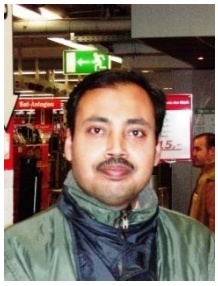

DR ANSUMAN CHATTOPADHYAY, M.Sc., Ph.D.
Professor
Department of Zoology; Visva-Bharati; Santiniketan-731 235.

Areas of Research

1. Toxicology of fluoride, arsenic and nanoparticles (organ and genotoxicity; molecular mechanisms).
2. Screening of anticancer properties of fungal metabolites and biogenic nanoparticles.

Position and Employment

Sl No.	Institution Place	Position	From (Date)	To (date)
1.	Visva-Bharati	Professor	17.12.2011	continuing
2.	Visva-Bharati	Associate Professor	17.12.2005	16.12.2011
3.	North Eastern Hill University	Lecturer (Senior Grade)	10.4.2002	14.12.2005
4.	St. Edmund's College	Lecturer	15.4.1996	9.4.2002

Honors/Awards

i) National Scholarship in B.Sc Examination, 1989.
ii) Visiting Fellowship (HBCSE, TIFR), 2004.
iii) UICC Fellowship, Institute of Pathology, Munich, Germany, 2005.

Publications

Books : 02; Book Chapters: 02 ; Research Papers: 36; General articles : 03

Number of students awarded Ph.D. degree: 05
Number of students submitted Ph.D. thesis: 01
Number of students registered for Ph.D. degree: 03

Peer-reviewed publications :

1. Chatterjee, A., Chattopadhyay, A. and Lawlor, C.J.Z (1995) Effect of glutathione on sister chromatid exchanges in normal and buthionine sulfoximine treated mice. **Mutation Research 327** :171-177.

2. Chattopadhyay, A., Choudhury, S., Chatterjee, A. (1997) Modulation of the clastogenic activity of bleomycin by reduced glutathione, glutathione-ester and buthionine sulfoximine. **Mutagenesis 12**: 221-225.
3. Chatterjee, A., Chattopadhyay, A. (1997) Differential influence of buthionine sulfoximine on radiation induced chromosome aberrations in mammalian cells. **Transaction of Zoological Society of India 1**:127. - 33.
4. Chatterjee, A.,Chattopadhyay, A. (1998) Influence of buthionine sulfoximine mediated glutathione depletion on clastogenic activity of bleomycin and gamma rays**. Current Science 75 (6):** 604-607.
5. Chattopadhyay, A., Deb, S. and Chatterjee, A. (1999) Modulation of clastogenic activity of Gamma irradiation in Buthionine Sulfoximine mediated glutathione depleted mammalian cells. **International Journal of Radiation Biology 75 (10**): 1283-1291.
6. Chattopadhyay, A.and Chatterjee, A. (1999) Influence of buthionine sulfoximine on radiation induced chromosome aberrations in mammalian cells. **Recent aspects of fundamental and applied radiobiology** (ed. F.HA. Schneeweiss and R. N. Sharan). Foschunzentrum, Julich, Gimbh, Germany, **30**: 89-92.
7. Chattopadhyay A, Mahajan BS (2004) Students' understanding of DNA and DNA technologies after "Fifty years of DNA Double Helix". **epiSTEME-1:** 14 (49), 19.
8. Chattopadhyay A (2005) Understanding of genetic information in higher secondary students in northeast India and the implications for genetics education. **Cell Biology Education** 02/2005; 4(1):97-104.
9. Podder S, Chattopadhyay A, Bhattyacharya S,Roy MR (2008) Differential In vivo genotoxic effect of higher and lower concentrations of fluoride in mouse bone marrow cells. **Fluoride 41(4):** 301-302.
10. Podder S, Bhattacharya S, Chattopadhyay A, Roy MR (2010) Histopathology and cell cycle alteration in spleen of low and high doses of sodium fluoride exposed mice. **Fluoride 43(4)**: 237–245.
11. Podder S, Chattopadhyay A , Bhattacharya S, Roy MR, Chakraborty A (2010) Fluoride induced genotoxicity in mouse bone marrow cells: Effect of buthionine sulfoximine and N-acetyl-L-cysteine. **Journal of Applied Toxicology, 31**: 618-625.
12. Podder S, Chattopadhyay A, Bhattachary S (2010) Reduction of fluoride induced genotoxicity in mice by substituting high fluoride containing water with safe drinking water. **Journal of Applied Toxicology, 31**: 703-705.
13. Chattopadhyay A, Podder S, Agarwal S, Bhattacharya S (2011) Fluoride induced histopathology and synthesis of stress protein in liver and kidney of mice. **Archives of Toxicology 85: 327-335.**
14. Chattopadhyay A (2012) Understanding of Mitosis and Meiosis in Higher Secondary Students of Northeast India and the Implications for Genetics Education, **Education 2 (3): 41-47**.
15. Chatterjee S , Banerjee P P, Chattopadhyay A, Bhattacharya S (2013) Low concentration of HgCl 2 drives rat hepatocytes to autophagy/apoptosis/necroptosis in a time-dependent manner. **Toxicological and Environmental Chemistry, 12/2013; 95(7)**:1192-1207**. 95(7):1192-1207. DOI:10.1080/02772248.2013.862392 ·**
16. Srivastava R, Sengupta A , Mukherjee S, Chatterjee S, Sudarshan M, Chakraborty A, Bhattacharya S, Chattopadhyay A. (2013) Invivo effect of arsenic trioxide on Keap1-p62-Nrf2 signaling pathway in mouse liver: expression of antioxidant responsive element-driven genes related to glutathione metabolism. **ISRN Hepatology, Article ID 817693, 13 pages**.

17. Chatterjee S, Nandi P, Mukherjee S, Chattopadhyay A, Bhattacharya S (2013) Regulation of autophagy in rat hepatocytes treated in vitro with low concentration of mercury. **Toxicological and Environmental Chemistry, 01/2013; 95(3). 95(3). DOI:10.1080/02772248.2013.786941**.
18. Nath A, Chattopadhyay A, Joshi SR (2013) Biological activity of endophytic fungi of Rauwolfia serpentina Benth: an ethnomedicinal plant used in folk medicines in Northeast India. **Proceedings of the National Academy of Sciences, India Section B: Biological Sciences**:1-8. **85(1). DOI:10.1007/s40011-013-0184-8**.
19. Chatterjee S, Munshi C, Chattopadhyay A, Bhattacharya S (2014) Mercuric chloride effects on adult rat oval cells- induced apoptosis. **Toxicological and Environmental Chemistry, 04/2014.** 95(10). DOI:10.1080/02772248.2014.904085 .
20. Mukhopadhyay D, Chattopadhyay A (2014) Induction of Oxidative Stress and Related Transcriptional Effects of Sodium Fluoride in Female Zebrafish Liver. **Bulletin of Environmental Contamination and Toxicology, 04/2014. 93(1). DOI:10.1007/s00128-014-1271-0**
21. Sarkar S, Mukherjee S, Chattopadhyay A, Bhattacharya S (2014) Low dose of arsenic trioxide triggers oxidative stress in zebrafish brain: Expression of antioxidant genes. **Ecotoxicology and Environmental Safety 06/2014**; **107C:1-8.**
22. Adhikari S , Ghosh A, Mandal S , Sengupta A, Chattopadhyay A, Matalobos J S, Lohar S, Das D (2014) Visible light excitable ON fluorescence and naked eye detection of Cu(2+)via hydrolysis of rhodamine-thiophene conjugate: human breast cancer cell (MCF7) imaging studies. **Dalton Transactions, 06/2014; 43(21):7747-51.**
23. Lohar S, Sengupta A, Chattopadhyay A, Sanmartin M J, Das D (2014) Structurally characterized antipyrine-based dual fluorescent probe: enhanced Al III selectivity of a dinuclear ZnII complex for intracellular sensing by a displacement approach. **European Journal of Inorganic Chemistry 10/2014**. DOI:10.1002/ejic.201402702.
24. Kumari B, Lohar S, Adhikari S, Sengupta A, Chattopadhyay A, Brandao P, Felix V, Das D (2015) Rhodamine derived colorimetric and fluorescence mercury(II) chemodosimeter for human breast cancer cell (MCF7) imaging. **RSC Advances 02/2015. DOI:10.1039/C4RA14624G**.
25. Ghosh A, Sengupta A, Chattopadhyay A, Das D (2015**)** A single probe for sensing both acetate and aluminum(III): Visible region detection, red fluorescence and human breast cancer cell imaging. **RSC Advances 2015,** 5**, 24194 - 24199.**
26. Mukhopadhyay D, Srivastava R, Chattopadhyay A (2015) Sodium fluoride generates ROS and alters transcription of genes for xenobiotic metabolizing enzymes in adult zebrafish (Danio rerio) liver: expression pattern of Nrf2/Keap1 (INrf2). **Toxicology Mechanisms and Methods. DOI: 10.3109/15376516.2015.1025348.**
27. Srivastava R , Bhattacharya S, Chakraborty A, Chattopadhyay A (2015) Differential *in vivo* genotoxicity of arsenic trioxide in glutathione depleted mouse bone marrow cells: involvement of Nrf2/Keap1/P62. **Toxicology Mechanisms and Methods. DOI: 10.3109/15376516.2015.1034334**.
28. Lohar S, Safin DA, Sengupta A, Chattopadhyay A, Matalobos JS, Babashkina MG, Robeyns K, Mitoraj MP, Kubisiak P, Garcia Y, Das D (2015) Ratiometric sensing of lysine through the formation of pyrene excimer: Experimental and computational studies. **Chemical Communications 04/2015; 51(40). DOI:10.1039/c5cc01359c**

29. Ghosh A, Sengupta A, Chattopadhyay A, Das D (2015) Lysine triggered ratiometric conversion of dynamic to static excimer of a pyrene derivative: aggregation-induced emission, nanomolar detection and human breast cancer cell (MCF7) imaging. **Chemical Communications (accepted).**
30. Mukhopadhyay D, Priya P, Chattopadhyay (2015) Sodium fluoride affects behaviour and alters mRNA transcription of biomarker genes: role of Nrf2/Keap1. **Environmemtal Toxicology and Pharmacology**. DOI 10.1016/j.etap.2015.07.003
31. Ghosh A, Mandal S, Lohar S, Sengupta A, Chattopadhyay A, Das D (2015) Single crystal X-ray structurally characterized palladium(II) selective fluorescence and colorimetric indicator for human breast cancer cell imaging. **Inorganica Chimica Acta.** (accepted).
32. Nandi S, Sahana A, Mandal S, Sengupta A, Chatterjee A, Safin DA, Babashkina MG, Nikolay A Tumanov NA, Filinchuk Y, Das D (2015) Hydrazine selective dual signaling chemodosimetric probe in physiological conditions and its application in live cells. **Analytica Cmemica Acta** (accepted).
33. Kumari B, Lohar S, Ghosh M, Ta S, Sengupta A, Banerjee PP, Chattopadhyay A, Das D (2015) Structurally Characterized Zn(2+) Selective Ratiometric Fluorescence Probe in 100 % Water for HeLa Cell Imaging: Experimental and Computational Studies. **Journal of Fluorescence** (accepted).
34. Barua S, Banerjee PP· Sadhu A, Sengupta A, Chatterjee S, Sarkar S, Barman S, Chattopadhyay A, Bhattacharya S, Mondal NC, Karak N (2016) Silver Nanoparticles as Antibacterial and Anticancer Materials Against Human Breast, Cervical and Oral Cancer Cells. **Journal of Nanoscience and Nanotechnology**; 16; 1-9.
35. Banerjee G, Sengupta A, Roy T, Banerjee PP, Chattopadhyay A, Ray AK (2016) Isolation and characterization of two fluoride resistant bacterial strains from fluoride endemic area of West Begal, India: assesment of their fluoride absorption efficiency. **Fluoride** (accepted).
36. Mondal MK, Banerjee PP, Saha SK, Chowdhury P, Sengupta A, Bandyopadhyay A, Bhattacharya S, Chattopadhyay A (2016) Selective reduction technique (SRT):A robust method to synthesize Ag/Au doped grapheme oxide. Materials and Design. DOI: 10.1016/j.matdes.2016.04.017

Chapters in Books

1. **Vinyl fluoride.** Chattopadhyay A and Podder S (Editor:Wexler P). 2014. Encyclopedia of Toxicology. 3rd ed. Elsevier. 04/2014: pages 939-941; ISBN: ISBN: 9780123864543.
2. **Transgenic animals: new vista in toxicological research.** Podder S and Chattopadhyay A (Editor: Behera K). 2014. Advanced Frontier on Biotechnology. Jaya Publishing House, Delhi, India. ISBN: 978-93-82471-55-4.

Books

1. **Genotoxicity of fluoride: modulation of endogenous glutathione level.** Podder S, Chattopadhyay A, Bhattacharya S. 2012. Lambert Academic Publishing. Saarbrucken Germany. ISBN: 978-3-8473-4066-9.
2. **Molecular mechanisms of functional disorder induced by mercury**.

Chatterjee S., Bhattacharya S., Chattopadhyay A. 2014. Lambert Academic Publishing. Saarbrucken Germany**. ISBN:** 978-3-639-51115-4.

Reviewer of the following journals:

1. Chemosphere
2. Biochimie
3. Biological Trace Element Research
4. Bulletin of Environmental Contamination and Toxicology
5. Chemico-Biological Interaction
6. Fluoride
7. Journal of Applied Oral Science
8. Cell Biology Education
9. Proceeding of National Academy of Science (Allahabad)
10. Indian Journal of Experimental Biology
11. Pharmacologia
12. Journal of Clinical and Diagnostic Research
13. Journal of Water Resource and Protection
14. International Blood Research and Reviews
15. Human and Experimental Toxicology
16. British Biotechnology Journal

Ongoing Research Projects

Sl No.	Title of Project	Funding Agency	Amount (INR)	Date of sanction and Duration
1	Polymer supported green silver nano paprticles using plants of northeast india; studies on toxicity and anti cancer property.	DBT (Twining)	Total 60L VB component 25L	13.2.2014 (three years)
2	Studies on anticancer properties of grapheme oxide based gold nano particles	UGC-DAE-CSR-Kolkata Centre	12 L	1.12.2015 (three years extendable for two more years)

Completed Research Projects (State only major projects of last 3 years)

Sl No.	Title of Project	Funding Agency	Amount (Rs.)	Date of completion
1	A highly efficient technique for breeding	West Bengal State Department of	17.5 L	31.3.2012

	Indian major carps.	Science & Technology.		
2.	Arsenic induced modulation of trace elements in mammalian cells.	UGC-DAE	7.5 L	31.8.2012
3.	Low radiation induced hyper radiosensitivity of mammalian cells	IUAC, N. Delhi	6 L	25,12,2009
4.	Isolation , characterization and anticancer properties of endophytic fungal metabolites from north eastern India	DBT (Twining)	Total: 81 L VB component: 37.96 L	27.6.2014

Life Membership:

1. Indian Association for Radiation Biology
2. Zoological Society of Calcutta
3. Association of Teachers in Biology
4. All India Congress of Cytology and Genetics
5. DNA Society of India
6. UICC (International Union Against Cancer)
7. International Society for Fluoride Research

Extracurricular activities:

1. **'Sangit Prabhakar'** diploma in 'Tabla' playing from Prayag Sangit Samiti (Allahabad). Singer of '**Rabindrasangeet**'.
2. Member of the National Academic Committee of the **International Biology Olympiad** held in Mumbai, India, 2008.
3. Participated as "**Scientific Observer"** from **India** in the **International Biology Olympiad** held in Changwon, South Korea, 2010.