

Stress Biology

1. Studies on the genotoxicity of endosulfan in bacterial systems ; K.Choudury, **S.Selvaraj**, A.K.Pal, Mutation Research, 439 (1999) 63.
2. Selective induction and alteration of xenobiotic transforming enzymes by Vanadium during diethylnitrosamine induced hepatocarcinogenesis ; S.Selvaraj, **A.Chakraborty**, Neoplasma 47(1999) 81.
3. Vanadium toxicology - an assesment of general health, haematological aspects and energy response in an Indian catfish Clarias Batrachus(LINN.) ; **A. Chakraborty**, S.Oinam, M.Chatterjee Biometals 11;(2) 95 (1999).
4. Modulation of some quantitative and qualitative characteristics in rice (*Oryza sativa L.*) and mung (*Phaseolus mungo L.*) by ionizing radiation” ; J.P. Maity, D. Mishra, **A. Chakraborty**, **A. Saha**, S.C. Santra and S. Chanda. Radiation Physics and Chemistry, 74(5) 391-394 (2005).
5. Influence of copper (II) ions and its derivatives on radiosensitivity of *Escherichia coli* ; **S. Selvaraj**, K. Chabita , **A. Chakraborty** **S. N. Bhattacharya**, **A. Saha**, Rad . Phys. Chem doi:10.1016/j.radphyschem 2006.10.009 (2006).
6. Radiation Induced Phenotypic Alterations in Relation to Isozymes and RAPD Markers in *Vigna radiata* (L.) Wilczek ; S Roy, Y Begum, **A Chakraborty**, S Ray Chaudhuri, Int Jou. Rad. Biol. 82: (11) 823-832 (2006).
7. Genomic Sequences amplified by RAPD in *Vigna radiata* Wilczek Y. Begum ; S. Roy , S Bandopadhyay, S. Sen Roy Chowdhury, **A. Chakraborty**, NCBI nucgss (2007).
8. Trifluoperazine stimulates ionizing radiation induced cell killing through inhibition of DNA repair ; S. Gangopadhyay, P Karmakar, U Dasgupta, **A. Chakraborty**, Mutation Research. 2007 Oct 4; 633(2) : 117-25
9. Radiation induced alterations in *Vigna radiata* during in vitro somatic embryo genesis ; Y. Begum, S. Roy, S Bandopadhyay, S Bandopadhyay, U Dasgupta, **A. Chakraborty** and S. Sen Roy Chowdhury, Int J. Rad. Biol. 84(2) 165-175 (2008).
10. Protective role of curcumin against nicotine-induced genotoxicity on rat liver under restricted dietary protein ; G Bandyopadhyaya, S. Sinha, B D Chattopadhyay, **A Chakraborty**, European Journal of Pharmacology 588 :151–157 (2008).

11. A case study of ongoing traditional practices at East Calcutta Wetland ; Ray Chaudhuri, S., M. Mishra, P. Nandy and A. R. Thakur, 2008. Waste management: American Journal of Agricultural and Biological sciences, 3. 10.3844/ajabssp.2008.315.320.
12. Microbial Biodiversity Screening for Metal Accumulators from Mineral Ore Rich Site in Andhra Pradesh, India ; Aditya Kumar Sarkar, Susmita Roy, Ananya Pal, Sourav Pakrashi, Prahlad Kumar Mahra, Sayanti Sahoo, Aritra Deb, Madhusmita Mishra, Sudip Kumar Sen, Ashoke Ranjan Thakur and Shaon Ray Chaudhuri , Online Journal of Biological Sciences. 8(2): 32-40, (2008).
13. Isolation and characterization of novel metal accumulating extracellular protease secreting bacteria from marine coastal region of Degha in West Bengal, India ; Susmita Roy, Kaushal Prasad Mishra, Ashoke Ranjan Thakur and Shaon Ray Chaudhuri, Online Journal of Biological Sciences, 8(1):25-31. (2008).
14. Novel Metal Accumulator and Protease Secretor Microbes from East Calcutta Wetland ; Sanhita Chowdhury, Madhusmita Mishra, Adarsh V K, Anindita Mukherjee, Ashoke Ranjan Thakur, Shaon Ray Chaudhuri, American Journal of Biochemistry and Biotechnology, 4 (3): 255-264,2008.
15. Protective role of zinc in ameliorating arsenic-induced oxidative stress and histological changes in rat liver , A. Kumar, A. Malhotra, P. Nair, Garg M.L., Dhawan DK, Jou. Environ Pathol Toxicol Oncol. 2010 ; 29(2):91-100
16. Influence of extraneous supplementation of zinc on trace elemental profile leading to prevention of dimethylhydrazine-induced colon carcinogenesis, V.D. Chadha, **M.L. Garg**, D. Dhawan, Toxicol Mech Methods. 2010 Oct ; 20(8):493-7.
17. Radiation induced effects on viability and antioxidant enzymes of crustaceans from different habitats. D. Mukherjee, M. Manna, **S. Selvaraj**, S. Bhattacharya, S. Homechoudhury and **A. Chakraborty**, J. Environ. Biol.; 31, 251-254 (2010)
18. Physiological responses of water hyacinth to water pollution in and around Kolkata ; **S. S. Ram, A. Chakraborty** and S Sahoo, International Journal of Environmental Science 1(2), 183 (2010).
19. Fluoride-induced genotoxicity in mouse bone marrow cells: effect of buthionine sulfoximine and N-acetyl-L-cysteine ; S.Podder, A. Chattopadhyay, S. Bhattacharya, M.R.Ray and **A. Chakraborty**, Jou. Appl. Toxicol DOI 10.1002/jat.1605 (2010)

20. Leaf extract of *Moringa oleifera* prevents ionizing radiation-induced oxidative stress in mice ; Mahuya Sinha, Dipesh Kr. Das, Surajit Bhattacharjee, Subrata Majumdar, Sanjit De, *Journal of Medicinal Food* 18: 1167-1172. (2011).
21. Formulation of Nutrient Mediaum for In Vitro Somatic Embryo Induction of *Plantago ovata* Forsk ; P Saha, S Bandopadhyay , S Sen Raychaudhuri ; *Biological Trace Elements Research. Biol Trace Elem Res.* 2011 May ; 140(2):225-43. doi: 10.1007/s12011-010-8684-3.
22. Amelioration of ionizing radiation induced lipid peroxidation in mouse liver by *Moringa oleifera* leaf extract ; Mahuya Sinha, Dipesh Kr. Das, Sanjukta Datta, Santinath Ghosh, Sanjit Dey, *Indian Journal of Experimental Biology* 50: 209-215, (2012).
23. Epicatechin ameliorates ionizing radiation-induced oxidative stress in mice liver ; Mahuya Sinha, Dipesh Kr. Das, Sanjukta Datta, Tanusree Ray, Alok Kumar Sil, Sanjit Dey, *Free Radical Research (PMID:22497453)* (2012).
24. Intercalation and induction of strand breaks by adriamycin and daunomycin: a study with human genomic DNA ; D. Ghosh, M. Hossain, C. Saha, S. K. Dey & G. K. Suresh, *DNA and Cell Biology* 31, 377 (2012).
25. An attempt to conserve *Withania somnifera* Dunal - a highly essential medicinal plant, through in vitro callus culture ; Rout J. R., Sahoo S .L. and Das R, *Pak. Jou. Botany.* 43(4): 1837-1842. (IF:0.943) (2011).
26. Morphological and protein profile alterations in *Withania somnifera* L.with response to iron stress ; Rout J. R, Sahoo S.L, *Indian Journal of Life sciences* 2(1): 21-25, (2012).
27. Modulatory role of quercetin against gamma radiation mediated biochemical and morphological alterations of red blood cells ; Dipesh K. Das, Anirban Chakraborty, Mahuya Sinha, Krishnendu Manna, Dipanwita Mukherjee, **Anindita Chakraborty**, Sekhar Bhattacharjee and Sanjit Dey, *International Journal of Radiation Biology*, 2013; Early Online: 1–11 (2013)
28. Antioxidant enzyme gene expression in response to copper stress in *Withania somnifera* L. ; Rout J.R. and Sahoo S.L., *Plant Growth Regulation* (2013). 71(1): 95–99.
29. Alterations in transcriptome and proteome on Metallothioneins following oxidative stress induced by sublethal doses of cadmium and gamma rays in *Plantago ovate* ; N,Ghoshal S

Talapatra, A Moulick, **A Chakraborty**, and SS Raychaudhuri, Int. Jou. Radiation Biology 89 (7) 571-582 (2013).

30. In vivo effect of arsenic trioxide on Keap1 -p62 Nrf2signalling pathway mouse liver : expression of antioxidantresponsive element driven genes related to glutathione metabolism: R. Srivastava A.Sengupta, S.Mukherjee.S. Chatterjee, M. Sudarshan., A.Chakraborty, S.Bhattacharya, A.Chattpadhyay, Hepatology doi.1155 / 2013817693(2013)
31. Exposure to ionizing radiation –a possibility for lignocellulosic metal stressed waste degradation by microbes ? Dipanwita Das, A. Chakraborty, S.C.Santra, Indian Biologist. 45(1), 105-112. (2013)
32. **GenBank Submission:** S.Raychaudhuri and N.Ghosal
 - a. *Plantago ovata* cultivar GI 1 manganese superoxide dismutase mRNA, partial cds. Accession: KC897690.1 GI: 511262387
 - b. *Plantago ovata* cultivar GI1 cytosolic copper-zinc superoxide dismutase mRNA, complete cds. Accession: KC897689.1 GI: 511262385
 - c. *Plantago ovata* cultivar GI 1 chloroplastic copper/zinc superoxide dismutase mRNA, partial cds. Accession: KF195928.1 GI: 527480170
 - d. *Plantago ovata* metallothionein type 3 gene, partial cds. Accession: JX560797.1 GI: 410031850
 - e. *Plantago ovata* metallothionein 1 (mt1) gene, partial cds. Accession: JN798189.1 GI: 363498963
33. . Role of ferulic acid in the amelioration of ionizing radiation induced inflammation: A murine model ; Ujjal Das, Krishnendu Manna, Mahuya Sinha, Sanjukta Datta, Dipesh Kr Das, **Anindita Chakraborty**, Mahua Ghosh, Krishna Das Saha, Sanjit Dey, PLoS ONE 04/2014; DOI:10.1371/journal.pone.0097599
34. Protective effect of Coconut water concentrate and its active component shikimic acid against hydroperoxide mediated oxidative stress through suppression of NF-κB and activation of Nrf2 pathway ; Krishnendu Manna, Amitava Khan, Dipesh Kr Das, Swaraj Bandhu Kesh, Ujjal Das, Sayan Ghosh, Rakhi Sharma Dey, Krishna Das Saha, **Anindita Chakraborty**, Sreya Chattpadhyay, Sanjit Dey, Debprasad Chattpadhyay, Journal of Ethnopharmacology 04/2014; DOI:10.1016/j.jep.2014.04.046
35. Seabuckthron (*Hippophae rhamnoide L.*) leaf extract ameliorates the gamma radiation mediated DNA damage and hepatic alterations Amitava Khan, Krishnendu Manna,

Chinchubose, Dipesh Kr Das, Mahuya Sinha, Swaraj Bandhu Kesh, Ujjal Das, Rakhi Sharma Dey, Asoke Banerji, Sanjit Dey Indian Journal of Experimental Biology 08/2014

36. Effect of iron stress on *Withania somnifera* L.: antioxidant enzyme response and nutrient elemental uptake of in vitro grown plants Jyoti R Rout Sadhana Behera Nitin Keshari, Shidharth Ram Subhajit Bhar, **Anindita Chakraborty**, Ecotoxicology; 24(2). DOI: 10.1007/s10646-014-1389-1 12/2014
37. Ionising radiation in modulating zinc tolerance potential of *Aspergillus niger* ; Dipanwita Das, **A.Chakraborty**, S.C.Santra. Proc. Natl. Acad. Sci. India. Sect. B. Biol Sc. DOI: 10.1007/s40011-014-0397-5 (2014).
38. Naringin inhibits gamma radiation-induced oxidative DNA damage and inflammation by modulating p53 and NF-κB signaling pathways in murine splenocytes, Krishnendu Manna, Ujjal Das Dipesh Das Swaraj Bandhu Kesh, Amitava Khan, **Anindita Chakraborty**, Sanjit Dey, Free Radical Research 02/2015; 49(4).
39. Differential in vivo genotoxicity of arsenic trioxide in glutathione depleted mouse bone marrow cells: expressions of Nrf2/Keap1/P62 ; Ritu Srivastava, Shelley Bhattacharya, Anindita Chakraborty, Ansuman Chattopadhyay Toxicology Mechanisms and Methods 25(3), 2015, 223
40. Gossypetin ameliorates ionising radiation induced oxidative stress in mice liver-a molecular approach ; Amitava Khan Krishnendu Manna Dipesh Kr Das Swaraj Bandhu Kesh Mahuya Sinha Ujjal Das Sushobhan Biswas, Aaveri Sengupta, Kunal Sikder, Sanjukta Datta, Mahua Ghosh, **Anindita Chakrabarty**, Asoke Banerji, Sanjit Dey, Free Radic Res. 49 : 1173-1186 (2015).
41. Cross-adaptation to cadmium stress in *Plantago ovata* by pre-exposure to low dose of gamma rays: Effects on metallothionein and metal content ; Nirmalya Ghoshal, Shonima Talapatra, Pratik Talukder, Mandar Sengupta, Suman Kumar Ray, **Anindita Chakraborty**, Sarmistha Sen Raychaudhuri. Int J Radiat Biol. 91 : 611-13(2015).
42. **Dipanwita Mukherjee, Aniruddha Mukhopadhyay and Anindita Chakraborty** Effect of widely used industrial chemicals on cell signaling pathways and cytoskeletal integrity in mammalian system Int. J. of Adv. Res. 3 (9). 408-419(2015)

- 43.** Characterisation of Metabolic Changes and Antioxidative Response in a Potential Zinc Tolerant Fungal Strain Aspergillus terreus Dipanwita Das, A. Chakraborty, S.C.Santra, Proceedings of National Academy of Science, India, Sec-B, , 2015.
- 44.** Effect of ionizing radiation on Cadmium tolerance and lignocellulosic enzyme function in Aspergillus terreus Dipanwita Das, A. Chakraborty, S.C.Santra, Indian Journal of Biotechnology 2015.
- 45.** Gold-conjugated green tea nanoparticles for enhanced anti-tumor activities and hepatoprotection- synthesis, characterization and in vitro evaluation ; Sudeshna Mukherjee, Sayan Ghosh , Dipesh Kr. Das, Priyanka Chakraborty, Sreetama Choudhury Payal Gupta, Arghya Adhikary, Sanjit Dey, Sreya Chattopadhyay, The Journal of Nutritional Biochemistry 15:152-57. (2015)
- 46.** Evaluation of Antimicrobial Screening and DNA Cleavage Activity in 3,5-disubstituted Pyrazoles and 3,5- disubstituted-4-ferrocenylmethyl Pyrazoles and Their Methylated Derivatives ; Pradipta Kumar Basu, Amrita Ghosh, Amitava Khan, Anindita Chakraborty, S Selvaraj, and Sanjit Dey American Journal of Experimental Biology 3(1) : 1-18 (2016)
- 47.** Naringin ameliorates radiation-induced hepatic damage through modulation of Nrf2 and NF- κ B pathways Krishnendu Manna, Amitva Khan, Sushobhan Biswas, Ujjal Das, Aaveri Sengupta, Dipanwita Mukherjee, **Anindita Chakraborty** and Sanjit Dey, RSC Adv., 6, 23058-23073 (2016)
- 48.** Ferulic acid (FA) abrogates ionizing radiation induced oxidative damage in murine spleen ; Ujjal Das Sushobhan Biswas Aaveri Sengupta Krishnendu Manna, **Anindita Chakraborty** Sanjit Dey; International Journal of Radiation Biology 92(12):1-36 · 2016 DOI: 10.1080/09553002.2016.1230241
- 49.** Bactericidal and Cytotoxic Properties of Silver Nanoparticle Synthesized from Root Extract of Asparagus Racemosus ; Kalyani Khanra, Sudipta Panja, Indranil Choudhuri, **Anindita Chakraborty**, Nandan Bhattacharyya, Nano Biomedicine and Engineering 8(1):39-46 · 2016 DOI: 10.5101/nbe.v8i1.p39-46 .
- 50.** Ferulic acid (FA) abrogates γ -radiation induced oxidative stress and DNA damage by up-regulating nuclear translocation of Nrf2 and activation of NHEJ pathway ; Ujjal Das Krishnendu Manna Amitava Khan Mahuya Sinha Sushobhan Biswas **Anindita**

Chakraborty Sanjit Dey, Free Radical Research · January (2017) DOI: 10.1080 / 10715762.2016.1267345

51. Phenotypic and biochemical alterations in relation to MT2 gene expression in *Plantago ovata* Forsk under zinc stress ; Paulami Pramanick, **Anindita Chakraborty**, Sarmistha Sen Raychaudhuri BioMetals (2017)
52. Protective effects of curcumin against gamma ray induced conformational change of Human Serum Albumin ; Turban Kar, Pijush Basak, Rittik Kumar Ghosh, Maitree Bhattacharyya, International Journal of Biological Macromolecules, 99 (2017) 600–607
53. Analysis of Curcumin interaction with Human Serum Albumin using spectroscopic studies with molecular Simulation ; Turban Kar, Pijush Basak, Rittik Kumar Ghosh, Maitree Bhattacharyya, Frontiers in Biology, 2017 (Accepted). DOI 10.1007/s11515-017-1449.