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ACADEMIC CREDENTIALS

Qualification	Institution/Issuing Body	Duration	Score (%)	Class
Ph.D. Marine Biology & Oceanography	Centre of Advanced Science in Marine Biology Annamalai University Porto Novo, Tamil Nadu	2016 - 2021	-	-
SET (State level Eligibility Test for Assistant Professors)	University Grants Commission, New Delhi & Government of Tamil Nadu	2016	-	-
M.Sc. Zoology (Spl. in Biotechnology)	Lady Doak College Madurai, Tamil Nadu	2014-2016	79	First class with Distinction
B.Sc. Zoology (Spl. in Biotechnology)	Lady Doak College Madurai, Tamil Nadu	2011-2014	83	First class with Distinction
Higher Secondary Course Certificate	E.B.G. Matriculation Higher Secondary School Madurai, Tamil Nadu	2009- 2011	77	First class with Distinction
Matriculation School leaving Certificate	E.B.G. Matriculation Higher Secondary School Madurai, Tamil Nadu	2008- 2009	86	First class with Distinction

DETAILS OF EMPLOYMENT

Designation	Institution	Level of Students	Duration
Assistant Professor	Department of Biotechnology, Lady Doak College, Madurai, Tamil Nadu	Undergraduates & Postgraduates	August 2023 - till date
Assistant Professor	Department of Biotechnology, The American College, Madurai, Tamil Nadu	Undergraduates	December 2021 - June 2023

DISSERTATION WORKS

- ❖ **Doctor of Philosophy in Marine Biology and Oceanography** 2016 - 2022
Research Supervisor: Prof. Dr. S. T. Somasundaram
Research Title: Metagenomic assessment of meiofaunal diversity with reference to Phylum Tardigrada in estuarine and mangrove ecosystems
- ❖ **Master of Science in Zoology with specialization in Biotechnology** 2014 - 2016
Thesis: Physico-chemical and functional characterization of biosurfactant from *Cronobacter sakasakii* and their potential applicability as an anti-adhesive to prevent biofilm formation.
Term paper: Gender differences in autoimmune diseases - Why are women more susceptible than men to autoimmunity?
- ❖ **Bachelor of Science in Zoology with specialization in Biotechnology** 2011- 2014
Thesis: Formulation of low-cost feed using *Azolla microphylla* as principle protein supplement and its influence on body protein and lipid content in *Tilapia* sp.

RESEARCH EXPERIENCE

Junior Research Fellow for 2 years (May 2017 - April 2019)

Institution: Centre of Advanced Study in Marine Biology, Annamalai University, PortoNovo, Tamil Nadu

- Consultancy project financially supported by the Centre for Applied Research & Development, Neyveli Lignite Corporation India Limited, Neyveli, Tamil Nadu
- **Mentor:** Prof. Dr. S. T. Somasundaram & Prof. Dr. P. Anandharaman
- Experimentation on humic acid supplementation for the growth enhancement of marine phytoplankton
- Investigation on growth and survival of *L. vannamei* larva fed with marine phytoplankton supplemented with humic acid
- Performed lab scale & mass scale culturing of marine phytoplankton and hatchery management, Microscopy and UV Spectroscopy
- Results are published in International Journal for Innovative Research in Multidisciplinary Field

Summer Research Fellow for 3 months (May - July, 2015)

Institution: Medical Microbiology Laboratory, Bharathidasan University, Trichy, Tamil Nadu

- Summer Research Fellowship programme jointly sponsored by Indian Academy of Sciences (Bangalore), Indian National Science Academy (New Delhi) and National Academy of Sciences (Allahabad)
- **Mentor:** Prof. Dr. K. Natarajaseenivasan
- Investigated the immunogenic potential of recombinant HtrA1 from *Leptospira interrogans* using animal model

- Immunogenicity elucidation by immunization of purified HtrA1 to animal model and production of HtrA1 specific polyclonal antibody
- Performed culturing of bacterial cells, recombination, UV spectroscopy, immobilized metal affinity chromatography, polyacrylamide gel electrophoresis, protein studies, dialysis, maintenance of animal model, ELISA

PUBLICATIONS

- **Nancy Catherine, S.** and Somasundaram, S. T. (2021) High quality metagenomic DNA from marine, estuarine and mangrove sediment samples for next generation sequencing studies of meiofaunal diversity. *Advances in Bioresearch*, 13(1/2)
- **Nancy Catherine, S.** and Somasundaram, S. T. (2021) Lignite humic acid for enhanced hatchery shrimp seed production by improving phytoplankton growth. *International Journal for Innovative Research in Multidisciplinary Field*, Vol. 7: 7
- **Nancy C S** and Amalarani S (2016) Effect of *Azolla microphylla* as principal protein source in fish feed in comparison with soybean and *Spirulina* on growth, body protein and lipid content of *Oreochromis niloticus*. *Paripex - Indian Journal of Research* 5(5), 268-269

TECHNICAL EXPERIENCE

- Skilled in culturing of marine plankton for sustainable fishery resources at Annamalai University, Porto Novo, Tamil Nadu in 2018
- Trained in applying bioinformatics tools in Molecular Taxonomic studies at Lady Doak College, Madurai, Tamil Nadu in 2017

LEADERSHIP AND INVOLVEMENT

- Served as Resource Person in the Summer Internship Programme on “Analytical and Instrumentation Techniques in Sciences” organized by Science Instrumentation Centre and Research & Development Cell, Lady Doak College, Madurai, Tamil Nadu on October, 2024
- Served as Evaluator at the district level at the 31st National Children Science Congress held at Lady Doak College, Madurai, Tamil Nadu on October, 2023

Leadership supports - Annamalai University, Porto Novo, Tamil Nadu

- Organizing member in one day workshop on culture techniques and mass scale propagation of microalgae for livelihood prospecting (2019)
- Helped in organizing a three day lecture workshop on modern trends in Biology (2019)
- Assisted the organizing members in conducting two day International seminar on coastal and marine biodiversity and conservation (2018)
- Supported in organizing two day International conference on aquatic animal health and parasitic diseases (2017)

Leadership supports - Lady Doak College, Madurai, Tamil Nadu

- Helped in organizing a seminar on taking research from bench to bedside - Prof. Whitin Endowment Lecture series (2016)

- Supported the organizing members in conducting a two day national seminar on emerging trends in Biological research (2014)
- Volunteered in one day seminar on cancer in women (2013)

Peer Tutor - Lady Doak College, Madurai, Tamil Nadu

- Tutored peer-slow learners (8 hour per week) during undergraduation and postgraduation studies (2011-2016)

Service learning - Lady Doak College, Madurai, Tamil Nadu

- Created awareness in the people in squalid about cleanliness and sanitation as a part of study of Environmental Biology course during the undergraduation program (2011-2012)

OTHER PARTICIPATIONS

- Participated in the workshop on “Navigating peace & fostering peace education” organized by Lady Doak College, Madurai, Tamil Nadu (2024)
- Participated in Prof. Whitin Endowment lecture series on “Intellectual property rights & bioethics” organized by department of Zoology & Research Centre and department of Biotechnology, Lady Doak College, Madurai, Tamil Nadu (2024)
- Participated in Prof. Whitin Endowment lecture series on “Multiomics: a holistic approach for health care” organized by department of Biotechnology, Lady Doak College, Madurai, Tamil Nadu (2023)
- Participated in a National level technical symposium on “Impact of Molecular Biology in modern Biotechnology” organized by department of Biotechnology, Kamaraj College of Engineering and Technology, Virudhunagar, Tamil Nadu (2023)
- Participated in one day workshop on “Art and Science of methodical scientific writing & publishing in a high impact journal” organized by Internal Quality Assurance Cell, The American College, Madurai, Tamil Nadu (2023)
- Participated in Faculty Orientation Programme organized by Internal Quality Assurance Cell, The American College, Madurai, Tamil Nadu (2022)

PRESENTATIONS

- Oral presentation at the National conference on advances in Biological Sciences - V. O. Chidambaram College, Tuticorin, Tamil Nadu (2022)
- Oral presentation at the International conference on changing contours of blue economy-promises and challenges - Annamalai University, Porto Novo, Tamil Nadu (2019)
- Oral presentation at the International conference on Benthos - Cochin University of Science and Technology, Kochi, Kerala (2019)
- Oral presentation at National symposium on algal diversity and resource status-current trends in utilization and prospects for innovation - V. O. Chidambaram College, Tuticorin, Tamil Nadu (2017)
- Oral presentation at National Conference on Biological Sciences: The amalgamation and advancements of multidisciplinary Life Sciences - V. V. Vanniaperumal College for Women, Virudhunagar, Tamil Nadu (2014)
- Third prize in poster presentation - Lady Doak College, Madurai, Tamil Nadu (2013)

- Oral presentation in the State level inter-collegiate seminar on recent challenges in Biotechnology - The American College, Madurai, Tamil Nadu (2012)
- First prize in poster presentation - Lady Doak College, Madurai, Tamil Nadu (2012)

AWARDS

- Awarded certificate of Special honour for consistent, creditable and excellent performance in academic and co-curricular activities of the College - 2016
- Mrs. Mercy Williams memorial prize for the best candidate in M.Sc. Zoology lab (2016)
- Awarded certificate of personal meritorious achievement for working against social, physical, economic and psychological handicap still maintaining a good academic record - 2016
- Dr. E. M. Thillayambalam endowed prize for the best candidate in B.Sc. degree examination in Zoology (2015)
- Awarded certificate of recognition for exhibiting the exemplary qualities of altruism, leadership, inclusive outlook, proactivity, analytical thinking, risk taking, interpersonal skills, endurance, team spirit, voluntarism and perseverance during the postgraduation degree studies 2014 -16
- Mrs. Padma Hansraj endowed prize for the best Zoology student in Biology of Invertebrates (2014)
- Awarded Certificate of Special honour for consistent, creditable and excellent performance in academic and co-curricular activities of the College - 2014
- J. P. Samuel memorial prize for consistent, creditable and excellent participation in various activities of the Department of Zoology while maintaining a high academic record (2014)
- First rank in B.Sc. Zoology (Specialization in Biotechnology) degree -2011 – 2014
- Academic merit award for excellent and consistent academic performance during the years 2011 – 14
- Awarded certificate of recognition for exhibiting the exemplary qualities of altruism, leadership, inclusive outlook, creativity, proactivity, analytical thinking, risk taking, interpersonal skills, endurance, team spirit, voluntarism and perseverance during the undergraduation degree studies 2011 -14

OTHER PRIZES

- Second prize for proficiency in Lab courses during the academic year 2015 -16
- Second prize for proficiency in Major courses during the academic year 2015 -16
- First prize for proficiency in Lab courses during the academic year 2013 - 2014
- Second prize for proficiency in Nanoscience during the academic year 2012 -13
- First prize for proficiency in Lab courses during the academic year 2012 -13
- First prize for proficiency in Major courses during the academic years 2011 -12 and 2012 -13
- First prize for proficiency in Horticulture during the academic year 2011 -12
- First prize for proficiency in Allied (Mathematics) during the academic year 2011 -12
- First prize for proficiency in Allied (Microbiology) during the academic year 2011 -12