

CURRICULUM VITAE

Dr. SURAJIT DAS, M.Sc, Ph.D



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Date of Birth : November 25, 1980

Marital Status : Unmarried

Sex : Male

Nationality : Indian

Education:

- B. Sc. (Industrial Fish & Fisheries) in 2000 from Asutosh College, University of Calcutta, India.
- M. Sc. (Coastal Aquaculture) in 2003 from Centre of Advanced Study in Marine Biology, Annamalai University, Tamil Nadu, India.
- Ph.D. (Marine Biology: Microbiology) in 2008 from Centre of Advanced Study in Marine Biology, Annamalai University, Tamil Nadu, India

Title of Ph.D. Thesis: Studies on benthic microbial diversity of the continental slope (200-1000m depth) of Bay of Bengal (India)

Area of Research:

Aquatic microbiology, marine biotechnology, aquaculture, fisheries, ecology, biodiversity and biostatistics.

Expertise:

- On-board sampling of water and sediment from marine environs, physico-chemical parameters and relevant data collection.
- General microbiological techniques.
- Isolation of marine microorganisms- (environmental microbes/human pathogens).
- Fishery microbiology (sampling and isolation of microorganisms from fish samples- Health management).
- Basic biotechnological experiments- DNA extraction, PCR, Electrophoresis, 16S rRNA gene sequencing, restriction mapping and blotting techniques.

- Analyzing gene sequencing data for multiple sequence alignment and phylogenetic affiliation using packages, e.g. BioEdit, Geneious, DAMBE 5, MEGA 4.1, Phylip, Clustal X and TreeView.
- Marine pollution monitoring by bacterial indicator.
- Molecular and conventional identification of marine bacteria, actinomycetes and fungi.
- Screening of marine microorganisms for antibiotic production.
- Probiotic application experiments on juvenile shrimps.
- Univariate and multivariate statistical techniques using PRIMER, BdPro, SPSS, Statistica and SigmaPlot software for statistical treatment of data.
- Biodiversity conservation issue and policies.

Research experience: 6 years

Teaching experience:

Taught M.Sc. and B.Tech Biotechnology students of Amity University Uttar Pradesh, India from 2008-2009.

Research activities:

March 2008- October 2008: Honorary Postdoctoral Fellow at National Center for Marine Conservation and Resource Sustainability, University of Tasmania, Australia

Project: Studies on application of marine actinobacteria as probiotics in aquaculture

GenBank accession of marine Streptomyces strains: FJ200295, FJ200296 and FJ200297.

March 2008- July 2009: Lecturer (Ad Hoc) and Lecturer at Amity Institute of Biotechnology, Amity University Uttar Pradesh, India

Project: Biosorption of heavy metal by bacterial exopolysaccharide

November 2007- February 2008: Research Scholar (Resource Management Service) at Bay of Bengal Programme- Inter Governmental Organization (BOBP-IGO), Chennai, India

Projects: (i) Post-tsunami intervention in the livelihood of the fisherfolk communities of Tamil Nadu.

(ii) Status of the marine ornamental fishery resources of India

(iii) Safety at Sea

October 2003- September 2007: Junior and Senior Research Fellow at Centre of Advanced Study in Marine Biology, Annamalai University, Tamil Nadu, India

Project: Benthic fauna of the continental slope of Bay of Bengal and Arabian Sea (sponsored by Ministry of Earth Sciences, Govt of India)

Reviewers for Journals:

Deep-Sea Research Part 1, Aquaculture Engineering (www.elsevier.com), Fish Physiology and Biochemistry, Aquaculture Research (www.springerlink.com); International Journal of Ecology and Development (ISSN 0972-9984) and International Journal of Biomedical Science, www.ijbs.org (ISSN 1550-9702).

Peer-reviewed publications (from most recent first):

A) JOURNALS

- 1) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2009. Filamentous fungal population and species diversity from the continental slope of Bay of Bengal, India. *Acta Oecologica*, 35: 269-279.
- 2) **Das, S.,** L. R. Ward and C. Burke, 2008. Prospects of using marine actinobacteria as probiotics in aquaculture. *Appl. Microbiol. Biotechnol.*, 81: 419-429.
- 3) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2008. Characterization and identification of marine actinomycetes- existing systems, complexities and future directions. *Natl. Acad. Sci. Lett. (India)*, 31 (5&6): 149-160.
- 4) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2008. Distribution and generic composition of culturable marine actinomycetes from the sediments of Indian continental slope of Bay of Bengal. *Chinese J. Oceanol. Limnol.*, 26 (2): 166-177.
- 5) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2007. Fatty acid profiles of marine benthic microorganisms isolated from the continental slope of Bay of Bengal: A possible implications in the benthic food web. *Ocean Science Journal*, 42 (4): 247-254.
- 6) **Das, S.,** R. Shanmugapriya, P. S. Lyla and S. Ajmal Khan, 2007. Heavy metal tolerance of marine bacteria- An index of marine pollution. *Natl. Acad. Sci. Lett. (India)*, 30 (9&10): 279-284.
- 7) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2007. Spatial variation of aerobic culturable heterotrophic bacterial population in sediments of the continental slope of western Bay of Bengal. *Indian J. Mar. Sci.* 36 (1): 51-58.
- 8) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2007. Biogeochemical processes in the continental slope of Bay of Bengal: I. Bacterial solubilization of inorganic phosphate. *Rev. Biol. Trop. (Revista de Biologia Tropical)*, 55 (1): 1-9.
- 9) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2006. Application of *Streptomyces* as a probiotic in the laboratory culture of *Penaeus monodon* (Fabricius). *The Israeli Journal of Aquaculture- Bamidgeh*, 58 (3): 198-204.
- 10) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2006. Present status and the application of statistical tools in marine microbial biodiversity. *Natl. Acad. Sci. Lett. (India)*, 29 (5&6): 147-158.
- 11) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2006. Marine microbial diversity and ecology: Present status and future perspectives. *Curr. Sci.*, 90 (10): 1325-1335.

- 12) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2006. Chitinolytic activity of marine bacteria isolated from marine sediments in the continental slope of Bay of Bengal. *J. Mar. Biol. Ass. India*, 48 (2): 233-236.
- 13) **Das, S.,** 2005. Operational techniques for cultured pearl production in *Lamellidens marginalis* (Lamarck, 1819): A hands-on experience. *J. Aqua. Biol.*, 20 (1): 163-165.
- 14) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2005. Variation in microbial population in a mangrove area of Parangipettai coast- Effect of Tsunami? *Res. J. Chem. Environ.*, 9 (3): 46-49.
- 15) **Das, S.,** P. S. Lyla, S. Ajmal Khan and S. Rajagopal, 2005. Antimicrobial activities of marine bacteria isolated from deep sea sediment of Bay of Bengal. *Poll. Res.*, (24) special issue: 97-100.
- 16) **Das, S.** and S. Chatterjee, 2005. Monsoon fishing ban and people's participatory approach- A case study in Chennai Harbour. *Fishing Chimes*, 24 (12): 16-18.
- 17) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2004. Bio-medical aspects of Indian Mackerel fish (*Rastrelliger kanagurta*) - remedy for the coronary heart disease. *J. Aqua. Biol.*, 19 (2): 153-156.

B) BOOKS

- 1) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2008. Microbial resources of the mangrove and Vellar estuary, southeast coast of India. *In: Advances in Aquatic Ecology- Vol II* (Ed. V. B. Sakhare), Daya Publishing House, Delhi, pp. 26-33 (p. 143).
- 2) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2007. Physico-chemical parameters of the benthic environment of the continental slope of Bay of Bengal. *In: Advances in Aquatic Ecology- Vol I* (Ed. V. B. Sakhare), Daya Publishing House, Delhi, pp. 52-63 (p. 194).
- 3) **Das, S.,** P. S. Lyla and S. Ajmal Khan, 2006. Marine microbial biodiversity: Present status and advanced statistical paradigms. *In: Conservation Biology in Asia*. (Eds. J. A. McNeely, T. M. McCarthy, A. Smith, L. Olsvig-Whittaker and E. D. Wikramanayake), Society for Conservation Biology Asia Section and Resources Himalaya Foundation, Nepal, pp. 363-385 (p. 455).

Academic Distinctions (Awards / Honours etc):

- Endeavour Research Fellowship by the Australian Government (from 01.05.08 to 31.10.08) to undertake Postdoctoral research programme in Australia.
- Junior Scientist for the Year 2007 award by the Board of International Awards of National Environmental Science Academy (www.nesainternational.org), New Delhi, India.
- Junior Research Fellowship from October, 2003 to September, 2005 and Senior Research Fellowship from October, 2005 to September, 2007 from the Centre for Marine Living Resources and Ecology, Ministry of Earth Sciences (Formerly Department of Ocean Development), Government of India.

- Ramasamy Padayatchiar Endowment Merit Award by Government of Tamil Nadu for the year 2002-2003 from Annamalai University.
- Qualified in the National Eligibility Test (NET) conducted in 2004 by Agricultural Scientist Recruitment Board (ICAR) and recognized by CSIR/UGC, in the Fish and Fishery Science discipline.
- Completed student project entitled “Does Indian Mackerel Fish has the potential to prevent coronary heart disease? - An investigation” sponsored by Tamil Nadu State Council for Science and Technology (TNSCS&T), Chennai.
- First class M.Sc with Distinction from Annamalai University with FIRST RANK.
- First class B.Sc. from University of Calcutta in Industrial Fish and Fisheries.

Membership in Professional Bodies / Societies:

- Member of the IUCN Commission on Ecosystem Management (CEM), South Asia.
- Editorial board member and reviewer of Academic Journals Inc. New York (<http://www.acadjour.com>) published journals- Biotechnology, Research Journal of Environmental Sciences, Research Journal of Microbiology and Asian Journal of Scientific Research.
- Member of “The International Association for Ecology” www.intecol.net.
- Life member (L/M- 1052) of the National Environmental Science Academy, New Delhi, India.

Educational details:

Degree	Year	College/University	Subject	Marks secured
Postdoctoral Research	2008	National Centre for Marine Conservation and Resource Sustainability, Tasmania, Australia	Aquatic microbiology & biotechnology	By research
Ph. D	2008	CAS in Marine Biology, Annamalai University, Tamil Nadu, India	Marine Biology (Microbiology)	By research
M. Sc.	2001-2003	CAS in Marine Biology, Annamalai University, Tamil Nadu, India	Coastal Aquaculture	8.69 OGPA (FIRST RANK)
B. Sc. (10+2+3)	1997-2000	Asutosh College, Calcutta University, Kolkata, India	Industrial Fish & Fisheries (IFFV)	71.62%

Additional Degree/Diploma:

- Post Graduate Diploma in Human Resource Management (PGDHRM) (2006-2007) from the Directorate of Distance Education, Pondicherry University, India.
- Diploma in Information Technology Application (DITA) (October, 2000 to September, 2001) from Computer Training Institute, State Youth Centre, West Bengal State Council of Technical Education, Government of West Bengal.