

# RESEARCH OUTPUT INDICATOR



### PUBLICATION HIGHLIGHTS 2012-13

Publication	121
Average Impact Factor	3.248
Publication with IF $\geq 7$	4
IF $\geq 6$	4
IF $\geq 5$	8
IF $\geq 4$	18
IF $\geq 3$	22
Book Chapters	8

1. Abarikwu SO; Pant AB; Farombi EO. Respiratory toxicity in bone-based industrial workers in India. *J Biochem Mol Toxicol*: 26; 2012;477-485.
2. Abbas S; Khan K; Khan MP; Nagar GK; Tewari D; Maurya SK; Dubey J; Ghazi Ansari N; Bandyopadhyay S; Chattopadhyay N. Developmental exposure to As, Cd and Pb-mixture diminishes skeletal growth and causes osteopenia at maturity via osteoblast and chondrocyte malfunctioning in female rats. *Toxicol Sci*: 134; 2013; 207-220.
3. Agrawal M; Kumar V; Singh AK; Kashyap MP; Khanna VK; Siddiqui MA; Pant AB. trans-resveratrol protects ischemic PC12 Cells by inhibiting the hypoxia associated transcription factors and increasing the levels of antioxidant defense enzymes. *ACS Chem Neurosci*: 4; 2013; 285-294.
4. Ahmad I; Shukla S; Kumar A; Singh BK; Kumar V; Chauhan AK; Singh D; Pandey HP; Singh C. Biochemical and molecular mechanisms of N-acetyl cysteine and silymarin-mediated protection against maneb- and paraquat-induced hepatotoxicity in rats. *Chem-Biol Interact*: 201; 2013; 9-18.
5. Ahmad J; Ahamed M; Akhtar MJ; Alrokayan SA; Siddiqui MA; Musarrat J; Al-Khedhairi AA. Apoptosis induction by silica nanoparticles mediated through reactive oxygen species in human liver cell line HepG2. *Toxicol Appl Pharmacol*: 259; 2012; 160-168.
6. Akhtar MJ; Ahamed M; Fareed M; Alrokayan SA; Kumar S. Protective effect of sulphoraphane against oxidative stress mediated toxicity induced by CuO nanoparticles in mouse embryonic fibroblasts BALB 3T3. *J Toxicol Sci*: 37; 2012; 139-148.
7. Akhtar MJ; Ahamed M; Khan MA; Alrokayan SA; Ahmad I; Kumar S. Cytotoxicity and apoptosis induction by nanoscale talc particles from two different geographical regions in human lung epithelial cells. *Environ Toxicol*: 2012; doi: 10.1002/tox.21766.
8. Alam S; Pal A; Kumar R; Dwivedi PD; Das M; Ansari KM. EGFR-mediated Akt and MAPKs signal pathways play a crucial role in patulin-induced cell proliferation in primary murine keratinocytes via modulation of Cyclin D1 and COX-2 expression. *Mol Carcinog*: 2013; doi: 10.1002/mc.22060.
9. Ali D; Alarifi S; Kumar S; Ahamed M; Siddiqui MA. Oxidative stress and genotoxic effect of zinc oxide nanoparticles in freshwater snail *Lymnaea luteola* L. *Aquat Toxicol*: 124-25; 2012; 83-90.
10. Alotaibi A; Bhatnagar P; Najafzadeh M; Gupta KC; Anderson D. Tea phenols in bulk and nanoparticle form modify DNA damage in human lymphocytes from colon cancer patients and healthy individuals treated *in vitro* with platinum based-chemotherapeutic drugs. *Nanomedicine (Lond)*: 8; 2013; 389-401.
11. Anbalagan C, Lafayette I, Antoniou-Kourounioti M, Gutierrez C, Martin JR, Chowdhuri DK, De Pomerai DI. Use of transgenic GFP reporter strains of the nematode *Caenorhabditis elegans* to investigate the patterns of stress responses induced by pesticides and by organic extracts from agricultural soils. *Ecotoxicology*: 22; 2013; 72-85.
12. Arif M; Tripathi SK; Gupta KC; Kumar P. Self-assembled amphiphilic phosphopyridoxyl-polyethylenimine polymers exhibit high cell viability and gene transfection efficiency *in vitro* and *in vivo*. *J. Mater. Chem. B*: 1; 2013; 4020-4031.
13. Arora D; Mahmood Z; George J; Yadav AK; Kumar S; Singh US; Shukla Y. Plasma protein profiling of breast cancer patients of north Indian population: A potential approach to early detection. *Journal of Proteomics and Bioinformatics*: 6; 2013; 88-98.
14. Bandyopadhyay S; Cahill C; Balleidier A; Huang C; Lahiri DK; Huang X; Rogers JT. Novel 5' untranslated region directed blockers of iron-regulatory protein-1 dependent amyloid precursor protein translation: implications for down syndrome and Alzheimer's disease. *PLoS One*: 8; 2013; e65978.
15. Banerjee S; Chattopadhyay K; Chhabra JK; Chattopadhyay B. Protein dependent fate of hepatic cells under nicotine induced stress and curcumin ameliorated condition. *Eur J Pharmacol*: 684; 2012; 132-145.

16. Bansal R; Tripathi SK; Gupta KC; Kumar P. Lipophilic and cationic triphenylphosphonium grafted linear polyethylenimine polymers for efficient gene delivery to mammalian cells. *J Mater Chem*: 22; 2012; 25427-25436.
17. Chandra R; Singh R. Decolourisation and detoxification of rayon grade pulp paper mill effluent by mixed bacterial culture isolated from pulp paper mill effluent polluted site. *Biochem Eng J*: 61; 2012; 49-58.
18. Chandra R; Singh R; Yadav S. Effect of bacterial inoculum ratio in mixed culture for decolourization and detoxification of pulp paper mill effluent. *J Chem Technol Biotechnol*: 87; 2012; 436-444.
19. Chaturvedi RK; Beal MF. Mitochondria targeted therapeutic approaches in Parkinson's and Huntington's diseases. *Mol Cell Neurosci*: 55; 2013; 101-114.
20. Chaturvedi RK; Beal MF. Mitochondrial diseases of the brain. *Free Radic Biol Med*: 2013; doi: 10.1016/j.freeradbiomed.2013.03.018.
21. Dixit A; Srivastava G; Verma D; Mishra M; Singh PK; Prakash O; Singh MP. Minocycline, levodopa and MnTMPyP induced changes in the mitochondrial proteome profile of MPTP and maneb and paraquat mice models of Parkinson's disease. *Biochim Biophys Acta: Mol Basis Dis*: 1832; 2013; 1227-1240.
22. Dixit S; Das M. Fatty acid composition including trans-fatty acids in edible oils and fats: probable intake in Indian population. *J Food Sci*: 77; 2012; T188-199.
23. Dixit S; Khanna SK; Das M. All India survey for analyses of colors in sweets and savories: exposure risk in Indian population. *J Food Sci*: 78; 2013; T642-647.
24. Dwivedi A; Pal MK; Tripathi AK; Yadav N; Mujtaba SF; Pant MC; Singh SK; Mishra DP; Ray RS; Prabhu BH. Role of type-II pathway in apoptotic cell death induction by photosensitized CDRI-97/78 under ambient exposure of UV-B. *Toxicol Lett*: 2013; doi: 10.1016/j.toxlet.2013.06.210.
25. Fareed M; Bihari V; Kesavachandran C; Mathur N; Srivastava AK. Visual disturbances due to exposure of organophosphate pesticides among farm workers. *Toxicol Environ Chem* 2012; doi: 10.1080/02772248.2012.718780.
26. Fernandes AP; Wallenberg M; Gandin V; Misra S; Tisato F; Marzano C; Rigobello MP; Kumar S; Bjornstedt M. Methylselenol formed by spontaneous methylation of selenide is a superior selenium substrate to the thioredoxin and glutaredoxin systems. *PLoS One*: 2013; e50727.
27. George J; Shukla Y. Early changes in proteome levels upon acute deltamethrin exposure in mammalian skin system associated with its neoplastic transformation potential. *The Journal of Toxicological Science*: 4; 2013; 629-642.
28. Ghosh T; Gupta S; Bajpai P; Agarwal D; Agarwal M; Gupta OP; Agrawal D. Association of CYP1A1, GSTM1, and GSTT1 gene polymorphism with risk of oral submucous fibrosis in a section of north Indian population. *Mol Biol Rep*: 39; 2012; 9383-9389.
29. Goswami R; Singh A; Gupta N; Indian Genome Variation Consortium, Rani R. Presence of strong association of the major histocompatibility complex (MHC) class I allele HLA-A\*26:01 with idiopathic hypoparathyroidism. *J Clin Endocrinol Metab*: 97; 2012; e1820-1824.
30. Gupta NK; Gupta KP. Effects of C-Phycocyanin on the representative genes of tumor development in mouse skin exposed to 12-O-tetradecanoyl-phorbol-13-acetate. *Environ Toxicol Pharmacol*: 34; 2012; 941-948.
31. Gupta S; Khanna VK; Maurya A; Bawankule DU; Shukla RK; Pal A; Srivastava SK. Bioactivity guided isolation of antipsychotic constituents from the leaves of *Rauwolfia tetraphylla* L. *Fitoterapia*: 83; 2012; 1092-1099.
32. Gupta SK; Srivastava M; Akhoun BA; Gupta SK; Grabe N. *In silico* accelerated identification of structurally conserved CD8+ and CD4+ T-cell epitopes in high-risk HPV types. *Infect Genet Evol*: 12; 2012; 1513-1518.
33. Gurbani D; Bharti SK; Kumar A; Pandey AK; Ana GR; Verma A; Khan AH; Patel DK; Mudiam MKR; Jain SK; Roy R; Dhawan A. Polycyclic aromatic hydrocarbons and their quinones modulate the metabolic profile and induce DNA damage in



- human alveolar and bronchiolar cells. *Int J Hyg Environ Health*: 216; 2013; 553-556.
34. Jain A; Saxena S; Khanna VK; Shukla RK; Meye CH. Status of serum VEGF and ICAM-1 and its association with external limiting membrane and inner segment-outer segment junction disruption in type 2 diabetes mellitus. *Molecular Vision*: 19; 2013; 1760–1768.
35. Jain R; Mudiam MKR; Chauhan A; Ratnasekhar Ch; Murthy RC; Khan HA. Simultaneous derivatisation and preconcentration of parabens in food and other matrices by isobutyl chloroformate and dispersive liquid-liquid microextraction followed by gas chromatographic analysis. *Food Chem*: 141; 2013; 436-443.
36. Kapoor R; Kakkar P. Protective role of morin, a flavonoid, against high glucose induced oxidative stress mediated apoptosis in primary rat hepatocytes. *PLoS One*: 7; 2012; e41663.
37. Kapoor R; Rizvi F; Kakkar P. Naringenin prevents high glucose-induced mitochondria-mediated apoptosis involving AIF, Endo-G and caspases. *Apoptosis*: 18; 2013; 9-27.
38. Kapoor U; Srivastava MK; Srivastava AK; Patel DK; Garg V; Srivastava LP. Analysis of imidacloprid residues in fruits, vegetables, cereals, fruit juices, and baby foods and daily intake estimation in and around Lucknow, India. *Environ Toxicol Chem*: 32; 2013; 723-727.
39. Kesavachandran C; Pangtey BS; Bihari V; Fareed M; Pathak MK; Srivastava AK; Mathur N. Particulate matter concentration in ambient air and its effects on lung functions among residents in the National Capital Region, India. *Environ Monit Assess*: 185; 2013; 1265-1272
40. Kisku GC; Yadav S; Sharma RK; Negi MPS. Potential environmental pollution hazards by coal based power plant at Jhansi (UP) India. *Environ Earth Sci*: 67; 2012; 2109-2120.
41. Kisku GC; Pradhan S; Khan AH; Bhargava SK. Pollution in Lucknow City and its health implication on exposed vendors, drivers and traffic policemen, Air Quality, Atmosphere & Health: 6; 2013; 509-515.
42. Kumar A; Bhandari A; Sinha R; Sardar P; Sushma; Goyal P; Goswami C; Grapputo A. Molecular phylogeny of OVOL genes illustrates a conserved C2H2 zinc finger domain coupled by hypervariable unstructured regions. *PLoS One*: 7; 2013; e39399.
43. Kumar A; Sharma A; Dhawan A. Methods for detection of oxidative stress and genotoxicity of engineered nanoparticles. *Methods in Molecular Biology*; 1028; 2013; 231-246.
44. Kumar N; Baudh K; Kumar S; Dwivedi N; Singh DP; Barman SC. Extractability and phytotoxicity of heavy metals present in petrochemical industry sludge. *Clean Techn Environ Policy*; 2012; doi: 10.1007/s10098-012-0559-1.
45. Kumar R; Alam S; Chaudhari BP; Dwivedi PD; Jain SK; Ansari KM; Das M. Ochratoxin A-induced cell proliferation and tumor promotion in mouse skin by activating the expression of cyclin-D1 and cyclooxygenase-2 through nuclear factor-kappa B and activator protein-1. *Carcinogenesis*: 34; 2013; 647-657.
46. Kumar R; Ansari KM; Chaudhari BP; Dhawan A; Dwivedi PD; Jain SK; Das M. Topical application of ochratoxin A causes DNA damage and tumor initiation in mouse skin. *PLoS One*: 7; 2012; e47280.
47. Kumar R; Ansari KM; Saxena N; Dwivedi PD; Jain SK; Das M. Detection of Ochratoxin A in wheat samples in different regions of India. *Food Control*: 26; 2012; 63-67.
48. Kumar R; Das M; Ansari KM. Nexrutine(R) inhibits tumorigenesis in mouse skin and induces apoptotic cell death in human squamous carcinoma A431 and human melanoma A375 cells. *Carcinogenesis*: 33; 2012; 1909-1918.
49. Kumar S; Nigam A; Priya S; Bajpai P; Budhwar R. Lipoic acid prevents Cr(6+) induced cell transformation and the associated genomic dysregulation. *Environ Toxicol Pharmacol*: 36; 2013; 182-193.
50. Kumar S; Verma AK; Das M; Dwivedi PD. A molecular insight of CTLA-4 in food allergy. *Immunol Lett*: 149; 2013; 101-109.

51. Kumar S; Verma AK; Das M; Dwivedi PD. Allergenic diversity among plant and animal food proteins. *Food Rev Int*: 28; 2012; 277-298.
52. Kumar S; Verma AK; Das M; Dwivedi PD. Molecular mechanisms of IgE mediated food allergy. *Int Immunopharmacol*: 13; 2012; 432-439.
53. Kumar S; Verma AK; Das M; Jain SK; Dwivedi PD. Clinical complications of kidney bean (*Phaseolus vulgaris* L.) consumption. *Nutrition*: 29; 2013; 821-827.
54. Kumar S; Verma AK; Sharma A; Kumar D; Tripathi A; Chaudhari BP; Das M; Jain SK; Dwivedi PD. Phytohemagglutinins augment red kidney bean (*Phaseolus vulgaris* L.) induced allergic manifestations. *J Proteomics*: 2013; doi: 10.1016/j.jprot.2013.02.003.
55. Macwan AS; Kukshal V; Srivastava N; Javed S; Kumar A; Ramachandran R. Crystal structure of the hexachlorocyclohexane dehydrochlorinase (LinA-Type2): Mutational analysis, thermostability and enantioselectivity. *PloS One*: 7; 2012; e50373.
56. Macwan AS; Srivastava N; Javed S; Kumar A. Role of a repeated hexapeptide motif GIHFAP near C-terminus in assembly, stability, and activity of "HCH dehydrochlorinase LinA". *Appl Biochem Biotechnol*: 169; 2013; 1397-1404.
57. Magdolenova Z; Collins A; Kumar A; Dhawan A; Stone V; Dusinska M. Mechanisms of genotoxicity. A review of *in vitro* and *in vivo* studies with engineered nanoparticles. *Nanotoxicology*: 2013; doi: 10.3109/17435390.2013.773464.
58. Mishra M; Ali S; Das M. A new extraction method for the determination of oxytocin in milk by EIA or HPLC: Validation by LC-MS. *Food Analytical Methods*: 6; 2013; 1308-1319.
59. Mishra M; Mishra V; Chaudhuri BP; Khanna VK; Mehrotra S; Ali S; Das M. Anomalies in ovary following oral exposure to oxytocin: Mechanistic studies. *Reprod Toxicol*: 40; 2013; 24-34.
60. Mishra M; Sharma A; Shukla AK; Pragya P; Murthy RC; de Pomerai D; Dwivedi UN; Chowdhuri DK. Transcriptomic analysis provides insights on hexavalent chromium induced DNA double strand breaks and their possible repair in midgut cells of *Drosophila melanogaster* larvae. *Mutat Res: Fund Mol Mech Mut*: 747-8; 2013; 28-39.
61. Mishra S; Ansari KM; Pandey HP; Dwivedi PD; Das M. Surveillance of deoxynivalenol in cereals and its likely intake in Indian population. *Food Control*: 30; 2013; 549-555.
62. Mitra S; Gera R; Siddiqui WA; Khandelwal S. Tributyltin induces oxidative damage, inflammation and apoptosis via disturbance in blood-brain barrier and metal homeostasis in cerebral cortex of rat brain: An *in vivo* and *in vitro* study. *Toxicology*: 310; 2013; 39-52.
63. Mudiam MKR; Ratnasekhar Ch; Chauhan A; Manickam N; Jain R; Murthy RC. Optimization of UA-DLLME by experimental design methodologies for the simultaneous determination of endosulfan and its metabolites in soil and urine samples by GC-MS. *Anal Methods*: 4; 2012; 3855-3863.
64. Mudiam MKR; Chauhan A; Singh AK; Sharma VP; Saxena PN. Molecularly imprinted SPE combined with dispersive liquid-liquid microextraction for selective analysis of telmisartan in biological and formulation samples. *Bioanalysis*: 5; 2013; 847-858.
65. Mudiam MKR; Chauhan A; Singh KP; Gupta SK; Jain R; Ratnasekhar Ch; Murthy RC. Determination of t, t-muconic acid in urine samples using a molecular imprinted polymer combined with simultaneous ethyl chloroformate derivatization and pre-concentration by dispersive liquid-liquid microextraction. *Anal Bioanal Chem*: 405; 2013; 341-349.
66. Mudiam MKR; Jain R; Varshney M; Ratnasekhar Ch; Chauhan A; Goyal SK; Khan HA; Murthy RC. In matrix derivatization of trichloroethylene metabolites in human plasma with methyl chloroformate and their determination by solid-phase microextraction-gas chromatography-electron capture detector. *J Chromatogr B Analyt Technol Biomed Life Sci*: 925; 2013; 63-69.
67. Mudiam MKR; Ratnasekhar Ch. Ultra sound assisted one step rapid derivatization and dispersive liquid-liquid microextraction followed by gas chromatography-mass spectrometric

- determination of amino acids in complex matrices. J Chromatogr A: 1291; 2013; 10-18.
68. Mudiam MKR; Ratnasekhar Ch; Jain R; Saxena PN; Chauhan A; Murthy RC. Rapid and simultaneous determination of twenty amino acids in complex biological and food samples by solid-phase microextraction and gas chromatography-mass spectrometry with the aid of experimental design after ethyl chloroformate derivatization. J Chromatogr B Analyt Technol Biomed Life Sci: 907; 2012; 56-64.
  69. Mujtaba SF; Dwivedi A; Yadav N; Ray RS; Singh G. Singlet oxygen mediated apoptosis by anthrone involving lysosomes and mitochondria at ambient UV exposure. J Hazard Mater: 252-3; 2013; 258-271.
  70. Nigam S; Gopal K; Vankar PS. Biosorption of arsenic in drinking water by submerged plant: *Hydrilla verticillata*. Environ Sci Pollut Res Int: 20; 2013; 4000-4008.
  71. Nigam S; Vankar PS; Gopal K. Biosorption of arsenic from aqueous solution using dye waste. Environ Sci Pollut Res Int: 20; 2013; 1161-1172.
  72. Pal A; Alam S; Singhal J; Kumar R; Ansari KM; Das M. Protective effect of topical application of  $\alpha$ -tocopherol and/or N-acetyl cysteine on arge-mone oil/alkaloid-induced skin tumorigenesis in mice. Nutr Cancer: 65; 2013; 78-87.
  73. Pandey M; Gupta KP. Involvement of STAT-3, NFkB and associated downstream molecules before and after the onset of urethane induced lung tumors in mouse. Enivon Toxicol Pharmacol: 34; 2012; 502-511.
  74. Pandey A; Chandra S; Chauhan LK; Narayan G; Chowdhuri DK. Cellular internalization and stress response of ingested amorphous silica nanoparticles in the midgut of *Drosophila melanogaster*. Biochem Biophys Acta: 1830; 2013; 2256-2266.
  75. Pandey P; Khan AH; Verma AK; Singh KA; Mathur N; Kisku GC; Barman SC. Seasonal trends of PM<sub>2.5</sub> and PM<sub>10</sub> in ambient air and their correlation in ambient air of Lucknow city, India. Bull Environ Contam Toxicol: 88; 2012; 265-270.
  76. Pandey P; Patel DK; Khan AH; Barman SC; Murthy RC; Kisku GC. Temporal distribution of fine particulates (PM<sub>2.5</sub>:PM<sub>10</sub>), potentially toxic metals, PAHs and Metal-bound carcinogenic risk in the population of Lucknow city, India. J Environ Sci Health A Tox Hazard Subst Environ Eng: 48; 2013; 730-745.
  77. Panigrahi G; Maheshwari R; Kumar V; Prakash J; Kumar S; Prabakaran J. Preparative thin layer chromatographic separation followed by identification of antifungal compound in *Cassia laevigata* by RP-HPLC and GC-MS. J Sci Food Agric: 2013; doi: 10.1002/jsfa.6259.
  78. Parveen A; Rizvi SHM; Gupta A; Singh R; Ahmad I; Mahdi F and Mahdi AA. NMR-based metabonomics study of sub-acute hepatotoxicity induced by silica nanoparticles in rats after intranasal exposure. Cellular & Molecular Biology: 58; 2013; 193-200.
  79. Pathak MK; Fareed M; Srivastava AK; Pangtey BS; Bihari V; Kuddus M; Kesavachandran C. Seasonal variations in cholinesterase activity, nerve conduction velocity and lung function among sprayers exposed to mixture of pesticides. Environ Sci Pollut Res Int: 2013; doi: 10.1007/s11356-013-1743-5.
  80. Pathak N; Mitra S; Khandelwal S. Cadmium induces thymocyte apoptosis via caspase-dependent and caspase-independent pathways. J Biochem Mol Toxicol: 27; 2013; 193-203.
  81. Patnaik S; Gupta KC. Novel polyethylenimine-derived nanoparticles for *in vivo* gene delivery. Expert Opin Drug Deliv: 10; 2013; 215-228.
  82. Priya S; Nigam A; Bajpai P; Kumar S. Dysregulation of pathways involved in the processing of cancer and microenvironment information in MCA+TPA transformed C3H/10T1/2 cells. In Vitro Cell Dev Biol Anim: 49; 2013; 295-305.
  83. Rai NK; Ashok A; Rai A; Tripathi S; Nagar GK; Mitra K; Bandyopadhyay S. Exposure to As, Cd and Pb-mixture impairs myelin and axon development in rat brain, optic nerve and retina. Toxicol Appl Pharmacol: 2013. pii: S0041-008X(13) 00192-0. doi: 10.1016/j.taap.2013.05.003447.



84. Ray L, Kumar P, Gupta KC. The activity against Ehrlich's ascites tumors of doxorubicin contained in self assembled, cell receptor targeted nanoparticle with simultaneous oral delivery of the green tea polyphenol epigallocatechin-3-gallate. *Biomaterials*: 34; 2013; 3064-3076.
85. Satya; Upreti DK; Patel DK. *Rinodina sophodes* (Ach.) Massal.: a bioaccumulator of polycyclic aromatic hydrocarbons (PAHs) in Kanpur city, India. *Environ Monit Assess*: 184; 2012; 229-238.
86. Seth CS; Misra V; Chauhan LKS. Accumulation, detoxification, and genotoxicity of heavy metals in indian mustard (*Brassica juncea* L.). *Int J Phytoremediat*: 14; 2012; 1-13.
87. Shahin S; Singh VP; Shukla RK; Dhawan A; Gangwar RK; Singh SP; Chaturvedi CM. 2.45 GHz microwave irradiation-induced oxidative stress affects implantation or pregnancy in mice, *Mus musculus*. *Appl Biochem Biotechnol*: 169; 2013; 1727-1751.
88. Sharma A; Dinesh K; Yadav S; Jain SK; Pant MC; Parmar D. Cytochrome P450 2A isoenzymes in freshly prepared blood lymphocytes isolated from rats and validation as a biomarker for clinical studies in humans. *Xenobiotica*: 43; 2013; 311-319.
89. Sharma A; Saurabh K; Yadav S; Jain SK; Parmar D. Expression profiling of selected genes of toxication and detoxication pathways in peripheral blood lymphocytes as a biomarker for predicting toxicity of environmental chemicals. *Int J Hyg Environ Hlth*: 2012; doi: 10.1016/j.ijheh.2012.11.002.
90. Sharma P; Bihari V; Agarwal SK; Verma V; Kesavachandran CN; Pangtey BS; Mathur N; Singh KP; Srivastava M; Goel SK. Groundwater contaminated with hexavalent chromium [Cr (VI)]: a health survey and clinical examination of community inhabitants (Kanpur, India). *PLoS One*: 7; 2012; e47877.
91. Sharma SK; Puri R; Jain A; Sharma MP; Sharma A; Bohra S; Gupta YK; Saraya A; Dwivedi S; Gupta KC; Prasad M; Pandey J; Dohroo NP; Tandon N; Sesikeran B; Dorle AK; Tandon N; Handa SS; Toteja GS; Rao S; Satyanarayana K; Katoch VM. Assessment of effects on health due to consumption of bitter bottle gourd (*Lagenaria siceraria*) juice. *Indian J Med Res*: 135; 2012; 49-55.
92. Shukla A; Mohapatra TM; Agrawal AK; Parmar D; Seth K. Salsolinol induced apoptotic changes in neural stem cells: Amelioration by neurotrophin support. *Neurotoxicology*: 35; 2013; 50-61.
93. Shukla RK; Kumar A; Gurbani D; Pandey AK; Singh S; Dhawan A. TiO<sub>2</sub> nanoparticles induce oxidative DNA damage and apoptosis in human liver cells. *Nanotoxicology*: 7; 2013; 48-60.
94. Shukla V; Patel DK; Upreti DK; Yunus M. Lichens to distinguish urban from industrial PAHs. *Environ Chem Lett*: 10; 2012; 159-164.
95. Singh A; Yadav S; Srivastava V; Kumar R; Singh D; Sethumadhavan R; Parmar D. Imprinting of cerebral and hepatic cytochrome P450s in rat offsprings exposed prenatally to low doses of Cypermethrin. *Mol Neurobiol*: 48; 2013; 128-140.
96. Singh AK; Kashyap MP; Kumar V; Tripathi VK; Yadav DK; Khan F; Jahan S; Khanna VK; Yadav S; Pant AB. 3-Methylcholanthrene induces neurotoxicity in developing neurons derived from human CD34+Thy1+ stem cells by activation of aryl hydrocarbon receptor. *Neruro Molecular Medicine*: 15; 2013; 570-592.
97. Singh AK; Parashar A; Singh AK; Singh R. Pre-natal/juvenile chlorpyrifos exposure associated with immunotoxicity in adulthood in Swiss albino mice. *J Immunotoxicol*: 10; 2013; 141-149.
98. Singh G; Vajpayee P; Bhatti S; Ronnie N; Shah N; McClure P; Shanker R. Determination of viable *Salmonellae* from potable and source water through PMA assisted qPCR. *Ecotoxicol Environ Safety*: 93; 2013; 121-127.
99. Singh KP, Gupta S, Rai P. Predicting carcinogenicity of diverse chemicals using probabilistic neural network modeling approaches. *Toxicol Appl Pharmacol*: 272; 2013; 465-475.
100. Singh KP; Gupta S; Rai P. Predicting acute aquatic toxicity of structurally diverse chemicals in fish using artificial intelligence approaches. *Ecotoxicol Environ Saf*: 95; 2013; 221-233.



101. Singh M; Singh U; Mathur N; Shukla Y. Expression of P-glycoprotein is positively correlated with p53 in human papilloma virus induced squamous intraepithelial lesions of uterine cervix: Poor prognosis association. *Asian Pacific Journal of Cancer Prevention*: 13; 2012; 6039-6045.
102. Singh R; Manickam N; Mudiam MKR; Murthy RC; Misra V. An integrated (nano-bio) technique for degradation of  $\gamma$ -HCH contaminated soil. *J Hazard Mater*: 258-59; 2013; 35-41.
103. Singh R; Misra V; Mudiam MKR; Chauhan LK; Singh RP. Degradation of  $\gamma$ -HCH spiked soil using stabilized Pd/Fe<sup>0</sup> bimetallic nanoparticles: pathways, kinetics and effect of reaction conditions. *J Hazard Mater*: 237-38; 2012; 355-368.
104. Singh R; Misra V; Singh RP. Removal of Cr(VI) by nanoscale zero-valent iron (nZVI) from soil contaminated with tannery wastes. *Bull Environ Contam Toxicol*: 88; 2012; 210-214.
105. Singh R; Misra V; Singh RP. Removal of hexavalent chromium from contaminated ground water using zero-valent iron nanoparticles. *Environ Monit Assess*: 184; 2012; 3643-3651.
106. Singh SB; Biswas D; Rawat J; Sindhwani G; Patras A; Devrani S; Sarkar P; Mitra S; Gupta SK. Ethnicity-tailored novel set of ESAT-6 peptides for differentiating active and latent tuberculosis. *Tuberculosis*, 2013. pii: S1472-9792(13)00150-9. doi: 10.1016/j.tube.2013.08.001.
107. Smita S; Gupta SK; Bartonova A; Dusinska M; Gutleb AC; Rahman Q. Nanoparticles in the environment: assessment using the causal diagram approach. *Environ Health*: 11; 2013; S13.
108. Srivastava AK; Bhatnagar P; Singh M; Mishra S; Kumar P; Shukla Y; Gupta KC. Synthesis of PLGA nanoparticles of tea polyphenols and their strong *in vivo* protective effect against chemically induced DNA damage. *Int J Nanomedicine*: 8; 2013; 1451-1462.
109. Tilak AR; Kumar S; Pant MC; Mathur N; Kumar A. Polymorphism Arg72Pro of p53 confers susceptibility to squamous cell carcinoma of lungs in a north Indian population. *DNA Cell Biol*: 32; 2013; 66-72.
110. Tiwari MN; Singh AK; Agrawal S; Gupta SP; Jyoti A; Shanker R; Prakash O; Singh MP. Cypermethrin alters the expression profile of mRNAs in the adult rat striatum: a putative mechanism of postnatal pre-exposure followed by adulthood re-exposure-enhanced neurodegeneration. *Neurotox Res*: 22; 2012; 321-334.
111. Tripathi SK; Goyal R; Gupta KC; Kumar P. Functionalized graphene oxide mediated nucleic acid delivery. *Carbon*: 51; 2013; 224-235.
112. Tripathi SK; Gupta KC; Kumar P. Polyethylene-glycol crosslinked N-(2-hydroxyethyl)-polyethylenimine nanoparticles as efficient non-viral vectors for DNA and siRNA delivery *in vitro* and *in vivo*. *Mol Bio Syst*: 9; 2013; 2322-2330.
113. Tripathi SK; Singh VP; Gupta KC; Kumar P. Hydrophobic and membrane permeable polyethylenimine nanoparticles efficiently deliver nucleic acids *in vitro* and *in vivo*. *J Mater Chem B*: 1; 2013; 2515-2524.
114. Unzueta U; Ferrer-Miralles N; Cedano J; Xu ZK; Pesarrodona M; Saccardo P; Garcia-Fruitos E; Domingo-Espin J; Kumar P; Gupta KC; Mangues R; Villaverde A; Vazquez E. Non-amyloidogenic peptide tags for the regulatable self-assembling of protein-only nanoparticles. *Biomaterials*: 33; 2012; 8714-8722.
115. Valdiglesias V; Costa C; Sharma V; Kiliç C; Pásaro E; Teixeira JP; Dhawan A; Laffon B. Comparative study on effects of two different types of titanium dioxide nanoparticles on human neuronal cells. *Food Chem Toxicol*: 57; 2013; 352-361.
116. Verma AK; Kumar S; Das M; Dwivedi PD. A comprehensive review of legume allergy. *Clin Rev Allergy Immunol*: 45; 2013; 30-46.
117. Verma AK; Kumar S; Das M; Dwivedi PD. Impact of thermal processing on legume allergens. *Plant Foods Hum Nutr*: 67; 2012; 430-441.

118. Verma M, Chattopadhyay BD; Paul BN. Epigenetic regulation of DNMT1 gene in mouse model of asthma disease. *Mol Biol Rep*: 2012; doi: 10.1007/s11033-012-2317-1.
119. Verma R; Praharaj HN; Khanna VK, Garg RK, Singh MK, Malhotra HS. Study of micronutrients (Copper, Zinc and Vitamin B12) in posterolateral myelopathies. *J Neurol Sci*: 329; 2013; 11-16.
120. Yadav A; Kumar A; Tripathi A; Das M. Sunset yellow FCF, a permitted food dye, alters functional responses of spleenocytes at non cytotoxic dose. *Toxicol Lett*: 217; 2013; 197-204.
121. Yadav N; Dwivedi A; Mujtaba SF; Kushwaha HN; Singh SK; Ray RS. Ambient UVA-induced expression of p53 and apoptosis in human skin melanoma A375 cell line by quinine. *Photochem Photobiol*: 89; 2013; 655-664.

## Book Chapters

1. Ravi Ram K and Chowdhuri DK. *Drosophila* as a model for biotechnologists. In: *Animal biotechnology: models in discovery and translation* (Eds. Verma & Singh), Elsevier, 2013.
2. Kisku GC and Sharma VP. Coal Fired Power Plants: Environmental Risk, Mitigation. In *Human and Animal Health : Environmental Perspectives*. Ed. Sudhi Ranjan Garg, Satish Serial Publishing House, Azadpur, Delhi, ISBN 978-93-81226-30-8; 2012, 267-284.
3. Kisku GC. Environmental Impact of Human Activities on Coastal Erosion, Coastal Ecosystem and Marine Biodiversity in India,. In *Environmental Health and Problems*. Ed. Dr. Pawan Kumar Bharti and Dr. Khwairakpam Gajananda, ENVBOOKS series, Discovery Publishing House Pvt. Ltd. New Delhi, ISBN 93-5056-263-4; 2013, 87-97.
4. Kumar A; Sharma V; Dhawan A. Methods for detection of oxidative stress and genotoxicity of engineered nanoparticles. Donald Armstrong and Dhruva J. Bharali (eds.), *Oxidative Stress and Nanotechnology: Methods and Protocols*, Methods in Molecular Biology, 2013; 1028: 231-246.
5. Smita S; Singh KP; Akhoun BA; Gupta S; Gupta SK. Bioinformatics tools for interpretation of data used in molecular identification. In *"Analyzing Microbes"*, Manual of molecular Biology Techniques. Page 209 - 243. Published by Springer Protocols, Springer. ISBN: 978-3-642-34410-7.
6. Smita S; Singh KP; Akhoun BA; Gupta SK. Biological sequence analysis: algorithms and statistical methods. In *"Analyzing Microbes"*, Manual of molecular Biology Techniques. Page 303 - 333. Published by Springer Protocols, Springer. ISBN: 978-3-642-34410-7.
7. Schmitz U; Gupta SK. Essay on "Target site". *Encyclopedia of System Biology* 2013. Published by Springer press. ISBN 978-1-4419-9862-0.
8. Pandey AK, Shanker R; Dhawan A. Microorganisms: A versatile model for toxicity assessment of engineered nanoparticles, Nano - antimicrobials: Progress and Prospects. Eds: Dr. Nicola Cioffi and Dr. Mahendra Rai. Publisher: Springer Verlag, GmbH, 2012; pp. 497-524.