896, (2001), 9, 2643-2652, DOI: 10.1016/S0968-0896(01)00184-5. (IF: 2.442)
 116. Mechanism of biochemical action of substituted 4-methylbenzopyran-2-ones. Part 6: Hydrolysis of 7,8-diacetoxy-4-methylcoumarin by a novel deacetylase in rat liver microsomes - a simple method for assay and characterization, H G Raj, V S Parmar, S C Jain, S Goel, Y K Tyagi, S K Sharma, C E Olsen, J Wengel, *Bioorg. Med. Chem.* ISSN: 0968-0896, (2000), 8, 233-237, DOI: 10.1016/S0968-0896(99)00272-2. (IF: 2.442)
 117. Mechanism of biochemical action of substituted 4-methylbenzopyran-2-ones. Part-7: Assay and characterization of 7,8-diacetoxy-4-methylcoumarin: protein transacetylase from rat liver microsomes based on the irreversible inhibition of cytosolic glutathione *S*-transferase, H G Raj, V S Parmar, S C Jain, E Kohli, N Ahmad, S Goel, Y K Tyagi, S K Sharma, J Wengel, C E Olsen, *Bioorg. Med. Chem.* ISSN: 0968-0896, (2000), 8, 1707-1712, DOI: 10.1016/S0968-0896(00)00104-8. (IF: 2.442)
 118. Novel constituents of *Gardenia* species, V S Parmar, S K Sharma, Poonam, *J. Sci. Ind. Res.*, ISSN: 0022-4456, (2000), 59, 893-903. (IF: 0.500)
 119. Anti-invasive activity of novel phenolics against solid tumours, V S Parmar, S K Sharma, M E Bracke, M Mareel C E Olsen, J Wengel, *The FASEB Journal*, ISSN: 0892-6638, (2000), 14, A1513. (IF: 5.595)
 120. Novel diastereoselective acylation of 4-C-hydroxymethyl-1,2-O-(1-methylethylidene)-3-O-(phenylmethyl)- β -D-pentofuranose: effects of lipases and acylating agents on stereoselectivity, S K Sharma, S Roy, R Kumar, V S Parmar, *Tetrahedron Letters*, ISSN: 0040-4039, (1999), 40, 9145-9146. (IF: 2.125)
 121. Biocatalytic resolution of racemic 6-acetyl-3,4-dihydro-3-hydroxy-7-methoxy-2,2-dimethyl-2*H*-1-benzopyran, V S Parmar, S K Sharma, S Malhotra, A Jha, W Errington, O W Howarth, M S Puar, *Indian J. Chem.*, ISSN: 0376-4699, (1999) 38B, 1231-1233. (IF: 0.471)
 122. Mechanism of biochemical action of substituted 4-methylbenzopyran-2-ones. Part 5: Pulse radiolysis studies on the antioxidant action of 7,8-diacetoxy-4-methylcoumarin, HG Raj, VS Parmar, S C Jain, KI Priyadarsini, J P Mittal, S Goel, S K Sharma, C E Olsen, J Wengel, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (1999), 7, 2091-2094. (IF: 2.442)
 123. Synthesis of novel 3'-C-branched 2'-deoxynucleosides. Incorporation of 3'-C-(3-hydroxypropyl)thymidine into oligodeoxynucleotides, H M Pfundheller, P N Jorgensen, U S Sorensen, S K Sharma, M Grimstrup, C Stroch, P Nielsen, G Viswanadham, C E Olsen, J Wengel, *J. Chem. Soc., Perkin Trans.*, ISSN: 0300-922X, (1998), 1, 1409-1422, DOI: 10.1039/a708801. (IF:3.564)
 124. Synthesis and anti-invasive activity of novel 1,3-diphenylpropanones, VS Parmar, S C Jain, K S Bisht, N K Sharma, Himanshu, S Gupta, A K Prasad, A Jha, Poonam, S Malhotra, SK Sharma, ME Bracke, W Errington, CE Olsen, J Wengel, *Indian J. Chem.*, ISSN: 0376-4699, (1998), 37B, 628-643. (IF: 0.471)
 125. Novel constituents of *Tamarix* species, S K Sharma, V S Parmar, *J. Sci. Ind. Res.*, ISSN, 0022-4456. (1998), 57, 873-890.

- (IF: 0.500)
126. Novel chemoselective de-esterification of esters of polyacetoxy aromatic acids by lipases, V S Parmar, A Kumar, K S Bisht, S Mukherjee, A K Prasad, S K Sharma, J Wengel, C E Olsen, *Tetrahedron*, ISSN: 0040-4020, (1997), 53, 2163-2176, DOI.10.1016/S0040-4020(96)01118-0. (IF: 2.377)
 127. Anti-invasive activity of alkaloids and polyphenolics in vitro, VS Parmar, ME Bracke, J Phillippe, J Wengel, S C Jain, C E Olsen, K S Bisht, N K Sharma, A Courtens, S K Sharma, K Vennekeus, VV Marck, S K Singh, N Kumar, A Kumar, S Malhotra, R Kumar, V K Rajwanshi, R Jain and M M Mareel, *Bioorg. Med. Chem.*, ISSN: 0968-0896, (1997), 5, 1609-1619, DOI: 10.1016/S0968-0896(97)00091-6. (IF: 2.442)
 128. Thermodynamics of β -Cyclodextrin-*p*-nitrophenyl glycoside complexes. A simple system to understand the energetics of carbohydrate interactions in water, E Junquera, J Laynez, M. Menendez, S K Sharma, S Penades, *J. Org. Chem.*, ISSN 0022-3263, (1996), 61, 6790-6798, DOI: 10.1021/jo960659g. (IF: 4.805)
 129. Synthesis, antimicrobial and antiviral activities of novel polyphenolic compounds, V S Parmar, K S Bisht, R Jain, S Singh, S K Sharma, S Gupta, S Malhotra, OD Tyagi, A Vardhan, H N Pati, D Vanden Berghe, A J Vlietinck, *Indian J. Chem.*, ISSN: 0376-4699, (1996), 35B, 220-232. (IF: 0.471)
 130. Chemoprevention of carcinogen-DNA binding: the relative role of different oxygenated substituents on 4-methylcoumarins in the inhibition of aflatoxin B1-DNA binding *in vitro*, H G Raj, S Gupta, G Biswas, S Singh, A Singh, A Jha, K S Bisht, S K Sharma, S C Jain, V S Parmar, *Bioorg. Med. Chem*, ISSN: 0968-0896, (1996), 4, 2225-2228. (IF: 2.442)
 131. Hydrolytic reactions on polyphenolic perpropoanoates by porcine pancreatic lipase immobilized in microemulsion-based gels, V S Parmar, H N Pati, S K Sharma, A Singh, S Malhotra, A Kumar, K S Bisht, *Bioorg. Med. Chem Lett.*, ISSN: 0960-894X, (1996). 6, 2269-2274. (IF: 2.442)
 132. Molecular recognition of carbohydrates using a synthetic receptor. A model system to understand the stereoselectivity of a carbohydrate-carbohydrate interaction in water, J Jimenez-Barbero, E Junquera, M Martin-Pastor, S K Sharma, C Vicent, S Penades, *J. Am. Chem. Soc.*, ISSN 0002-7863, (1995), 117, 11198-204. (IF: 14.357)
 133. Single step stereoselective synthesis of unprotected 2,4-dinitrophenyl glycosides, S K Sharma, G Corrales, S Penades, *Tet. Lett.*, ISSN: 0040-4039, (1995), 36, 5627-30. (IF: 2.193)
 134. Synthetic and mass spectral studies on new 1,3-diphenylprop-2-enones of agrochemical interest, V S Parmar, S K Sharma, K S Bisht, A Singh, S Aggarwal, R Jain, A Vardhan, *Russian J. Org. Chem.*, ISSN: 1070-4280, (1995), 31, 1839-1848. (IF: 0.655)
 135. Synthesis, biological activity and solvent-induced shifts in the ^1H NMR spectra of 2,3-dihydro-4*H*-1-benzopyran-4-ones, V S Parmar, A Vardhan, S K Sharma, N K Sharma, K S Bisht, *Indian J. Chem.*, ISSN: 0376-4699, (1994), 33B, 17-26. (IF: 0.471)
 136. Novel 2-phenyl-4*H*-1-benzopyran-4-ones from Tamarix dioica, V S Parmar, P Taneja, S Singh, R Jain, S K Sharma, P M Boll, J Moller, *Indian J. Chem.*, ISSN: 0376-4699, (1994), 33B, 305-308. (IF: 0.471)
 137. Highly oxygenated bioactive flavones from Tamarix, VS Parmar, KS Bisht, SK Sharma, R Jain, P Taneja, S Singh, O Simonsen, PM Boll, *Phytochemistry*, ISSN: 2349-8234, (1994), 36, 507-511, DOI: 10.1016/S0031-9422(00)97104-8. (IF: 3.186)
 138. Anti-invasive activity of 3,7-dimethoxyflavone *in vitro*, VS Parmar, R Jain, S K Sharma, A Vardhan, A Jha, P Taneja, S Singh, B M Vyncke, M E Bracke, M M Mareel, *J. Pharm. Sci.*, ISSN: 0022-3549, 83, 1217-1221 (1994). (IF: 2.575)
 139. Synthesis of some commonly occurring 2-phenyl-4*H*-1-benzopyran-4-ones: revised structures for three natural products, V S Parmar, S Gupta, R Sinha, SK Sharma, *Indian J. Chem.* (1993), 32B, 244-256. (IF: 0.471)
 140. New fragmentation pathways in the Electron Impact Mass Spectrometry of derivatized pyrano 1,3-diphenylprop-2-enones, V S Parmar, S K Sharma, A Vardhan, R K Sharma, J Moller, P M Boll. *Org. Mass Spectrom.* (Now published as *J. of Mass Spectrometry*), ISSN: 1096-9888, (1993), 28, 23-26. (IF: 2.125)
 141. Lipase-catalysed selective deacetylation of peracetylated benzopyranones, V S Parmar, A K Prasad, N K Sharma, A Vardhan, H N Pati, S K Sharma, K S Bisht, *Chem. Comm.*, ISSN 1359-7345, (1993), 27-29, DOI 10.1039/C39930000027. (IF: 6.290)
 142. ^{13}C Nuclear Magnetic Resonance studies on 3-methylbut-2-enylated 1,3-diphenylprop-2-enones, V S Parmar, S K Sharma, A Vardhan, S Gupta, S Malhotra, P M Boll, *Spectrochimica Acta*, ISSN: 1386-1425, (1992), 48A, 617-620, doi.org/10.1016/0584-8539(92)80054-Z, IF: 2.880
 143. ^{13}C Nuclear Magnetic Resonance studies on pyrano- and dihydropyrano-1,3-diphenylprop-2-enones, V S Parmar, S K Sharma, A Vardhan, R K Sharma, S Gupta, S Malhotra, P M Boll. *Magn. Reson. Chem.*, ISSN 1097-458X, (1992), 30, 560-563. (IF: 1.601)
 144. ^{13}C Nuclear Magnetic Resonance studies on 1,3-diphenylprop-2-enones, V S Parmar, SK Sharma, J S Rathore, M Garg, S Gupta, S Malhotra, V K Sharma, S Singh, P M Boll, *Magn. Reson. Chem.*, ISSN 1097-458X, (1990), 28, 470-474, DOI: 10.1002/mrc.1260280516 (IF: 1.601)
 145. Solvent-induced chemical shifts by a combination of trifluoroacetic acid and benzene in the PMR spectra of 2*H*-1-benzopyran-2-ones, V S Parmar, S Singh, S K Sharma and S Nauriyal, *J. Indian Chem. Soc.*, ISSN: 0019-4522, (1990), 67, 207-209. (IF: 0.204)

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 multi-amphiphilic polymers as nanocarriers for biomedical applications. *NSTI-Nanotech 2013: TechConnect World 2013 Proceedings, Vol. 3*, 308-311 (2013).
3. S Satapathi, P Yadav, M Kumari, L Li, LA Samuelson, J Kumar, SK Sharma. Two-photon active coumarins for high contrast imaging of cancer cells. *Abstracts of Papers, 245th ACS National Meeting & Exposition*, New Orleans, LA, United States, April 7-11, 2013 (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.

Research Guidance

1. *Supervision of awarded / submitted Doctoral Thesis – 16*

Mr. Sumit Kumar: Design and synthesis of 3-(3-chromonyl)acrylic acid derivatives & synthesis of PEG based amphiphilic 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, guanidylated 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.

Mr. Amit Kumar: Development of New Protocols for the Synthesis of Heterocyclic Frameworks Employing Metal-catalysis (Gold, Platinum and Indium) and Multicomponent Reactions – May 2014.

Mr. Abdullah Khan: Design and Synthesis of Novel Benzoxazine, Pyridone, and Quinolone Analogues and Their Biological Activity Evaluation- November 2014.

Mr. Shiv Kumar: Chemo-enzymatic Synthesis of Dendronized Polymeric Architectures for Biomedical Applications and Synthesis of Benzopyrones as Antimicrobial Agents. – August, 2015.

Mr. Atul K. Sharma: Synthesis of Benzoxazine, Pyridone, and Benzopyrone Derivatives and Evaluation of their Biological Activity. September 2015.

Ms. Meena Kumari: Synthesis of Biologically Potent Heterocyclic Compounds and PEG-Glycerol Based Amphiphilic Copolymers for Biomedical Applications - February 2016.

Ms. Preeti Yadav: Benzopyranone and Quinolone Derivatives & Dendritic Architectures: Study of Photophysical and Biological Applications – August 2016

Ms. Suchita Prasad: Non-ionic Amphiphilic Architectures & Benzopyranone Derivatives: Study of Physico-chemical Properties and Biological Applications – July 2017.

Mr. Badri Parshad: Chemo-enzymatic Synthesis of Polymeric and Dendritic Architectures for Biomedical Applications & Synthesis of Biologically Potent Heterocyclic Compounds, Thesis submitted, January 2018.

Ms. Priyanka Manchanda: Design and Synthesis of Kinase Inhibitors, Antimicrobial Agents, and Amphiphilic Architectures for Biomedical Applications, May 2018.

Abhishek K. Singh: Synthesis of Glycerol and Oligoglycerol Based Amphiphilic Architectures for Biomedical Applications, July 2018.

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*

Ms. Rashmi, Ms. Ayushi Mittal, Mr. Parmanand, Mr. Anoop Kumar, Ms. Diksha Verma, Ms. Krishna, Ms. Aarti, Ms. Pinki Saharan

Projects (Major Grants / Collaborations)

1. **Biotechnology Industry Research Assistance Council (BIRAC, A PSE of Department of Biotechnology (DBT), Government of India):** 2020-2021. Partially Hydrolysed Guar Gum Based Non-ionic Amphiphiles for Biomedical and Industrial Applications: A Cleaner and Greener Biocatalytic Approach.
2. **Department of Science & Technology (DST-DFG International Collaboration):** 2017- 2020. Chemo-enzymatic synthesis of multivalent dendritic architectures for the control of neurodegenerative disorders.
3. **Science & Engineering Research Board (SERB-DST):** January 2016 – July 2019 2018. "Design and Synthesis of Oligoglycerol

and PEG based Nanocarriers for Biomedical Applications”.

4. **Indo-German Science & Technology Center (IGSTC)**: April 2012 – December 2015. “Chemoenzymatic synthesis and development of biodegradable, structurally persistent core-shell nano-architectures for drug delivery applications”.
5. **Council of Scientific and Industrial Research (CSIR)**: Jan. 2012- July. 2015. “Design and Synthesis of 3-(4-Oxo-4H-chromen-3-yl)acrylates as Anti-inflammatory Agents”.
6. **Defence Research Development Organization (DRDO)**: June 2011 – March 2015. “Design and Synthesis of Lead Antimicrobial Compounds for Defense Applications”.
7. **DU-DST Purse Grant**: December 2009 – March 2012. 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.
8. **Department of Biotechnology (DBT)**: December 2005 – December 2010. Design and Synthesis of Novel Peptide Nucleic Acids With Improved Cell Permeability.
9. **Defence Research Development Organization (DRDO)**: September 2007 – March 2010. Design and Synthesis of Glycerol Based Building Blocks for Flame Retardant Polymers”.
10. **Polytechnic University**, New York, USA. 2006 – December 2009. Development of reactions and technologies in the generation of novel materials.

Organization of Conferences

Convener: Indo-German Workshop on ‘Multivalent Macromolecular Architectures for Biomedical Applications’, 5-6 April 2019, Department of Chemistry, University of Delhi.

Convener: International Conference on Challenges in Carbohydrate Chemistry and Biology, CARBO-XXXI, 14-16 November 2016, Department of Chemistry, University of Delhi.

Organizing Secretary: DU-JAIST Indo-Japan Symposium on ‘Chemistry of Functional Molecules/Materials’ on 26-27th February 2016 at Department of Chemistry, University of Delhi.

Organizing Convener: 2nd Indo-German Workshop on ‘Supramolecular Chemistry’ on 30th March 2015 at Department of Chemistry, University of Delhi.

Organizing Secretary: 20th ISCB International Conference on Chemistry and Medicinal plants in Translational Medicine for Healthcare organized by Department of Chemistry, University of Delhi, 1st – 4th March 2014.

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 2010, 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.

Kinase Inhibitors: Promising candidates for cancer control

Conference Participation: 108

1. **GVK Biosciences Private Limited, Hyderabad**, 14 February 2020, Invited Talk “Bio catalytic synthesis of non-ionic Nano transporters for biomedical applications”.
2. **National Seminar on Applied Polymer Science and Technology (NSAPST-2020)**, 28 – 29 Jan., 2020, Sardar Patel University. Invited Talk: Chemo-enzymatic synthesis of amphiphilic polymers.
3. **DST 2nd -INSPIRE INTERNSHIP SCIENCE CAMP – 2020**, 25th January 2020, Meerut Institute of Technology, Meerut, Invited as an Eminent Mentor: Biocatalysts: A Greener Approach in Organic Synthesis.
4. **International Conference (ICACSEM)**, 9-10 January, 2020, University of Madras, Chennai, Prof. Dr. T. Balakrishnan Endowment Lecture.
5. **DST 2nd -INSPIRE INTERNSHIP SCIENCE CAMP – 2019**, 19th December 2019, Smriti College of Pharmaceutical Education, Indore. Invited as an Eminent Mentor: Chemo-enzymatic synthesis of amphiphilic polymeric and dendritic architectures for biomedical applications.
6. **International Conference on “Advances in Polymer Science and Rubber Technology” (APSRT)**, 24-27 September 2019, IIT Kharagpur. Invited Talk: Chemo-enzymatic synthesis of amphiphilic polymeric and dendritic architectures for biomedical applications.
7. **National Conference on ‘Recent Advances in Materials’ (RAM)**, 6-7 July 2019, Centurion University, Bhubaneswar. Invited Talk: Chemo-enzymatic synthesis of amphiphilic polymeric and dendritic architectures for biomedical applications.

8. **NIISER Bhubaneswar**, 5 July 2019, Invited Talk: Chemo-enzymatic synthesis of amphiphilic polymeric and dendritic architectures for biomedical applications
 9. **Indo-German Workshop on 'Multivalent Macromolecular Architectures for Biomedical Applications'**, 5-6th April 2019, Department of Chemistry, University of Delhi.
- Poster presentations by:
- i. Ms. **Rashmi**: Study of Self-Assembly and Nanotransport Behaviour of Non-ionic Bolaamphiphiles for Biomedical Applications.
 - ii. Ms. **Rashmi**: Non-ionic PEG-Dendron Conjugates for Biomedical Applications.
 - iii. Ms. **Ayushi Mittal**: Selective Functionalization of Oligo-glycerol Derivatives to Develop a Novel Amphiphilic System for Biomedical Applications.
 - iv. Mr. **Parmanand**: Synthesis of diglycerol and mPEG based amphiphilic nanocarriers.
 - v. Mr. Anoop: Synthesis of Non-ionic Amphiphilic Architectures for Biomedical Applications.
 - vi. Ms. **Krishna**: Non-ionic A₂B₂ Monomer Based Amphiphiles: Self-assembly and Transport Study for Drug Delivery Applications.
10. **Workshop on "NMR as a tool for fingerprinting materials"**, 19th-20th February, 2019, Department of Physics, University of Delhi. Invited talk: NMR as a tool for characterizing organic compounds.
 11. **Fourth International Symposium on "Advances in Sustainable Polymers"**, 8-11 January 2018, IIT Guwahati.
Invited talk: *Fabrication of nanostructures through self-assembly of non-ionic amphiphiles for biomedical applications*
Poster presentation by
 - i. **Mr. Abhishek Kumar Singh**: Aggregation Behaviors of Non-Ionic Twinned Amphiphiles and Their Application as Biomedical Nanocarriers.
 - ii. **Ms. Rashmi**: Synthesis of Non-ionic Bolaamphiphile and Study of its Self-assembly and Transport Behaviors for Drug Delivery Application Glucitol based self-assembling non-ionic amphiphilic architectures for encapsulation of non-polar drugs.
- Participation:** Ms. Ayushi Mittal, Mr. Parmanand, Mr. Anoop Kumar, Ms. Diksha Verma, Ms. Krishna
12. **International Conference on Nanomaterials: Initiatives and Applications"**, 9-11 March, 2018, Jiwaji University, Gwalior. Self-assembly of non-ionic amphiphiles for biomedical applications.
 13. **Symposium on the "Emerging Chemistry and Biology of Carbohydrates" CARBO-XXXII**, 18-20 December 2017, IIT Kharagpur.
Invited talk: Carbohydrate Based Architectures for Biomedical Applications.
 14. **8th Conference of Haridwar ISCA Chapter**, 14-15 October 2017, Nainital, Invited lecture: Kinase Inhibitors: Promising candidates for cancer control
 15. **Refresher Course in Chemistry**, 14 June 2017, IIT-ISM Dhanbad, Delivered two lectures: i. Biocatalysts: Modern Tools of Organic Synthesis; ii. Chemo-enzymatic Synthesis of Biocompatible Polymeric and Dendritic Nano-architectures for Biomedical Applications.
 16. **23rd ISCBC International Conference (ISCBC-2017)**, 8-10 February, 2017, SRM University, Chennai, Invited talk: Synthesis and Kinase Inhibition Study of Pyridylpyrimidinylaminophenyl Derivatives.
 17. **Refresher Course in Chemistry**, 18 January 2017, UGC-Human Resource Development Centre, Jawaharlal Nehru University, Invited lecture: Challenges and Options for Drug Delivery.
 18. **DST-INSPIRE Internship Science Camp**, 22nd Dec. 2016, SRM University, Delhi – NCR, Invited talk: Challenges in Drug Development.
 19. **International Conference on Challenges in Carbohydrate Chemistry and Biology, CARBO-XXXI**, 14-16 November 2016, Department of Chemistry, University of Delhi.
Poster presentation by Ms. Priyanka Manchanda: *Glucitol based self-assembling non-ionic amphiphilic architectures for encapsulation of non-polar drugs.*
 20. **Departmental Seminar**, 26 September 2016, IIT-ISM Dhanbad: Amphiphilic Dendritic Architectures for Biomedical Applications.
 21. **TEQIP-II sponsored Short term training Programme on "Recent Trends in Applied Chemical Sciences"** 19 October 2016 Department of Applied Chemistry, SVNIT, Surat.
Invited talks: i. Chemo-enzymatic Synthesis of Functionalized Polymeric Architectures for Drug Delivery applications; ii. Design and Development of Kinase Inhibitors for Cancer Control
 22. **Symposium on advances in sustainable polymers (ASP-16)**, 3-7 August 2016, Kyoto Institute of Technology, Kyoto, Japan, Invited talk: Chemo-enzymatic Synthesis of Perfluoroalkyl-functionalized Dendronized Polymers for Biomedical applications.
 23. **DST-INSPIRE Internship Program**, 29th July 2016, Lal Bahadur Singh Samarak Mahavidyalaya, Gohawar (Bijnor, UP), Invited talk as a Mentor: Drug Development From Natural Sources.
 24. **FUB-DU Joint Research Workshop on Supramolecular Chemistry and Nanoscale Systems, 8 – 10 June, 2016**, Institut für Chemie und Biochemie, Freie Universität Berlin. Invited talk: Chemo-enzymatic Synthesis of Perfluoroalkyl-functionalized Dendronized Polymers Biomedical applications.
 25. **International Conference on Futuristic Materials & Emerging Trends in Chemical Sciences**, February 8-10, 2016 at DBS College, Kanpur University, Kanpur. Invited talk: *Chemoenzymatic Synthesis of Dendronized Amphiphilic Polymers for Biomedical Applications.*

26. **CABiomass-2016: Catalysis Applied to Biomass - Toward Sustainable Processes and Chemicals**, March 9-11, 2016, UTC, Compiègne, France. Plenary Lecture: Chemo-enzymatic Synthesis of Oligoglycerol Derivatives.
27. **30th Carbohydrate Conference (CARBO-XXX)**, December 29-31, 2015 at Pondicherry University, Puducherry. Invited talk: Carbohydrate based amphiphilic dendritic architectures for bio-medical and metal sensing applications.
28. **CPDHE Refresher Program**, 2-3 December 2015, Shimla University, Shimla. Invited talks: i. Glycerol Based Amphiphilic Architectures for Biomedical Applications; ii. Design and Development of Kinase Inhibitors For Cancer Control.
29. **Seminar Lecture**, 1st July 2015, Freie University Berlin, Germany. Title: Glycerol Based Value Added Products for Biomedical Applications.
30. **International Workshop on "Biochemistry, Physiology and Pharmacology of Oxidative Stress"**, 2-4 July, 2015 at Sapienza University of Rome, Italy. Invited talk: Chromenone and quinolinone derivatives as potent antioxidant agents.
31. **21st ISCBC International Conference on "Current Trends in Drug Discovery and Developments"** 25-28th February, 2015 at Central Drug Research Institute, Lucknow. Invited talk: Chemoenzymatic Synthesis of Amphiphilic Polymeric Architectures for Biomedical Applications.
32. **MACRO 2015, International Symposium on Polymer Science and Technology**, 23-26th January, 2015 at Indian Association for the Cultivation of Science, Jadavpur, Kolkata. Invited talk: **Non-ionic Dendronized Multiamphiphilic Polymers as Multivalent Nanocarriers for Drug Delivery Applications.**
33. **Second Symposium on Advances in Sustainable Polymers (ASP-15)**, January 21-22, 2015, IIT Guwahati. Invited talk: **Chemoenzymatic Synthesis of Dendronized Amphiphilic Polymers for Biomedical Applications.**
34. **5th Asia Oceania Conference on "Green and Sustainable Chemistry"**, 15-17th January 2015 at India Habitat Center, Delhi. Invited talk: **Cleaner & Greener Chemo-enzymatic Synthesis of Glycerol Based Value Added Products for Biomedical Applications.**
35. **ISBOC-10, IUPAC's International Symposium on Bio-Organic Chemistry**, 11-15th January, 2015 at Indian Institute of Science Education and Research (IISER) Pune, INDIA
Poster presentation by Mr. Badri Parshad: Synthesis and Antimicrobial Activity Evaluation of Amides & Quaternary Ammonium Derivatives of Coumarin.
36. **One Day Lecture Series**, January 9, 2015 at Department of Chemistry, University of Delhi, Delhi. Invited talk: Chemoenzymatic Synthesis of Dendronized Amphiphilic Polymers for Biomedical Applications.
37. **29th Carbohydrate Conference (CARBO-XXIX)**, December 29-31, 2014 at CIAB, Mohali, Panjab. Invited talk: "Cleaner & Greener Chemo-enzymatic Synthesis of Glycerol Based Value Added Products for Biomedical Applications".
38. **David A. Walsh '67 Arts & Science Seminar Series, March 31, 2014 at Clarkson University, Potsdam, NY, USA.** Invited Talk: Glycerol Based Amphiphilic Polymeric and Dendritic Architectures for Biomedical Applications.
39. **CABiomass-II: Catalysis Applied to Biomass Toward Sustainable Processes and Chemicals, March 27-28, 2014, UTC, Compiègne, France.** Oral Communication: Cleaner & Greener Chemo-enzymatic Synthesis of Glycerol Based Value Added Products for Biomedical Applications.
40. **20th ISCB International Conference on Chemistry and Medicinal plants in Translational Medicine for Healthcare**, organized by Department of Chemistry, University of Delhi, 1st – 4th March 2014.
Session Chair: SK Sharma
Poster Presentation:
- Meena Kumari: Chemo-enzymatic Synthesis and Transport Potential Evaluation of Azido-glycerol Based Amphiphilic Polymeric Materials. (**Best poster award**).
 - Preeti Yadav: Synthesis of Two-Photon Active Cinnamoylcoumarins for High-Contrast Imaging of Cancer Cells.
 - Suchita Parshad: Synthesis of Ammonium and Amino Derivative of Pyranocoumarins and Coumarins and Evaluation of Their Antimicrobial activity.
 - Badri Prashad: Synthesis and Antioxidant Activity Evaluation of Chromenones.
- Participation:** Mr. Abdullah Khan, Mr. Shiv Kumar, Mr. Atul K. Sharma, Mr. Amit Kumar, Ms. Priyanka Manchanda, Mr. Abhishek K. Singh
41. **International Conference on Harnessing Natural Resources for sustainable Development – Global Trends** organized by cotton college, Guwahati, Assam on 29-31st January 2014.
Invited Talk:
Cleaner & Greener Chemo-enzymatic Synthesis of Glycerol Based Polymeric and Dendritic Architectures for Biomedical Applications
Poster Presentation:
- Meena Kumari: Non-ionic Dendronized Multiamphiphilic Polymers as Nanocarriers for Drug Delivery Applications.
 - Preeti Yadav: Chemo-enzymatic Synthesis of Glycerol and PEG Based Amphiphilic Dendritic Architectures for Various Biomedical Applications.
- Participation: Ms. Suchita Prasad, Mr. Badri Parshad, Mr. Atul K. Sharma
42. **International Conference on Challenges in Chemistry and Biology of Carbohydrates CARBO-XXVIII** organized by Association of Carbohydrates Chemist & Technologists, Dehradun, India on 20-22nd January 2014
Oral Presentations:
- Meena Kumari: Chemo-enzymatic Synthesis and Transport Study of Glycerol Based Amphiphilic Polymeric Materials
- Poster Presentation:

- i. Shiv Kumar: *Synthesis of Carbohydrate Conjugates of Pyranocoumarins and Evaluation of Their Antimicrobial Activity*
- ii. Abdullah Khan: *Abdullah Khan in Dehradun on "Design and Development of "Click" Approach for the Synthesis of Benzoxazine Glycoconjugates and Study of Their Antibacterial Potential"*
- Participation: Ms. preeti yadav, Suchita Prasad, Badri Parshad, Mr. Abhishek k. Singh, Ms. Priyanka Manchanda, Atul K. Sharma
43. **27th International Carbohydrate Symposium (ICS27)** organized by Indian Institute of Science, Bangalore, 12-17th January 2014.
- Poster Presentation:
- i. Mr. Shiv Kumar: *Dendronized Multiamphiphilic Nanocarriers for Drug Delivery Applications.*
- Participation: Abhishek K. Singh
44. **Emerging Trends in Glycoscience & Glycotechnology** "(A Satellite Symposium of ICS-27)" organized by Indian Institute of Technology Delhi in Delhi, India on 08-10th January 2014.
- Invited Talk: *Glycerol Based Amphiphilic Polymeric and Dendritic Architectures for Biomedical Applications.*
- Poster Presentation:
- i. Ms. Meena Kumari : *Chemo-Enzymatic Synthesis & Encapsulation Behavior of Amphiphilic Dendritic Polymers for Drug Delivery Applications*
- Participation: Abhishek K. Singh
45. **International Workshop on "Green Initiatives in Energy, Environment and Health"** jointly organized by Gautam Buddha University and University of Delhi at Delhi, India, 02-03 December 2013.
- Poster Presentation:
- i. Ms Meena Kumari: *Cleaner & Greener Chemo-enzymatic Synthesis of Glycerol Based Polymeric & Dendritic Architectures for Drug Delivery Applications.*
46. **Nanotech-2013**, National Harbor, Washington DC, USA, 12-16 May 2013.
- Invited Lecture: *Non-ionic Dendronized Multiamphiphilic Polymers as Nanocarriers for Biomedical Applications.*
47. **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:
- i. Mr. Shiv Kumar: *Synthesis, Anti-proliferative, and c-Src Kinase Inhibitory Activities of Chromone Derivatives.*
- ii. Mr. Abdullah Khan: *Synthesis of Novel 2-Pyridone Derivatives and Evaluation of their Anti-proliferative Activity.*
- iii. Mr. Abhishek K. Singh: *Chemo-enzymatic Synthesis of Amphiphilic Dendritic Polymers for Biomedical Applications.*
- Awarded Best Presentation**
48. **19th ISCB International Conference (ISCB-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 architectures for Biomedical Applications.*
- Poster Presentations:
- i. Mr. Shiv Kumar and Ms. Meena Kumari: *Synthesis, Anti-proliferative, and c-Src Kinase Inhibitory Activities of Chromone Derivatives.*
- ii. 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
49. **"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:
- i. Ms. Meena Kumari and Mr. Abdullah Khan: *Synthesis of Novel 2-Pyridone Derivatives and Evaluation of their Anti-proliferative Activity.*
- ii. Ms. Preeti Yadav: *Two-photon active coumarin derivatives for high-contrast imaging of cancer cells.*
- iii. 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
50. **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
51. **National Carbohydrate Conference (CARBO-XXVII)** at CFTRI Mysore, Karnataka, 13-15 December 2012.
- Invited talk: *Glycerol Based Polymeric and Dendritic Architectures for Biomedical Applications.*
52. **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.*
53. **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.
54. **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.
55. **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.
56. **Organic Group Seminar**, University of Massachusetts Lowell, 14 September 2012.
Invited lecture: Biocatalysts: Modern Tools of Organic Synthesis.
57. **13th Belgian Organic Synthesis Symposium (BOSS XIII)**, KU Leuven, Belgium 15-20th July 2012.
Participation: Mr. Amit Kumar
58. **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".
59. **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.
60. **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 platinumated nucleic acids and heterocyclic compounds.
61. **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".
62. **CPDHE Refresher Course, Department of Chemistry, University of Delhi, December 1 - 22, 2011**. *Recent Advances in Methods of DNA Synthesis and Gene Modification*.
63. **"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.
64. **JAIST, Komatsu Japan**, 9th March 2010.
Invited talk: Design and Synthesis of Polymeric and Dendritic Architectures for Drug Delivery Applications.
65. **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.
66. **Topics in Supramolecular Chemistry**. Organized 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.
67. **UGC-SAP sponsored 'National Conference on Nanomaterials & Coordination Chemistry'**. Organized by Department of Chemistry, Manipur University, Canchipur, Imphal on 26-27 March 2010.
Invited lecture: Biocatalytic synthesis of polymeric materials for drug delivery applications.
68. **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.
69. **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:
- Ms. Anjali Gupta: Specificities of Calreticulin Transacetylase to acetoxy derivatives of benzofurans. **Awarded Best Poster**
 - Mr. Karam Chand: Characterization of acetoxy quinolones as an effective antiplatelet agent.
 - Ms. Abha Kathuria: Chromen-2-ones, quinolin-2-ones and chromen-4-ones as lead antimicrobial compounds.
 - Ms. Shilpi Gupta: Biocatalytic synthesis of PEG based conjugated polymer dendrimer architectures for drug delivery applications.
 - Ms. Sarah Jalal: Chemoenzymatic approach for the synthesis of valuable triacyl glycerol based dendritic blocks.
70. **University of Rhode Island, USA 5th May 2009**.
Invited lecture: DNA Targeting to Control Abnormal Gene Activity.
71. **6th Indo -Italian workshop on "Chemistry and Biology of Antioxidants"**. Organized by Department of Chemistry, University of Delhi and Embassy of Italy on 10-11 December 2009.
Poster Presentations:
- Ms. Anjali Gupta: Specificities of Calreticulin Transacetylase to acetoxy derivatives of benzofurans.
 - Mr. Karam Chand: Characterization of acetoxy quinolones as an effective antiplatelet agent.
72. **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.

73. **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.

74. **Indo-French Symposium on "Biomolecular Chemistry".** Organized 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.

75. **Indo - German Symposium on "Supramolecular Chemistry".** 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.

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

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

78. **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.

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

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

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

82. **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 activity profile of various classes of organic Compounds.

Poster presentations:

i. 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.

ii. Mr. Sumit Kumar Chemoenzymatic route to polyglycerol - PEG based dendritic structures for drug delivery applications.

iii. 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.

iv. Mr. Karam Chand Synthesis of novel quinolin-2-ones as potential bioactive compounds.

83. **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 Amphiphilic Polymers.

84. **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:

i. Ms. Shilpi Gupta: Chemo - enzymatic synthesis of PEG - glycerol based amphiphilic polymers. – **Awarded Best Poster**

ii. Ms. Anjali Gupta: Synthesis of analogs of benzofuran-3-ones and their potential as antioxidants.

85. **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:

- i. Mr. Karam Chand: Synthesis of novel thio coumarins.
 - ii. Ms. Anjali Gupta: Synthesis of analogs of benzofuran-3-ones and their potential as antioxidants.
 - iii. Ms. Abha Kathuria: Synthesis of novel C-3 substituted 4-methylcoumarins and evaluation of their Transacetylase activity.
86. **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:

- i. Mr. Sumit Kumar, Shilpi Gupta: Chemo -enzymatic synthesis of Peg -glycerol based amphiphilic polymers.
 - ii. Ms. Sarah Jalal: Synthesis of dendritic polyglycerol : A new versatile biocompatible material for industrial and biomedical application.
87. **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.
88. **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.

- i. Mr. Karam Chand: Design and synthesis of chromones and evaluation of their anti-inflammatory activity.
 - ii. Ms. Sarah Jalal: Synthesis of Dendritic Polyglycerol : A new versatile Biocompatible material for Industrial and Biomedical application.
89. **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.

90. **International Symposium on Polymer Therapeutics (ISPT -2007).** Organized by Institute of Chemistry and Biochemistry Freie Universität, Berlin, on 19-20 February 2007.
91. **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 -Isooxazolidines) and their fluorinated analogs.

92. **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.

93. **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.

94. **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.

95. **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.

96. **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.

97. **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.

98. **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.

99. **National Meeting and Exposition Program, 226th ACS National Meeting, New York.** Organized by American Chemical

<p>Society, New York, on 7-11 september 2003.</p> <p>General Paper on Polymer synthesis and characterization: Synthesis of amino functionalized amphiphilic copolymers as potential gene delivery Carriers.</p> <p>100. Fifth IUPAC International symposium on Bio -organic chemistry. ISBOC - 5. Organized by NCL, Pune, on 30 January - 4 February 2000.</p> <p>Poster Presentation: Novel diastereoselective acylation of 4-(1-hydroxy-methyl-1,2-o-(1-methyl ethylidene)-3-o-(phenyl methyl)-α-D-pentofuranose.</p> <p>101. International Symposium on trends in medicinal Chemistry and Biocatalysis. Organized by Department of Chemistry, University of Delhi, on 26-29 January 2000.</p> <p>Short Lecture: Lipase: Modern tools of selective organic synthesis.</p> <p>102. 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.</p> <p>Lecture title: Facile lipase-catalysed diastereoselective acylation of bis -hydroxymethyl furano sugar in organic solvent.</p> <p>103. 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.</p> <p>104. 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.</p> <p>Invited lecture: Lipase catalysed manipulation of hydroxyl groups of carbohydrates and synthesis of modified nucleosides.</p> <p>105. First National Symposium on Green Chemistry. Organized by Department of Chemistry, University of Delhi, on 11-13 January 1999.</p> <p>Poster presentations:</p> <p>a) Resolution of a novel (\pm)-4-(1-chloroethyl)-7-hydroxy coumarin: The Green way.</p> <p>b) Biocatalytic resolution of chroman-3-ols.</p> <p>c) A Facile lipase-catalysed regioselective acetylation of bis -hydroxy methyl furano sugar in organic synthesis.</p> <p>106. XIII Carbohydrate conference. Organized by Chemistry division -Forest Research Institute, Dehradun and ACCT (India) on 19-20 November 1998.</p> <p>Invited Lecture: Chemo -enzymatic manipulations of hydroxyl groups of pentoses and polyols and synthesis of modified nucleosides.</p> <p>107. National seminar on perspective in Interfacial areas of Chemistry and Biology. Organized by Department of Chemistry, University of Delhi on 20-22 January 1998,</p> <p>108. International symposium on recognition processes. Organized by RSC, University of Birmingham on 24-29 July 1994.</p>
Total Publication Profile
<p>In Indexed/ Peer Reviewed Journals</p> <p>Articles published: 131</p> <p>Review articles published: 14</p> <p>Patents: 1</p>
Collaborators
<p>Professor Rainer Haag, Freie Universitat Berlin, Germany</p> <p>Professor Jayant Kumar, University of Massachusetts, Lowell, USA</p> <p>Professor K. Parang, Chapman University, Irvine, CA, USA</p> <p>Professor Hemant K. Gautam, IGIB, Delhi, India</p> <p>Professor Luciano Sasso, Institute of Pharmacology, Sapienza University, Rome, Italy</p> <p>Dr. Praveen Vats, DRDO-DIPAS, New Delhi, India</p>
Other Details
<p>Member Reviewers committee of, Elsevier, Wiley, ScholarOne, and many other journals.</p>

(Professor Sunil K. Sharma)

1st March 2020