

NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS)

COIMBATORE

STAFF PROFILE

NAME : DR. M. MERCY

DESIGNATION : Assistant Professor

DEPARTMENT : Department of Bioinformatics

QUALIFICATION : M.Sc., M.Phil., PHD., PGDCA

EXPERIENCE : 5 Years

AREAS OF SPECIALIZATION : Aquaculture, Toxicology and Environmental Studies

E-MAIL : mercyamudhu@gmail.com

ACADEMIC QUALIFICATIONS :

DEGREE	YEAR OF COMPLETION	NAME OF THE INSTITUTION	CLASS
B.SC Advanced Zoology and Biotechnology	2012	Nirmala college for women Coimbatore	82%
M.SC Zoology	2014	Nirmala college for women Coimbatore	88% 2 nd rank
M.Phil., Zoology	2016	Nirmala College for Women Coimbatore.	70%
Ph. D Zoology	2022	Nirmala College for Women Coimbatore.	Highly commended

ADDITIONAL QUALIFICATIONS:

DIPLOMA/ VOCATIONAL/ CERTIFICATION	AREA OF SPECIALIZATION	NAME OF THE INSTITUTION/ UNIVERSITY/ AGENCY	YEAR
PGDCA	Computer Application	Nirmala College for Women Coimbatore.	2014

RESEARCH GUIDANCE:

PROGRAMME	NO. OF SCHOLARS	
	COMPLETED	PURSUING
Ph.D	-	-
M.Phil	-	-

RESEARCH PUBLICATIONS:

INTERNATIONAL:

- [1] **Mercy (2016).** Histological alternation in selected organs of fish *Oreochromis niloticus* from selected lakes around Coimbatore district. *International journal of recent scientific research*. Vol .6, issue,12. ISSN: 0976-3031.
- [2] **Mercy (2017).** Toxicological evaluation of heavy metals in tissues of freshwater fish *Oreochromis niloticus* collected from lakes of Coimbatore district. *International research journal of pharmacy*, 8(1), pp: 41-45. ISSN 2230-8407.
- [3] **Mercy. M, Sr.Mary Fabiola., (2020).** Seasonal Variations in Physicochemical Parameters of selected Wetlands in and around Coimbatore District. *Int J Pharm Sci*.11(3), B54-59. <http://dx.doi.org/10.22376/ijpbs.2020.11.3.b54-59>.
- [4] **Mercy. M, Sr. Mary Fabiola. (2021).** Seasonal variation of heavy metal concentration in water samples from different fresh water bodies in and around Coimbatore district. *International Journal of Creative Research Thoughts*, 9 (4): 5598-5604.
- [5] **Mercy. M., Sr.Mary Fabiola., B.Dhanalakshmi. (2021).** Evaluation of microbes under stored condition at 4°C in freshwater fish *Oreochromis mossambicus* collected from local fish market, Ukkadam, Coimbatore. *International Journal for Research in Applied Science & Engineering Technology*, 9(6): 4930-4933.
- [6] **Nagalakshmi R, Gowrisankar L, Mercy M, Dhivya P, Johncy Caroline J.2025** Targeting DPP4 with Bioactive Compounds from *Artocarpus hirsutus L.*: An Ai-Based Approach for Anti-Diabetic Drug Discovery. *Musik in Bayern*. ISSN: 0937-583x Volume 90, Issue 4, pp11-21. DOI <https://doi.org/10.15463/gfbm-mib-2025-405>.

NATIONAL:

- [1] **Mercy (2014).** Antifeedant and insecticidal activities of *Cinnamomum tamala* bark extract on fourth instar larvae of *Helicoverpa armigera* (Hubner). ISBN: 978-93-5174-565-5.
- [2] **Mercy (2015).** Consumer awareness on vermicompost and its effect on the growth of a vegetative crop *Lycopersicon esculentus*.
- [3] **Mercy (2016).** Analysis of water quality using heavy metal parameters in selected lakes around Coimbatore district.
- [4] **Mercy (2018).** Determination of heavy metal concentration in water samples collected from lakes of Coimbatore district, Tamilnadu ,India.

- [5] **Mercy (2018).** Assessment of xenobiotics in the selected organ tissues of fresh water fish freshwater fish *Oreochromis niloticus* of selected lotic ecosystem of Coimbatore district. ISBN-978-93-5321-859-1.

PRESENTATIONS IN CONFERENCE:

INTERNATIONAL:

- [1] Presented a paper titled **“Antifeedant and Insecticidal Activities of *Cinnamomum tamala* Bark Extract on Fourth Instar Larvae of *Helicoverpa armigera* (Hübner)”** in the **International Conference on Nanobio, Biomimetic Materials and its Applications**, organized by the Department of Biosciences, Hindusthan College of Arts and Science, held on **27th & 28th February 2014**.
- [2] Participated in the **International Conference on Physiology and Medicine**, organized by the Department of Zoology, Periyar University, Salem, held from **15th to 17th October 2014**.
- [3] Presented a paper titled **“Potentiality of Microbial Strains for Bioremediation of Toxic Heavy Metals from Polluted Water Samples Collected from Freshwater Bodies of Coimbatore District, Tamil Nadu, India”** in the **International Conference on Recent Biotechnological Innovation in Aquaculture**, organized by the Department of Zoology, Bharathiar University, Coimbatore, held on **27th & 28th February 2020**.
- [4] Presented a paper titled **“Bioremediation – A Sustainable Technology for Removal of Metal Contaminants”** in the **International Conference on New Frontiers in Research: Challenges and Innovations**, organized by the PG and Research Department of Library, Nirmala College for Women, Coimbatore, held on **9th & 10th February 2022**.
- [5] Presented a paper titled **“Sustainable bioremediation techniques: An Eco-friendly solution for contaminated environment and pollution management”** in an **International Conference on “Sustainable Bioremediation Techniques: An Eco-friendly Solution for Contaminated Environment and Pollution Management”**, organized by Jai Shivaasni Educational Trust (JET), Avudaiyanoor, Tenkasi, Tamil Nadu in collaboration with Nirmala College for Women, held from **23rd to 25th November 2025** (Online mode).
- [6] Presented a paper titled **“Sustainable Microplastic Mitigation Through Plant-Derived Biopolymers: Efficiency and Environmental Benefits”** in the **Second International Conference on “Environmental Conservation & Sustainability – A Biological Perspective (ECS-B)”**, organized by the Post Graduate and Research Department of Zoology, C. Abdul Hakeem College, held from **17th to 19th December 2025** (Hybrid mode).

NATIONAL:

- [1] Presented a paper titled **“Future Prospect of Medicinal Creeper – Grape Berries”** in the **UGC Sponsored National Conference on Medicinal Plants – Present Scenario and Future Prospects**, organized by the Department of Botany, Nirmala College for Women, Coimbatore, held on **6th & 7th December 2012**.
- [2] Presented a paper titled **“*Cinnamomum tamala* (Bark Extract)”** in the **National Symposium and Exhibition on Medicinal Values of Plants and Plant Products**, organized by the Department of Zoology, Kongunadu Arts and Science College, on **23rd January 2014**.
- [3] Presented a paper titled **“Antifeedant Activity and Toxicity of Plant Extracts against *Helicoverpa armigera*”** in **Biovision (National Level Paper Presentation)**, organized by the Department of Zoology, Mercy College, Palakkad, on **16th December 2014**.
- [4] Presented a paper titled **“Consumer Awareness on Vermicompost and its Effect on the Growth of a Vegetative Crop (*Lycopersicum esculentum*)”** in the **National Conference on Emerging Dimensions in the Indian Business Scenario**, organized by the Department of Commerce, Nirmala College for Women, Coimbatore, on **15th September 2015**.
- [5] Presented a paper titled **“Analysis of Water Quality Using Heavy Metal Parameters in Selected Lakes around Coimbatore District”** in the **Nirmala Annual Research Congress**, organized by IQAC Cell, Nirmala College for Women, Coimbatore, on **28th January 2016. (Regional Level)**
- [6] Presented a paper titled **“Determination of Heavy Metal Concentration in Water Samples Collected from Lakes of Coimbatore District, Tamil Nadu, India”** in the **National Seminar on Advances in Biological Sciences Research**, organized by the Department of Zoology, Nirmala College for Women, held on **19th & 20th September 2018**.
- [7] Presented a paper titled **“Assessment of Xenobiotics in the Selected Organ Tissues of Freshwater Fish *Oreochromis niloticus* of Selected Lotic System of Coimbatore”** in the **Nirmala Annual Research Congress**, organized by IQAC Cell, Nirmala College for Women, Coimbatore, on **4th December 2018. (Regional Level)**
- [8] Presented a paper titled **“Impact of Heavy Metal Pollution on Metallothionein Expression in Freshwater Fish *Oreochromis niloticus* Collected from Lakes around Coimbatore District”** in the **National Conference on Future Trends in Marine Biotechnology**, organized by the Centre for Marine Science and Technology, Manonmaniam Sundaranar University, Kanyakumari, held on **14th & 15th February 2019**.
- [9] Presented a paper titled **“Bioaccumulation and Histopathological Alterations of Heavy Metals in Freshwater Fish *Oreochromis niloticus* Collected from Two Different Lakes in Coimbatore District”** in the **Nirmala Annual Research Congress**, held on **27th November 2019. (Regional Level)** .

- [10] Presented a paper titled **“Genotoxicity in Freshwater Fish *Oreochromis niloticus* Collected from Different Lakes in and around Coimbatore District”** in the **National Seminar on Biology for Life 2K19**, organized by the Department of Zoology, Avinashilingam Institute for Home Science and Higher Education for Women, on **11th December 2019**.

PARTICIPATION IN CONFERENCES:

- [1] Participated in the **National Conference on Medicinal Plants – Present Scenario and Future Prospects (UGC Sponsored)**, organized by the Department of Botany, Nirmala College for Women, Coimbatore, held on **6th & 7th December 2012**.
- [2] Participated in the **National Conference on Immuno Informatics – An In Silico Aid Towards Better Medicines (DBT/DRDO/DST Sponsored)**, organized by the Department of Bioinformatics, Nirmala College for Women, Coimbatore, held on **3rd & 4th October 2013**.
- [3] Participated in the **International Conference on Nanobio, Biomimetic Materials and its Applications**, organized by Hindusthan College of Arts and Science, held on **27th & 28th February 2014**.
- [4] Participated in the **International Conference on Physiology and Medicine**, organized by Periyar University, Salem, held from **15th to 17th October 2014**.
- [5] Participated in the **National Conference on Emerging Dimensions in the Indian Business Scenario**, organized by Nirmala College for Women, Coimbatore, on **15th September 2015**.
- [6] Participated in the **International Conference on Challenges to Environment and Health**, organized by Jamal Mohamed College, Trichy, on **30th January 2020**.
- [7] Participated in the **International Conference on Recent Biotechnological Innovation in Aquaculture**, organized by Bharathiar University, Coimbatore, held on **27th & 28th February 2020**.
- [8] Participated in the **International Conference on New Frontiers in Research: Challenges and Innovations**, organized by Nirmala College for Women, Coimbatore, held on **9th & 10th February 2022**.
- [9] Participated in the **International Conference on “Unraveling Therapeutic Resources from Nature’s Treasure”**, organized by PG & Research Department of Biosciences, Chennai, held on **20th & 21st April 2022**.
- [10] Participated in the **National Conference on Future Trends in Marine Biotechnology**, organized by Manonmaniam Sundaranar University, Kanyakumari, held on **14th & 15th February 2019**.
- [11] Participated in the **National Conference on Evolutionary Advancement in Ocean Studies and Research (NEAOSR’24)**, organized by Bharathidasan University, on **30th September 2024**.

PARTICIPATION IN SEMINARS:

- [1] Participated in the **National Seminar on Current Advances in Applied Genetics and Bioethics**, organized by Nirmala College for Women, Coimbatore, held on **18th & 19th September 2009**.
- [2] Participated in the **Symposium on Animal Welfare & Conservation**, organized by Nirmala College for Women, Coimbatore, on **27th January 2011**.
- [3] Participated in the **Symposium on Animal Welfare & Conservation**, organized by Nirmala College for Women, Coimbatore, held on **24th & 25th January 2012**.
- [4] Participated in the **National Seminar on Current Trends in Biotechnology and Bioinformatics (DBT Sponsored)**, organized by Nirmala College for Women, Coimbatore, on **2nd March 2012**.
- [5] Participated in the **Lecture Programme on Thrust Areas for Future Research in Biological Sciences**, organized by PSGR Krishnammal College for Women, Coimbatore, held on **27th & 28th September 2012**.
- [6] Participated in the **National Level Symposium on An Interface of Biology with Nanotechnology (UGC Sponsored)**, organized by Nirmala College for Women, Coimbatore, on **8th October 2012**.
- [7] Participated in the **National Workshop on Recent Advances in Aquatic Research**, organized by Kongunadu Arts and Science College, on **12th December 2013**.
- [8] Participated in the **National Symposium and Exhibition on Medicinal Values of Plants and Plant Products**, organized by Kongunadu Arts and Science College, on **23rd January 2014**.
- [9] Participated in the **National Seminar on Trends in Environmental Resource Management (UGC Sponsored)**, organized by Nirmala College for Women, Coimbatore, held on **7th & 8th August 2014**.
- [10] Participated in **Biovision (National Level Paper Presentation)**, organized by Mercy College, Palakkad, on **16th December 2014**.
- [11] Participated in the **International Symposium on Public Health Emergency and Disaster Management**, organized by Hindusthan College of Arts and Science, on **3rd November 2015**.
- [12] Participated in the **Science Symposium**, organized by Regional Science Centre, Coimbatore, on **18th November 2015**.
- [13] Participated in the **National Seminar on Advances in Biological Sciences Research**, organized by Nirmala College for Women, held on **19th & 20th September 2018**.
- [14] Participated in the **National Seminar on Biology for Life 2K19**, organized by Avinashilingam Institute, on **11th December 2019**.

- [15] Participated in the **National Symposium on Exploration of Research Innovation: Its Trends and Challenges**, organized by Nirmala College for Women, on **11th January 2020**.
- [16] Participated in the **National Webinar on Marine Bioresources and Bioprospecting**, organized by Bharathidasan College of Arts and Science, on **14th June 2021**.
- [17] Participated in a **National Seminar on “Biotechnology Driven Solutions for Aquaculture Farming, Nutrition and Feed Efficiency”**, organized by Dr. G. R. Damodaran College of Science, Coimbatore, held on **27th & 28th (2026)** (Offline mode).

PARTICIPATION IN WORKSHOPS:

- [1] Participated in the **Workshop in Biotechnology (UGC Sponsored)**, organized by Nirmala College for Women, Coimbatore, held from **11th to 13th September 2013**.
- [2] Participated in the **Workshop on Techniques in Animal Biotechnology (DBT Sponsored)**, organized by Nirmala College for Women, Coimbatore, held on **29th & 30th September 2014**.
- [3] Participated in the **Workshop on Statistical Tools for Research (UGC Sponsored)**, organized by Nirmala College for Women, Coimbatore, held on **11th & 12th February 2015**.
- [4] Participated in the **Workshop on Open Access E-Resources for Research & INFLIBNET**, organized by Nirmala College for Women, Coimbatore, on **9th November 2018**.
- [5] Participated in the **National Workshop on Cutting Edge Technologies in Fisheries and Aquaculture**, organized by ICAR-NBFGR, Kochi, held from **13th to 22nd December 2021**.
- [6] Participated in the **National Workshop on Biomolecules Separation Technique**, organized by Bharathidasan University, Trichy, held from **7th to 11th March 2022**.
- [7] Participated in the **National Workshop on Scanning Probe Microscopy Technology and Applications**, organized by NIT, Trichy, on **29th August 2024**.
- [8] Participated in the **Hands-on Workshop on DNA Fingerprinting and Phylogenetic Study**, organized by Rathinam College of Arts and Science, held from **13th to 15th February 2025**.
- [9] Participated in a **National Level Workshop on “Hydra in the Classroom – A Dynamic Tool for Teaching Life Science”**, organized by St. Joseph College, Tiruchirappalli, on **28th August 2025** (Online mode).
- [10] Participated in the **Biodiversity Data Mobilization Workshop**, organized by GBIF & The Naturalist School, Bangalore, held on **27th & 28th September 2025**.

PARTICIPATION IN ORIENTATION PROGRAMME/ INDUCTION PROGRAMME/ SHORT TERM COURSES:

- [1] Participated in the **ICAR-Sponsored Winter School Programme**, held at PAGR, NBFGR, Kochi during 22.01.2026 to 10.02.2026

PARTICIPATION IN FACULTY DEVELOPMENT PROGRAMMES:

- [1] Participated in a **Faculty Development Programme on “Blockchain and Digital Transformation”**, organized by Nirmala College for Women, Coimbatore, held from **14th November to 20th November** (National level, Online mode).
- [2] Participated in a programme on **“Outcome Based Education, Binary Accreditation & Usage of AI”**, organized by the IQAC, St. Mary’s Centenary Degree College, held from **2nd to 6th June 2025** (Online mode).
- [3] Participated in the **“Online NEP 2020 Orientation & Sensitization Programme”**, organized by MMTTC, Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Wardha, Maharashtra, held from **2nd to 10th September 2025** (Online mode).
- [4] Participated in a programme on **“NEP on Generative AI in Higher Education”**, organized by the IQAC, Nirmala College for Women, Coimbatore, on **6th February 2026** (Online mode).
- [5] Participated in a **Faculty Development Programme on “Advanced Applications of AI in Research and Innovation”**, organized by Sri Venkateswara College of Engineering and Technology, Andhra Pradesh, held from **24th to 28th March 2025** (Online mode).
- [6] Participated in a training programme on **“Leveraging Canva for Effective powerpoint Presentations and Impactful Lectures”**, organized by ACT Academy, Kerala, on **20th May 2025** (Online mode).
- [7] Participated in a **Training Programme on “AI Integrated Power BI Interactive Dashboard Creation”**, organized by Brain Swig Pvt. Ltd., on **8th June 2025** (Online mode).

CONFERENCE/ SEMINAR/ WORKSHOP ORGANIZED:

- [1] Organized a **Two-Day National Level Online Workshop on “Molecular Docking”**, held on **29th & 30th July 2024**.
- [2] Organized a Webinar on Next Generation Sequencing in Health Management Research held on **21st February 2025**.
- [3] Organized a **Two-Day National Level Online Workshop on “Molecular Docking”**, held on **15th & 16th May 2025**.
- [4] Organized a **Two-Day National Level Online Workshop on “Research Methodology and Data Analysis using SPSS”**, held on **22nd & 23rd May 2025**.

- [5] Organized a **Two-Day National Level Workshop on “Exploring Evolution: Molecular Phylogeny and Algorithmic Approaches”**, held on **22nd & 23rd December 2025**.

INVITED SPEAKER/ SESSION CHAIR- CONFERENCE/ SEMINAR/ WORKSHOP:

- [1] Presented guest lecture on **Vertebrates- general community (In and around)-** Department of Biotechnology, Rathinam College of Arts and Science, Coimbatore
- [2] Presented guest lecture on **Organogenesis in animals-** Department of Biotechnology, Rathinam College of Arts and Science, Coimbatore
- [3] Presented guest lecture on **Water Resources around Coimbatore –** Conventional practices and conservation techniques, Department of English (SF), Nirmala College for Women, Coimbatore.
- [4] Participated as a **Resource Person** and delivered a talk on **Exploring the future: Advanced Technologies in Molecular biology and biotechnology-**Chinmaya Vidyalaya Matriculation School, Coimbatore.
- [5] Participated as a **Resource Person** and delivered a talk on **Drug Designing Using Rasmol -**Department of Chemistry, Nirmala College for Women, Coimbatore.
- [6] Participated as a **Resource Person** and delivered a talk on **“RasMol in Molecular Visualization and Drug Design”**, organized by the Department of Chemistry, Nirmala College for Women, Coimbatore, on **19th February 2026**.

BOOK PUBLICATIONS:

- [1] Authored a book titled ***“Exploring Molecular Interaction: A Question Based Learning Resources***
- [2] Authored a book titled ***“Genomics: Probing the Code of Life”***.
- [3] Authored a book titled ***“Learning Pharmacogenomics: A Step Toward Precision Medicine”***.