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Assistant Professor
PG and Research Department of Zoology
Holy Cross College (Autonomous)
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I have twenty-two years of teaching and three years of research experience. As part of research activities, published 37 original articles in research journals of high impact factor at national and international level with 436 citations, h-index (11) and i10-index (11). Several papers were presented at national and international conferences; received 14 awards for academic excellence and research activities, to name a few, awarded **Young Scientist** and **Gold Medal** for the best performance in oral presentation at **14 All India Congress of Zoology** at Kanyakumari in the year 2003. Organized a **National Conference** sponsored by DBT in the year 2013. Completed a **UGC Minor Research Project** between 2016-2018. Delivered several **Guest Lectures in DBT sponsored National Level Conferences** at several places and submitted **2 Nucleotide Sequence** in GenBank. Serving as core committee member of **Department of Value Education (DOVE)** and **Vizhuthugal 100 Project** of the institution, published one book and authored several book chapters.

AWARDS RECEIVED: 14

- 1 College Management Medal for **Academic Performance** (M.Sc. Biochemistry)
- 2 Awarded **Young Scientist** and **Gold Medal** for the best performance in oral presentation at **14 All India Congress of Zoology** at Kanyakumari from Dec 21-23, 2003.
- 3 Awarded **Second Prize** for oral presentation at XX National Symposium on, 'Reproductive Biology and Comparative Endocrinology' at Dr ALM Post Graduate Institute of Basic Medical Sciences, University of Madras during Jan 25-27, 2004
- 4 Awarded **First Prize** for oral presentation in HAPTEN2K9 (National Level Technical Symposium) conducted by Department of Biotechnology on 19-20 March 2009 at Arunai Engineering College, Tiruvanamalai.
- 5 Awarded **First Prize** for oral presentation in National Conference conducted by Department of Biotechnology on 11-12 March 2010 at Adhiyaman Engineering College, Hosur.
- 6 Presented a paper entitled, "Antihyperglycemic effects of *Elephantopus scaber* extracts in alloxan- induced diabetic rats" in National Symposium on Current Perspectives in Animal Biotechnology on 3-4 Feb 2011 at Bharathidasan University, Tiruchirappalli. (Awarded **First Prize**).
- 7 Presented a paper entitled, "Antidiabetic and antimicrobial activity of *Acalypha indica* Linn extracts" in UGC-SAP sponsored National Conference on Diabetes

- Mellitus and Cancer on 17 Dec 2011 at Annamalai University, Chidambaram. (Awarded **Third Prize**).
- 8 Presented a paper entitled, “Antidiabetic effects of *Elephantopus scaber* in diabetic rats” in one day national level students symposium on Sep 29,2012 organized by Department of Biotechnology, St. Josephs College of Engineering (Awarded **Third Prize**).
 - 9 Presented a paper entitled, “Antibacterial activity of *moringa oleifera* extracts and phytochemically synthesized silver nano particles against isolated urinary tract infectious bacterial pathogens” at the two-day National Level Students Technical symposium on 1-2 Mar 2013, organized by Department of Biotechnology, Vivekananda College of Engineering for Women (Awarded **Second Prize**).
 - 10 Presented a paper entitled, “Screening of *Solanum nigrum* for its phytochemical and antimicrobial activity against respiratory tract pathogens” at the two-day National conference on 11-12 Sep 2014, organized by Department of Biotechnology, Karpaga Vinayaga College of Engineering and Technology (Awarded **Special Prize**).
 - 11 Awarded **HAR GOBIND KHORANA MEMORIAL BEST SCIENTIST AWARD** by Bose Science Society on January 12, 2017.
 - 12 Awarded **FIRST PRIZE IN PAPER PRESENTATION COMPETITION** held for staff during **Mother Foundress Day Celebration** on August 10, 2018.
 - 13 Participated and presented a poster entitled “**ANTIUROLITHIC PROPERTY OF *Macrotyloma uniflorum***” at Intercollegiate Technical Fest conducted by the Department of Biotechnology, School of Biological Sciences, St. Joseph’s College (Autonomous), Tiruchirappalli on 22 September, 2023(**FIRST PRIZE**).
 - 14 Presented a poster entitled, “Bioremediation: Role of zooplankton” at the One Day National Conference on, “Eco Harmony 2024: Exploring the Web of life in Zoology” held on 23 February 2024, organized by the PG & Research Department of Zoology, Holy Cross College (Autonomous), Tiruchirappalli (**FIRST PRIZE**).

EVENTS ORGANISED

1. Organised BIOXPLORE (A National Level Workshop) at the Department of Biotechnology, MVJ College of Engineering, on Feb 27, 2009.
2. Organised Phytochemistry Workshop sponsored by CPE at PG and Research Department of Zoology, Holy Cross College (Autonomous), Tiruchirappalli-620002, on Jan 31 & Feb 01, 2019

PROJECTS COMPLETED

1. Completed DBT (**Department of Biotechnology**, New Delhi, vides Letter No. DBT/CTEP/01/20130013) sponsored (Rs **50, 000**) two-day national conference on, “**Diabetes mellitus in Indian Population: Current Scenario and future perspective**” on 2-3 Aug, 2013.
2. Completed UGC **Minor Research Project** entitled, “**PREPARATION-CHARACTERISATION AND THERAPEUTIC PROPERTY OF *Premna***

latifolia NANOPARTICLES”, of Rs 1,80,000 (PROPOSAL NUMBER: 3625; F.NO:4-4/2015-2016(MRP/UGC-SERO).

GUEST LECTURE DELIVERED: 04

1. Delivered a guest lecture in the DBT sponsored national level seminar cum workshop entitled, “Applications of Green Technologies for Separation of Bioproducts” held at KVCET on July 22-23, 2013. The title of the lecture was, “**Phytochemicals as therapeutics for diabetes**”.
2. Delivered a guest lecture in the DBT sponsored national level conference entitled, “Achievements, challenges and opportunities in environmental biotechnology for sustainable livelihood security” held at Pudukottai on Feb 27-28, 2016. The title of the lecture was, “**Therapeutic activities of Bignonia and its gold nanoparticle**”.
3. Delivered a guest lecture in the DBT sponsored national level conference entitled, “Enhancing Entrepreneurship and Innovation in Biotechnology for Sustainable Development” held at the Department of Botany, HH The Rajah’s College, Pudukottai on Jul 28-29, 2017. The title of the lecture was, “**Anticariogenic property of *Premna latifolia* nanoparticles**”.
4. Delivered a guest lecture for the students of Computer Application on “**Values for Holistic Development**” in Shanthi’s Hall on 18 July 2023 organized by Department of Computer Applications, Holy Cross College (Autonomous), Tiruchirappalli.

SESSION CHAIRED:7

1. **Chaired a technical session** in the DBT sponsored national level conference entitled, “Applications of Biomaterials and Nanomaterial’s in Biomedical Engineering” held at KVCET on Mar 13-14, 2014.
2. **Chaired a technical session** (Oral and Poster) in the DBT sponsored national level conference entitled, “Achievements, challenges and opportunities in environmental biotechnology for sustainable livelihood security” held at Pudukkottai on Feb 27-28, 2016.
3. **Participated in the India International Science Festival as a Delegate** held at Lucknow from Oct 5 th to 8 th, 2018.
4. **Chaired a session in One Day Conference** on “Challenges and Opportunities in Life Sciences” organized by School of Life Sciences, Holy Cross College (Autonomous), Tiruchirappalli on 8th February 2023.
5. **Judged the, Intra-departmental Paper Presentation** Competition conducted by the department of chemistry on, “Conserve Nature Conserve Life” at Chemistry Department on 27/07/2023 between 2.30 to 3.30 pm.
6. **Served as Session Coordinator** in the National Conference on, “The Evolving Landscape: Exploring Possibilities and Challenges for the Girl Child in a Dynamic World” on 24 January 2024 organized by Women’s Studies Centre (Funded by UGC), Holy Cross College (Autonomous), Tiruchirappalli in collaboration with Centre for Women’s Development Studies, New Delhi.
7. **Served as judge for, “Science & Maths Exhibition-2024”** on 10 October 2024 at Holy Cross Girls Higher Secondary School, Teppakulam, Tiruchirappalli-620 002.

FACULTY DEVELOPMENT PROGRAM ATTENDED:02

1. **Attended UGC-Sponsored Twelfth Online Faculty Induction Programme** conducted by UGC-HRDC, Bharathidasan University (Duration: One Month) from 28.10.2022 to 26.11.2022.
2. **Attended the NEP Orientation & Sensitization Programme** held from 04 June to 14 June 2024 organized by Guru Angad Dev Malaviya Mission Teacher Training Centre, SGTB Khalsa College, University of Delhi.

NPTEL COURSES COMPLETED:02

1. Completed a NPTEL-AICTE Faculty Development Programme (12 Weeks-Jan to Apr 2023) on “**Basic Course in Ornithology**” Funded by M o E, Government of India.
2. Completed a NPTEL-AICTE Faculty Development Programme (12 Weeks-Jul to Oct 2023) on “**Advance Course in Social Psychology**” Funded by M o E, Government of India.

ELECTION DUTIES UNDERTAKEN:03

1. Served as **Presiding Officer** for Karnataka Elections in 2007 at Bangalore.
2. Served as **Presiding Officer** for Tamilnadu Elections in 2016 at Tiruchirappalli.
3. Served as **Polling Officer 1** for Tamilnadu Elections in 2024 at Thuraiyur.

TEACHING EXPERIENCE: 22 Years

Classes	College	Duration	
		From	To
B.Sc., Biochemistry	Holy Cross College (Autonomous)	16 June 1999	11 April 2001 (2 Years)
B.Sc. & M.Sc., Biochemistry	Pavendar Bharathidasan College of Arts & Science	25 June 2004	30 Sep 2004 (3 Months)
B.Sc., & M.Sc., Biochemistry	Srimad Andavan Arts & Science College	01 June 2005	17 July 2006 (1 Year 2 Months)
B.E. Biotechnology	MVJ College of Engineering	16 Aug 2006	11 Mar 2010 (3Year 7 Months)
B. Tech. & M. Tech. Biotechnology	Karpaga Vinayaga College of Engineering and Technology	23 Aug 2010	31 May 2014 (3 Year 10 Months)
B.Sc., M.Sc., M. Phil.,	Holy Cross College (Autonomous)	16 Jun 2014	Till date (10 Years)

RESEARCH EXPERIENCE: 3 Years

- ❖ Worked as a Project Associate in the U.G.C. Sponsored Project at Holy Cross College (Autonomous), Tiruchirappalli – 620 002.
 - a. Project No. : F.3-81/2001 (SR II)
 - b. Title : Evaluation of some plant extracts-their mode and action on blood sugar levels of normal and diabetic rats.
 - c. Duration : 02 May 2001 – 02 May 2004 (3 Year)

NUCLEOTIDE SEQUENCE SUBMITTED:02

- Deposited a nucleotide sequence in GenBank: **OQ72663.1**, “*Moina macrocopa* isolate PAR HCC ZOO 003 cytochrome c oxidase subunit 1(COX1 gene), partial cds; mitochondrial” submitted on 02/04/2023.
- Deposited a nucleotide sequence in GenBank: **PP493988.1**, “*Mesocyclops pehpeiensis* isolate COPR-1 small subunit ribosomal RNA gene, partial sequence” submitted on 16/03/2024.

RESEARCH DETAILS

Orcid ID: **0000-0003-3717-1797**

Scopus ID: **57213384907**

Vidwan ID:**281161**

Researcher ID: **ITV-9787-2023**

Google Scholar ID: **1TamJyQAAAAJ**

STUDENTS GUIDED

Ph.D.: 01 M.Phil.: 03

**Ph.D. Guideship: Anna University of Technology-Chennai (2010-2014)
(AUTC/Ph.D./2011(N)/S&H/CM008)**

PUBLICATIONS (Citations-436; h- index-11; i10- index-11)

BOOKS PUBLISHED:1

1. Published a book, “**Spiritual Radical of Faith**” (2024), published by **Holy Cross publishing House**, Publication Division, Holy Cross College (Autonomous), Tiruchirappalli (ISBN No.978-81- 965870-5-5).

BOOK CHAPTERS PUBLISHED:3

1. One chapter in III UG Ethics Textbook, “**Family and Career Development**” (2015), Department of Value Education, Holy Cross college (Autonomous), Tiruchirappalli-2.
2. Few chapters in the book “**A Text Book of Practical Zoology for Undergraduates-2021**”, published by Publication Division, Holy Cross college (Autonomous), Tiruchirappalli-2 (ISBN No.978-81- 953014-2-3).
3. M Rajathi D Modilal and Anusiya T (2024). **ECOTOXICITY ANALYSIS OF TRICLOSAN AGAINST MOINA MACROCOPA A ZOOPLANKTON**, Futuristic Trends in Biotechnology, IIP Series, Volume 3, Book 1, Part 1, Chapter 13, 186-200 (e-ISBN: 978-93-6252-358-7).

EDITORIAL BOARD MEMBER

World Journal of Pharmacognosy & Phytochemistry (**Journal**)

REVIEWER OF

- **Asian Plant Research Journal**

i. Research Paper Published (Original Articles): 37

a. **National Journal : 32**

1. **M Rajathi** and P Daisy. Effect of plant extracts on the blood glucose and cholesterol level of alloxan diabetic rabbits. *Indian Journal of Comparative Animal Physiology*, Vol. 18, 2000, 14-17.
2. **Rajathi M** and Daisy P. Evaluation of the oral hypoglycemic effect of *Cichorium itybus* in alloxan-induced diabetic rats. *Proceedings of XX Symposium on Reproductive Biology and Comparative Endocrinology*, 2002, 127-128.
3. P Daisy, N Nirmalpriya, **M Rajathi**. Immunomodulatory activity of *Eugenia jambolana*, *Clitoria ternatea* and *Phyllanthus emblica* on alloxan-induced diabetic rats. *Journal of Experimental Zoology*, Vol. 7, 2004, 269-278.
4. P Daisy, R Jasmine, M Uma, **M Rajathi**. Therapeutic effects of *Eugenia jambolana* and *Phyllanthus emblica* on alloxan induced diabetic rats. *Journal of Experimental Zoology*, Vol.9, 2006, 109-115.
5. P Azhagu Saravana Babu, **M Rajathi**, K Vanitha, SR Amruthavarshini Aithal. Lipase enzyme production and purification from *Pseudomonas aeruginosa* using characterized poly acrylo nitrile membrane by ultrafiltration. *Proceedings of the National Conference on Innovations and Emerging Trends in Biotechnology*, 2009, 27-30.
6. Daisy Pitchai, Azhagu Saravana Babu, **Rajathi Modilal**. Antihyperglycemic effects of *Phyllanthus* extracts in alloxan –induced diabetic rats. *International Journal of Pharmaceutical Sciences* 2009, Vol 1, 261-264.
7. **Rajathi Modilal**, Daisy P. Hypoglycemic effects of *Elephantopus scaber* in alloxan-induced diabetic rats. *Indian Journal of Novel Drug Delivery*, Vol 3, 2011, 98-103.
8. **M Rajathi D Modilal**, Daisy Pitchai. Hypoglycemic and hypolipidemic effects of *Phyllanthus* (Euphorbiaceae) fruits in alloxan-induced diabetic rats. *Journal of Biotechnology and Biotherapeutics*, Vol 1, 2011, 34-39.
9. **M Rajathi D Modilal**, J Joseph. Evaluation of the hypoglycemic effects of *Elephantopus scaber* in alloxan- induced diabetic rats. *Proceedings on International Conference on Biomedical Instrumentation, Engineering and Environmental Management*, 2011, 66-70
10. **M Rajathi D Modilal**, Rajitha R Sheno, Nivya Sebastian, J Joseph, K Mugundan, A Saravanan. Isolation, purification and characterisation of proteases from vegetable waste. *International Journal of Institutional Pharmacy and Life Sciences*, Vol 1(2), 2011, 1-11.
11. **M Rajathi D Modilal**, V Karthikeyan, K Sivakumar, R Magesh, Karthika VC, Smera Sureshan, Bhuvanewari V, Abarna K, Vishal Anand. Isolation, purification and characterisation of proteases from fish waste. *International Journal of Institutional Pharmacy and Life Sciences*, Vol 1(3), 2011, 36-45.
12. Sheeladevi, A., Johana Rajkumar, **Rajathi D Modilal**, Ilayaraja, R. Antimicrobial activities of *Avicennia marina*, *Caesalpinia pulcherrima* and *Melastoma malabathricum* against clinical pathogens isolated from UTI. *International Journal of Pharma and Bio Sciences*, 2012, 3(3) (B): 698-705.
13. **M. Rajathi D. Modilal**, P. Daisy, A. Sheela Devi, V. Bhuvanewari, K. Abarna. Antidiabetic and antimicrobial activity of *Acalypha indica* Linn. extracts. *Journal of Scientific Research in Pharmacy*, 2012, 1(3), 73-75.

14. **M Rajathi D Modilal**, R Magesh, V Karthikeyan, K Sivakumar, M Gopinath, C Mohanapriya, Aswathi Ramac handran, Neethu Devi V S. A comparative study on the adsorption of methylene blue using rice and coconut husk. Research journal of pharmaceutical and biochemical sciences, 2013, 4(1), 241-246.
15. C Mohanapriya, S Uma, **M Rajathi D Modilal**, N Nithyalakshmi. Phytochemical screening and in vitro antioxidant studies on acetone extract of *Manilkara zapota* L. seeds. International Journal of Pharmaceutical Sciences and Research, 2014 5(6), 2354-61.
16. **M. Rajathi D Modilal**, T Sathiyavathi and S. Jahira Banu. Anemia in Indian Women. *Exploring gender issues in multi-dimensional approaches*, JAZYM publishers, 2015, 361-367.
17. S Catharin Sara and **M Rajathi D Modilal**. Corporate Skills. Academia and Society, 2015, 1(2), 43-47.
18. **M.Rajathi D Modilal**, R. Anandan, R. Sindhu and M.N. Logeshwari. Screening of *Solanum nigrum* for its phytochemical and antimicrobial activity against respiratory tract pathogens. International Journal of Pure and Applied Zoology, 2015, 3(3), 210-215.
19. **M. Rajathi D Modilal**, R. Anandan and Logeshwari, M. N. Antibacterial activity of *Premna latifolia* leaves against isolated cariogenic pathogens. Journal of Experimental Zoology India, 2015, 18(1): 433-436.
20. Monicka Seles J, Jahira Banu, Anandan R, Logeshwari MN, **Rajathi D Modilal** (2016). Anticariogenic effect of silver nanoparticles synthesized using *Premna latifolia* Leaves. Indian Journal Of Natural Sciences Vol.6, Issue 35,10708-13. ISSN: 0976 – 0997.
21. Jahira Banu S, Monicka seles J, Anandan R and **Rajathi D Modilal M** (2016). Antimicrobial Activity of *Bignonia magnifica* and its Silver Nanoparticles against Urinary Tract Infection Pathogens. Indian Journal of Natural Sciences Vol.6, Issue 35,10859-65. ISSN: 0976 – 0997.
22. **M Rajathi D Modilal**, R. Cecily Rosemary Latha, and S. Jeyaparvathi (2018). Moral Values for the Transcendence of Youth- A Review. Published in the Proceedings of the National Conference on Youth and Values, Organized by the Department of Value Education, Holy Cross College, Trichy, ISBN:978-93-83069-323.
23. Azhagu Saravana Babu P, Vajiha Aafrin B, Renuka V, Shalini Priyanga C, Pooja D, Archana G, **Rajathi M Modilal D** (2020). Polyphenolic composition and invitro evaluation of radical scavenging and anti diabetic properties of *Canthium parviflorum*. International journal of research in pharmaceutical sciences, 11, 1056-1061.
24. Jayanthi, B Cesily Rosemary Latha R and **Rajathi D Modilal** (2020). A comparative study on the Composing performance of garden leaf litter into vermicompost by using *Eudrilus eugenie*. International Journal of Education and Society. Volume 6. No. 1& 2, Page No.7(ISSN: 2581-5423).
25. **M Rajathi D Modilal**, R Sindhu, R Cecily Rosemary Latha and R Anandan (2020). Phytochemical and Antimicrobial Activity of *Solanum torvum* Against Respiratory Tract Pathogens. Acta Scientific Pharmaceutical Sciences, Volume 4 Issue 1, Page No. 69 (ISSN: 2581-5423).

26. Cecily Rosemary Latha, Jayanthi, B and **Rajathi D Modilal**. In vivo and In vitro analysis of anti-inflammatory efficacy of *Curculigorchiodes* rhizomes (2020). International Journal of Education and Society. Volume 6. No. 1& 2, Page No.73(ISSN: 2581-5423).
27. Cecily Rosemary Latha, Jayanthi, B and **Rajathi D Modilal (2020)** (Studies on *Oryzaephilus surimamensis* infestation and Management in the date fruits. International Journal of Education and Society. Volume 6. No. 1& 2. Page No. 78(ISSN: 2581-5423).
28. **M. Rajathi D Modilal**, Hema. R, Azhagu Saravana Babu. P& Anandan. R (2022). Effect of methanolic extract of *Boerhaavia diffusa* stem on struvite crystals - an in vitro study. International Journal of Zoology and Research (IJZR) Vol. 12, Issue 1, 13–18. ISSN (P): 2278–8816; ISSN (E): 2278–8824.
29. **M.Rajathi, D.M.** and Viji, M., (2022). Gene Expression of UMOD in the Blood of Patients with Chronic Kidney Disease. Proceedings on, “Insights into the current scenario of natural resources in India”, Published by Biodiversity Conservation Foundation Trichy, India,71-83.
30. **M.Rajathi, D.M.**, Albina, S. and Mayavathi, M., (2022). In-vitro Analysis of *Premna latifolia* Leaves Against Kidney Stones. Proceedings on, “Insights into the current scenario of natural resources in India”, Published by Biodiversity Conservation Foundation Trichy, India, 99-115.
31. G. Kulandaimary and **M. Rajathi D Modilal.**, (2024). Usage of e-resources in libraries among women faculty members in selected colleges in Tamilnadu. Proceedings of the International Multidisciplinary Conference on, “Recent Research Trends and Technologies 2024”, Published by AIMAN COLLEGE OF ARTS AND SCIENCE FOR WOMEN, 1-8 (ISBN: 978-81-970541-6-7).
32. G. Kulandaimary and **M. Rajathi D Modilal.**, (2024). Bridging the knowledge gap: The role of technology in connecting users to digital resources. Proceedings of the National Conference on, “Connecting users to library resources through innovative technologies”, published by Department of Library, Nirmala College for Women (Autonomous) and Society for the Advancement of Library and Information Science, 582-587 (ISBN: 978-93-85469-12-1).

b. International Journal : 05

1. **M Rajathi** and P Daisy. Hypoglycemic and other related effects of *Cichorium intybus* in alloxan-induced diabetic rats. Journal of Tropical Medicinal Plants, Vol. 4, 2003, 81-90.
2. P Daisy, HI Averal, **M Rajathi**. Curative properties of *Phyllanthus* extracts in alloxan diabetic rats. Journal of Tropical Medicinal Plants, Vol. 5, 2004, 21-27.
3. Daisy P, Nirmala A, **Rajathi M**. Hypoglycemic and other related effects of *Elephantopus scaber* extracts on alloxan-induced diabetic rats. Journal of Biological Sciences, Vol 7, 2007, 433-437.
4. Daisy, P., Santhosh, K., **Rajathi, M**. Antihyperglycemic and antihyperlipidemic effects of *Clitoria ternatea* Linn. in alloxan-induced diabetic rats. African Journal of Microbiology Research, Vol 3, 2009, 287-291.

- 5 Daisy P, **Rajathi M.** Antihyperglycemic effects of *Clitoria ternatea* Linn. in alloxan-induced diabetic rats. Tropical Journal of Pharmaceutical Research, Vol 8 (5), 2009, 393-398.

ii. Research Paper Presented (Original Articles):43

1. Presented a paper entitled, "Studies on the responses of bajra seedlings to bioinoculants" in the State Level Seminar on, 'Recent Trends in Biological Sciences' at Avinashilingam University on Dec 5, 1998.
2. Presented a paper entitled, "Effect of plant extracts on the blood glucose level of normal and alloxan diabetic rabbits" in the National Symposium on, 'Medicinal Plants- Diversity, Utilization and Conservation' at St Joseph's College during Feb 5-6, 2001.
3. Presented a paper entitled, "Evaluation of the oral hypoglycemic effect of *Cichorium intybus* in alloxan diabetic rats" at the XX National Symposium on, 'Reproductive Biology and Comparative Endocrinology' at Bharathidasan University during Jan 7-9, 2002.
4. Presented a paper entitled, "Indigenous Herbs-Prospective Cure for Diabetics" at the international conference on, 'Sustainable Development and Management of Natural Resources' at Holy Cross College on Mar 16, 2003.
5. Presented a paper entitled, "Anti-diabetic effect of *Elephantopus scaber* in alloxan-induced diabetic rats" at 14 All India Congress of Zoology at Kanyakumari from 21-23 Dec 2003.
6. Presented a paper entitled, "Evaluation of antihyperglycemic effect of *Elephantopus scaber*, *Eugenia jambolana* and *Clitoria ternatea* in alloxanised diabetic rats." at the XX National Symposium on Reproductive Biology and Comparative Endocrinology at Dr ALM Post Graduate Institute of Basic Medical Sciences, University of Madras during Jan 25-27, 2004.
7. Presented a paper entitled, "Therapeutic properties of *Clitoria ternatea* extracts in alloxan-induced diabetic rats" in HAPTEN2K9 (National Level Technical Symposium) conducted by Department of Biotechnology on 19-20 March 2009 at Arunai Engineering College, Tiruvannamalai.
8. Presented a paper entitled, "Therapeutic properties of *Phyllanthus* extracts in alloxan-induced diabetic rats" in the National Conference on Diabetes Mellitus and Cancer during 19 & 20 December 2009 in the Department of Biochemistry & Biotechnology, Annamalai University, Chidambaram.
9. Presented a paper entitled, "Antihyperglycemic effects of *Clitoria ternatea* Linn. in alloxan-induced diabetic rats" in National Conference conducted by Department of Biotechnology on 11-12 March 2010 at Adhiyaman Engineering College, Hosur.
10. Presented a paper entitled, "Antihyperglycemic effects of *Elephantopus scaber* extracts in alloxan- induced diabetic rats" in National Symposium on Current Perspectives in Animal Biotechnology on 3-4 Feb 2011 at Bharathidasan University, Tiruchirappalli.
11. Presented a paper entitled, "Therapeutic effects of *Elephantopus scaber* extracts in alloxan- induced diabetic rats" in National Symposium on Current Perspectives

- in Animal Biotechnology on 3-4 Feb 2011 at Bharathidasan University, Tiruchirappalli.
12. Presented a paper entitled, "Evaluation of the hypoglycemic effects of *Elephantopus scaber* in alloxan- induced diabetic rats" in International Conference on Biomedical Instrumentation, Engineering and Environmental Management on 22-23 July 2011 at Karpaga Vinayaga College of Engineering and Technology, Kanchipuram.
 13. Presented a paper entitled, "Isolation, purification and characterisation of proteases from vegetable waste." in National Seminar conducted by Department of Biotechnology on 24-25 August 2011 at Adhiyaman College of Engineering, Hosur.
 14. Presented a paper entitled, "Antidiabetic and antimicrobial activity of *Acalypha indica* Linn extracts" in UGC-SAP sponsored National Conference on Diabetes Mellitus and Cancer on 17 Dec 2011 at Annamalai University, Chidambaram.
 15. Presented a paper entitled, "Antibacterial activities of the leaves of *Acalypha indica*" in DBT sponsored National Conference on Application of stem cell therapy in medicine and dentistry-Current and future scenario in India on 23-24 Jan 2012 at Karpaga Vinayaga College of Engineering and Technology, Kanchipuram.
 16. Presented a paper entitled, "In vitro antioxidant studies and phytochemical analysis of acetone extract of *Manilkara zapota* L. seeds and profiling of its secondary metabolites" on Aug 2, 2012 on Newer Vista in the Frontier Areas of Biotechnology organized by Department of Biotechnology, PITAM, Chennai.
 17. Presented a paper entitled, "Antimicrobial activities of *Avicennia marina*" in one day Symposium on Aug 22, 2012 on, "Recent Trends in Biotechnology" organised by Department of Biotechnology, KVCET.
 18. Presented a paper (Antibacterial and antidiabetic activity of *Acalypha indica* Linn. leaves extract) in the national conference on, "Evolutionary trends in biochemistry and molecular biology-Biotrendz- 2012" held during Sep 20 and 21, 2012 organised by Department of Biochemistry, Bharathidasan University.
 19. Presented a paper entitled, "**Isolation and characterisation of proteases isolated from vegetable waste**" in one day national seminar on Sep 24, 2012 on, "New horizons in Biotechnology and Bionanomedicines" organised by Department of Biotechnology, Periyar University.
 20. **Awarded third place** for the paper entitled, "Antidiabetic effects of *Elephantopus scaber* in diabetic rats" in one day national level students symposium on Sep 29, 2012 organized by Department of Biotechnology, St. Josephs College of Engineering.
 21. Presented a paper entitled, "Isolation, purification and characterization of alkaline proteases from the intestines of three commercially available fishes" in the National Conference on Diagnostic and therapeutic challenges in food safety diseases in India-A Biotechnological Approach on 24-25 Jan 2013.

22. Presented a paper entitled, “Therapeutic effects of *Acalypha indica* Linn. leaves extract” in the International Conference on Innovations in Molecular Therapeutics (Avidham’ 13) held at Anna University, Chennai on 28-31 Jan 2013.
23. Presented a paper entitled, “Antibacterial activity of *moringa oleifera* extracts and phytochemically synthesized silver nano particles against isolated urinary tract infectious bacterial pathogens” at the two-day National Level Students Technical symposium on 1-2 Mar 13, organized by Department of Biotechnology, Vivekananda College of Engineering for Women.
24. Presented a paper entitled, “Therapeutic properties of *Acalypha indica* Linn. extracts” in the International Conference on Bioactive Phytochemicals and Therapeutics (ICBPT-2013) held at Annamalai University, Chidambaram on 5-7 Apr 2013.
25. Presented a paper in the international conference organized by **Bharathidasan University** (Department of Environmental Biotechnology) on Health and Climate in Changing Environment on Sep 14-16, 2016.
26. Presented a paper entitled, “Moral Values for the Transcendence of Youth” in the one-day national conference on Youth and Values conducted by Department of Value Education of Holy Cross College (Autonomous), Tiruchirappalli-620 002 on 01 Dec 2017.
27. Presented a poster entitled, “Preparation, characterisation and anticariogenic property of silver nanoparticles synthesized using *Premna latifolia* leaves” in the **International Conference on Innovations and Challenges in Biomedical Sciences Research** organized by Department of Biotechnology of Holy Cross College (Autonomous), Tiruchirappalli-620 002 on 12-14 Dec 2017.
28. Presented a paper entitled, “**Mother Claudine Echernier as Joyful Witness**” in paper presentation held for staff during Mother Foundress Day Celebration on August 9, 2019.
29. Presented a paper entitled, “Antirolithic property of methanolic extract of *Premna latifolia* leaves” at VITA FEST – 2K19, National Level Intercollegiate Meet organized by Srimad Andavan Arts & Science College, Trichy on 9 January 2019
30. Presented a paper entitled, “**Green synthesis of silver nanoparticles using *Premna latifolia* leaves and its anticariogenic property**” at 9th National Conference organized by Tamil Nadu Scientific Research Organization in Association with Pushkaram Agricultural College held on 24 august 2019.
31. Presented a paper entitled, “Effect of Methanolic extract of *Boerhavia diffusa* stem on struvite crystal” at 9th National Conference on Natural Sciences organized by Bose Science society at Pushkaram college of Agricultural Sciences, Pudukkottai on 24 august 2019.
32. Presented a paper entitled, “A Study on the Prevalence and Diagnostic Markers of Rheumatoid Arthritis” at ‘International Conference on Sustainable Management and Conservation of Natural Resources’ – sponsored by National Biodiversity

- Authority, Government of India conducted by Department of Zoology, Periyar E.V.R. College (Autonomous), Trichy on 15th February 2020
33. Presented a paper entitled, “Invitro study of antiurolithic property of *Premna latifolia* bark in ‘International conference on Recent trends in Biotechnology and Biomedical Engineering (ICRTBB)’ conducted by Department of Biotechnology and Biomedical Engineering. Karpaga Vinayaga College of Engineering and Technology, Chengalpattu on 25 February 2021.
 34. Participated and presented a paper entitled, “In-Vitro evaluation of antiurolithic properties of *Premna latifolia* leaves against CHPD crystals” at International Virtual Conference titled Transdisciplinary Research, Innovation and Entrepreneurship for Sustainability held at Holy Cross Incubation and Innovation Council, Holy Cross College (Autonomous), Tiruchirappalli-620 002 sponsored by UGC-Stride on 28-30 Sep, 2021
 35. Participated and presented a paper entitled, “In-vitro and in-silico analysis of *Macrotyloma uniflorum* against kidney stones” in Two Days National Conference on “Global Marine Diversity- Status, Threats and Conservation-(NCGMB, 2022)” sponsored by DBT conducted by Department of Zoology, VV Vaniaperumal College for Women, Virudhunagar-626001 on 09.03.2022 to 10.03.2022
 36. Participated and presented a paper entitled, “Gene expression of UMOD in the blood of patients with chronic kidney disease” National e- Conference on Insights into the current scenario of conservation of natural resources in India – 2022 sponsored by National Biodiversity Authority conducted by Department of Zoology, Thanthai Periyar Government Arts and Science College on March 24 & 25, 2022.
 37. Participated and presented a paper entitled, “The UMOD and SHROOM3 proteins: Insights into their interaction with *Macrotyloma uniflorum* phytochemicals and Prognosis of Kidney Disease” at International Conference on, “Material Science for Sustainable Development” School of physical Sciences, The PG and Research Department of Chemistry, Holy Cross College (Autonomous) Trichy on 23.08.2022-24.08.2022.
 38. Participated and Paper Presented entitled ‘Inhibition of the growth of calcium hydrogen phosphate dihydrate crystals with extracts of *Premna latifolia* leaves’ in International Conference on “Environmental Management and Sustainable Development” held at PG Department of Environmental Science, Holy Cross College, Tiruchirappalli on 24th January 2023.
 39. Participated and Paper Presented titled “Importance and Need of value Education in Today’s Society” at International Conference on “The Transformative Power of Value Education for the development of Youth Today” conducted by Department of Value Education, Holy Cross College, Tiruchirappalli on 8th February 2023.

40. Participated and presented a poster entitled “Green synthesis of silver nano particles, its characterisation and antimicrobial activity against isolated UTI pathogen” at Intercollegiate Technical Fest conducted by the Department of Biotechnology, School of Biological Sciences, St. Joseph’s College (Autonomous), Tiruchirappalli on 22 September, 2023.
41. Presented a poster entitled “**Antiuro lithic property of *Macrotyloma uniflorum***” at Intercollegiate Technical Fest conducted by the Department of Biotechnology, School of Biological Sciences, St. Joseph’s College (Autonomous), Tiruchirappalli on 22 September, 2023.
42. Presented a poster entitled, “Bioremediation: Role of zooplankton” at the One Day National Conference on, “Eco Harmony 2024: Exploring the Web of life in Zoology” held on 23 February 2024, organized by the PG & Research Department of Zoology, Holy Cross College (Autonomous), Tiruchirappalli.
43. Presented a paper at the International Multidisciplinary Conference on, “Recent Research Trends and Technologies 2024”, organized by AIMAN COLLEGE OF ARTS AND SCIENCE FOR WOMEN on 22 June 2024.
44. Presented a paper at the National Conference on, “Connecting users to library resources through innovative technologies”, organized by Department of Library, Nirmala College for Women (Autonomous) and Society for the Advancement of Library and Information Science on 4 and 5 October 2024.

CONFERENCE / SYMPOSIUM / WORKSHOP ATTENDED: 29

1. Participated in the National Conference on International Networking of Human Resource, Industry and Technology organized by Holy Cross College during Jan 10-12, 2001.
2. Attended the National Level Technical Symposium on “Advancement and Challenge in Biotechnology” organized by Department of Biotechnology at Pavendar Bharathidasan College of Engineering & Technology during Mar 2-3, 2007.
3. Attended the National Symposium organized by PG Department of Biotechnology and Bioinformatics at Holy Cross College during Jan 23-25, 2008.
4. Participated in the National Conference on "Biohydrogen-An Innovative Fuel" Sponsored by MNRE, New Delhi and organized by the Department of Biotechnology and Petrochemical Technology, Periyar Maniammai University, Vallam, Thanjavur from Jan 21-23, 2009.
5. Participated in **BIOXPLORE** (A National Level Workshop) organized by the Department of Biotechnology, MVJ College of Engineering, on Feb 27, 2009.
6. Attended a Workshop organized by **Microsoft Corporation & MVJ College of Engineering** on Advanced Developer Technologies on May 28, 2009.
7. Attended a One Day National Seminar organized by **Bharathidasan University** (Department of Microbiology) on Diagnosis of Infectious Diseases by Molecular Biological Methods on Nov 29, 2010.

8. Attended a One Day Workshop during 27 National Science Day Celebration, **SciGATHER 2013** held at VIT University, Vellore on Feb 28, 2013.
9. Attended a One Day International Workshop on **Research Methodology** organized by Department of Mechanical Engineering & Automobile Engineering, Karpaga Vinayaga College of Engineering and Technology on Apr 3, 2013.
10. Attended a workshop, "**Basics of Bioinformatics & CADD**" organized by Department of Biotechnology, Holy Cross College (Autonomous), Tiruchirappalli-620 002 on Aug 12-14, 2014.
11. Attended a one-day national seminar on "Advances in Animal Science for Sustainable Development" organized by Department of Zoology, Jamal Mohamed College (Autonomous), Tiruchirappalli-620 020 on Jan 5, 2017.
12. Attended a one-day national seminar on "Global Food Security and the Role of Biotechnology in Sustainable Food Systems and Nutrition" organized by Department of Biotechnology, St. Joseph's College (Autonomous), Tiruchirappalli-620 002 on Feb 15, 2018.
13. Attended the Science Academies Lecture Workshop held at Department of Zoology, Seethalakshmi Ramasamy College (Autonomous), Tiruchirappalli-620 002 on Jun 21-22, 2018.
14. Participated in the 8th National Conference on Natural Sciences & Award Presentation Ceremony organized by Bose Science Society, Tamilnadu Scientific Research Organization, Pudukkottai, Tamilnadu, on Sep 15, 2018.
15. Participated in One Day National Webinar on "Research Report Writing and Publication in Indexed Journals" conducted by Research Department of Zoology, A.D.M. College for Women (Autonomous), Nagapattinam-611 001 on 4th May, 2021.
16. Participated in National Level 5 Days Faculty Development Program (FDP) on "Data Analysis in Social Science using SPSS" conducted by PG Department of Library & Information Science, and Central Library, Holy Cross College (Autonomous), Tiruchirappalli-620 002 from 12th July to 16th July, 2021.
17. Participated in One day National Webinar on "Give Your Stress Wings and Let it Fly Away" conducted by Saint Francis De Sales College, Nagpur on 11th September, 2021.
18. Participated in Five days online FDP on "The Heterogenous Perspectives of Life Sciences" conducted by PG & Research Department of Zoology, Holy Cross College (Autonomous), Tiruchirappalli on 16.08.2021 – 20.08.2021
19. Attended a Fifteen Day International Online Faculty Development Programme on Gender Equality and Empowerment today for a sustainable tomorrow conducted by UGC Department of Women's Studies, BDU, Tiruchirappalli & PG & Research Department of Rehabilitation Science, Holy Cross College (Autonomous), Tiruchirappalli-620 002 from 16/03/2022 to 31/03/2022.
20. Participated in One Day Conference on "Challenges and Opportunities in Life Sciences" conducted by School of Life Sciences, Holy Cross College, Tiruchirappalli on 8th February 2023.
21. Participated in International Conference on "Future Prospects in Cancer Nanotechnology" conducted by School of Life Sciences, PG Department of Biochemistry, Holy Cross College, Tiruchirappalli on 21 February 2023.

22. Participated in three-day FDP on Emotional Intelligence conducted by ICT academy at MAM College of Engineering, Tiruchirappalli from 26-28 June 2023.
23. Participated in national Conference on “Industrial Safety and Occupational Health-Improving the Care and Well-being of the Workers through Science and Technology” organized by the Department of Biotechnology, Karpaga Vinayaga College of Engineering and Technology during 17 & 18 August, 2023.
24. Participated in International Conference on “New Scientific Dimensions on Therapeutic Aspects of Millets” organized by the PG Department of Biochemistry, Holy Cross College (Autonomous), Tiruchirappalli on 8 September, 2023.
25. Participated in online FDP on, “CADD and Systems Biology” conducted by PG and Research Department of Biotechnology, Holy Cross College (Autonomous), Tiruchirappalli-620 002 between Dec 18-22, 2023.
26. Participated in the International Conference on, Recent Advances in Physical Sciences (ICRAPS-2024), organized by School of Physical Sciences at Holy Cross College (Autonomous), Tiruchirappalli held on 19 and 20 January 2024.
27. Participated in the National Level Webinar on “Philosophy and Ethics” organized by the AIMAN College of Library and E-Resource Centre, AIMAN College of Arts and Science for Women, Trichy-620 021, Tamilnadu on 19th March 2024
28. Attended a workshop jointly organized by All India Association for Christian Higher Education (AIACHE), New Delhi and St. Joseph’s College (Autonomous), Tiruchirappalli on, “AI Tools for Smart Teaching and Learning” conducted between 2 to 4 April 2024.
29. Attended a National Seminar cum Workshop on “Biotechnological Approaches in Improvisation of Value-Added Products from Organic Farming-Clean and Green India Mission” organized by the Department of Biotechnology, Karpaga Vinayaga College of Engineering and Technology during 10 and 11 May 2024, sponsored by Science and Engineering Research Board (SERB), Government of India, New Delhi.

EDUCATIONAL QUALIFICATION

Course	Board / University	% of Marks
S.S.L.C	Central Board of Secondary Education	79.6
Higher Secondary	Maharashtra State Board	81.5
B. Sc (Chemistry)	Bharathidasan University	78.7
M.Sc (Biochemistry)	Bharathidasan University	67.3
M.Phil (Biochemistry)	Avinashiligam University	73
Ph. D (Biochemistry-Zoology)	Bharathidasan University	Awarded on 10 May 2006

TRAINING PROGRAMME ATTENDED:

1. Participated in the training course on, “Electrophoresis Techniques” held between Nov 5-10, 2001 at “The Electrophoresis Institute” at Yercaud.
2. Attended One Day Hands on Training offered by QIAGEN - Real Time PCR on Nov 25, 2017.

EXTRACURRICULAR

1. Participated in Yoga event that was documented in **Pathanjali Book of World Records** on Jun 21, 2016.
2. Attended a **Meditation Class** at **Bodhi Zendo**, Perumalmalai, Kodaikanal from 13 to 20 May 2024.

MEMBERSHIP: 03

1. International Natural Hygiene Society
2. European Federation of Biotechnology
3. Fellow & Life member of Bose Science Society

RESPONSIBILITIES HELD

1. Worked as **NSS Coordinator** at Holy Cross College between Jun 1999-Apr 2001.
2. Served as **HOD** in P.G. Department of Biochemistry at Pavender Bharathidasan College of Arts and Science, Tiruchirappalli from Jun 2004-Apr 2005.
3. Served as **NBA Coordinator** of MVJ College of Engineering, Bangalore, Karnataka from 2006 to 2010.
4. Served as **NBA Coordinator** of Karpaga Vinayaga College of Engineering and Technology, Kanchipuram from 2010 to 2014.
5. Served as **Core Committee member of Alumna Department** of the institution from 2014 to 2021.
5. Currently serving as Core committee member of **Department of Value Education**, (2014 onwards), **Criteria VII** (from 2017 to 2021; 2024 onwards) and **Vizhuthugal 100 Project** (2023 onwards) of the institution.

Declaration

I certify that the information furnished above are true and correct to the best of my knowledge and belief.

Place: Tiruchirappalli

Date: 13/10/2024

yours sincerely,



Dr M. RAJATHI D MODILAL