

Name : Dr.Archana G

Designation : Assistant Professor

Department : Biotechnology

Qualification : M.Sc., PhD

Experience : Teaching -8 Years

Research : 14 Years

Area of Specialization(s) : Biopolymer- Biomedical-Food-Nano Materials

Email (Official ID) : archanag@psgrkcw.ac.in



Academic qualifications

Degree	Branch	Institution/University Name	Year of Graduation
Ph.D.	Biotechnology	Centre for Biotechnology, Anna University	2016
M. Sc.	Marine Biology	Madurai Kamaraj University	2010
B.Sc.	Biotechnology	Jaya College of Arts and Science	2008

Research Interests

- Design of smart polymers for biomedical and Environmental sensors
- Advanced packaging systems
- Smart Biopolymer & Edible Scaffold Engineering
- Eco-Green Nanotechnology
- Natural Bioactive-Driven Food Protection & Waste Valorization
- In-silico and in-vitro studies & Bioactive Compound Screening -Inspired Drug Discovery

Additional Qualifications

Diploma/ Vocational/ Certification	Area of Specialization	Institution/University/Agency Name	Year
Diploma	Lead Auditing in Quality Control	LITZ Consultancies	2018
Coursera Courses completed	9 Courses	Coursera	2023

Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
PhD	NA	1

Research Publications (Indexed)

- ✓ Published **25 research** papers in peer-reviewed international journals.
 - ✓ Presented **7 papers** in national and international conferences.
 - ✓ Contributed chapters **to 2 edited** books.
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- ❖ Kannan, K. Muruganandham, S.; Ganesan, A. Periakaruppan, R.; Kathiravan, N.; Narayanan, S. Phyto-Fabrication, Structural Characterization and Antibacterial Properties of Hybanthus enneaspermus-Assisted Mn-Doped ZnO Nanocomposites. Eng 2025, 6, 21.
 - ❖ 2. Archana Ganesan, Rajiv Periakaruppan, P. Vanathi, Selva Kumar Thirumalaisamy, Karungan Selvaraj Vijai Selvaraj. 2024. Ulva rigida-mediated silver nanoparticles: synthesis, characterization and antibacterial activity. Journal of Biomass Conversion and Biorefinery.
 - ❖ 3. Kaviarasu Ganesan, P. Vanathi, G. Sasthri, Archana Ganesan, Rajiv Periakaruppan. 2023. Green synthesis and characterization of Halymenia foesia-mediated silica nanoparticles with antibacterial potential for removal of heavy metals from water. Journal of Biomass Conversion and Biorefinery.
 - ❖ 4. Dmitry Moskovskikh, Kaviarasu Ganesan, P. Vanathi, G. Sasthri, Archana Ganesan, Rajiv Periakaruppan. 2023. Green synthesis and characterization of Halymenia foesia-mediated silica nanoparticles with antibacterial potential for removal of heavy metals from water. Journal of Biomass Conversion and Biorefinery.
 - ❖ 5. S. Babuskin, P.A.S. Babu, M. Sasikala, K. Sabina, G. Archana, M. Sivarajan. Antimicrobial and antioxidant effects of spice extracts on the shelf life extension of raw chicken meat. International Journal of Food Microbiology 171, 32-40.

Patent

S.No	Name of the Faculty	Title of the Invention	Application No.	Date of Filing	Publication Date
1	Dr. Archana Ganesan	UK Design Patent-Multi-Effect Vacuum Evaporation Based Fruit Juice Concentrator	6428318	2024	2025
2	Dr. Archana Ganesan	Rotational Drum Dryer with Convectional Heating Assembly for Drying Food Waste to Prepare Animal Feed	397670-001	2025	2023

Book Chapter Published

- ✓ **Food Waste to Valuable Resources – Applications and Management, Elsevier Publications, Chapter 10 (2020).**
- ✓ **Abstract Published in Conference Proceedings:**Title of Proceedings: International conference on ICSSR & DBT Government of India New Delhi Sponsored “International

Conference on “Current Immunological Tools for Biodiversity And Status of Environment Health” During 21- 23, August, 2019.
ISBN No: 2019-978-3-659-29407-5.

Short Term Course

- ✓ INSA Science Academies, New Delhi sponsored refresher course, St. Joseph’s College, Trichy (2018).
- ✓ Refresher course, Centre for Human Resource Development, KAHE, Coimbatore (2018).

Letter of Appreciation

- ✓ Session Chair – National & International Conferences

Acted as a Resource Person

- ✓ Chief Guest for national Science Day-2024 at United National Public School Coimbatore
- ✓ Session Chair at National Level Symposium on Blue Carbon Sink (BCaS-2024)” held between 22nd and 23rd February, 2024 at Dept. of Marine and Coastal Studies, Madurai.

Reviewer in journal

- ✓ Current Cancer Drug Targets – Bentham Science Publishers.
- ✓ The Open Environmental Research Journal – Bentham Science Publishers.

Paper Presentations in Conference

International

- ✓ Awarded Second Prize for Oral research Paper Presentation at the “International Conference on Biotechnological Interventions in Food, Agriculture, Nutrition and Health Sciences for the Sustainable Management of Bioresources” organized by Department of Biotechnology at Sri Ramakrishna arts and science college, Coimbatore during 04 & 05 October 2023 on “Surface Engineered Next Generation Quantum Dots Nanoparticles as a Novel and Fluorescent Bio-Probe for Biomedical Application” and Won Second Prize for under oral presentation for the same.
- ✓ Co-author of top 3 most cited research article entitled ‘Antimicrobial and antioxidant effects of spice extracts on the shelf life extension of raw chicken meat’ of International Journal of Food microbiology, vol. 171, pp. 32-40 published by Elsevier’s 2014.

National

- ✓ “Best Oral Presentation Award” at the “National Conference on Bioprospecting India – BIOFAIR 2019, at School of Biosciences, Botany - 2019, Periyar University, Salem for the research paper presentation.
- ✓ “Best Women Researcher- 2017” by Pearl Foundation, Madurai Kamaraj University, Madurai, India.

Presentations in Seminar

- Participated in the “**National Conference on Bioprospecting India – BIOFAIR 2019, at School of Biosciences, Botany - 2019**”, Periyar University, Salem.
- **Organised National Level Seminar** entitled “**Food Safety and Security**” during December 19-20, 2018 at Department of Biotechnology, KAHE, Coimbatore, India.
- **Participated in the 2 days’ workshop** organised by Centre for Skill Development (CSD) at KAHE, Coimbatore entitled “**Research Methodology and Data Analysis using SPSS**” During 11th and 12th June 2018

Participation in Conference/ Seminars

- Participated in the “**National Conference on Bioprospecting India – BIOFAIR 2019, at School of Biosciences, Botany - 2019**”, Periyar University, Salem.
- **Organised National Level Seminar** entitled “**Food Safety and Security**” during December 19-20, 2018 at Department of Biotechnology, KAHE, Coimbatore, India.
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Participation in Workshop

- **Workshop on GC MS Workshop and training Organised by perkin Elmer at (DIA-CoE), Bharathiyar University, Coimbatore during December 2024**
- Participated in National seminar cum workshop on “**Advances in Medical Plant Biology and Toxicology**” at PRIST University during 21-22 June 2012.
- Participated in Hands on training on “**Alternative Animal Model-2025 at Bharathidasan University**”, Trichy-2025

Participation in Faculty Development Programme

- **Seven Days FDP on “Smart technologies for Socio Impact” organised by Hindustan Arts and Science College, September 2024**
- Attended **INSA Science Academies, New Delhi** Sponsored Refresher course on “**known to unknown techniques in biology**” at St. Joseph’s College Trichy, during 1-15 November, 2018.
- **Participated in the Refresher course** organised by Centre for Human Resource Development during 20.04.2018-10.05.2018 at KAHE, Coimbatore.

Participation in Webinar

Intellectual Property Rights – Theme 2025 Organized by SRM Engineering College Katangulathur, Chennai, April, 2025.

Conference/Seminar/Workshop Organized

Organized;

- ✓ International Seminar on “**Innovations in Bacterial Signaling Dynamics: Driving Forces in Biohydrogen And Biomethane Production**” at Department of Biotechnology, PSGRKCW during January **2024**
- ✓ Guest Lecture on Crustaceans Hormones-Functional Commonality in Growth and Reproduction-Prof T.Subramoniam, Emeritus Professor, Dept of Zoology, Madras University at Department of Biotechnology, PSGRKCW during February **2024**
- ✓ National Seminar on "Tackling Antibiotics Resistance by Bacteriophage Therapy"- at Department of Biotechnology, PSGRKCW during January **2024**
- ✓ Workshop on “Integrated Recirculating Aquaponics- Hydroponics: A Profitable and Sustainable Business” at Department of Biotechnology, PSGRKCW during July **2023**

Grants

S.No	Project Title	Agency	Amount Granted	Status
1	GRG Trust Project-Low Cost Phyto-biotic Herbal Formulations Enhancing Immunomodulatory Effects In Shrimps For White Feces Disease Prevention	GRG TRUST-PSGRKCW	1.2lakh	Ongoing

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Member of (BRSI) THE BIOTECH RESEARCH SOCIETY, INDIA- #OM 4896	ANNUAL	YEARLY
Member of (IACR) INDIAN ASSOCIATION FOR CANCER RESEARCH- #AM/2020/0069	ANNUAL	YEARLY
Lifetime Member of Operant Pharmacy Federation(OPF) - #OPF/MEM/2020/LTM/201	LIFE TIME	LIFE TIME

Awards/Honors

- **Best Paper Award, SNR College, 2025**
- **CIED Think Thank Award, IIC & CIED, PSGRKCW, 2024**
- **Excellence in research and Extension Activities, 9th Asian PGPR India National Conference2024**
- **Best Prototype Award, IIC Innovation Expo, 2023**
- **Best Researcher Award, Operant Pharmacy Federation, 2020**
- **NASI-IASc-SRF Fellowship, INSA Science Academies, New Delhi, 2019**
- **Best Oral Presentation BIOFAIR, Periyar University, 2019**
- **Best Women Researcher, Pearl Foundation, MKU, 2017**

Indexing and Citations

All	Since 2020	
<u>Citations</u>	997	61
		1
<u>h-index</u>	11	10
<u>i10-index</u>	12	10

Contribution

- Reviewer for international journals (Elsevier, and UGC journals)
- Member Board of Studies – Department of Biotechnology
- Acting as a Coordinator for NAAC Criteria since 2022 onwards
- Acting as a Member for Audit Committee
- Department Association In-charge and BOS member