

**Name** : Dr. A.M. Ramachandran

**Designation** : Assistant Professor

**Department** : Microbiology

**Qualification** : M.Sc., PhD.

**Experience** : Teaching - 18 Years |

Industry - 5.9 Years | Research - 5 Years



**Area of Specialization(s)** : Agricultural Microbiology, Pharmaceutical QA

**Email (Official ID)** : [ramachandran@drngpasc.ac.in](mailto:ramachandran@drngpasc.ac.in)

#### Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Microbiology	Gandhigram Rural Institute- Deemed University, Gandhigram	2011
M.Sc.	Microbiology	Ayya Nadar Janaki Ammal College, Sivakasi	1999
B.Sc.	Microbiology	Sengunthar Arts and Science College, Thiruchengode	1997

#### Additional Qualifications

Dip. / Cert.	Area of Specialization	Institution / University / Agency Name	Year
Certificate	German language	Tamil Nadu Theological Society	2003
Computer Hardware and Networking	Computer Technology	MSME Development Institute, Chennai	2015
Certificate	Cell Culture Technologies	NPTEL	2020
Certificate	Applied Environmental Microbiology	NPTEL	2023
Certificate	HACCP - Level 3	AVT Academy	2023
Certificate	Microbial Biotechnology	NPTEL	2025

### Projects Completed

Project Title	Agency	Amount	Duration
“Detection and Identification System of Bacteria and Bacterial Endotoxin in the drinking water source by foldscope”	DBT	₹ 800000	1 Year
“Mass cultivation of <i>Sphingomonas trueperi</i> for Polycyclic Aromatic Hydrocarbons (PAH) Degradation in textile waste dump yard at Tirupur“	DRNGPASC	₹ 101500	1 Year

### Consultancy

Nature of	Client	Amount	Status
Antibacterial assay	Department of Costume Design & Fashion, Dr. N.G.P. Arts and Science College	₹ 2000	Completed

### Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	-	02

### Research Publications (Indexed)

#### International

- Chellaraj Emmanueul E S, Ramachandran A M, David Ravindran A, Natesan M, Maruthamuthu S, **Effect of rare earth elements on dry matter partitioning, nodule formation and chlorophyll content in *Arachis hypogaea* L. plants.**, Australian Journal of Crop Science, 4(9):670-675, 2010, ISSN 1835-2707, (Indexed in UGC).

#### National

- Ramachandran A M, David Ravindran A, **The role of MHB on Mycorrhiza infected *Arachis hypogaea* L.**, Journal of Pure & Applied Microbiology, vol. 2(2):477-4, 2008, ISSN: 2581-690X, (Indexed in UGC).

### Other Publications: International / National Journals

- A.M.Ramachandran, **Bacterial Isolates from Pharmaceutical Industry Environment and Water System**, Asian Journal of Applied Science and Technology Vol 1 (9), Pages 01-13, 2017, ISSN:2456-883X, (Indexed in International Scientific Intex/ Google Scholar, Google,

Academia, SSRN, Researchgate).

- Ramachandran AM and David Ravindran A, **Biocontrol of *Aspergillus* root rot by tripartite symbiosis in groundnut.** Int. J. Adv. Res. Biol. Sci., Vol 4(9): 5-15, 2017, ISSN: 2348-8069, (Indexed in Google Scholar).
- Appanna Mohanram Ramachandran, Kiruthika Balasubramani, Nivetha Selvaraj and Piruthika Ramanan, **Dye Degrading Microbial Isolates from Textile Soil - A Monograph,** International Journal of Pharmacy and Biological Sciences, vol 9 (3): 599-604, 2019, ISSN 2321-3272, (UGC Approved, Index Copernicus, Journal index).
- Harsha Karunakaran, Ramachandran A. M., Saranya S. and Manju M, **Isolation of *Lactobacillus* from Non-Dairy Products and Assessment Of their probiotic Properties,** World Journal of Pharmaceutical And Life Sciences, Vol. 6(8): 226-23, 2020, ISSN: 2454-2229, (Web of Science Group, Academic Research index, Indian Citation Index, Index Copernicus).
- Saranya S., Ramachandran A. M., Manju M and Harsha Karunakaran, **An *In Vitro* study of *Ipomea Carnea* and *Piper Betel* Leaf Extract Mixture on Anti diabetic and bacterial endotoxin neutralization,** World Journal of Pharmaceutical and Life Sciences, vol 6(8): 257-263, 2020, ISSN: 2454-2229, (Web of Science Group, Academic Research index, Indian Citation Index, Index Copernicus).
- Manju M., Ramachandran A.M., Saranya S and Harsha Karunakaran, **Seaweed Extract – A source for cosmetic formulation and antibacterial activity,** International Journal of Multidisciplinary Educational Research, Vol. 9(7):1-12, 2020, ISSN: 2277 – 7881, (SCIRUS, International Scientific Index, Scribd, ULRICHS WEB, Scope Med, Index scholar).
- Nivethitha.M, Ramachandran A.M, **Green Synthesis of Silver Nanoparticles Using *Zingiber Officinale* Rhizome Extract and Its Application on Diabetic Foot Ulcer,** International Journal of Creative Research Thoughts, Vol 9(7): 584-591, 2021, ISSN: 2320-2882, UGC Approved Journal No: 49023 (18), (Indexed in Google Scholar, SSRN, Semantic Scholar Research Gate, Thomson Reuters).

- Priyadharshini.R, Renuga devi.S, Saranya.T, Ramachandran A.M, **Construction Of Simplified Microbial Consortium from Gold Ornaments and their sensitivity against Disinfectants**, International Journal of Creative Research Thoughts, Vol 9(8): 425-434, 2021, ISSN: 2320- 2882, UGC Approved Journal No: 49023 (18), (Indexing In Google Scholar, SSRN, Semantic Scholar Research Gate, Thomson Reuters).
- Renuga devi. S, Priyadharshini. R, Saranya. T, Ramachandran A.M, **Evaluation of Microbial Load on Combs in various places within the Tirupur District, Tamil Nadu, and sensitivity pattern of Disinfectants**, International Journal of Creative Research Thoughts, Vol 9(8):774-786, 2021, ISSN: 2320-2882, UGC Approved Journal No: 49023 (18), (Indexing In Google Scholar, SSRN, Semantic Scholar Research Gate, Thomson Reuters).
- Saranya. T, Renuga devi. S, Priyadharshini. R, Ramachandran A.M, **Antibacterial and Phytochemical analysis of *Capsicum Annum* (Chili Pepper Bss-859 F1 Hybrid) against foodborne pathogens**, International Journal of Creative Research Thoughts, Vol 9(8): 816-822, 2021, ISSN: 2320-2882, UGC Approved Journal No: 49023 (18), (Indexed in Google Scholar, SSRN, Semantic Scholar Research Gate, Thomson Reuters).
- Praveen K, Ramachandran A.M., Nivethitha M, **Synthesis of Silver Nanoparticles Using Leaf Extract of *Tridax Procumbens* and Analysis of its Activity against Skin Infection Causing Bacteria**, Strad Research, Vol 8 (9):353-359, 2021, ISSN: 0039-2049, (Indexed in UGC CARE GROUP II, Web of Science).
- Ramachandran A.M., Senthil Prabhu S., Devakumar J., Rengaramanujam J., Karthik Sundaram S., Mahenthiren R., Varsha T.K., **Hydrogel Formulation from *Calotropis Gigantea* Plant Extract Against Foot Ulcer Causing Bacteria In Diabetes**, Asian J Pharm Clin Res, Vol 14, Issue 11, 2021, 1-4, ISSN: 2455-3891, (Indexing In Google Scholar, Elsevier Products (EMBASE & EBSCO), Index Copernicus).
- Rama T.C., Ramachandran A. M., **Topical Gel Formulation from *Cassia Auriculata* Flower and *Aloe Vera* Leaf Extract Against Skin Infection Causing Bacteria *Staphylococcus***

**aureus Caused Wound Scar**, World Journal of Pharmaceutical And Life Sciences, Vol. 8, Issue 11, 2022, 188-195 ISSN: 2454-2229, (Web of Science Group, Academic Research index, Indian Citation Index, Index Copernicus).

- R. Devadharshini, G. Karpagam, K. Pavithra, S. Kowsalya, P. Mohana Priya and A. M. Ramachandran, **Green Synthesis of Silver Nanoparticles**, Microbiology Research Journal International, Volume 33, Issue 5, Page 1-9, 2023, ISSN: 2456-7043, (Research gate, Google scholar, Index Copernicus).
- G Karpagam , K Pavithra , S Kowsalya ,R Devadharshini , P Mohana priya and A M Ramachandran, **Cow urine based dermal defender: A review**, World Journal of Advanced Research and Reviews, 18(01), 1114–1121, 2023, ISSN 2581-9615 (Google Scholar, Cross Mark, Scilit).
- Ramachandran A. M., Arivishnu G and Paul Abiaa J, **Formulation of Cow Urine and Papaya Seed Extract Powder based Medicinal Soap and Its Antibacterial Activity against Pyogenic Organisms**, Indian Journal of Natural Sciences, Vol.15 / Issue 85 / Aug / 2024, ISSN: 0976 – 0997 (Indexed in UGC Care, Web of Science).
- Rahul R, Deepika A, Kesavardhini K, Bharath Kumar S and A.M. Ramachandran, **Isolation and Characterization Of Polycyclic Aromatic Hydrocarbon Degrading Organism From Tirupur City Dump Yard Soil**, International Journal of Creative Research Thoughts, Volume 12, Issue 7 July 2024 | ISSN: 2320-2882. (Research gate, Google scholar, Index Copernicus).
- Deepika.A, Rahul.R, Kesavardhini.K, Bharath kumar.S, Ramachandran AM, **Phytochemical Screening and Evaluation of Antimicrobial, Antioxidant and Antibiofilm Properties of the Bioactive Compounds from the Extracts of Carica Papaya L Leaves**, June 2024, Volume 11, Issue 2, 649-662. (E-ISSN 2348-1269, P- ISSN 2349-5138) (Research gate, Google scholar, Index Copernicus).
- Arunavarsini K, Durgadevi L, Ramachandran A.M and Mahenthiran R, **Isolation, Identification and Assessment Of Antimicrobial, Antioxidant, Antidiabetic and Anti-Inflammatory Activity of Heat- Killed Postbiotic from Lactobacillus Strain**, International Journal of Biology, Pharmacy and Allied Sciences, Special Issue, 2025, 14(3): 193-200. (Indexed in UGC Care, Web of Science).

- Chapters Published in Edited Book

- Ramachandran A M, Nivedha A, Devadharshini R, Jaya Shree K and Riya R, 2022, “**Microbes for Clean and Green Environment**”, Volume - 2 (ISBN:978-93-91342-06-7).
- Ramachandran A. M., Nivethitha M., 2022, **Immunology, Medical Microbiology and Genetic Engineering** (Lab Manual for PG students), Published by Dr. N.G.P. Arts and Science College, page no.1-50, ISBN NO 978-81-960241-9-2.
- Ramachandran A M, Paul Abiaa J, Arivishnu G. Joel J S Vijay and Vishmitha M, “**Bioactive Phytochemicals: Recent Developments in Extraction, Isolation, Characterization and Applications**”, Published By : INAM Pathipagam Coimbatore, Tamil Nadu, India, First Edition : September 2024, Volume 1, page no.32-42. 9600370671. ISBN : 978-93-95137-80-5.

#### **Presentations in Conference**

- **Efficacy of N<sub>2</sub> fixing bacteria and AMF in seedling mixed to colonize plants roots and control root diseases of *Arachis hypogaea* L.**, An international symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics, 49<sup>th</sup> Annual conference of Association of Microbiologist of India at Delhi University, New Delhi, 18 -Nov-2008 to 20-Nov-2008.
- **An approach to reduce starch content in sago effluent by biological agent and ionization**, National conference on Genomics and proteomics in bioprospecting-Role in Healthcare Development, Dept of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 21-Dec-2016.
- **Formulation of Moringo based herbal tooth paste against *Streptococcus mutants***, International conference on Recent innovation in Health & biological sciences, PSG College of Arts and Science, Coimbatore, 14 Jul-2023 & 15 Jul-2023.
- **Fungi candidate for degrading Poly Aromatic Hydrocarbon (PAH) compounds in automobile engine oil and grease spilled soil** in the International conference on “Recent Trends on Fungal Applications in Agriculture, Industry and Biomedical Process” (IFAAIB–2024) held at Madurai Kamaraj University, Madurai Tamil Nadu, India on 25th October, 2024.
- **Ameliorate the Biodegradation of Used Engine Oil/Grease Spilled Soil In Automotive Shop By Lipophilic Bacteria**, Departments Of Biotechnology, Microbiology and Food Processing Technology & Management Jointly Organizes BIOSUMMIT 2025 International Conference On Innovation In Biosustainability (ICIB) at HICAS on 31st January 2025.

## Participation in Conference

### International

- Conference on Research and Development in Biosciences, Dept of biotechnology and microbiology, Kannur University, Thalassery Campus, Palayad, Kannur, 17 to 19-Jan- 2019.
- Conference on Recent innovation in Health & biological sciences, PSG College of Arts and Science, Coimbatore, 14 Jul-2023 & 15 Jul-2023.

### National

- Conference on Transitional and Translational Scenarios in Biological Sciences (3 I's- *In vitro* to *in silico*) DBT and ICMR sponsored national level conference has been participated as organizer at Dr. N.G.P. Arts and Science College, 9 and 10-Sep-2016.
- Conference on Recent Innovation in Nanomedicine & Drug Delivery, DDU Kaushal Kendra & Department of Applied Sciences, Mangaluru, 3-Sep-2018.

## Participation in Seminars

- Modern Biological Sciences, S.N.M.V. College, Coimbatore, 15 & 16-Feb-2006.
- Advances in Solid waste management, Dept. of biology, GRI, 22 & 23-Feb-2005.
- Biodegradation and Bioremediation, Dept. of biochemistry and biotechnology, Sourashtra College, Madurai, 17 & 18-Sep-2004.
- Rural Biotechnology for Sustainable Agriculture Development, GRI, 19 & 20-Feb-2004.
- Current Trend in Biotechnological Application, Thiyagarajar College, Madurai, 20-Jul-2006.

## Participation in Orientation Programme / Short Term Courses

- One Week Online Course for Aspirants of CSIR-NET in Life sciences Organized by PG and Research Department of Zoology, Jamal Mohamed College, Tiruchirappalli from 5<sup>th</sup> –11<sup>th</sup> - May 2020.
- NPTEL Online Certification program on **Cell culture techniques**, by NPTEL, Jan-April, 2020.
- One Week Online Certificate Course on **Digital Teaching Techniques** by ICT Academy from 10<sup>th</sup> – 15- Aug- 2020.
- NPTEL Online Certification program on **Applied Environmental Microbiology**, by NPTEL, Jan- April, 2023.
- UGC sponsored online refresher course in Life Sciences conducted by UGC-MMTTC,

Bharathiyar University held from 18<sup>th</sup> September to 1<sup>st</sup> October, 2024 and obtained A+ grade.

### Gene Bank Submissions

- Ramachandran,A.M. and David Ravindran,A. Rhizobium sp. GRU-2/09 16S ribosomal RNA gene, partial sequence, GQ243694.
- Ramachandran,A.M. and David Ravindran,A. Rhizobium sp. GRU-1/09 16S ribosomal RNA gene, partial sequence,GQ243693.
- Saravanan,J.A., Ramachandran,A.M. and David Ravindran,A. Rhizobium leguminosarum strain GU-1 16S ribosomal RNA gene, partial sequence, EU722290.1

### Participation in Workshop

- National level workshop cum training programme on Polymerase Chain Reaction (PCR) organized by the National Institute of Food Technology, Entrepreneurship and Management (NITEM-T), Thanjavur held on 4-Aug-2023.
- E Workshop cum Discussion forum on High end characterization of Microalgae: Overcoming the Technological Barriers, from 3 & 4-Mar- 2021, TERI.
- Research Based Pedagogical tools, DBT, British Council, IISER Pune, and Sacred Heart College, Kochi, Kerala, 11 to 14-Oct-2017.

### Participation in Faculty Development Programme

- Two days FDP on Critical and Creative Thinking Skills on 5<sup>th</sup> & 6<sup>th</sup> August 2024 organized by IQAC of Michael Job Memorial College of Education for Women.
- AICTE Training and Learning (ATAL) Academy Online Elementary FDP on **Drug Engineering through Bioprospecting**, 12 to 16-July-2021.
- One Week online FDP Program on **Research Methodology and Pedagogy for Tertiary Education**, June 15 to 21-June-2021Dr. N.G. P. Arts and Science College, Coimbatore.
- One Week FDP Program on **Quality Initiatives in Higher Education**, Dr. N.G.P. Arts and Science College, Coimbatore, Sri Ramakrishna College of Arts and Science, Coimbatore, Gobi Arts and Science College, Gobi, Vellalar College for Women, Erode, 13 to 20-Apr- 2020.
- One week FDP Programme on **Moodle Learning Management System**, Dr. N.G.P. Arts and Science College, Coimbatore, 04-May-2020.
- Seven days FDP on **NAAC Revised Accreditation Frame Work and OBE Assessment**



**Methodology**, Dr. N.G.P. Arts and Science College, Coimbatore, 27-May-2019 to 02-Jun-2019.

- Seven days FDP on **Quality Measures in Higher Education**, Dr. N.G.P. Arts and Science College, Coimbatore, 3 to 9-Dec-2019.

#### **Conference / Seminar / Workshop Organized**

- Organizing Secretary of 17<sup>th</sup> Louis Pasteur Memorial National Symposium in **Alternative Medicine for Combating Infectious Diseases (AMCID-2022)**, D.N.G.P. Arts and Science College, 27<sup>th</sup> & 28<sup>th</sup> - February-2025.
- Organizing Secretary of 15<sup>th</sup> Louis Pasteur Memorial National Symposium in **Microbial Prospecting and Entrepreneurship (MPE-2023)**, D.N.G.P. Arts and Science College, 22-September-2023.
- Organizing member, National Conference on **Interdisciplinary Approaches on Dynamics of Bioscience Research**, Faculty of Biosciences and DBT- Star College Scheme, Dr. N.G.P. Arts and Science College, 28-March-2023.
- Organizing member, International Symposium on **Role of Multidisciplinary Research in Microbiology for Sustainable Development**, Dept. of Microbiology and DBT-Star College Scheme, Dr. N.G.P. Arts and Science College, 9 to 10-March-2023.
- Organizing Member, International Seminar on **Perspectives of nanotechnology in medical applications**, Dr. N.G.P. Arts and Science College. Nov-2022.
- Organizing Secretary, Workshop on **Identification Fungi & Algae and Training in Foldscape- WIFATF-2019**, under DBT Star Scheme, Dr. N.G.P. Arts and Science College., 06 & 07-Feb-2019.
- Organizing member, **National Workshop on Intellectual Property Rights-2019**, IPR cell and DBT star scheme, Dr. N.G.P. Arts and Science College, 15-Feb- 2019.
- Organizing Member of 10th Louis Pasteur Memorial National Symposium in **Nanotechnology in drug delivery a tool for biology and medicine (PSNDD-2017)**, Dr. N.G.P. Arts and Science College, Coimbatore.
- Organizing member of 14th national conference of IAAM on **Transitional and Translational Scenarios in Biological Sciences** 09 – Sep- 2016 & 10– Sep- 2016, at Dr. N.G.P. Arts and Science College.

#### **Invited Speaker / Session Chair- Conference / Seminar / Workshop**

- In-house Lecture on the title **Corrective and Preventive Measures on Lab**, Dr. N.G.P. Arts

and Science College, Coimbatore, 12-May-2022.

- Online lecture workshop presentation on **Quality Analysis in Pharmaceuticals**, under the DBT-star scheme, Department of Microbiology, 7-October-2021.
- Online Guest Lecture on **Career Opportunities for Microbiologist in Pharmaceutical Industry**, Department of Microbiology, School of Life Sciences, Vels Institute of Science Technology and Advanced Studies, Chennai, 7-December-2021.

#### **Administrative Experience/ Post & Responsibilities Held**

- Academic Audit Committee Member, since 2020, Dr. N.G.P. Arts and Science College.
- NSS Member, since 2021, Dr. N.G.P. arts and Science College.

#### **E- Content**

- <https://luxyram40.blogspot.com>

#### **Member in BoS**

- Internal member of Microbiology Board, DRNGPASC, Coimbatore, since 2016.
- Member of BOS in Bharathiyar University PG Microbiology since 2025.

#### **Membership in Professional Bodies**

<b>Name of the Professional Body</b>	<b>Nature of membership</b>	<b>Duration</b>
IAAM	Life-time	2016