

CURRICULUM VITAE

Alok Dhawan

Ph.D., FST, MNASc, MAMS

Scientist E-1

Developmental Toxicology Division

Predictive Toxicology Group



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Date of Birth: September 11, 1964

Education (Post-Graduation onwards):

Institution	Place	Degree Awarded	Year
Lucknow University	Lucknow	M.Sc	1986
Lucknow University	Lucknow	Ph.D* (Bio-Chemistry)	1991

**Thesis Title: Studies on brain mixed function oxidases.*

Professional Career:

April 2001-todate	Scientist 'E-I' (Assistant Director), Industrial Toxicology Research Centre, CSIR, Govt. of India, New Delhi. (Merit Promotion)
Sept 2005-Feb 2006	Visiting Scholar, Michigan State University, East Lansing, MI, USA.
March 2000- Feb 2001	BOYSCAST Fellow, TNO-BIBRA International, Carshalton, Surrey, U.K.
April 1997-April 2001	Scientist 'C', Industrial Toxicology Research Centre, CSIR, Govt. of India, New Delhi. (Open Selection)
July 1994- September 1994	Visiting Scientist at BIBRA Toxicology International, Surrey, U.K., under bilateral exchange programme between Indian National Science Academy (India) - The Royal Society (U.K.).
Feb.1995-Mar.1997	Senior Research Associate (Pool Officer), Council of Scientific & Industrial Research, Govt. of India, New Delhi.
Nov. 1991-Feb.1995	Scientist Fellow, Council of Scientific & Industrial Research, Govt. of India, New Delhi.
1989-Nov. 1991	Senior Research Fellowship, Council of Scientific & Industrial Research, Govt. of India New Delhi.
1986-1989	Junior Research Fellowship, Indian Council of Medical Research, Govt.

of India, New Delhi.

Honours and Awards:

- 2005 **Alexander Hollaender Award** to present a paper at the 9th International Conference on Environmental Mutagens, and the 36th Annual Meeting of the Environmental Mutagen Society at San Francisco, USA from September 3-8, 2005.
- 2005 **Shakuntala Amir Chand Prize 2002**, of ICMR in the field of Biomedical Research
- 2005 **Elected, Member**, National Academy of Medical Sciences, India
- 2004 **Fellow**, Society of Toxicology (India)
- 2003 **Moderator of NIH Listserv** on Comet Assay hosted on the website www.cometassay.com
- 2000 **BOYSCAST Fellowship 2000**, in the field of Molecular Epidemiology from Department of Science & Technology, Govt. of India.
- 1999 **CSIR Young Scientist Award 1999** in the field of Biological Sciences
- 1998 **Elected, Member**, National Academy of Sciences, India.
- 1996 **Tulsabai Somani Educational Trust Award 1996**, for the best paper presented at the XIV Annual Conference of Indian Academy of Neurosciences.
- 1994 **Visiting Scientist** under bilateral exchange programme between Indian National Science Academy (India) - The Royal Society (U.K.) to work at BIBRA Toxicology International, Surrey, U.K.
- 1994 **Congress Award** by IUPHAR to present a paper in the XIIth International Congress of Pharmacology held at Montreal, Canada from July 24-29, 1994.
- 1993 **INSA Medal For Young Scientist 1993** in the field of Medical Sciences.
- 1990 Fellowship by IUPHAR to present a paper in the XI International Congress of Pharmacology held at Amsterdam, The Netherlands.
- 1990 **Research Fellow** Award of Industrial Toxicology Research Centre, Lucknow, for the year 1989-1990.

Best Poster Awards – for the papers entitled

“Gender-Related differences in basal DNA damage in lymphocytes of a healthy Indian population using Alkaline comet assay” coauthored with Mahima Bajpayee, **Alok Dhawan**, Devendra Parmar, Alok Kumar Pandey, Neeraj Mathur and Prahlad K. Seth and presented at the Symposium of Environmental Genomics and Health Sciences and XXVII Annual Conference of, Lucknow Environmental Mutagen Society of India, March 19-21, 2002.

“Cytochrome P450 2E1 in cultured rat brain cells” coauthored with Nidhi Kapoor, Aditya B. pant, Devendra Parmar, U.N. Dwivedi, **Alok Dhawan** and Prahlad K. Seth, presented at the International Symposium on Molecular Toxicology and Environmental Health, Lucknow, November 5-8, 2003.

UKEMS Young Scientist Poster Award – for the paper entitled “Assessment of DNA damage in the lymphocytes of a healthy Indian population using the alkaline Comet assay” co-authored with Mahima Bajpayee, **Alok Dhawan**, Devendra Parmar, Alok Kumar Pandey, Neeraj Mathur and Prahlad K. Seth, presented at the 25th Anniversary Conference of UK Environmental Mutagen Society held at Plymouth, U.K. from June 30-July 3, 2002.

Prize for Oral Presentation – for the paper entitled “DNA damage induced by industrial solid waste and municipal sludge leachates in human peripheral blood lymphocytes” co authored with Adekunle A. Bakare, Alok K. Pandey, Mahima Bajpayee, Devendra Parmar, D. Kar Chowdhuri and **Alok Dhawan**, presented at the International Symposium on Environmental Mutagenesis and Public Health and XXXI Annual Conference of Environmental Mutagen Society of India, Hyderabad, February 23-25, 2006.

Research Areas of Interest:

Molecular and Genetic Toxicology, Neuroscience, Bioinformatics.

Grants received:

I have been able to get funding from the major granting agencies to support my research.

Assessment of DNA Damage in Human Population Exposed to Petroleum Products Using Comet Assay – CSIR Young Scientist Project - Funded by CSIR.

Modulation in cytochrome P450 mRNA and protein expression following exposure to deltamethrin and lindane: long term effects and role of P450 mediated metabolism in the neurobehavioural toxicity of deltamethrin and lindane – Funded by DBT.

Reactive Metabolites of Benzene with the Ability to Induce Oxidative Stress as Component of the Mechanism of Benzene Toxicity - Funded by ICMR

Characterization of lindane inducible forms of cytochrome P450 in rat – INSA Young Scientist Project - Funded by INSA

Established an “*In Vitro* Toxicology as well as a Tissue Culture Facility” at the Institute from the project funding and am the **Network Project Coordinator** of ITRC for the **CSIR Task Force on *Animal Models and Animal Substitute Technologies*** with a funding of about **Rs. 4 crores as ITRC component**.

Human Resource Development:

Teaching experience

During the past 5-6 years, I have been involved in the graduate programme of the institute where we take seminars of the PhD students who are working at ITRC. Also I have supervised the dissertation of twenty M.Sc./M. Tech biochemistry, biotechnology and environmental sciences students in the field of molecular toxicology, epidemiology and bioinformatics. Three Ph.D. students in biochemistry and environmental sciences are under my supervision. As a visiting faculty, I have been invited to delivered lectures in the Department of Agricultural Microbiology, Faculty of Agricultural Sciences, Aligarh Muslim University, Aligarh; Department of Biotechnology, Allahabad Agricultural Institute-Deemed University, Allahabad; Department of Toxicology, Jamia Hamdard, New Delhi; Institute of Nuclear Medicine and Allied Sciences, New Delhi; and Department of Biomedical Sciences, University of Bradford, Bradford, UK. I have also been invited to deliver lectures in

national and international Workshops, symposia and conferences.

Courses / Symposium / Conference / Workshops Organised:

- Organised hands on training on various biochemical and molecular biology techniques for graduate and postgraduate students from time to time.
- Organised hands on training on Comet assay during the Indo-German Workshop on Prediction and Prevention of Impact of Chemicals on Environment & Human Health, November 5-7, 2001.
- Organised hands on training on Comet assay during the Workshop on Biological Monitoring of Chemical Exposure, December 15-20, 1998.
- Symposium on Environmental Genomics and Health Sciences March 19-21, 2002.
- XXVII Annual Conference of Environmental Mutagen Society of India, March 19-21, 2002.
- Hands on training on Comet assay during the MOEF and WHO sponsored, Short-Term Training Workshop on Environmental Toxicology and Health Impact Assessment, September 23-27, 2002.
- Workshop on Comet Assay: Applications in Toxicology and Molecular Epidemiology organised from February 7-11, 2003
- International Symposium on Molecular Toxicology and Environmental Health, November 5-8, 2003
- Workshop on Current Techniques in Genetic Toxicology, December 1-15, 2004.

Member of Committees:

Institutional:

Business Development Group
Equipment Purchase
Information Technology
PhD Programme Committee

Others:

Bioinformatics Centre, Lucknow
Biotechnology City, Lucknow
Biotech Park, Lucknow
CSIR Task Force on Animal Models and Animal Substitute Technologies.

Fellowship/Memberships of Scientific Societies:

Vice President – Environmental Mutagen Society of India - 2006
Fellow - Society of Toxicology (India)
Member - Academy of Environmental Biologists
Member - Asian Association of Environmental Mutagen Societies, Japan
Member - Environmental Mutagen Society of India
Member - Indian Academy of Neurosciences

Member - Indian Pharmacological Society
Elected Member - National Academy of Sciences, India
Elected Member - National Academy of Medical Sciences
Member - United Kingdom Environmental Mutagen Society, UK

I LIST OF PUBLICATIONS

1. **Alok Dhawan**, Devendra Parmar, Mukul Das and Prahlad K. Seth
Characterization of cerebral 7-ethoxycoumarin-O-deethylase (7-ECOD): Evidence for multiplicity of cytochrome P-450 in Brain.
Biochemical Medicine and Metabolic Biology (Renamed Molecular Genetics and Metabolism) 41:184-192, 1989.
2. **Alok Dhawan**, Devendra Parmar, Mukul Das and Prahlad K. Seth
7-Ethoxyresorufin-O-deethylase: A cytochrome P-448 dependent enzyme in mammalian brain.
European Journal of Pharmacology 183:1509, 1990.
3. Prahlad K. Seth, **Alok Dhawan**, Devendra Parmar and Mukul Das
Cytochrome P-450 Catalysed Reactions in Brain. In: Biological Oxidation Systems. Vol.1. Academic Press. Eds. C. Channa Reddy, Gordon A. Hamilton and K.M. Madyastha, pp.133-146, 1990. *[BOOK CHAPTER]*
4. **Alok Dhawan**, Devendra Parmar, Mukul Das and Prahlad K. Seth
Cytochrome P-450 dependent monooxygenases in neuronal and glial cells: Inducibility and specificity.
Biochemical and Biophysical Research Communications. 170 (2):441-447, 1990.
5. **Alok Dhawan** and Prahlad K. Seth
Status of cytochrome P-448 dependent enzymes in brain after acute exposure to Carbaryl (Short Communication).
International Journal of Toxicology, Occupational and Environmental Health, 1(1): 188, 1991.
6. **Alok Dhawan**, Devendra Parmar and Prahlad K. Seth
Role of mixed function oxidases (MFO's) in lindane induced neurotoxicity in rats (Short Communication).
Annals of Neurosciences, 3: 31, 1992.
7. **Alok Dhawan**, Ashwani Kumar and Prahlad K. Seth
Role of Biotransformation reactions in activation and detoxication of chemicals. *[REVIEW]*
Journal of Scientific and Industrial Research, 51: 444, 1992
8. **Alok Dhawan**, Devendra Parmar, Mukul Das and Prahlad K. Seth
Presence of 7-Ethoxyresorufin-O-deethylase: A specific P-450c enzyme in mammalian brain.
International Journal of Toxicology, Occupational and Environmental Health, 1 (2): 88, 1992.
9. **Alok Dhawan**, Devendra Parmar and Prahlad K. Seth
Effect of Lindane on the cytochrome P450 dependent enzymes in rat brain. (Short Communication)
Canadian Journal of Physiology and Pharmacology, 71 (1) : 295, 1994

10. Diana Anderson, **Alok Dhawan**, Tian Wei Yu and Micheal J. Plewa
An investigation of bone marrow and testicular cells *in vivo* using Comet assay.
Mutation Research, *Genetic Toxicology*, 370 (3-4): 159-174, 1996.
11. Devendra Parmar, **Alok Dhawan** and Prahlad K. Seth
Immunochemical evidence for the presence of Phenobarbital (PB) and 3-methylcholanthrene (MC) inducible cytochrome P450 isoenzymes in rat brain.
International Journal of Toxicology, 17 (6): 619-630, 1998.
12. Monika Dayal, Devendra Parmar, **Alok Dhawan**, Upendra N. Dwevedi and P.K. Seth (1998).
Expression of xenobiotic metabolising cytochrome P450 in rat brain (brief communication).
Arch. Pharmacol. 358 (1): 17, 1998.
13. Prahlad K. Seth, Monika Dayal, **Alok Dhawan** and Devendra Parmar
Role of cytochrome P450 2B1/2B2 and 1A1/1A2 isoenzymes in the neurotoxicity of selected environmental chemicals (brief communication).
Arch. Pharmacol. 358(1): 427, 1998.
14. Devendra Parmar, **Alok Dhawan** and Prahlad K. Seth
Evidence for O-dealkylation of 7-pentoxoresorufin by cytochrome P450 2B1/2B2 isoenzymes in brain.
Molecular and Cellular Biochemistry 189 (1-2): 201-205, 1998.
15. **Alok Dhawan**
The Comet assay and its application.
Industrial Toxicology Bulletin 20: 4-6, 1999.
16. **Alok Dhawan**, Devendra Parmar, Monika Dayal and Prahlad K. Seth
Cytochrome P450 (P450) isoenzyme specific dealkylation of alkoxyresorufins in rat brain microsomes.
Molecular and Cellular Biochemistry 200 (1-2): 169-176, 1999.
17. Monika Dayal, Devendra Parmar, **Alok Dhawan**, Uppendra N. Dwivedi, J. Doehmer and P.K. Seth
Induction of rat brain and liver cytochrome P450 1A1/1A2 and 2B1/2B2 isoenzymes by deltamethrin.
Environmental Toxicology and Pharmacology 7 (3): 169-178, 1999.
18. Diana Anderson, **Alok Dhawan**, Anthony Y. Jones, Costas Ioannides and John Webb
Effect of antioxidant flavonoids and a food mutagen on lymphocytes of a thalassemia patient without chelation therapy in the comet assay
Teratogenesis, Carcinogenesis and Mutagenesis 21 (2): 165-174, 2001.
19. **Alok Dhawan**, Neeraj Mathur and Prahlad K. Seth
The effect of smoking and eating habits on DNA damage in Indian population as measured in the comet assay.
Mutation Research, *Fundamental and Molecular Mechanisms of Mutagenesis* 474 (1-2) 121-128, 2001.

20. Aparajita Dey, Devendra Parmar, Monika Dayal, **Alok Dhawan** and Prahlad K. Seth
Cytochrome P450 1A1 (CYP 1A1) in blood lymphocytes: Evidence for expression of catalytic activity.
Life Sciences 69: 383-393, 2001.
21. Monika Dayal, Devendra Parmar, M. Ali, **Alok Dhawan**, Upendra N. Dwivedi and P.K. Seth
Induction of rat brain cytochrome P450s (P450s) by Deltamethrin: regional specificity and correlation with neurobehavioural toxicity.
Neurotoxicity Research 3 (4): 351-357, 2001.
22. **Alok Dhawan**, Diana Anderson, Sonia de Pascual-Teresa, Celentino Santos-Buelga, Michael N Clifford and Costas Ioannides
Evaluation of the antigenotoxic potential of monomeric, dimeric and black tea polyphenolics against heterocyclic amine-induced DNA damage in human lymphocytes using the comet assay.
Mutation Research, *Genetic Toxicology and Environmental Mutagenesis*, 515: 39-56, 2002.
23. Mahima Bajpayee, **Alok Dhawan**, Devendra Parmar, Alok Kumar Pandey, Neeraj Mathur and Prahlad Kishore Seth
Gender related differences in basal DNA damage in lymphocytes of healthy Indian population as revealed by the alkaline Comet assay.
Mutation Research, *Genetic Toxicology and Environmental Mutagenesis*, 520 (1-2): 83-91, 2002.
24. Aparajita Dey, Devendra Parmar, **Alok Dhawan**, D. Dash and Prahlad K. Seth
Cytochrome P450 2E1 dependent catalytic activity and lipid peroxidation in rat blood lymphocytes
Life Sciences, 71(21): 2509-2519, 2002.
25. Monika Dayal, Devendra Parmar, **Alok Dhawan**, Mohd. Ali, Upendra N. Dwivedi and Prahlad K. Seth
Effect of pretreatment of cytochrome P450 (P450) modifiers on neurobehavioral toxicity induced by deltamethrin.
Food and Chemical Toxicology 41 (3): 431-437, 2003.
26. Devendra Parmar, Sanjay Yadav, Monika Dayal, Ashu Johri, **Alok Dhawan** and Prahlad K. Seth
Effect of lindane on hepatic and brain cytochrome P450s and influence of P450 modulation in lindane induced neurotoxicity.
Food and Chemical Toxicology 41 (8): 1077-1087, 2003.
27. **Alok Dhawan**, Mahmood A. Kayani, James M. Parry, Elizabeth Parry, and Diana Anderson
Aneugenic and clastogenic effects of doxorubicin in human lymphocytes
Mutagenesis 18: 487-490, 2003.

28. Elizabeth D. Wagner, Diana Anderson, **Alok Dhawan**, A. Lane Rayburn and Michael J. Plewa
Evaluation of EMS-induced DNA damage in the single cell gel electrophoresis (Comet) assay and with flow cytometric analysis of micronuclei.
Teratogenesis, Carcinogenesis and Mutagenesis; Supplement 2: 1-11, 2003.
29. Hifzur R. Siddique, **Alok Dhawan**, D. Kar Chowdhuri, and D.K. Saxena
Drosophila melanogaster as an *in vivo* model for somatic cell genotoxicity of chemicals by Comet assay. (*Technique Notes*)
Drosophila Information Service 86:149-151, 2003.
30. Indranil Mukhopadhyay, D. Kar Chowdhuri, Mahima Bajpayee and **Alok Dhawan**
Evaluation of *in vivo* genotoxicity of cypermethrin in *Drosophila melanogaster* using alkaline Comet assay.
Mutagenesis 19(2): 85-90, 2004.
31. Devendra Parmar, Sanjay Yadav, Ashu Johri, Nidhi Kapoor, Aditya B. Pant, **Alok Dhawan** and Prahlad K. Seth
Toxicological consequences of modulation of brain cytochrome P450s by environmental chemicals. In: Pharmacological Prospective of Soma Toxic Chemicals and Their Antidotes. Narosa Publishing House, New Delhi, Eds. S.J.S Flora, James A. Romano, Steven I. Baskin and K. Sekhar, pp 331-355, 2004. [*BOOK CHAPTER*]
32. Nidhi Kapoor, Aditya B. Pant, Devendra Parmar, Upendra N. Dwivedi, **Alok Dhawan** and Prahlad K. Seth
Expression of cytochrome P450s in cultured rat brain cells
Journal of Neurochemistry, 87 (S-1): 52, 2003 (Short Communication).
33. Nidhi Kapoor, Aditya B. Pant, Devendra Parmar, Upendra N. Dwivedi, **Alok Dhawan** and Prahlad K. Seth
Evidence for expression of CYP2B in cultured rat brain neuronal and glial cells.
Journal of Neurochemistry 88 (S-1): 68, 2004 (Short Communication).
34. Kauser M Ansari, L.K.S. Chauhan, **Alok Dhawan**, Subhash K. Khanna and Mukul Das
Unequivocal evidence of genotoxicity of argemone oil in mouse
International Journal of Cancer 112 (5): 890-895, 2004.
35. Mahima Bajpayee, Alok Kumar Pandey, Devendra Parmar, Neeraj Mathur, Prahlad K. Seth and **Alok Dhawan**
Comet assay responses in human lymphocytes are not influenced by the menstrual cycle: a study in healthy Indian females.
Mutation Research, *Genetic Toxicology and Environmental Mutagenesis* 565 (2): 163-172, 2005.
36. Kausar M. Ansari, **Alok Dhawan**, Subhash K. Khanna and Mukul Das
In vivo DNA damaging potential of sanguinarine alkaloid, isolated from argemone oil, using alkaline comet assay.
Food and Chemical Toxicology 43(1):147-153, 2005.

37. Alok K. Pandey, Mahima Bajpayee, Devendra Parmar, Subodh K. Rastogi, Neeraj Mathur, Prahlad K. Seth and **Alok Dhawan**
DNA damage in lymphocytes of rural Indian women exposed to biomass fuels as assessed by the comet assay.
Environmental and Molecular Mutagenesis 45 (5) 435-441, 2005.
38. Mahima Bajpayee, Alok K. Pandey, Devendra Parmar and **Alok Dhawan**
Current Status of Short Term Tests for Evaluation of Genotoxicity, Mutagenicity and Carcinogenicity of Environmental Chemicals and NCEs. [REVIEW]
Toxicology Mechanisms and Methods 15: 1-26, 2005.
39. Hifzur R. Siddique, D. Kar Chowdhuri, D.K. Saxena and **Alok Dhawan**
Validation of *Drosophila melanogaster* as an *in vivo* model for genotoxicity assessment using modified alkaline Comet assay
Mutagenesis 20 (4) 285-290, 2005.
40. Aparajita Dey, **Alok Dhawan**, Prahlad Kishore Seth and Devendra Parmar
Evidence for cytochrome P450 2E1 catalytic activity and expression in rat blood lymphocytes.
Life Sciences 77: 1082-1093, 2005.
41. Mukul Das, Kausar M. Ansari, **Alok Dhawan**, Yogeshwer Shukla and Subhash K. Khanna
Correlation of DNA damage in epidemic dropsy patients to carcinogenic potential of argemone oil and isolated alkaloid in mice.
International Journal of Cancer 117: 709-717, 2005.
42. Hifzur R. Siddique, Subash C. Gupta, **Alok Dhawan**, Ramesh C. Murthy, Daya K. Saxena and D. Kar Chowdhuri
Genotoxicity of industrial solid waste leachates in *Drosophila melanogaster* using a modified alkaline comet assay
Environmental and Molecular Mutagenesis 46: 189-197, 2005.
43. Alok K. Pandey, Mahima Bajpayee, Devendra Parmar, Subodh K. Rastogi, Neeraj Mathur, Prahlad K. Seth and **Alok Dhawan**
DNA damage in lymphocytes of Indian rickshaw pullers as measured by the alkaline Comet assay
Environmental and Molecular Mutagenesis 47(1): 25-30, 2006.
44. Sanjay Yadav, **Alok Dhawan**, Ram L Singh, Prahlad K Seth and Devendra Parmar
Expression of constitutive and inducible cytochrome P450 2E1 in rat brain.
Molecular and Cellular Biochemistry 286 (1-2): 171-180, 2006.
45. Sanjay Yadav, **Alok Dhawan**, Prahlad K Seth, Ram L Singh and Devendra Parmar
Cytochrome P4503A: Evidence for mRNA expression and catalytic activity in rat brain.
Molecular and Cellular Biochemistry 287 (1-2): 91-99, 2006.

46. Sushila Patel, Alok K Pandey, Mahima Bajpayee, Devendra Parmar, and **Alok Dhawan**
Cypermethrin induced DNA damage in organs and tissues of mouse: Evidence by Comet Assay
Mutation Research, *Genetic Toxicology and Environmental Mutagenesis*, 607 (2) 176-183, 2006.
47. Ashu Johri, **Alok Dhawan**, Ram Lakhani Singh and Devendra Parmar
Effect of prenatal exposure of deltamethrin on the ontogeny of xenobiotic metabolizing cytochrome P450s in the brain and liver of offsprings.
Toxicology and Applied Pharmacology, 214: 279–289, 2006.
48. Poornima Vajpayee, **Alok Dhawan** and Rishi Shanker
Evaluation of the alkaline comet assay conducted with the wetlands plant *Bacopa monnieri* L. as a model for ecogenotoxicity assessment.
Environmental and Molecular Mutagenesis 47: 483-489, 2006.
49. Shahina B. Maqbool, Anwaar Ahmad, **Alok Dhawan**, Stephen J. Callister, Tamara Tsoi, Mariam B. Sticklen and Syed A. Hashsham
Response of selected genes of *Burkholderia xenovorans* strain LB400 to onion extract using a DNA:RNA hybrid capture detection system
Research Journal of Microbiology 1(5): 378-391, 2006.
50. Kausar M. Ansari, **Alok Dhawan**, Subhash K. Khanna and Mukul Das
Protective effect of bioantioxidants on argemone oil/sanguinarine alkaloid induced genotoxicity in mice.
Cancer Letters, 244: 109-118, 2006.
51. Manoj Pandey, **Alok Dhawan** and Mukul Das
Induction of p53, p21^{waf1}, ornithine decarboxylase activity and DNA damage leading to cell cycle arrest and apoptosis following topical application of repeated fish fried oil extract to mice.
Molecular Carcinogenesis, 45 (11): 805-813, 2006.
52. Nidhi Kapoor, Aditya B. Pant, **Alok Dhawan**, Uppendra N. Dwivedi, Yogendra K. Gupta, Prahlad K. Seth, Devendra Parmar
Differences in sensitivity of cultured rat brain neuronal and glial cytochrome P450 2E1 to ethanol.
Life Sciences, 79(16):1514-1522, 2006.
53. Ashu Johri, Sanjay Yadav, Ram L. Singh, **Alok Dhawan**, Mohd. Ali and Devendra Parmar.
Long lasting effects of prenatal exposure to deltamethrin on cerebral and hepatic cytochrome P450s and behavioral activity in rat offspring.
European Journal of Pharmacology, 544(1-3):58-68, 2006.
54. Aparajita Dey, Sanjay Yadav, **Alok Dhawan**, Prahlad K. Seth and Devendra Parmar
Evidence for cytochrome P450 3A expression and catalytic activity in rat blood lymphocytes.
Life Sciences, 79(18):1729-1735, 2006.

55. Nidhi Kapoor, Aditya B. Pant, **Alok Dhawan**, Uppendra N. Dwivedi, Prahlad K. Seth, and Devendra Parmar
Cytochrome P450 1A isoenzymes in brain cells: Expression and inducibility in cultured rat brain neuronal and glial cells.
Life Sciences, 79(25):2387-2394, 2006.
56. Sanjay Yadav, Ashu Johri, **Alok Dhawan**, Prahlad K. Seth and Devendra Parmar
Regional specificity in deltamethrin induced cytochrome P450 expression in rat brain.
Toxicology and Applied Pharmacology, 217(1):15-24, 2006.
57. Mahima Bajpayee, Alok Kumar Pandey, Sabina Zaidi, Javed Musarrat, Devendra Parmar, Neeraj Mathur, Prahlad Kishore Seth and **Alok Dhawan**
DNA damage and mutagenicity induced by endosulfan and its metabolites
Environmental and Molecular Mutagenesis, 2006 Aug 24; [Epub ahead of print].
58. **Alok Dhawan**, Julian S. Taurozzi, Alok K. Pandey, Wenqian Shan, Sarah M. Miller, Syed A. Hashsham and Volodymyr V. Tarabara
Stable colloidal dispersions of C₆₀ fullerenes in water: Evidence for genotoxicity
Environmental Science and Technology, October 26, 2006 [Epub ahead of print]
59. Adekunle A. Bakare, Alok K. Pandey, Mahima Bajpayee, Devyani Bhargav, Debapratim Kar Chowdhuri, Kunwar P. Singh, Ramesh C. Murthy and **Alok Dhawan** (2006)
DNA damage induced in human peripheral blood lymphocytes by industrial solid waste and municipal sludge leachates
Environmental and Molecular Mutagenesis (In press).

Reviews and Book Chapter:

1. **Alok Dhawan**, Ashwani Kumar and Prahlad K. Seth (1992).
Role of Biotransformation reactions in activation and detoxication of chemicals. [REVIEW]
Journal of Scientific and Industrial Research, 51: 444
2. Devendra Parmar, Sanjay Yadav, Ashu Johri, Nidhi Kapoor, Aditya B. Pant, **Alok Dhawan** and Prahlad K. Seth (2004)
Toxicological consequences of modulation of brain cytochrome P450s by environmental chemicals. In: Pharmacological Prospective of Soma Toxic Chemicals and Their Antidotes. Narosa Publishing House, New Delhi, Eds. S.J.S Flora, James A. Romano, Steven I. Baskin and K. Sekhar, pp 331-355. [BOOK CHAPTER]
3. Mahima Bajpayee, Alok K. Pandey, Devendra Parmar and **Alok Dhawan** (2005).
Current Status of Short Term Tests for Evaluation of Genotoxicity, Mutagenicity and Carcinogenicity of Environmental Chemicals and NCEs. [REVIEW]
Toxicology Mechanisms and Methods 15: 1-26.

II Patent

Alok Dhawan, Mahima Bajpayee, Alok K. Pandey, Kailash C. Khulbe, Devendra Parmar and Prahlad K. Seth (2004).

A process for the manufacture of twin window slides having low fluorescence and a twin window slide made thereby useful for comet assay.

Patent Appl. No. 1870/DEL/2004.

III Software Copyright

Alok Dhawan, Shailender Bakshi, Nikhil Garg, Prahlad K. Seth and Yogendra K. Gupta (2004).

Comet Assay Abstract Search Software.

Copyright No. 024/CR/2004.

Journal / Book Edited:

1. **Associate Guest Editor** of a special issue of **Teratogenesis, Carcinogenesis and Mutagenesis** Journal (Supplement 1, 2003) published by Wiley-Liss, Inc, U.K.
2. **Editor** of a book entitled **Modern Approaches to Molecular Toxicology** containing 19 chapters currently being edited by Dr. Alok Dhawan, Prof. Diana Anderson, Prof. Coatas Ioannides and Prof. P. K. Seth. John Wiley and Son, Ltd. London, U.K have approved this book for publication.

Features:

Talking Science...Getting Results

TWAS Newsletter, Vol 12 (3) pp. 12-15, 2000

Smoking and eating meat can damage DNA

Nature NewsIndia, April issue, page 6, 2002.

Lymphocytes to serve as liver surrogates

www.bmn.com, July 2002.

Softwares Developed:

1. Molecular Epidemiology Data Mining and Management Software
2. Comet Assay Data Mining and Management Software
3. Comet Assay Forum
4. Autorun CD for the Environmental Mutagen Society meeting, 2002, containing abstracts, other relevant material.
5. Autorun CD for the Workshop on Comet assay containing protocols, lectures and other relevant material – WOCA – 2003
6. Autorun CD for the Workshop on current Techniques in Genetic Toxicology containing protocols, lectures and other relevant material – WOTGET– 2004

Website Hosted:

A website on Comet assay www.comet.itrcindia.org (now www.cometassayindia.org) was developed and hosted by me in September 2003. This has been very well received by peers in the field and has got more than 3,75,000 hits since its launch.

Invited Lectures:

1. Harmful effects of Plastics.
Regional Science Centre, Lucknow, September 1999.
2. The Beleaguered Cell: Protection from Environmental Toxins.
Department of Biomedical Sciences, University of Bradford, U.K. October 11, 2000.
3. Comet assay: A tool for human biomonitoring.
Indo-German Workshop on Prevention of Impact of Chemicals on Environment and Human Health, November 5-7, 2001, Lucknow.
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