



SHRIMATI INDIRA GANDHI COLLEGE

(Affiliated to Bharathidasan University)

Nationally Accredited at 'A' Grade (4th Cycle) by NAAC | An ISO 9001 : 2015 Certified Institution
Tiruchirappalli - 620 002

Name : Dr. P. Priya Dharsini
Designation : Assistant Professor
Department : PG and Research Department of Microbiology
Qualification : M.Sc., M.Phil. PGDHT., Ph.D., NET (ICAR)., PDF.,
Experience : Teaching: 4 years Research: 5 (Excluding Ph.D period)
Area of Specialization(s) : Actinobacteriology Secondary Meta
Area of Specialization(s) : Actinobacteriology; Secondary Metabolites
Email (Official ID) : priyadharsinip@sigc.edu
Aadhar Number : 9643 1260 7455

Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.,	Microbiology	Bharathidasan University, Trichy -24.	2014
M. Phil.,	Environmental Biotechnology	Bharathidasan University, Trichy -24.	2009
M.Sc.,	Microbiology	Srimad Andavan College of Arts & Science, Trichy -05	2008
B.Sc.,	Microbiology	Shrimati Indira Gandhi College, Trichy-02	2006

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
PGDHT	Herbal Technology	Srimad Andavan College of Arts & Science, Trichy -05	2007

NET	Agricultural Microbiology	Indian Council of Agricultural Research, New Delhi	2018
Post-Doctoral Fellow	Antimicrobial Peptides	University Grants Commission, New Delhi	2015

Research Guidance

Programme	No. of Students	
	Completed	Pursuing
M.Sc., Microbiology	9	
B.Sc., Microbiology	10	

Research Publications (Indexed)

International

- P.Priyadharsini**, D. Dhanasekaran and B. Kanimozhi (2012): Isolation and Structural characterization of N-(naphthalen-1-yl) propanamide, an herbicidal compound from *Streptomyces* sp KA1-3. Archives of Phytopathology and Plant Protection, 46.3, 0.290.
- P.Priyadharsini**, D. Dhanasekaran and B. Kanimozhi (2012): Isolation and Structural characterization of N-(naphthalen-1-yl) propanamide, an herbicidal compound from *Streptomyces* sp KA1-3. Microbiological Research in Agroecosystem Management 187-195.
- P. Priyadharsini** and Dhanasekaran, D (2015): Diversity of Soil Allelopathic Actinobacteria in Tiruchirappalli district, Tamilnadu, India, Journal of the Saudi Society of Agricultural Sciences, 14, 54-6.
- P.Priyadharsini**, P.M. Gopinath, S. Megala and D. Dhanasekaran (2014): Medium Optimization for Herbicidal Compound Production from *Streptomyces anulatus* using Response Surface Methodology, Scientific transactions in environment and technovation, 8:1, 20-26.
- Ranjani, P. M. Gopinath, K. Rajesh, D. Dhanasekaran and P. Priyadharsini (2016): Diversity of Silver Nanoparticle Synthesizing Actinobacteria Isolated from Marine Soil, Tamil Nadu, India, Arabian Journal of Science and Engineering, 41, 25- 32.
- P.Priyadharsini**, D. Dhanasekaran, K. Ramanathan, V. Shanthi, S. Chandraleka and Bhaskar Biswas (2017): Spectroscopic Identification and Molecular Modelling of Diethyl, 7-

hydroxytrideca-2, 5, 8, 11-tetraenedioate: a Herbicidal Compound from *Streptomyces* sp, Arabian Journal of Science and Engineering, 42, 2217- 2227.

7. **P. Priya Dharsini** and P. Selvamani. (2019): Actinobacterial species selection for production of antimicrobial peptide using PROMETHEE GAIA. International Journal of Pharmacy and Biological Sciences, 9(2), 259-268.
8. **P.Priya Dharsini**, P. Selvamani and S. Latha. (2020). Current Strategies in Peptide Conjugated Nanoparticles: A novel approach in the Field of Biomedicine. Handbook of Research on Nano-Strategies for Combatting Antimicrobial Resistance and Cancer. 1- 19.
9. E.Devi, R. Bharathidasan and **P. Priya Dharsini**. (2025). Antioxidant properties and Bioactivity of *Streptomyces albicans* DR57. Journal of Pure and Applied Microbiology, 19(1), 707 – 713.
10. Winny fred crossia, **P.Priya Dharsini**, K.Vijiyalakshmi and M.Mohamed Mahroop Raja. (2025). Exploration of carica papaya L., extract infused silver nanoparticles against *Staphylococcus* sp from acne skin lesions. Biochem.cell.Arch, 25 (1), 493 – 500. **Book Publications** .
11. Book entitled “Recent Advances in Microbial Sciences” ISSN No. 978-81-979376-7-5 in JPS Scientific publications, India.

Presentations in Conference

INTERNATIONAL

1. International conference on “Recent Advances in Biosciences” held at Department of Microbiology, Dhanalakshmi Srinivasan college of Arts and sciences for Women, Perambalur on January 8th and 9 th, 2008.
2. International conference on “Recent trends in Biomedical Sciences” held at PG and Research Departments of Zoology, Biotechnology and Bioinformatics, Holy Cross College, Tiruchirappalli on January 7th to 9th, 2014. Title - Herbicidal compound and its allelopathic activity of terrestrial Actinobacteria.

NATIONAL

1. Regional level inter- collegiate competition” Microspark-07” organized by Department of Microbiology, Shrimati Indira Gandhi College, Tiruchirappalli on 9th January, 2007.
2. Symposium on “Bioresources in the Development of Medicine and 28th Annual Conference of Indian Association of Biomedical Scientist” held at National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli on 20th to 22nd Sep, 2007.
3. National seminar on “Advances in Microbiology” organized by PG and research Department of Microbiology Kurunji college of Arts and Science, Tiruchirappalli on 5th Oct, 2007. Title:

Biofertilizer for efficient nitrogen use in maize, sorghum, raddish and ladies finger

4. National seminar on “Medicinal Plant Research and Marketing - Present Scenario” organized by Department of Herbal Technology, Srimad Andavan Arts and Science college, Tiruchirappalli on 2nd and 3rd Feb, 2008.
5. National seminar on “Prospects and Retrospects in Microbial Technology” held at Department of Microbiology and Biotechnology, Cauvery College for Women, Tiruchirappalli on 17th& 18th Feb, 2012. Title - Characterization of actinobacterial secondary metabolites for herbicidal activity against selected weeds.
6. National Seminar on “Microbiological Research in 21st Century” held at Department of Microbiology, Bharathidasan university, Tiruchirappalli on 27th and 28th Feb, 2012 and received the best poster award. Title - Evaluation of Herbicidal Compound from *Streptomyces* sp against weeds.
7. National Seminar on “Cutting Edge Microbial Research and Challenges” held at Department of Microbiology, Bharathidasan University, Tiruchirappalli on 25th and 26th Feb, 2013. Title – Allelophytic actinobacterial diversity from paddy field soils of Tiruchirappalli district
8. National Seminar on “Microbiology and Microbial Technology” organized by Department of Botany, St. Teresa’s college, Ernakulum on October 7th and 8th, 2013. Title - Characterization and Biological Evaluation of Herbicidal Compounds from Actinobacteria.
9. National Seminar on “Microbes and Human Welfare” organized by National Academy of Biological Sciences and Department of Microbiology, Bharathidasan university held on July 20th and 21th 2013. **Received best poster award.** Title - Allelopathic properties of Herbicidal Compound from Actinobacteria.
10. State level symposium on “Microbe- A remedy for Environmental pollutants” held at PG and Research Departments of Microbiology, Adhiparasakthi College of Arts and Science, Kalavai on 19th December 2018. Title -Preliminary assessment of antimicrobial peptide producing *Streptomyces* sp. for multidrug resistance.
11. National seminar on “Recent Trends in Ethics and Healthy by Nature” held at PG and Research Department of Zoology, Abdul Hakeem College, Melvisharam on 1st March, 2018. Title - Characterization and Biological attributes of antimicrobial peptide from *Streptomyces rochei*.
12. National symposium on “Multidrug resistance microbes and its impact” held at PG and Research Departments of Microbiology, Adhiparasakthi College of Arts and Science, Kalavai on 18th September 2019. Title - Characterization of crude antimicrobial peptide from actinobacteria for multidrug resistance pathogens.

International

1. International conference on “Innovations and challenges in Biomedical Sciences Research” held at Holy Cross College, Tiruchirappalli on December 12th to 14th, 2017.

National

1. National Conference on “New Opportunities and Challenges in Microbial Research” organized by Department of Microbiology, Bharathidasan University, Tiruchirappalli on 5 th and 6th September, 2013.

Participation in Seminars

1. National seminar on “Emerging Trends in Microbial Diseases and Traditional System of Medicines” organized by Department of Microbiology, Srimad Andavan Arts and Science college, Tiruchirappalli on 5th and 6th October 2006.
2. National seminar on “Recent Trends in Chemical Signaling” organized by Center for Pheromone technology, department of animal science Bharathidasan University, Tiruchirappalli on 2nd Feb, 2009.
3. Awareness program on “National Intellectual Property Awareness Mission (NIPAM)” conducted by Controller General of Patents, Designs and Trade Marks, at Shrimati Indira Gandhi College on 26.04.2023

Participation in Workshop

1. National workshop on “Recent Development in Genetic Engineering and Gene Therapy through Bactofection” organized by PG and Research Department of Zoology, Bishop Heber College, Tiruchirappalli on 26th and 27th February 2019.
2. Workshop on “Cytochemical staining Techniques” organized by the Department of Biochemistry of Shrimati Indira Gandhi College, Tiruchirappalli on 15th September 2022.
3. Participated in Five days online workshop on SPSS in Research, organized by Star International Foundation for Research and Education on 26.12.2023 – 30.12.2023.

Participation in Orientation Programme / Short Term Courses

1. UGC- Academic Staff College organized a course on” Methods in Life Science Research” held at Bharathidasan University, Tiruchirappalli on Bharathidasan University.
2. Global Initiative of Academic Networks organized a course on “A recent Trends in Life Science Research with Special Reference to Molecular Imaging, proteomics and Metabolomics” held at Department of Animal Science, Bharathidasan University, Tiruchirappalli on 12th to 16th February, 2018.
3. Completed the NEP 2020 Orientation & Sensitization programme under Malviya mission

Teacher Training programme (MM-TTP) OF University Grants Commission (UGC) Organized by UGC- Malviya mission Teacher Training Centre (UGC -MMTTC) Bharathidasan University, Trichy, from 05.02.2024 to 14.02.2024.

Participation in Faculty Development Programme

1. Faculty development program on “Innovative Pedagogies of the Future in Teaching Learning Process” organized by Department of Management Studies, Shrimati Indira Gandhi College, Tiruchirappalli on 17th to 19th March, 2022.
2. Faculty Enrichment Programme on “Shape yourself with Siddha” organized by the Department of Chemistry, Shrimati Indira Gandhi College, Tiruchirappalli on 14th July 2022.
3. Five Days International Virtual Faculty Development programme on Recent trends in Biological Sciences from 16/10/2023-20/10/2023 at SRC College, Trichy-2.
4. Six Days Virtual Faculty Development programme on Biotechnology for Entrepreneurship and startup from 20/11/2023- 25/11/2023 at Bon Socers College for Women, Thanjavur.
5. Five Days Virtual Faculty Development programme on Recent Advance in Chemical Sciences from 27/11/202- 01/12/2023 at K.S.R College of arts and Science for Women, Tiruchengode.
6. Six days Faculty Development Programme on “Understanding Outcome Based Education” organized by Internal Quality Assurance Cell at Shrimati Indira Gandhi College, Trichy from 10.06.2024 to 15.04.2024 & 18.06.2024.
7. Seven days Online Faculty Development Programme on”Workshop on Research Methodology and Publication Ethics” organized by Star International Foundation for Research and Education from 5.03.2025 to 11.03.2025

Conference / Seminar / Workshop Organized

1. **Organizing member** in the International Conference on Emerging Outlook and Recent Trends in Microbiology organized by Department of Microbiology, Shrimati Indira Gandhi College, Trichy on August 26th, 2022.
2. **Organizing member** in the International Conference on Unveiling the Frontiers in Life Sciences organized by Department of Biochemistry and PG and Research Department of Microbiology, Shrimati Indira Gandhi College, Trichy on August 17th and 18th, 2023.
3. **Organizing member** in the International Conference on Interdisciplinary Approaches in Biological Sciences for Innovative Research organized by PG and Research Department of Microbiology and Department of Biotechnology, Shrimati Indira Gandhi College, Trichy on September 27th, 2024.

Invited Speaker / Session Chair- Conference / Seminar / Workshop

1. Acted as Resource person in Arputha College of Arts and Science, Pudukkottai title on “Career opportunities in Microbiology” on 29.07.2024.

Repositories at NCBI

NUCLEOTIDE SEQUENCE

Streptomyces rochei - MG774931

Streptomyces sp. GRD - JX512257

BIOHERBICIDAL COMPOUND Deposited - 3

MODELED PROTEIN SUBMITTED IN THE PROTEIN MODEL DATABASE - PM0082709

Editorial / Review Board Member

1. Editorial Board Member in scientx Journal of microbiology from 27.02.2024 onwards
2. Reviewer in PLOS ONE Journal
3. Reviewer in Journal of Pure and Applied Microbiology (ISSN No 0973 - 7510) 24, New Maulana Azad Colony, Idgah Hills, Bhopal - 462001, Madhya Pradesh, India.
4. Reviewer in Asian Journal of Medicine and Health

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Microbiologists Society of India	Life Member	
Indian Association of Biomedical Scientist	Life Member	

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Rajiv Gandhi National Fellowship (JRF & SRF)	University Grants Commission, New Delhi.	2009
Post-Doctoral Fellow for Women	University Grants Commission, New Delhi	2015

Recognition National / International

Nature of Recognition	Organization / Institution	Year
Mentor in NPTEL	MHRD initiative, Course Approved by AICTE, New Delhi.	2024