

SOURYADEEP MUKHERJEE

E-Mail: souryadeep.dbs@presiuniv.ac.in, souryadeep@rediffmail.com,
mukherjeesouryadeep@gmail.com

Employments:

| Designation | Department | Tenure |
|---------------------------------------|---|--------------------------|
| Assistant Professor of Zoology | Dept. of Life Sciences Presidency University, Kolkata | 14.12.2012 till date |
| Assistant Professor (WBES) | Dept. of Zoology Presidency College, Kolkata | 01.12.2006 to 13.12.2012 |
| Lecturer in Zoology | Netaji Mahavidyalaya, Arambagh, Hooghly | 07.05.2005 to 30.11.2006 |

Teaching Experience: Post- Graduate teaching- > 14 years,
Under- Graduate teaching- > 15 years.

Education:

| | |
|---|---|
| Ph.D. in Zoology | Department of Zoology The University of Burdwan |
| National Eligibility Test (NET) | CSIR-NET |
| M.Sc. in Zoology University of Calcutta | 71%, 1st class Ranked 4 th in the University of Calcutta |
| B.Sc. (Zoology Honours) University of Calcutta | 68.25%, 1st class Ranked 5 th in the University of Calcutta |
| Higher Secondary Hindu School, Kolkata (W.B.C.H.S.E) | 71.5%, 1 st division National Scholar |
| Madhyamik (Secondary) Hindu School, Kolkata (W.B.B.S.E) | 84.22%, 1 st division with star National Scholar |

Research Projects:

| Project Title | Funding Agency |
|--|--|
| ‘Studies on butterfly diversity and abundance in Southern West Bengal covering lateritic belt, lower Gangetic plain and coastal and mangrove region with emphasis on ecological and biochemical interactions.’ | Department of Higher Education, Science & Technology and Biotechnology (WBHESTB) |
| ‘Culture Dependent and Independent Analyses of Prokaryotic Communities from the Burrows, Casts, and Guts of Earthworms from in and around Kolkata’ | West Bengal Bio-diversity Board, Department of Environment, Government of West Bengal. |
| ‘Isolation and Molecular Characterization of Microbial Strains capable of Aromatic Hydrocarbon Biodegradation’ | University Grants Commission |

Other Academic Assignments:

1. **Member of the Cluster Innovation Centre (CIC), Presidency University, National Innovation Council, Government of India.**
2. **Examiner of Biological-Sciences, West Bengal Joint Entrance Examinations Board.** [Date of Appointment 6th May, 2008]
3. **University Nominee in the Governing Body, Tarakeswar Degree College, University of Burdwan, Tarakeswar, Hooghly.** [September 2006 to February, 2008]
4. **Reviewer of Research Projects, Science and Engineering Research Council, Department of Science and Technology, Ministry of Science and Technology, New Delhi.**
5. **Examiner of Under-Graduate courses, University of Calcutta and Kalyani University.**
6. **Paper Setter and Examiner of Post- Graduate courses, Vidyasagar University, Visva Bharati University, Maulana Azad College, Bidhannagar Govt. College, Dinabandhu Andrews College and Vidyasagar College.**
7. **Trainer of Special Tutorship** for Postgraduate students appearing in NET, in Presidency College, under a project sponsored by **Foundation for Academic Excellence and Access, New Delhi.**

PUBLICATIONS

In Peer Reviewed Journals:

1. A De, **S Mukherjee**, G C Sadhukhan and N C Saha. Seasonal Variation of Culturable Benthic Soil Prokaryotic Microbiota as Potential Fish Pathogens and Probiotics from an Aquaculture Farm in East Kolkata Wetlands, India, **J Pure Appl Microbiol.** 2020; 14(3), (In Press).
2. A Dey, S Nandy, P Nongdam, L Tikendra, A Mukherjee, **S Mukherjee**, D K Pandey. Methyl jasmonate and salicylic acid elicit indole alkaloid production and modulate antioxidant defence and biocidal properties in *Rauvolfia serpentina* Benth. ex Kurz. in vitro cultures, **South African Journal of Botany**, 2020; 135, 1-17, DOI: 10.1016/j.sajb.2020.07.020.
3. P Sengupta, P Mondal, **S Mukherjee**, S Chanda, A Bose. Rutin-serum albumin interaction in different media and its effective dose selection in radiation-induced cytotoxicity on human blood cells. **Journal of Herbal Medicine**, 2020; 21, 100322, DOI: 10.1016/j.hermed.2019.100322.
4. **S Mukherjee**, A De, N K Sarkar, N C Saha, Aerobic Degradation of Benzene by *Escherichia* spp. from Petroleum-contaminated Sites in Kolkata, West Bengal, India, **J Pure and Applied Microbiology**, 2019; 13(4): DOI: 10.22207/JPAM.13.4.
5. **S Mukherjee**, A De. N K Sarkar, N C Saha. Isolation and Characterization of Benzene Utilizing *Bacillus* spp. from Petroleum Contaminated Soil in Kolkata, West Bengal, India. **Asian J. of Microbiol, Biotechnol & Env Sc.**, 2019, 21(2), 428-437.
6. S Das, P Campbell, S Roy, **S Mukherjee**, K Pramanick, A Biswas, S Raha. Cranial osteology and molecular phylogeny of *Argyrogena fasciolata* (Shaw, 1802) (Colubridae: Serpentes). **Vertebrate Zoology**, 2019, 69(3): 311–325. DOI: 10.26049/VZ69-3-2019-04
7. A De, **S Mukherjee**, GC Sadhukhan, NC Saha. An Insight into the Cellulolytic Potential of Three Strains of *Bacillus* Spp. Isolated from Benthic Soil of Aquaculture Farms in East Kolkata Wetlands, India. **Journal of Pure and Applied Microbiology**, 2018, 12(3), 1597-1605. doi.org/10.22207/JPAM.12.3.66.
8. A Dey, **S Mukherjee**, A De, DK Pandey, A Stigmasterol Containing n-hexane Fraction of *Rauvolfia serpentina* Methanolic Extract Shows Tissue-Specific Variation of Biocidal and Antioxidant Activities. **J. of Herbs, Spices & Medicinal Plants**, 2016, 22 (1), 81-91.
9. A Nath, A Dey, **S Mukherjee**, R Bhattacharyya. 'Bioproduction of Ascorbic Acid and Its Optimization by a Rhizobium sp. from Root Nodules of *Sesbania cannabina*'. **PNAS, India, Sect. B Biol. Sci.**, 2016 DOI 10.1007/s40011-016-0717-z

10. A Dey, A De, P Ghosh, **S Mukherjee**. “Altitude and Tissue Type Influence Antioxidant Potential of *Pellia endivifolia* from Darjeeling Himalaya”. **J. Biological Sciences**, 2014. DOI: 10.3923/jbs.2013.
11. B Gupta, K Gupta, and **S Mukherjee***, ‘Lipase production by a *Serratia marcescens* strain SN5gR isolated from the scat of lion-tailed macaque (*Macaca silenus*) in Silent Valley National Park, a biodiversity hotspot in India’, **Annals of Microbiology**, 2014 63:649–659 DOI 10.1007/s13213-012-0515-7.
12. **S Mukherjee**, A De, P Ghosh, A Dey, ‘*In vitro* antibacterial activity of various tissue types of *Dumortiera hirsuta* (Sw) Nees from different altitudes of eastern Himalaya’, **Asian Pacific J. Tropical Biomedicine**, 2012, ISSN: 2221-1691.
13. A Dey, A De, P Ghosh, and **S Mukherjee***, ‘Antioxidative potential of *Pellia endiviifolia* (Dicks.) Dumort. from Darjeeling Himalaya’, **Int. J. Pharmacology**, 2012.
14. **S Mukherjee**, A Dey, T Das, ‘*In-vitro* antibacterial activity of n-hexane fraction of methanolic extract of *Alstonia scholaris* L. R.Br. stem bark against some multi drug resistant human pathogenic bacteria’, **European J. Medicinal Plants**, 2(1): 1-10, 2012. ISSN: 2231-0894.
15. A Dey, T Das, and **S Mukherjee***, ‘*In Vitro* Antibacterial Activity of n-Hexane Fraction of Methanolic Extract of *Plumeria Rubra* L. (Apocynaceae) Stem Bark’, **J. Plant Sciences**, Vol. 6 (3), 2011, 135- 142. ISSN: 1816- 4951.
16. **S Mukherjee**, N K. Bardolui, S Karim, V Patnaik, R K. Nandy, P K. Bag, ‘Isolation and characterization of a monoaromatic hydrocarbon-degrading bacterium, *Pseudomonas aeruginosa* from crude oil’, **J. Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering**, 1532-4117, 45(9), 2010, 1048 – 1053. DOI: 10.1080/10934529.2010.486328.
17. Thakurta P, Bhowmik P, **Mukherjee S**, Hajra TK, Patra A, Bag PK, ‘Antibacterial, antisecretory and antihemorrhagic activity of *Azadirachta indica* used to treat cholera and diarrhea in India’, **J. Ethnopharmacology**. 2007, 111(3): 607-12. Epub 2007 Jan 21.
18. Hajra TK, Bag PK, Das SC, **Mukherjee S**, Khan A, Ramamurthy T, ‘Development of a simple latex agglutination assay for detection of shiga toxin-producing *Escherichia coli* (STEC) by using polyclonal antibody against STEC’, **Clinical and Vaccine Immunology**. 2007 May; 14(5): 600-4. Epub 2007 March 7.
19. T.K. Mukherjee, K.K. Banerjee, B. Gupta & **S. Mukherjee**, ‘New record of a phasmid, *Sipyloidea fontanesina* Giglio-Tos, 1910 (Necrosiinae: Diapheromeridae) from Barnwapara, Chhattisgarh, India.’ **Journal of Threatened Taxa**. June 2010, 2(6): 978-979. June 2010, ISSN 0974-7907 (online), 0974-7893 (print).

Book Chapters:

1. Nandy, S., **Dey A.**, De A., Bhattacharyya R., Ray P., Mukherjee, S. 2015. Enhanced Bioactivity Exhibited by In vitro Grown *Hemidesmus indicus* (L.) R. Br. Extracts in Terms of Antioxidation and Anti Human-Pathogenic Bacterial Activity. Medicinal Plants: Phytochemistry, Pharmacology and Therapeutics Vol. 4. Editor: Dr. Vijay Gupta. **Daya Publisher, New Delhi. Pp 255-264. In Press.**
2. **S Mukherjee***, A Dey, A De and P Ghosh, ‘Antioxidative potential of two Darjeeling Himalayan *Marchantia* sp. *M. paleacea* and *M. papillata*’, *Utilisation and Management of Medicinal Plants Vol. 2. Astral International Pvt. Ltd.*, New Delhi. Editor: Dr. V. K. Gupta, Deputy Director, Indian Institute of Integrative Medicine (CSIR), Jammu, India, **2014. Pp: 289-296 (*Corresponding author).**
3. R Bhattacharyya, S Das, A Dey and **S Mukherjee**, ‘Antibacterial Effect of Rhizobial Exopolysaccharide Against some Multidrug Resistance Human Pathogens’, *Utilisation and Management of Medicinal Plants Vol. 2. Astral International Pvt. Ltd.*, New Delhi. Editor: Dr. V. K. Gupta, Deputy Director, Indian Institute of Integrative Medicine (CSIR), Jammu, India, **2014. Pp: 415-420.**

Publications in Seminar/ Symposia Proceedings:

1. **Mukherjee S**, Saha N. C., Sarkar N. K Adverse influence of chronic benzene treatment on testicular structure and sperm profile in a murine model. 2nd Regional Science and Technology Congress, 2017 (Western Region), 16-17 November, 2017. The University of Burdwan. (Awarded 2nd in ‘Oral Presentation’).
2. **Mukherjee S**, Saha N. C., Sarkar N. K Studies on the mechanism of induction of anemia by the environmental pollutant benzene., Third International Conference on Mother Earth: Environmental Crisis and Sustainable Strategies. 11-13 January, 2018, The University of Burdwan.
3. **Mukherjee S**, Saha N. C., Sarkar N. K Adverse influence of chronic benzene treatment on testicular structure and sperm profile in a murine model. 25th West Bengal State Science & Technology Congress, 2018, Science City, Kolkata, 4-5 March, 2018.
4. **S Mukherjee**, B Gupta, K K Banerjee and R Singh, ‘Isolation, Purification and Biochemical Characterization of Aliphatic Hydrocarbon Degrading Strains from Faecal Samples of Chital Deer (*Axis axis*)’, Proc. Nat. Symp. On Modern Trends in Animal Science Research and Challenges of the Day, Presidency University, March **2011**.
5. **S Mukherjee** and A Sarkar, ‘Isolation and Characterization of Two Extracellular Lipase producing Bacterial Strains from Nilgiri Biosphere Reserve, India’, Proc. Nat. Symp. On Modern Trends in Animal Science Research and Challenges of the Day, Presidency University, March **2011**.

6. **S Mukherjee**, T Das, and R Ghosh. 'Plasmid Incidence in Aliphatic Hydrocarbon Degrading Bacterial Cells', Proc. Nat. Symp. On Modern Trends in Animal Science Research and Challenges of the Day, Presidency University, March **2011**.
7. A Banerjee, K. V. Uthaman, K Roy, **S Mukherjee**, R Mandal and, K K Banerjee, 'Observations on the group size and feeding behavior of Bonnet Macaque (Dark Bellied Bonnet Macaque: *Macaca radiata radiata*) in the Western Ghats of Northern Kerala. On Modern Trends in Animal Science Research and Challenges of the Day', Presidency University, March **2011**.
8. A De, **S Mukherjee**, K. V. Uthaman, R Mandal, A Banerjee, and K K Banerjee, 'Observations on the endemic and threatened avifaunal diversity in the Western Ghats of Northern Kerala'. Proc. Nat. Symp. On Modern Trends in Animal Science Research and Challenges of the Day, Presidency University, March **2011**.
9. **S Mukherjee**. 'Screening, Isolation and Partial Purification of Thermostable Extracellular Lipase of Bacterial Strains Isolated from different oil fields', Proceedings of National Symposium on Dimensions of Animal Science Researches and Human need, September, 2009. [Published in March **2010**].
10. V Santra, S Bose, A Dutta, **S Mukherjee**, K K Banerjee, and N Ghorai. 'Influence of diet on the habitat utilization pattern of two *Naja* species', Proceedings of National Symposium on Dimensions of Animal Science Researches and Human need, September **2009**.
11. S Bose, **S Mukherjee**, and K K Banerjee. 'A study of butterfly diversity in four protected areas of central India during summer', Proceedings of National Symposium on Dimensions of Animal Science Researches and Human need, September **2009**.
12. P Sengupta, D Manta, **S Mukherjee**, and N Ghorai. 'Mudpuddling in butterflies- a quest for non-floral nutrients', Proceedings of National Symposium on Dimensions of Animal Science Researches and Human need, September **2009**.
13. A Dutta, **S Mukherjee**, K K Banerjee and N Ghorai. 'On the occurrence of some spider species in the Northern Peninsular India', Proceedings of National Symposium on Dimensions of Animal Science Researches and Human need, September **2009**.
14. **S Mukherjee** and P K Bag 'Isolation and Characterisation of aromatic hydrocarbon degrading bacterial strains', Proceedings of UGC-Sponsored National Symposium on Current Trends in Zoological Research. March **2007**.
15. **S Mukherjee**, N.K. Bardoloi, Ranjan Kr. Nandi and Prasanta Kr. Bag, 'Degradation of Benzene Aerobically and Anaerobically in Pure Culture by a Strain of *Pseudomonas aeruginosa*', 10th Congress of the Federation of Asian and Oceanic Biochemists and Molecular Biologists held at Bangalore, India, December, **2003**. Abstract pp. 66.
16. T. K. Hajra, **S. Mukherjee**, T. Ramamurthy, and P. K. Bag. 'Development of a Simple Latex Agglutination Method to Detect the Verotoxin Producing *Escherichia coli*', 10th Congress of the Federation of Asian and Oceanic Biochemists and Molecular Biologists held in Bangalore, India, December **2003**. Abstract pp. 86.

Reviewer of the Journals:

1. Natural Product Research (Taylor & Francis, UK)
2. International Journal of Educational Policy Research and Review
3. Journal of Medicinal Plant Research (Academic Journals)
4. African Journal of Microbiology Research (Academic Journals)
5. Journal of Cereals and Oilseeds (Academic Journals)
6. European Journal of Medicinal Plants (Science Domain)

Other Qualification:

Dip. Photographic Art (Gold Medalist), from Photographic Association of Dum Dum, Kolkata.