

A. S. Merlyn Diana

14-4/27, Narmada Nathi Street,
Mahatma Gandhi Nagar,
Madurai -625014.

Phone: +91 7708848688

E- mail: dian86sam@gmail.com/merlyndiana@ldc.edu.in



EDUCATIONAL PROFILE

- Cleared **CSIR- UGC NET LS** (Life Sciences)- Dec 2018 – **AIR 59**
- Pursuing Ph. D. (F10247) at PG & Research Department of Zoology, Lady Doak College, Madurai.
- **Current Position:** Assistant Professor in Biotechnology, Bishop Heber College, Tiruchirappalli.

ACADEMIC QUALIFICATIONS

S. No	Qualification	University	Institution/ University	Year of Passing
1.	B. Sc. Zoology Spl. Biotechnology	Madurai Kamaraj University	Lady Doak College affiliated to Madurai Kamaraj University, Madurai.	2006
2.	M. Sc. Biotechnology	Madurai Kamaraj University	Lady Doak College affiliated to Madurai Kamaraj University, Madurai.	2008
3.	M. Phil. Biotechnology	Karunya University	Karunya University, Coimbatore	2009
4.	M. Sc. Zoology	Madurai Kamaraj University	Madurai Kamaraj University (DDE)	2018

AWARD RECEIVED

- **General Honour** for consistent and creditable performance in academic and co-curricular activities of the college (2003-2006).

TEACHING EXPERIENCE

1. Assistant Professor (Permanent)

Bishop Heber College, Tiruchirappalli

[19/06/2023 to 31.05.2024]

- Taught undergraduate and Postgraduate courses including Cell Biology, Molecular Biology, and Immunology.
- Developed practical manual for cell biology
- Supervised undergraduate and Postgraduate student projects.

2. Assistant Professor (Permanent)

Bishop Heber College, Tiruchirappalli

[01/06/2024 to 31.05.2025]

- Taught undergraduate and Postgraduate courses including Cell Biology, Molecular Biology, Immunology and Animal Biotechnology.
- Developed practical manual for cell biology
- Supervised undergraduate and Postgraduate student projects.

PUBLICATIONS:

S. No.	Category	Title	Name of the Journal/Book	Year of publication	Impact Factor
1.	Journal	Unraveling the Intricaices of OPG/RANKL/RANK Biology and its implications in Neurological Disorders – A comprehensive Literature Review	Molecular Neurobiology	22 May 2024	4.6
2.	Book Chapter	Introduction to Artificial Intelligence	Next-Gen Biology: AI's transformative impact on Life Sciences (ISBN:978-93-6554-230-1)	17 March 2025	NA

PAPERS PRESENTED:

1. Presented a paper on “Ultrasound-Assisted Extraction of *Ipomoea pes-caprae*: Phytochemical Profiling, Antioxidant Potential and Cytotoxic Evaluation” at the International Conference on Biodiversity & Climate Change (ICBCC-2025) jointly organized by the Department of Botany and Zoology, St. Xavier’s College (Autonomous), Palayamkottai on 13th-14th February.
2. Presented a paper on “Phytochemical profiling, Antioxidant, Antibacterial Potential and anti-osteoporotic potential of *Pisonia grandis* leaves & stem: Insights from GC-MS & *In silico* analysis.

RESEARCH EXPERIENCE

Student Projects Guided:

Sl. No.	Under Graduate/ Post Graduate	Title of the Thesis	Month & Year of Completion
1.	PG	Unlocking the Bone-Healing Secrets of <i>Pisonia grandis</i> : Phytochemical Insights and In Silico Anti-Osteoporotic Potential	March, 2024
2.	PG	Unveiling the Anti-Osteoporotic Potential of Karuppu Kavuni and kattuyanam Rice: A Phytochemical, GC-MS, and In Silico Exploration	March, 2024
3.	PG	Formulation and Evaluation of Spinach-Lentil Powder for Improved Nutritional Value	March, 2024
4.	PG	GC-MS Analysis and In Silico Screening of Bioactive Compounds from Ultrasonic-Assisted extract of <i>Pisonia grandis</i> and Analysis of its phytochemical constituents, antioxidant potential and Antimicrobial Activity	March, 2023
5.	PG	Molecular And Characterization Of The Virulency Of <i>Vibrio</i> Species In Marine Finfish Culture At Gulf Of Mannar And Palk Bay , India	March, 2023
6.	PG	Analysis of antiulcer and antioxidant activities of <i>Spilanthes acmella murr</i> and screening of its bioactive compound using GC-MS analysis	March, 2023
7.	UG	Exploring the anti-oxidant potential activity of ethanol extract of <i>Pisonia grandis</i> : a phytochemical and pharmacological study	March, 2024
8.	UG	A comparative analysis of phytochemicals, antioxidant activity, and bioactive compound profile in South Indian pigmented rice varieties through ultrasonic-assisted extraction, GC-MS analysis and screening of its ADMET properties	March, 2023
9.	SL (UG)	Sustainable starch-based bioplastics: A green solution for plastic waste reduction in college communities	March, 2024
10.	SL (UG)	A study on the utilization of Banana waste as organic fertilizer	October, 2023

Research Projects:

Minor Research Project (Ongoing) } Deciphering the Anti-Osteoporosis Potential of Halophytes in Saos-2 Cells: A Step Towards Treatment for Postmenopausal Women (Funded By a seed grant of Rs.50,000 by the management of Bishop Heber College

M. Phil : Screening of Antidiabetic, Antioxidant and Antimicrobial activities of *Cassia auriculata* and *Boerhaavia diffusa*

M. Sc. : Micropropagation of *Phyllanthus emblica* & Enhancement of tannin through callus culture and Determination of its antimicrobial activity.

B. Sc. : Analysis of novel chitinase gene from indigenous *Bacillus thuringiensis*.

Mini Project } Genetic manipulation of tomato plant with *ANNEXIN* gene through
(B. Sc.) } *Agrobacterium* mediated transformation.

FACULTY DEVELOPMENT PROGRAMMES PARTICIPATED

1. Five-Day Virtual Faculty Development Programme on “Frontiers in Biotechnology” organized by Centre for Drug Discovery and Development from 27.08.2024 to 31.08.2024.
2. One Week Faculty Development Programme on “AI-Driven Breakthroughs In Drug Development: Innovations in Diagnostics, Biomarker Discovery And Sustainability” organized by Sinicorn Labs Private Limited, Marthandam, Kanyakumari from 30th Sep-2024 to 04-Oct-2024.
3. Seven Day Online Faculty Development Programme (30 hours) on “The art of Publishing Articles in Indexed Journals” organized by MCC Research Colloquium from 12th to 19th February 2025, and obtained Grade A⁺⁺

SYMPOSIUMS/ SEMINARS/ CONFERENCES/ WORKSHOPS ORGANIZED

1. Served as Co-organizing secretary for “**BIOTECH SPARK – 2024: International symposium on progress, advancements and research knowledge in biotechnology (Hybrid Mode)**” organized by the Department of Biotechnology, Bishop Heber College on February 23, 2024
2. Served as an Organizing Secretary in “**Science Academies’ Lecture Workshop on Frontiers of Modern Biology: Discovering the Recent Scientific Advances**” sponsored & supported by Indian Academy of Sciences, Bengaluru, Indian National Science Academy, new Delhi, and The National Academy of Sciences, Allahabad organized by the Department of Biotechnology, Bishop Heber College, Tiruchirappalli on 14th & 15th March 2025.

SEMINARS /CONFERENCES PARTICIPATED

1. National seminar on ‘**Emerging trends and developments in Bioinformatics**’ organized by Dr. G. R. Damodaran College of Science, Coimbatore. January 2006.
2. ‘**4th International Symposium on Biocontrol and Biotechnology**’ organized by Lady Doak College, Madurai. November, 2006.
3. Regional level Seminar on ‘**Biomolecular modeling from Drug Discovery to Nanotechnology**’ sponsored by DST, New Delhi, organized by Lady Doak College, Madurai. June, 2007.

4. National Symposium on '**Applications of Systems Biology**' organized by Lady Doak College, Madurai, September, 2007.
5. Regional Seminar on "**IPR and Patents: Prospects and Challenges**", organized by the Department of Zoology, Lady Doak College, Madurai. July 2019.
6. Webinar series on "**Insights into emerging diseases- Diagnosis and Therapeutics**", organized by PG & Research department of Zoology, Lady Doak College, Madurai. 18th May -1st June 2020.
7. Webinar on "**Phytochemical Extraction Techniques**" organized by Central Dogma Pvt Ltd, Pune, on 24th May 2020.
8. Webinar on "**Mass Spectroscopy for Phytochemical Analysis**" organized by Central Dogma Pvt Ltd, Pune, on 24th May 2020.
9. Webinar on "**Chromatographic and spectroscopic Evaluation of Plant Based Drugs: Research Perspective**" organized by Central Dogma Pvt Ltd, Pune, on 15th May 2020.
10. Webinar on "**COVID-19 Pandemic Genetic and Therapeutic strategies**" organized by the Department of Human Genetics and Molecular Biology, Bharathiar University, Coimbatore. 5th June 2020.

WORKSHOPS ATTENDED

1. "**Workshop on Drug Designing**", organized by DBT-BIF, Department of Biotechnology, Lady Doak College, Madurai and Elite Biose Foundation, Chennai. November, 2009.
2. National Workshop on "**Application of Molecular Modeling and Structural Bioinformatics**", organized by the Department of Bioinformatics, Alagappa University, Karaikudi in association with Schrodinger, USA. January, 2010.
3. National Workshop on "**Network Biology**", organized by DBT-BIF, Department of Biotechnology, Lady Doak College, Madurai. February 2019.
4. "**Research Workshop**" organized by Bell Institute of research and development studies from 25th-29th June 2020.
5. Workshop on **Learning Statistics and Data Analysis using MS Excel**, organized by Simple Statistics Solution and Training Provider, Tirunelveli. February 1-3, 2021.
6. Workshop on **Learning Statistics and Data Analysis using SPSS**, organized by Simple Statistics Solution and Training Provider, Tirunelveli. February 4-6, 2021.

7. Workshop on “**Bioinformatics Data Resources and tools for Gene Annotation**” organized by PG & Research Department of Zoology, Lady Doak College, Madurai. 26th, 27th and 29th March 2021.
8. Workshop on “**Molecular Docking and Biological Software Packages for Data Analysis**” organized by the Center for Molecular and Nanomedical Sciences, International Research Center, Sathyabama Institute of Science and Technology, Chennai. 24th- 26th November 2022.

TRAININGS ATTENDED

- **Basic techniques in Biology** at Lady Doak College, Madurai (3 weeks, 2004).
- **Training in Molecular biology, Plant tissue culture, Genetic engineering and Immunotechnology** at Shreedhar Bhat’s Laboratory, Bangalore (1 month, 2005)
- **Entrepreneurship Development Programme** conducted by Lady Doak College & Center for Entrepreneurship Development, Madurai Kamaraj University (2 weeks, 2005)
- **Five Days Online Research Training Programme in Phytochemistry, Herbal Technology and Synthetic Chemistry** organized by Amity Institute of Phytochemistry and Phytomedicine, Amity Herbal Consortium, and Amity Institute of Herbal Research and Studies, Amity University, Uttar Pradesh, Noida. 12.04.2021 to 16.04.2021.
- Three days of On-site **HPTLC training from CAMAG HPTLC** at Lady Doak College, Madurai. From 9.8.2021 to 11.08.2021.
- On-site **HPTLC training from CAMAG HPTLC** at Lady Doak College, Madurai. 25.02.2022.

COMPUTER SKILLS

- | | |
|------------------------|---|
| Certificate Courses in | - Multimedia and Animation
- Image Manipulation and Animation
- Web Designing |
| Computer Skills | - Microsoft Office (Word, Excel, PowerPoint)
- HTML, C-language
- Internet & E-mail |

SELF-LEARNING COURSES

1. Sericulture
2. Mysteries of Behaviour
3. Bird Watching
4. Pharmaceutical chemistry

CHRISTIAN EDUCATION

1. Certificate in essence of Christian faith, Christian Education Council of Tamil Nadu, 2005-2006.
2. Certificate in biblical wisdom literature, Christian Education Council of Tamil Nadu, 2006-2007.
3. Diploma in religious education, Christian Education Council of Tamil Nadu

STRENGTHS

- Comprehensive problem-solving abilities
- Willingness to learn quickly and efficiently
- Good Team spirit and zeal to learn more and keep myself updated with the latest technologies.

PERSONAL PROFILE:

- **Date of birth** : 23rd February, 1986
- **Marital status** : Married
- **Category** : BC
- **Nationality** : Indian
- **Religion** : Christian (C.S.I.)
- **Address** : 14-4/27, Narmada Nathi Street,
Mahatma Gandhi Nagar,
Madurai -625014.
- **Languages known** : English and Tamil
- **Personal Interest/ Hobbies:**

Co-curricular programmes:

1. Short-term workshop on Doll Making (15 days)
2. Short-term workshop on Needlework and embroidery (15 days)

Co-curricular Activities: Certificates of merit won in competitions such as vegetable carving, group singing, Collage

Interests : Painting (pot, glass, nib, chart, fabric, canvas), Embroidery, Sewing, Knitting, Quilling.

DECLARATION

I solemnly declare that the aforesaid information is true and genuine to my belief and conscience.

Place : Madurai

Yours Sincerely,

Date : 26. 06. 2025

A.S. Merlyn Diana