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Title	Professor	First Name	Virinder Singh	Last Name	Parmar	Photograph
Designation	Professor					
Address (Campus)	Department of Chemistry North Campus, University of Delhi, Delhi - 110 007					
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Education Qualifications						
Subject	Institution			Year		
Ph.D. Chemistry	University of Delhi			1978		
M.Sc. Chemistry	University of Delhi			1970		
B.Sc. (Honours) Chemistry	University of Delhi			1968		
Any other qualification						
Career Profile						
Organization / Institution	Designation		Duration		Role	
University of Delhi	Professor		Sept. 1994-continued		Teaching & Research	
University of Delhi	Reader		Sept. 1984 - Aug. 1994		Teaching & Research	
St Stephen's College, University of Delhi	Lecturer		Aug. 1970 - Aug. 1984		Teaching	
University of Southern Denmark	Visiting Full (Adjunct) Professor		2008-2013		Research	
Areas of Interests / Specialization						
Synthetic Organic Chemistry, Biocatalysis, Nucleic Acid Chemistry, Polymer Science, Green Chemistry, Enzymology, Nanotechnology, Materials Science and Chemistry of Natural Products.						
Administrative Assignments						
Provost, Gwyer Hall Warden, Gwyer Hall Head, Department of Chemistry Chairman, Board of Research Studies Sciences						
Subjects Taught: Chemistry - Organic & Bioorganic Chemistry						
43 years teaching experience: Organic Chemistry, Bioorganic Chemistry, Asymmetric Synthesis, Inorganic / Physical Chemistry.						
Research Guidance						
Supervised work of 48 PhD Students, 14 MPhil Students and 16 Postdocs						
Publications Profile: Research Papers: 436; Books: 8						
During 2012-2013,number of publications: List Attached						

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Conference Organization / Presentations: During April 2010 – till date
Research Project (Major Grants / Research Collaboration)
Awards and Distinctions
Association with Professional Bodies
<ul style="list-style-type: none"> • Recipient of the Academic Staff Award from the EXPERTS II Consortium of the European Union in December 2012 and April 2013. • Member of the IUPAC Organic and Biomolecular Division's Subcommittees on Biomolecular Chemistry and Green Chemistry. • Member of the International Advisory Board of the Journal '<i>ChemSusChem</i>'. • Member of the Editorial Board of the Journal '<i>Biocatalysis and Biotransformation</i>'. • Member of the Editorial Advisory Board of the Journal '<i>Natural Product Communications</i>'. • Member of Editorial Board of the Journal '<i>Mendeleev Communications</i>'. • Member of the Editorial Board of the electronic Journal '<i>Arkivoc</i>'. • Regional Editor of the electronic Journal '<i>Molecules</i>'. • Member of the Advisory Board and Editorial Board of the Journal '<i>Indian Journal of Chemistry (Section B)</i>'. • Member of the Editorial Board of the abstracting Journals '<i>Medicinal & Aromatic Plants Abstracts</i>' and '<i>Indian Science Abstracts</i>'. • INSA-nominated Affiliate Member of the International Union of Pure and Applied Chemistry (IUPAC). • FRSC (Fellow of the Royal Society of Chemistry, London, UK). • Council Member of the Chemical Research Society of India (CRSI, Bangalore). • Fellow and/or Life Member of Indian Science Congress Association (ISCA, Kolkata), Indian Chemical Society(Kolkata), Chemical Research Society of India (CRSI, Bangalore), Institution of Chemists (Kolkata), Indian Council of Chemists (Agra), Society of Biological Chemists (Bangalore), Indian Society of Bioorganic Chemists (ISBOC, Pune), Society of Pesticide Science India (New Delhi), Zaheer Science Foundation (New Delhi), Indian Society of Analytical Scientists (Mumbai), National Society of Ethnopharmacology (TBGRI, Trivandrum), Indian Society for Mass Spectrometry (Mumbai) and Society of Polymer Scientists of India (Pune). • Member of the Research Council of the Regional Research Laboratory (RRL, CSIR), Jammu (India). • Member of the National Organic Symposium Trust (NOST, Bangalore) Council. • Appointed Visiting Full (Adjunct) Professor of Organic Chemistry at the Institute of Physics and Chemistry,

University of Southern Denmark.
Other Activities

(Signature of Faculty Member)

**(Signature & Stamp
of Head of the Department)**

List of Publications of Professor V. S. Parmar during 2010-2013

1. S Gupta, MK Pandey, K Levon, R Haag, AC Watterson, VS Parmar and SK Sharma. Biocatalytic approach for the synthesis of glycerol-based macroamphiphiles and their self-assembly to micellar nanotransporters. *Macromolecular Chemistry and Physics* **211**, 2010, 239-244.
2. NA Shakil, MK Singh, A Pandey, J Kumar, Pankaj, VS Parmar, MK Singh, RP Pandey and AC Watterson. Development of poly(ethylene glycol)-based amphiphilic copolymers for controlled release delivery of carbofuran. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry* **47**, 2010, 241-247.
3. VD Kancheva, L Saso, PV Boranova, A Khan, MK Saroj, MK Pandey, S Malhotra, JZ Nechev, SK Sharma, AK Prasad, MB Georgieva, C Joseph, AL DePass, RC Rastogi and VS Parmar. Structure-activity relationship of dihydroxy-4-methylcoumarins as powerful antioxidants: Correlation between experimental & theoretical data and synergistic effect. *Biochimie* **92**, 2010, 1089-1100.
4. MK Pandey, S Balwani, PK Sharma, VS Parmar, B Ghosh and AC Watterson. Design, synthesis and anti-inflammatory evaluation of PEGylated 4-methyl- and 4,8-dimethylcoumarins. *European Journal of Pharmaceutical Sciences* **39**, 2010, 134-140.
5. M Giuseppa, T Domenico, BK Singh, AK Prasad, VS Parmar, N Clara, M Ferdinando, S Antonina, C Mariateresa, F Omidreza and L Saso. Antioxidant properties of 4-methylcoumarins in *in vitro* cell-free systems. *Biochimie* **92**, 2010, 1101-1107.
6. A Jha, C Mukherjee, AK Prasad, VS Parmar, M Vadaparti, U Das, E De Clercq, J Balzarini, JP Stables, A Shrivastava, RK Sharma and JR Dimmock. Derivatives of aryl amines containing the cytotoxic 1,4-dioxo-2-butenyl pharmacophores. *Bioorganic and Medicinal Chemistry Letters* **20**, 2010, 1510-1515.
7. P Mladenka, K Macakova, L Zatloukalova, Z Rehakova, BK Singh, AK Prasad, VS Parmar, L Jahodar, R Hrdina and L Saso. *In vitro* interactions of coumarins with iron. *Biochimie* **92**, 2010, 1108-1114.
8. U Singh, A Kumar, R Sinha, S Manral, S Arora, S Ram, RK Mishra, P Gupta, SK. Bansal, AK Prasad, S Biswal, VS Parmar and HG Raj. Calreticulin transacetylase catalyzed modification of the TNF- α mediated pathway in the human peripheral blood mononuclear cells by polyphenolic acetates. *Chemico-Biological Interactions* **185**, 2010, 263-270.
9. R Petrucci, L Saso, V Kumar, AK Prasad, SV Malhotra, VS Parmar and G Marrosu. A spectroelectrochemical and chemical study on oxidation of 7,8-dihydroxy-4-

methylcoumarin (DHMC) and some related compounds in aprotic medium. *Biochimie* **92**, 2010, 1123-1129.

- 10.** A Kumar, MK Pandey, R Anandakathir, R Mosurkal, VS Parmar, AC Watterson and J Kumar. Sensory response of pegylated and siloxanated 4,8-dimethylcoumarins: A fluorescence quenching study by nitro aromatics. *Sensors and Actuators B: Chemical* **147**, 2010, 105-110.
- 11.** F Natella, B Lorrain, AK Prasad, VS Parmar, L Saso and C Scaccini. 4-Methylcoumarins as antioxidants: Scavenging of peroxy radicals and inhibition of human low-density lipoprotein oxidation. *Biochimie* **92**, 2010, 1147-1152.
- 12.** S Malhotra, M Calderon, AK Prasad, VS Parmar and R Haag. Novel chemoenzymatic methodology for the regioselective glycine loading on polyhydroxy compounds. *Organic and Biomolecular Chemistry* **8**, 2010, 2228-2237.
- 13.** D Sharma, RK Sharma, S Bhatia, R Tiwari, D Mandal, J Lehmann, K Parang, CE Olsen, VS Parmar and AK Prasad. Synthesis, Src kinase inhibitory and anticancer activities of 1-substituted 3-(*N*-alkyl-*N*-phenylamino)propane-2-ols. *Biochimie* **92**, 2010, 1164-1172.
- 14.** N Priya, A Gupta, K Chand, P Singh, A Kathuria, HG Raj, VS Parmar and SK Sharma. Characterization of 4-methyl-2-oxo-1,2-dihydroquinolin-6-yl acetate as an effective antiplatelet agent. *Bioorganic and Medicinal Chemistry* **18**, 2010, 4085-4094.
- 15.** R Kumari, S Bansal, G Gupta, S Arora, A Kumar, S Goel, P Singh, P Ponnann, N Priya, TK Tyagi, AS Baghel, S Manral, R Tandon, R Joshi, V Rohil, M Gaspari, E Kohli, YK Tyagi, BS Dwarkanath, D Saluja, S Chatterji, SK Sharma, AK Prasad, RC Rastogi, HG Raj and VS Parmar. Calreticulin transacylase: Genesis, mechanism of action and biological applications. *Biochimie* **92**, 2010, 1173-1179.
- 16.** M Husain, V Kumar, R Kumar, NA Shaklil, SK Sharma, AK Prasad, CE Olsen, RK Gupta, SV Malhotra, EV Eycken, AL Depass, K Levon and VS Parmar. Enantioselective biocatalytic reactions on (±)-aryl alkyl ketones with native and modified porcine pancreatic lipase. *Biocatalysis and Biotransformation* **28**, 2010, 172-184.
- 17.** A Gupta, N Priya, S Jalal, P Singh, K Chand, HG Raj, VS Parmar, AL DePass and SK Sharma. Specificity of calreticulin transacetylase to acetoxy derivatives of benzofurans: Effect on the activation of platelet nitric oxide synthase. *Biochimie* **92**, 2010, 1180-1185.
- 18.** MK Pandey, K Yang, C Pei, PK Sharma, J Viola, R Stromberg, J Kumar, VS Parmar and AC Watterson. Design and biocatalytic synthesis of pluronics-based nanomicellar self-

assembly systems for drug encapsulation applications. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry* **47**, 2010, 788-793.

- 19.** P Gupta, S Balwani, S Kumar, N Aggarwal, M Rossi, S Paumier, F Caruso, P Bovicelli, L Saso, AL DePass, AK Prasad, VS Parmar and B Ghosh. β -Sitosterol among other secondary metabolites of *Piper galeatum* shows inhibition of TNF α -induced cell adhesion molecule expression on human endothelial cells. *Biochimie* **92**, 2010, 1213-1221.
- 20.** P Singh, P Ponnann, S Krishnan, TK Tyagi, N Priya, S Bansal, D Scumaci, M Gaspari, G Cuda, P Joshi, JK Gambhir, D Saluja, AK Prasad, L Saso, RC Rastogi, VS Parmar and HG Raj. Protein acyltransferase function of purified clarecticulin. Part 1: characterization of propionylation of protein utilizing propoxycoumarin as the propionyl group donor. *The Journal of Biochemistry* **147**, 2010, 625-632.
- 21.** V Kumar, VS Parmar and SV Malhotra. Structural modifications of nucleosides in ionic liquids. *Biochimie* **92**, 2010, 1260-1265.
- 22.** SK Singh, VK Sharma, CE Olsen, J Wengel, VS Parmar and AK Prasad. Biocatalytic separation of *N*-7/*N*-9 guanine nucleosides. *Journal of Organic Chemistry* **75**, 2010, 7932-7935.
- 23.** NA Shakil, MK Singh, J Kumar, M Sathiyendiran, G Kumar, MK Singh, RP Pandey, A Pandey and VS Parmar. Microwave synthesis and antifungal evaluations of some chalcones and their derived diaryl-cyclohexenones. *Journal of Environmental Science and Health* **45B**, 2010, 524 - 530.
- 24.** V Kumar; B Gupta; G Kumar; MK Pandey; E Aiazian; VS Parmar; J Kumar and AC Watterson. Novel PEGylated amphiphilic copolymers as nanocarriers for drug delivery: synthesis, characterization and curcumin encapsulation. *Journal of Macromolecular Science, Pure and Applied Chemistry* **47**, 2010, 1154 - 1160.
- 25.** RK Sharma, D Mathur, S Singh, Kapil, RK Saxena, VS Parmar and AK Prasad. Chemoenzymatic modifications on D-glucose of bicyclonucleosides of therapeutic importance. *Trends in Carbohydrate Research* **2**, 2010, 1-9.
- 26.** P Gupta, S Bhatia, A Dhawan, S Balwani, S Sharma, R Brahma, R Singh, B Ghosh, VS Parmar and AK Prasad. Selective biocatalytic aminolysis of (\pm)-epichlorohydrin: Synthesis and ICAM-1 inhibitory activity of (S)-(+)-3-arylamino-1-chloropropan-2-ols. *Bioorganic and Medicinal Chemistry* 2011, **19**, 2263-2268.
- 27.** MK Pandey, S Kumar, RK Thimmulappa, VS Parmar, S Biswal and AC Watterson. Design, synthesis and evaluation of novel PEGylated curcumin analogs as potent Nrf2

activators in human bronchial epithelial cells. *European Journal of Pharmaceutical Sciences* 2011, **43(1-2)**, 16-24.

- 28.** D Mathur, K Bohra, S Bhatia, M Kumar, P Verma, RK Saxena, VS Parmar and AK Prasad. Distereoselective acetylation studies on 4-C-hydroxymethyl-1, 2-isopropylidene -3-O-alkly- β -L-threopentafuranose: Key precursor for biocompatible sugar-PEG copolymers. *Trends in Carbohydrate Research* 2011, **3(4)**, 42-50.
- 29.** A Verma, AN Bhatt, A Farooque, D Khaitan, MB Arya, VS Parmar, HG Raj and BS Dwarakanath. 7,8-Diacetoxy-4-methylcoumarin (DAMC) induced apoptosis in human tumor cells is influenced by calreticulin. *Biochimie* 2011, **97**, 497-505.
- 30.** Poonam, Raunak, G Kumar, LCS Reddy, R Jain, SK Sharma, AK Prasad and VS Parmar. Chemical constituents of the genus *Prunus* and their medicinal applications. *Current Medicinal Chemistry* 2011, **18**, 3758-3824.
- 31.** V Kumar, VS Parmar and SV Malhotra. Ionic liquids: Neoteric solvents for nucleoside chemistry. *Current Organic Synthesis* 2011, **8**, 777-786 [*Cheminform* **43 (14)**, 2012].
- 32.** I Kostova, S Bhatia, P Grigorov, S Balkansky, VS Parmar, AK Prasad and L Saso. Coumarins as antioxidants. *Current Medicinal Chemistry* 2011, **18**, 3929-3951.
- 33.** A Kumar, A Sushama, V Rohil, S Manral, S Gangopadhyay, AK Prasad, HG Raj and VS Parmar. Prevention of benzene-induced genotoxicity in bone marrow and lung cells: Superiority of polyphenolic acetates to polyphenols. *Archives of Toxicology* 2011, **85(9)**, 1141-1150.
- 34.** AS Baghel, R Tandon, G Gupta, A Kumar, RK Sharma, N Aggarwal, A Kathuria, NK Saini, M Bose, AK Prasad, SK Sharma, M Nath, VS Parmar and HG Raj. Characterization of protein acyltransferase function of recombinant purified GlnA1 from *Mycobacterium tuberculosis*: A moon lighting property. *Microbiological Research* 2011, **166(8)**, 662-672.
- 35.** P Singh, P Ponnann, N Priya, TK Tyagi, S Krishnan, M Gaspari, G Cuda, P Joshi, JK Gambhir, D Saluja, AK Prasad, L Saso, RC Rastogi, VS Parmar and HG Raj. 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. *Protein and Peptide Letters* 2011, **18(5)**, 507-517.
- 36.** S Manral, S Bhatia, R Sinha, A Kumar, V Rohil, A Arya, A Dhawan, P Arya, R Joshi, SC Sreedhara, S Gangopadhyay, SK Bansal, S Chatterjee, NK Chaudhury, VK Vijayan, L Saso, VS Parmar, AL DePass, AK Prasad and HG Raj. Normalization of deranged signal transduction in lymphocytes of COPD patients by the novel calcium channel blocker H-DHPM. *Biochimie* 2011, **93**, 1146-1156.
- 37.** Y Yadav, ED MacLean, A Bhattacharyya, VS Parmar, J Balzarini, CJ Barden, CKL Too and A Jha. Design, synthesis and bioevaluation of novel candidate selective

estrogen receptor modulators. *European Journal of Medicinal Chemistry* 2011, **46**, 3858–3866.

- 38.** S Malhotra, S Balwani, A Dhawan, BK Singh, S Kumar, R Thimmulappa, S Biswal, CE Olsen, EV Eycken, AK Prasad, B Ghosh and VS Parmar. Synthesis and biological activity evaluation of *N*-protected isatin derivatives as inhibitors of ICAM-1 expression on human endothelial cells. *Medicinal Chemistry Communications* 2011, **2**, 743-751.
- 39.** R Tandon, P Ponnann, N Aggarwal, R Pathak, AS Baghel, G Gupta, A Arya, M Nath, VS Parmar, HG Raj, AK Prasad and M Bose. Characterization of 7-amino-4-methylcoumarin as an effective antitubercular agent: Structure-activity relationships. *Journal of Antimicrobial Chemotherapy* 2011, **66(11)**, 2543-2555.
- 40.** N Priya, P Singh, S Bhatia, B Medhi, AK Prasad, VS Parmar and HG Raj. Characterization of a unique dihydropyrimidinone, ethyl 4-(4'-heptanoyloxyphenyl)-6-methyl-3,4-dihydropyrimidin-2-one-5- carboxylate, as an effective antithrombotic agent in a rat experimental model. *Journal of Pharmacy and Pharmacology* 2011, **63(9)**, 1175-1185.
- 41.** L Trapani, M Segatto, V Simeoni, V Balducci, A Dhawan, VS Parmar, AK Prasad, L Saso, S Incerpi and V Pallottini. Short- and long-term regulation of 3-hydroxy-3-methylglutaryl coenzyme A reductase by a 4-methylcoumarin. *Biochimie* 2011, **93(7)**, 1165-1171.
- 42.** S Kumar, BK Singh, P Arya, S Malhotra, R Thimmulappa, AK Prasad, EV Eycken, CE Olsen, AL DePass, S Biswal, VS Parmar and B Ghosh. Novel natural product-based cinnamates and their thio & thiono analogs as potent inhibitors of cell adhesion molecules on human endothelial cells. *European Journal of Medicinal Chemistry* 2011, **46(11)**, 5498-5511.
- 43.** B Gupta, V Kumar, G Kumar, A Khan, NA Shakil, A Dhawan, VS Parmar, J Kumar and AC Watterson. Amphiphilic copolymers having saturated and unsaturated aliphatic side chains as nano carriers for drug delivery applications. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry* 2011, **48(12)**, 1009-1015.
- 44.** V Kumar, S Kumar, M Hassan, H Wu, RK Thimmulappa, A Kumar, SK Sharma, VS Parmar, S Biswal and SV Malhotra. Novel chalcone derivatives as potent Nf2 activators on mice and human lung epithelial cells. *Journal of Medicinal Chemistry* 2011, **54**, 4147-4159.
- 45.** S Bhatia, A Mohr, D Mathur, VS Parmar, R Haag and AK Prasad. Biocatalytic route to sugar-PEG-based polymers for drug delivery applications. *Biomacromolecules* 2011, **12**, 2543-2555.

46. MK Pandey, R Tyagi, K Yang, RJ Fisher, CK Colton, J Kumar, VS Parmar, E Aiazian and AC Watterson. Design and synthesis of perfluorinated amphiphilic copolymers: Smart nanomicelles for theranostic applications. *Polymer* 2011, **52**, 4727-4735.
47. VP Mehta, AK Sharma, SG Modha, S Sharma, T Meganathan, VS Parmar and EV Eycken. N-Heterocyclic carbene catalyzed arylation of 3,5-dichloro-2(1H)-pyrazinones. *Journal of Organic Chemistry* 2011, **76**, 2920-2925 [*Cheminform* **42** (31), 2011].
48. H Le-Thi-Thu, GM Casanola-Martin, Y Marrero-Ponce, A Resigno, L Saso, VS Parmar, F Torrens and C Abad. Novel coumarin-based tyrosinase inhibitors discovered by OECD principles-validated QSAR approach from an enlarged, balanced database. *Molecular Diversity* 2011, **15**(2), 507-520.
49. VA Peshkov, OP Pereshivko, S Sharma, T Meganathan, VS Parmar, DS Ermolat'ev and EV Eycken. Tetrasubstituted 2-imidazolones via Ag(1)-catalyzed cycloisomerization of propargylic ureas. *Journal of Organic Chemistry* 2011, **76**, 5867-5872 [*Cheminform* **42** (48), 2011].
50. S Claerhout, S Sharma, S Skold, C Cavaluzzo, A Sandstrom, M Larhed, M Thirumal, VS Parmar and EV Eycken. Synthesis of functionlized furopyrazines as restricted dipeptidomimetics. *Tetrahedron* 2012, **68**, 3019-3029 [*Cheminform* **43** (35), 2012].
51. A Kumar, S Sushama, S Manral, S Sinha, R Joshi, U Singh, V Rohil, AK Prasad, VS Parmar and HG Raj. Calreticulin transacetylase mediated activators of human platelet nitric oxide synthase by acetyl group donor compounds. *Nitric Oxide: Biology and Chemistry* 2012, **26**(1), 9-19.
52. S Gupta, S Singh, A Kathuria, M Kumar, S Sharma, VS Parmar, B Singh, A Gupta, EV Eycken, GL Sharma and SK Sharma. Ammonium derivatives of chromenones and quinolinones as lead antimicrobial agents. *Journal of Chemical Sciences* 2012, **124**(2), 437-449.
53. S Kumar, LCS Reddy, Y Kumar, A Kumar, BK Singh, V Kumar, S Malhotra, MK Pandey, R Jain, R Thimmulappa, SK Sharma, AK Prasad, S Biswal, EV Eycken, AL DePass, SV Malhotra, B Ghosh and VS Parmar. Arylalkyl ketones, benzophenones, desoxybenzoins and chalcones inhibit TNF- α induced expression of ICAM-1: Structure-activity analysis. *Archives of Pharmacy and Chemistry, Life Sciences* 2012, **345**(5), 368-377.
54. S Gupta, R Tyagi, VS Parmar, SK Sharma and R Haag. Polyether based amphiphiles for delivery of active components. *Polymer* 2012, **53**, 3053-3078.
55. SG Modha, A Kumar, DD Vachhani, SK Sharma, VS Parmar and EV Eycken. Gold(I) and platinum(II) switch: a post-Ugi intramolecular hydroarylation to pyrrolopyridinones and pyrroloazepinones. *Chemical Communications* 2012, 10916-10918.

56. S Malhotra, H Bauer, A Tschiche, AM Staedtler, A Mohr, M Calderón, VS Parmar, L Hoeke, S Sharbati, R Einspanier and R Haag. Glycine-terminated dendritic amphiphiles for nonviral gene delivery. *Biomacromolecules* 2012, **13**, 3087-3098.
57. K Macáková, Z Reháková, P Mladenka, J Karlíčková, T Filipký, M Ríha, AK Prasad, VS Parmar, L ek Jahodár, P Pávek, R Hrdina and L Saso. In vitro platelet antiaggregatory properties of 4-methylcoumarins. *Biochimie* 2012, **94**, 2681-2686.
58. SK Singh, LCS Reddy, S Srivastava, CE Olsen, Y Sanghvi, N Langkjær, J Wengel, VS Parmar and AK Prasad. Selective biocatalytic acylation studies on 5'-O-(4,4'-dimethoxytrityl)-2',3'-secouridine: An efficient synthesis of UNA monomer. *Nucleosides, Nucleotides and Nucleic Acids* 2012, **31**, 831-840.
59. RK Sharma, S Singh, R Tiwari, D Mandal, CE Olsen, VS Parmar, K Parang and AK Prasad. O-Aryl a,b-D-ribofuranosides: Synthesis & highly efficient biocatalytic separation of anomers and evaluation of their Src kinase inhibitory activity. *Bioorganic and Medicinal Chemistry* 2012, **20**, 6821-6830.
60. S Malhotra, S Balwani, A Dhawan, Raunak, Y Kumar, BK Singh, CE Olsen, AK Prasad, VS Parmar and B Ghosh. Design, synthesis and biological activity evaluation of regioisomeric spiro-(indoline-isoxazolidines) in the inhibition of TNF- α -induced ICAM-1 expression on human endothelial cells. *Medicinal Chemistry Communications* 2012, **3**, 1536-1547.
61. A Goel, R Chhabra, S Ahmad, AK Prasad, VS Parmar, B Ghosh and N Saini. DAMTC regulates cytoskeletal reorganization and cell motility in human lung adenocarcinoma cell line: an integrated proteomics and transcriptomics approach. *Cell Death and Disease (a Nature Group Publication)* 2012, **3**, e402, 1-12.
62. SG Modha, A Kumar, DD Vachhani, J Jacobs, SK Sharma, VS Parmar, LV Meervelt and EV Eycken. A diversity-oriented approach to spiroindolines: Post-Ugi gold-catalyzed diastereoselective Domino cyclization. *Angewandte Chemie International Edition* 2012, **51**, 9572-9575.
63. S Kumar, BK Singh, AK Prasad, VS Parmar, S Biswal and B Ghosh. Ethyl 3',4',5'-trimethoxythionocinnamate modulates NF- κ B and Nrf2 transcription factors. *European Journal of Pharmacology* 2013, **700**, 32-41.
64. DD Vachhani, A Kumar, SG Modha, SK Sharma, VS Parmar and EV Eycken. Diversely substituted triazolo[1,5-a][1,4]benzodiazepinones: A post-Ugi copper-catalyzed tandem azide-alkyne cycloaddition/Ullmann C-N coupling approach. *European Journal of Organic Chemistry* 2013 (7), 1223-1227.
65. A Kumar, P Ponnann, HG Raj, VS Parmar and L Saso. Comparative specificities of calreticulin transacetylase to O-acetyl, N-acetyl and S-acetyl derivatives of 4-methylcoumarins and their inhibitory effect on AFB1-induced genotoxicity in vitro and in vivo. *Food and Chemical Toxicology* 2013, **52**, 216-224.

66. A Kumar, DD Vachhani, SG Modha, SK Sharma, VS Parmar and EV Eycken. Gold(I)-catalyzed post-Ugi hydroarylation: An approach to pyrrolopyridines and azepinoindoles. *European Journal of Organic Chemistry* 2013 (12), 2288-2292.
67. A Kumar, Z Li, SK Sharma, VS Parmar and EV Eycken. An expedient route to imidazo[1,4]diazepin-7-ones via a post-Ugi gold-catalyzed heteroannulation. *Organic Letters* 2013, **15**, 1874-1877.
68. A Kumar, Z Li, SK Sharma, VS Parmar and EV Eycken. Switching the regioselectivity via indium(III) and gold(I) catalysis: a post-Ugi intramolecular hydroarylation to azepino- and azocino-[cd]indolones. *Chemical Communications*, 2013, 6803-6805.
69. A Kumar, DD Vachhani, SG Modha, SK Sharma, VS Parmar and EV Eycken. Post Ugi gold(I)- and platinum(II)-catalyzed alkyne activation: Synthesis of diversely substituted fused azepinones and pyridinones. *Synthesis* 2013, **45**, 2571-2582.
70. A Kumar, DD Vachhani, SG Modha, SK Sharma, VS Parmar and EV Eycken. Post-Ugi gold-catalyzed diastereoselective domino cyclization for the synthesis of diversely substituted spiroindolines. *Beilstein Journal of Organic Chemistry* 2013, **9**, 2097-2102.
71. R Joshi, A Kumar, S Manral, R Sinha, S Arora, A Sharma, S Goel, N Kalra, S Chatterji, BS Dwarakanath, DS Rawat, AL DePass, V Rohil, D Saluja, VS Parmar, AK Prasad and HG Raj. Calreticulin transacetylase mediated upregulation of thioredoxin by 7,8-diacetoxy-4-methylcoumarin enhances the antioxidant potential and the expression of vascular endothelial growth factor in peripheral blood mononuclear cells. *Chemico-Biological Interactions* 2013, **206**, 327-336.