Dr. S. GOWRISHANKAR, M.Sc., Ph.D., (SET)

Assistant Professor

CONTACT

Address	: Department of Biotechnology Science Campus, Alagappa University Karaikudi – 630 003 Tamil Nadu, India
Employee Number	: 54405
Date of Birth	: April 09, 1986
Contact Phone (Office)	: +91 4565 223327
Contact Phone (Mobile)	: +91 9994933559
Contact e-mail(s)	: gowrishankar.alu@gmail.com; gowrishankars@alagappauniversity.ac.in
Skype id	: gowrishankar.alu@gmail.com

ACADEMIC QUALIFICATIONS

Degree	Year of Passing	Subject	Class	Institution
B.Sc.	April 2007	Microbiology	First class	Kongu College of Arts & Science, Karur – 639 006
M.Sc.	May 2009	Microbiology	First class with Distinction	Bharathidasan University, Tiruchirappalli
Post M.Sc., Diploma	June 2010	Advanced Diploma in Molecular Diagnostics	First class with Distinction	Dept. of Biotechnology, Alagappa University, Karaikudi
Ph.D.	December 2016	Biotechnology	Highly Commended	Dept. of Biotechnology, Alagappa University

TEACHING EXPERIENCE: 10 YEARS

Position	Institution	Duration
Assistant Professor (**Academic Level 10**)	Department of Biotechnology **Alagappa University**, Karaikudi 630 003.	Jan 30, 2016 to Jan 30, 2020
Assistant Professor (**Academic Level 11**)		Jan 31, 2020 to Till Date
Assistant Professor (**Academic Level 12**)		Jan 31, 2025 to Till Date

RESEARCH EXPERIENCE: 15 YEARS

Position	Institution	Duration
Junior Research Fellow in Department of Biotechnology (DBT), Govt. of India, Sponsored project "Bioprospecting marine microbial wealth through metagenomics" (Project reference: BT/PR/99114/NDB/52/134/2009)	Department of Biotechnology **Alagappa University**, Karaikudi 630 003.	Oct, 2010 to May, 2011
UGC- Rajiv Gandhi National - Junior Research Fellow		June, 2011 to May, 2013
UGC- Rajiv Gandhi National - Senior Research Fellow		June, 2013 to Jan, 2016

ADDITIONAL ACADEMIC & ADMINISTRATIVE RESPONSIBILITIES

S. No	Position	University Bodies	Period	
			From	To
1	Coordinator	Department level IQAC and NIRF Coordinator	Since 2018	Till Date
2	Coordinator	Department level Village Extension Programme (VEP) Coordinator	Since 2016	Till Date
3	Coordinator	Department level SWACHH BHARAT Coordinator	Since 2018	2023
4	Coordinator	Department level Placement Coordinator	Since Jan 2017	Till Date
5	Deputy Warden	Post Graduate Men's Hostel	22.02.2021	01.06.2023
6	Deputy Warden	International Students' Hostel	26.09.2023	01.06.2023
7	Faculty level Coordinator	Entrepreneurship Innovation & Career (EIC) Hub for the Faculty of Science	August, 2021	Till Date
8	Department level Coordinator	Cultural Club	Since 2016	Till Date
9	Department level Coordinator	Department level Non-Major Elective (NME) Course, MOOCs, SWAYAM & NAD Coordinator	Since Dec, 2019	Till Date

AREAS OF RESEARCH

- **Molecular Epidemiology**: Molecular characterization of multidrug resistant clinical pathogens, especially MRSA.
- **Antivirulence Therapy - "Pathoblockers"**: An alternative approach to combat AMR.
- Molecular insights into the mode of action of antivirulence agents through **OMICS** approach.
- **Phage Therapy**: Therapeutic characterization of phages and lysins against human and aquaculture pathogens.
- **Antifungal Drugs**: success through synergistic combination with antivirulence agents.

RESEARCH SUPERVISION / GUIDANCE

Program of Study		Completed	Ongoing
Research	**Ph.D.**	**03**	**04**
Project	**PG**	**31**	**05**
Summer Interns	**(M.Sc., / B.Tech., /B.Sc.)**	**08**	**--**

PUBLICATIONS

International		National		Others
Journals	**Conferences**	**Journals**	**Conferences**	**Book Chapters**
54	**31**	**--**	**12**	**08**

RESEARCH ACHIEVEMENTS

- No. of Research Publications : **57**
- Cumulative and Average Impact Factor :**248.7 (Avg. IF: 4.36)**
- h-index (*As per Google Scholar Citation Index*) :**29**
- i-10 index :**45**
- Total Citations ((*As per Google Scholar Citation Index*) :**2296** *(As on 17.06.2026)*
- Scopus Author ID :55372051100
- Orcid ID :0000-0001-5728-6837
- No. of Conferences Attended :**30**
- No. of Seminars and Workshops Attended :**15**

PATENTS

S. No	Title	Inventors	Patent Number	Filing Date	Current Status
1	Anti-biofilm composition and method of preparation thereof	Jothi R, **Gowrishankar S**, Prasath KG, Pandian SK	Application No.: 202141026689 Published 16.12.2022	17.06.2021	Granted on 27.03.2025 **Patent No. 564095**

2	Anti-bacterial composition, process for preparing and implementation thereof	Sangavi, R, Jothi R, **Gowrishankar S**, Pandian SK	Application No.: 202241011110	01.03.2022	**Published 01.09.2023**

Ph.D. SCHOLAR DETAILS

S. No	Name	Date of Registration	Ph.D. Title	Date of Viva Voce
1	C. Karthika	05.12.2018	Therapeutic efficacy evaluation of environmental phages against certain Gram-negative bacterial pathogens	02.05.2025
2	Dr. R. Jothi	27.09.2019	Therapeutic Alternatives and their Sub-Clinical Evaluation through Topical Formulations for Treatment of Bacterial and Fungal Vulvovaginitis	11.01.2024
3	R. Sangavi	02.02.2021	Exploration of natural anticariogenic agents, in synergism with antimicrobials, and their incorporation in dental restorative material(s) for effective control of dental caries	Thesis Submitted on 05.02.2026
4	N. Malligarjunan	07.12.2021	Molecular characterization of bacteriophage(s)-derived lysins, and their *in vitro* and *in vivo* anti-infective efficacy evaluation against Gram-positive and Gram-negative pathogens	Pursuing
5	R. Kanimozhi	01.10.2023	Prophylactic and therapeutic role of Probiotics in understanding the pathophysiology and immune response of *Galleria mellonella* to enteric bacterial pathogen(s)	Pursuing
6	B. Sriram	01.08.2025	Phage therapy and lysin as precision antibacterials against multidrug-resistant Gram-positive and Gram-negative pathogens	Pursuing
7	Amrutha S	Application submitted	Development of Recombinant Endolysin-Based Ophthalmic Formulation Against Ocular Pathogens Causing Bacterial Keratitis	Pursuing

FUNDED RESEARCH PROJECTS

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	University Grants Commission (**UGC**), New Delhi	22/01 2018	21/01/ 2020	"Deciphering the antivirulence mechanism of marine cyclic dipeptide cyclo(l-leucyl-l-prolyl) against *Listeria monocytogenes* through proteomic approach"	**8,00,000** *[As the only PI]*
2	AURF Start-Up Grant **(AURF)**	2018	2019	Efficacy evaluation of phytochemical(s) from *Achyranthes aspera* L. (amaranthaceae) against various virulence traits of certain human pathogens	**1,00,000** *[As the only PI]*
3	Department of Science & Technology **(DST), SERB**, New Delhi	22/12 /2020	21/12/ 2023	Refocusing Nature's destroyer of bacteria –Phages and their lysins as promising therapy against infections associated with ESKAPE pathogens	**32,60,000** *[As the only PI]*
4	Indian Council of Medical Research **(ICMR)**, New Delhi	01/11 /2021	31/10/ 2024	Identification of potential drug target(s) in *Streptococcus mutans*: an essential step for developing improved dental care products	**21,09,040** *[As the only PI]*

Ongoing Projects

S. No.	Agency	Period		Project Title	Budget (in Rs.)
		From	To		
1	**Chief Minister's Research Grant** (CMRG) 2023-24 *Student Project scheme*	16/12/ 2024	15/12/ 2027	Anticariogenic Mouthwash for Improved Oral Hygiene: A promising alternative to antimicrobials-based mouthrinse	**15,64,500** *[As Co-PI & my Ph.D., Scholar being PI]*
2	**Anusanthan National** Research Foundation (ANRF) [*erstwhile* DST SERB]	21/05/ 2025	20/05/ 2028	Development of engineered endolysin-loaded liposomal aerosol with enhanced antipathogenic and immunomodulatory potency for effective treatment of diabetic foot ulcer	**53,11,440** *[As the only PI]*
3	**Chief Minister's Research Grant** (CMRG) 2025-26 *Faculty Project*	30/01/ 2026	29/01/ 2029	Next-Gen Ophthalmic Antibacterials: Translational Development of Endolysin-Loaded Liposomes for Keratitis Therapy	**28,99,470** *[As PI]*

4	**Ministry of Earth Science** (MoES), Deep Ocean Mission (DOM) Project	2026	2028	Elucidation of Biodiversity of Hard-Bottom Communities along the Coast of India: Emphasis on Habitat Characteristics and Ecology	**39,15,197** *[As Co-PI – Multi-Institutional Network project]*

ACHIEVEMENTS / AWARDS

S. No.	Name of Award	Awarding Agency	Field/Category for which the award was given	Year of Award
19	**Excellence in Interdisciplinary Research Award - 2025**	Centre for Ocean Research, Sathyabama Institute of Science and Technology, Chennai	In recognition of my research contribution in the "International Seagrass–Climate Resilience Conference (ISCR 2025)" through a formal oral presentation	03rd to 05th December 2025.
18	**Academic and Research Excellence Award - 2025**	Alagappa University	Outstanding Academic and Research Excellence during 2024-2025	08th Sept 2025
17	**INTERNATIONAL TRAVEL AWARD**	Anusanthan National Research Foundation (ANRF) SERB ITS	To participate and present my research work in the American Society for Microbiology (ASM)-MICROBE-2024 Int. Conf. held during June 13th - 17th, 2024 at Atlanta, USA.	May, 2024
16	**Academic and Research Excellence Award - 2024**	Alagappa University	Outstanding Academic and Research Excellence during 2023-2024	05th Sept 2024
15	**BEST ORAL PRESENTATION AWARD**	Centre of Excellence in Life Sciences, PSGR Krishnammal College for Women, Coimbatore	International Conclave on "Antimicrobial Resistance"	March 04th & 5th, 2024.
14	**BEST ORAL PRESENTATION AWARD** (secured First Position)	Department of Microbiology, Bharathidasan University, Trichy	International Conference of Algae: FOOD, FEED, FUELS & FINE CHEMICALS – ICA-F4 23	September 06th to 8th, 2023
13	**Appreciation Award**	Alagappa University	Outstanding Academic and Research Excellence in acquiring the Patent & Projects during the Academic Years through 2020-21 to 2022-23	Sept 5th, 2023
12	**Promising Researcher Award**	Alagappa University	In recognition of the contribution made towards 'EXCELLENCE IN RESEARCH'	Sept 5th, 2022
11	**Vallal Alagappa**	Alagappa	In recognition of contribution	2020

	Research Recognition Award	University	towards the enhancement of Research Outcome of the University in the form of 'h' index.	
10	**Dr. APJ Abdul Kalam Award**	MARINA LABS, Reserach & Development, Chennai.	Young Scientist Award	24th Nov, 2019
9	**Outstanding Researcher Award - 2019**	Saveetha Dental College & Hospitals, SIMATS, Chennai	At the International Conference "Horizon 2019"-*The Epitome of Biomedical Research*	28th February to 1st March 2019.
8	**Start-up Grant**	UGC, New Delhi	(***Rs. 10 lakhs***) for the newly joined Faculties of Basic Sciences	2017
7	**International Travel Awards**	1. Indian Council of Medical Research (ICMR) 2. Centre for International Co-operation in Science (CICS)	(To attend the 25th European Congress of Clinical Microbiology and Infectious Diseases held during April 25th - 28th, 2015 at Copenhagen, Denmark).	2015
6	**First prize for oral presentation**	Department of Animal Biotechnology, Madras Veterinary College, Chennai, India	In the National Conference on "Bioactive Peptides-Application in Veterinary, Medical and Food Sciences"	December 18th - 19th, 2014
5	**Best poster and cash award**	Department of Biotechnology, Alagappa University, Karaikudi,	In the "National Seminar on Role of Microbes in Health, Agriculture and Industry"	26th - 27th - March 2012
4	**Poster presentation Award**	Sastra University, Thanjavur, India	Second prize for poster presentation in the International Conference on "Regulatory Network Architecture in Bacteria"	March 9th - 11th, 2012
3	**Rajiv Gandhi National Fellowship**	UGC, New Delhi	For pursuing PhD Program (JRF: 2yrs & SRF: 3yrs)	2011-2016
2	Awarded **Studentship** (Rs. 5000 per month for one year)	Department of Biotechnology (DBT), Government of India	For pursuing Post M.Sc., Advanced Diploma in Molecular Diagnostics Programme	July 2009 to June 2010
1	**State Eligibility Test (SET)**	Bharathiar University, Government of Tamil Nadu.	Lectureship (**SET**) in Life sciences	2008

EXTERNAL MEMBER IN BoS

- **Alagappa University**, Karaikudi (UG Biotechnology for Affiliated Colleges) (since 2026) *(University Nominee)*
- **Bharathidasan University**, Trichy (UG & PG Biotechnology) (since 2024) *(University Nominee)*
- **Department of Microbiology, Bharathidasan University**, Trichy (PG Microbiology) (since 2022)
- **Srimad Andavan Arts and Science College**, Tiruchirappalli (UG, PG Biotechnology) (since 2021 to till date)
- **JJ College of Arts and Science**, Pudukkottai (UG, PG Biotechnology) (since 2021)
- **Thassim Beevi Abdul Kader College for Women** (UG, PG Microbiology & UG Biotechnology) (Autonomous), Kilakarai (since 2023) (University Nominee)
- **Holy Cross College** (UG, PG Biotechnology) (Autonomous), Tiruchirappalli (since 2023).

OVERSEAS EXPOSURE / VISITS

Visited **Copenhagen, Denmark** to participate and present my research work as poster in the ***25th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID 2015)*** during 25th -28th April 2015.

Visited **Atlanta, USA** to participate and present my research work as poster in the ***American Society for Microbiology (ASM) MICROBE-2024*** International Conference during 13th -17th June 2024.

MEMBERSHIP IN PROFESSIONAL BODIES

1. Life Member : Microbiologists Society, India (MBSI) (MS/LM/476)
2. Life Member : Proteomic Society, India (PSI) (Reg. No. 458)
3. Life Member : Biotech Research Society of India (BRSI) (LM:1672)
4. Global Outreach – Contributing Membership: American Society for Microbiology (ASM)

RESOURCE PERSON IN VARIES CAPACITIES

1. Delivered a Special Lecture on the title "**Targeting virulence, not viability: A paradigm shifts in biofilm therapy at clinical settings"** in the International Conference on '**Breaking Barriers in Antimicrobial Resistance: Innovations in Antimicrobial and Biofilm Research -2026'** organised by the PG Department of Microbiology, Syed Ammal College of Arts & Science (Affiliated to Alagappa University), Ramanathapuram on 13.02.2026.
2. Served as a Member of Organizing Committee and a Resource Person for the **Three Days Skill Training Workshop** on "**Recent Techniques in Biotechnology – 2025"** organised by the Department of Biotechnology, Alagappa University, Karaikudi on 29.10.2025.
3. Delivered a Special Lecture on the title "**Metagenomics: "Exploring the unseen microbial world"** in the Seminar on '**Recent Innovations in Metagenomics'** organised by the Department of Microbiology under DBT Star College Scheme at Thassim Beevi Abdul Kader College for Women- Autonomous, Kilakarai, Ramanathapuram on 28.10.2025.

4. **Chaired a Session** in the Three Days (23rd - 25th Oct 2025) Workshop on "**Recent Trend in Sustainable Methods of Food Preservation**" organised by the Department of Nutrition and Dietetics, Alagappa University, Karaikudi, Tamil Nadu on 25th October, 2025.
5. **Chaired a Session** in the Two Days (29th - 30th Sept 2025) International Conference on "**FutureBio 2025: Smart Technologies and Sustainable Strategies in Biosciences" (FSTSSB – 2025)**" organised by the Department of Animal Health and Management, Alagappa University, Karaikudi, Tamil Nadu.
6. Delivered a Technical Lecture on the title "**Redefining Antimicrobial Therapy: "Biotechnological Advances in Alternatives to Conventional Antibiotics"** in 'International Conference on Recent Innovation in Molecular Biotechnology' organised by K.M.G. College of Arts and Science (Autonomous), Gudiyattam, Vellore on 24.09.2025.
7. Delivered a Lecture on the title "**The Nobel Prize in Physiology or Medicine 2024: "Discovery of microRNA and its role in post-transcriptional gene regulation"** in 'The Nobel Day Celebration 2024' Lecture series organised by CSIR-Central Electrochemical Research Institute, Karaikudi on 10.03.2025.
8. Served as a Resource Person for the Seminar on "**Beyond Antibiotics- Advancing Novel Strategies to Combat AMR**" organised by the Department of Microbiology under DBT Star College Scheme at Thassim Beevi Abdul Kader College for Women- Autonomous, Kilakarai, Ramanathapuram on 07.02.2025.
9. Delivered a Special Lecture on the title "**Advancing Strategies to Envision 'Alternative to Antibiotics'"** in the Two-Day National Conference on 'Advanced Bio-Chem Development' (ABCD-2024) organised by the Department of Biochemistry and Department of Biotechnology, Sri Sarada Niketan College for Women, Amaravathipudur, Karaikudi on 01.02.2024.
10. **Chaired a Session** in a "**National Symposium on Promoting Nutritional Diets through Millets**" organised by the Department of Nutrition and Dietetics, Alagappa University, Karaikudi, Tamil Nadu on 12th April, 2024.
11. Delivered a Special Lecture on the title "**Advancing Strategies to Envision 'Alternative to Antibiotics'"** in the Two-Day National Conference on 'Advanced Bio-Chem Development' (ABCD-2024) organised by the Department of Biochemistry and Department of Biotechnology, Sri Sarada Niketan College for Women, Amaravathipudur, Karaikudi on 01.02.2024.
12. **Chaired a Session** in an International Conference of Algae: FOOD, FEED, FUELS & FINE CHEMICALS – ICA-F4 23 organised by the Department of Microbiology, Bharathidasan University, Trichy during September 06th to 8th, 2023.
13. Delivered Inaugural Address and Technical Lecture in the "**International Symposium on Innovations in Life Sciences**" organized by School of Life Sciences, PG & Research Department of Zoology, Holy Cross College (Autonomous), Trichy on 31st January 2023.
14. Delivered a Special Lecture on the title "**The Future of Biotechnologist**" in the Induction Programme for UG and PG students of Biotechnology organized by Wilmut Club of PG and Research Department of Biotechnology, J.J. College of Arts and Science, Pudukottai on 25.11.2021.
15. Participated as Resource Person and Delivered a talk on "**Intellectual Property Rights with Special Reference to Indian Patents**" in the One Day Webinar on '***Intellectual Property Rights***' organized by the Internal Quality Assurance Cell (IQAC), Nirmalagiri College, Kuthuparamba, on 20th of October 2021.

16. Lead an online session as *Lead Moderator* on the title "**How to write an abstract and improve your article**" in a Faculty Development Program- "Gearing up for Research & Research Writing" organized by Department of Biotechnology, School of Bio and Chemical Engineering, Kalasalingam Academy of Research and Education, Krishnankoil on 23rd May, 2020.
17. Invited lecture delivered on the title "**Post Translational Modification and Folding of Newly Assembled Polypeptides**" (online session) on 06th May, 2020 organized by Department of Biotechnology, AJK College of Arts and Science, Coimbatore – 641 105.
18. Invited lecture delivered on the title "**Half a decade journey that links blue, red and white Biotechnology**" at Srimad Andavan Arts and Science College, Tiruchirappali on 21st Feb, 2020.

EVENTS PARTICIPATED

Conferences / Seminars / Workshops: 29/01/11

OTHERS

- **Reviewer for SCI journals** such as;

Biotechnology Advances, Drug Discovery Today, Journal of Nanobiotechnology, Pharmaceutical Biology, BMC Microbiology, Scientific Reports, Current Medical Science, Journal of Cellular and Molecular Medicine, Future Microbiology, PLoS ONE, Heliyon, Current Pharmaceutical Design, Microbial Drug Resistance, Probiotics and Antimicrobial Proteins, Current Microbiology, Journal of Medical Microbiology, Microbial Pathogenesis, Frontiers in Microbiology, Frontiers in Pharmacology, Frontiers in Medicine, International Journal of Biological Macromolecules, Journal of Environmental Science and Health, Part A, Pharmacological Research, Frontiers in Pharmacology, Biocatalysis and Agricultural Biotechnology, South African Journal of Botany & Gene Reports.

- **Sequences submitted in Public Databank**
  - GenBank : **56**
  - Multilocus sequence typing (MLST) : **33**
  - Whole Genome of Novel Phages : **02**

PUBLICATIONS IN SCI JOURNALS

S. No.	Authors, Title and Journal details	Impact Factor
57.	Umadevi, M., Vanimuthu, K., Kavitha, K., Arockia, JPJ., Gowrishankar, S., Sudha, A., & Biruntha, M (2025). Isolation, characterization, and antifungal behavior of humic acid and fulvic acid fractions from biowaste-derived vermiproducts. *Journal of Environmental Science and Health, Part B*	1.8
56.	Sangavi, R., Malligarjunan, N., Pandian, S.K. and Gowrishankar, S*., (2025). Ricinoleic acid potentiates sodium fluoride's antibacterial action against *Streptococcus mutans*: A synergistic approach for caries control. *Journal of Pathology, Microbiology and Immunology - the APMIS Journal.*	2.6

55.	Kanimozhi, R., Sangavi, R., Malligarjunan, N., and Gowrishankar, S*. (2025) Screening, isolation, identification and evaluation of bacteria with probiotic potential from traditional Palmyra palm nectar. *Frontiers in Cellular and Infection* https://www.frontiersin.org/articles/10.3389/fcimb.2025.1685639	4.8
54.	Jothi, R., Malligarjunan, N., Vidhya, K., Sangavi, R., Kamaladevi., A, Raja, V., Kannan, RRK., Pandian, S.K. and Gowrishankar, S*., (2025) Lupeol mitigates biofilm formation and attenuates virulence dimorphism in *Candida albicans* *Microbial Pathogenesis* https://doi.org/10.1016/j.micpath.2025.107989	3.5
53.	Sangavi, R., Malligarjunan, N., Pandian, S.K. and Gowrishankar, S*., (2025) Marine-Derived Cyclo(l-Leucyl-l-Prolyl) Targets d-Alanylation of Lipoteichoic Acid to Combat *Streptococcus mutans* UA159 Mediated Dental Cariogenesis. *Molecular Oral Microbiology*, e70000. DOI: https://doi.org/10.1111/omi.70000	2.8
52.	Karthika, C., Malligarjunan, N., Hari, N. P., Pandian, S.K. and Gowrishankar, S*., Phage (cocktail)-antibiotic synergism: A new frontier in addressing *Klebsiella pneumoniae* resistance. (2025) *Frontiers in Microbiology* DOI: https://doi.org/10.3389/fmicb.2025.1588472	4.0
51.	Kousi, F., Maheshwaran, G., Suganya, S., Sambasivam, S., Mohamed, A., Ranjithkumar, R., Gowrishankar, S., Sudhahar, S. 2025. Graphitic carbon nitride quantum dot embedded with MoO3-GO nanosheets as electrode material for enhanced supercapacitor performance. *Journal of Energy Storage* Volume 113, 30 March 2025, 115743	9.8
50.	Karthika, C., Malligarjunan, N., Pandian, S.K. and Gowrishankar, S*., Chitosan-encapsulated bacteriophage cocktail as promising oral delivery system to surpass gastrointestinal infection caused by *Klebsiella aerogenes*. *International Journal of Biological Macromolecules* DOI: https://doi.org/10.1016/j.ijbiomac.2024.139236 (2024)	8.5
49.	Sangavi, R., Jothi, R., Malligarjunan, N., Raja, V. and Pandian, S.K. and Gowrishankar, S*. Cetyltrimethylammonium chloride (CTAC) and its formulated mouthwash reduce the infectivity of *Streptococcus mutans* and *Candida albicans* in mono and dual state. *Applied Biochemistry and Biotechnology* [Accepted](2024)	3.1
48.	Sangavi, R., Malligarjunan, N., Satish, L., Raja, V., Pandian, S.K. and Gowrishankar, S*., Anticariogenic activity of marine brown algae *Padina boergesenii* and its active components towards *Streptococcus mutans*. *Frontiers in Cellular and Infection Microbiology* DOI: https://doi.org/10.3389/fcimb.2024.1458825 Front. Cell. Infect. Microbiol., 25 November 2024	4.8
47.	Dhatchanyani, M., Aarti, D., Akila, C., Abhishek, S. S., Neetika, S., Satish, L., Gowrishankar, S., Tulika, S., Shailendra, K. S., & Anand, M.S., 2024. A facile approach for growing Ag nano-dendrites employing towards *E. Coli*. cells monitoring using SERS: a proof-of-concept study. *Nano Express* [IOP Publishing Ltd] (Accepted)	2.7
46.	Thasnim P. M., Abinaya S. T., Jothi, R., Gowrishankar, S, Marappan V., Suman P., and Sankaralingam M *., 2024. Investigation of the inherent characteristics of copper(II) Schiff base complexes as antimicrobial agents. *New Journal of Chemistry* [Royal Society of Chemistry, England] (Accepted)	3.3
45.	Jothi, R., and Gowrishankar, S*., 2024. Synergistic anti-virulence efficacy of citral and carvacrol against mixed vaginitis causing *Candida albicans* and *Gardnerella vaginalis*: An *in vitro* and *in vivo* study. *The Journal of Antibiotics* [Nature Publishing Group, UK] (Accepted).	3.3
44.	Jothi, R., Kamaladevi, A., Malligarjunan, N., Muthuramalingam, P., Pandian, S.K. and Gowrishankar, S*., 2024. Untargeted metabolomics uncovers prime pathways linked to	4.0

	antibacterial action of citral against bacterial vaginosis-causing *Gardnerella vaginalis*: an *in vitro* and *in vivo* study. *Heliyon* [Cambridge, MA 02139, USA: Cell Press] https://doi.org/10.1016/j.heliyon.2024.e27983 (Accepted).	
43.	Jothi, R., Hong, ST., Enkhtsatsral, M., Pandian, S.K. and Gowrishankar, S*., 2023. ROS mediated anticandidal efficacy of 3-Bromopyruvate prevents vulvovaginal candidiasis in mice model. *PLoS ONE* 2023 Dec 28;18(12):e0295922. [San Francisco, CA : Public Library of Science] https://doi.org/10.1371/journal.pone.0295922	3.752
42.	Sangavi, R., Muthumanickam, S., Malligarjunan, N., Jothi, R., Boomi, P., Arivudainambi S., Raman, M., Joshi, CG., Pandian, S.K. and Gowrishankar, S*., 2023. *In silico* analysis unravels the promising anticariogenic efficacy of fatty acids against dental caries causing *Streptococcus mutans*. *Journal of Biomolecular Structure & Dynamics* [Taylor & Francis] https://doi.org/10.1080/07391102.2023.2283155	5.2
41.	Karthika, C., Malligarjunan, N., Jothi, R., Kasthuri, T., Ravi, AV., Pandian, S.K. and Gowrishankar, S*., 2023. Two novel phages PSPa and APPa inhibit planktonic, sessile and persister populations of *Pseudomonas aeruginosa*, and mitigate its virulence in Zebrafish model. *Scientific Reports* [Springer Nature]. https://doi.org/10.1038/s41598-023-45313-x	4.996
40.	Athulya, D., Sangavi, R., Gowrishankar, S., Kumar, R., Sankaralingam, M., 2023. Deciphering the Mechanism of MRSA Targeting Copper(II) Complexes of NN2 Pincer Type Ligands. *Inorganic Chemistry*. https://doi.org/10.1021/acs.inorgchem.3c02480	4.6
39.	Kannappan, A.,# Jothi, R#., Tian, X., Pandian, SK., *Gowrishankar, S.,** Chunle, S.,* 2023. Antibacterial activity of 2-hydroxy-4-methoxybenzaldehyde and its possible mechanism against Staphylococcus aureus. *Journal of Applied Microbiology*. https://doi.org/10.1093/jambio/lxad144.	4.0
38.	Jothi, R., Sangavi, R., Raja, V., Kumar, P., Pandian, S.K. and Gowrishankar, S*., 2023. Alteration of Cell Membrane Permeability by Cetyltrimethylammonium Chloride Induces Cell Death in Clinically Important *Candida* Species. *International Journal of Environmental Research and Public Health*. 20(1), p.27. DOI: https://doi.org/10.3390/ijerph20010027.	4.6
37.	Sowndarya, J., Suresh, D., Venkatachalam, S., Thamotharanc, S., Shanmugasundaram, K., Vincent, P., Sekarane, S., Gowrishankar, S., Pandian, SK., and P, Nithyanand. 2022. Heteroleptic pincer palladium (II) complex coated orthopedic implants impede the AbaI/AbaR quorum sensing system and biofilm development by *Acinetobacter baumannii*. *Biofouling* [Taylor & Francis] 29:1-11. https://doi.org/10.1080/08927014.2021.2015336.	3.797
36.	Jothi, R., Hariprasath, N., Gowrishankar, S*., Pandian, S.K., 2021. Bacterial quorum sensing molecules as promising natural inhibitors of *Candida albicans* virulence dimorphism: An *in silico* and *in vitro* study. *Frontiers in Cellular and Infection Microbiology* [Lausanne: Frontiers Media SA] https://doi.org/10.3389/fcimb.2021.781790.	6.073
35.	Jothi, R., Sangavi, R., Kumar, P., Pandian, S.K., Gowrishankar, S*., 2021. Catechol thwarts virulent dimorphism in *Candida albicans* and potentiates the antifungal efficacy of azoles and polyenes. *Scientific Reports* [Springer Nature]. DOI: 10.1038/s41598-021-00485-2.	4.996
34.	Muthumanickam, S., Boomi, P., Nachiyappan, M., Balajee, R., Vidhyavathi, R., Poorani, GP., Gowrishankar, S., Wang, Y., Biruntha, M., Subaskumar, R., Balakumar, C., Bayan, M.F., Ravikumar, S., Jeyakanthan, J., Prabu, H.G., King, S. 2021. *In Silico* Screening of Natural Phytoconstituents Towards Identification of Potential Lead Compounds to Treat	5.2

	COVID-19. *Frontiers in Molecular Biosciences* [Lausanne: Frontiers Media SA] 02 July 2021. https://doi.org/10.3389/fmolb.2021.637329	
33.	Muthumanickam, S☯., Kamaladevi, A☯., Boomi, P., Gowrishankar, S*., and Pandian, S.K. 2021. Indian ethnomedicinal phytochemicals as promising inhibitors of RNA binding domain of SARS-CoV-2 nucleocapsid phosphoprotein: an *in-silico* study. *Frontiers in Molecular Biosciences* [Lausanne: Frontiers Media SA] (In press) https://doi.org/10.3389/fmolb.2021.637122 ☯Equally Contributed * Corresponding author	5.2
32.	Gowrishankar, S*☯., Muthumanickam, S☯., Kamaladevi, A☯., Karthika, C., Jothi, R., Boomi, P., Maniazhagu, D., and Pandian, S.K. 2021. Promising phytochemicals of traditional Indian herbal steam inhalation therapy to combat COVID-19 – an *in-silico* study. *Food and Chemical Toxicology* [Elsevier, France] 148, 111966. https://doi.org/10.1016/j.fct.2020.111966 ☯Equally Contributed * Corresponding author	6.02
31.	Muthuramalingam, P., Jeyasri, R., Valliammai, A., Selvaraj, A., Karthika, C., Gowrishankar, S., Pandian, S.K., Ramesh, M., and Chen J.T., 2020. Global multi-omics and systems pharmacological strategy unravel the multi-targeted therapeutic potential of natural bioactive molecules against COVID-19: An *in-silico* approach. *Genomics* [Elsevier, Amsterdam], 112(6): 4486–4504. https://doi.org/10.1016/j.ygeno.2020.08.003	5.7
30.	Saraswathi, M.S.S.A., Rana, D., Divya, K., Gowrishankar, S., Nagendran, A., 2020. Versatility of hydrophilic and antifouling PVDF ultrafiltration membranes tailored with polyhexanide coated copper oxide nanoparticles. *Polymer Testing* [Elsevier, Amsterdam], Volume 84, April 2020, 106367. https://doi.org/10.1016/j.polymertesting.2020.106367	5.1
29.	Soumiya, G., Gowrishankar, S., Prabhu, MR. 2020. Influence of phosphotungstic acid in sulfonated poly (ether ether ketone)/poly (amide imide) based proton conductive membranes and its impact on the electrochemical studies of microbial fuel cell application. *Ionics* 26, 1841–1852(2020) [Springer Nature Switzerland AG]. https://doi.org/10.1007/s11581-019-03415-5	2.8
28.	Mahomoodally, F.M., Lobine, D., Rengasamy, K.R.R., Gowrishankar, S., Tewari, D., Zengin, G., Kim, D.H.., Sivanesan, I. 2019. Marine algae - a potential resource for anti-HSV molecules. *Processes* [MDPI AG, Switzerland] 7(12), 887. doi.org/10.3390/pr7120887. https://doi.org/10.3390/pr7120887	2.8
27.	FarisaBanu, S., Thamotharan, S., Gowrishankar, S., Pandian, S.K., Nithyanand, P., 2019. Marine bacterial DNase curtails virulence and disrupts biofilms of *Candida albicans* and non-albicans *Candida* species *Biofouling* [Taylor & Francis] 29:1-11. doi: 10.1080/08927014.2019.1680650	2.8
26.	Saraswathi, M.S.S.A., Rana, D., Divya, K., Gowrishankar, S., Sakthivel, A., Alwarappan, S., Nagendran, A., 2020. Highly permeable, antifouling and antibacterial poly (ether imide) membranes tailored with poly (hexamethylene biguanide) coated copper oxide nanoparticles. *Materials Chemistry and Physics* [Elsevier, Amsterdam] 240, 122224. https://doi.org/10.1016/j.matchemphys.2019.122224	4.094
25.	Saraswathi, M.S.S.A., Rana, D., Alwarappan, S., Gowrishankar, S., Vijayakumar, P., Nagendran, A., 2019. Polydopamine layered poly (ether imide) ultrafiltration membranes tailored with silver nanoparticles designed for better permeability, selectivity and antifouling. *Journal of Industrial and Engineering Chemistry* (In Press, Available online 14 March 2019) [Elsevier, Amsterdam] 76: 141-149. https://doi.org/10.1016/j.jiec.2019.03.014	6.064

24.	Rameshkumar, R., Pandian, S., Rathinapriya, P., Selvi, C.T., Satish, L., Gowrishankar, S., Leung, D.W.M., Ramesh, M., 2019. Genetic diversity and phylogenetic relationship of *Nilgirianthus ciliatus* populations using ISSR and RAPD markers: Implications for conservation of an endemic and vulnerable medicinal plant. *Biocatalysis and Agricultural Biotechnology* [Elsevier, USA] 18: 101072. https://doi.org/10.1016/j.bcab.2019.101072	4.0
23.	Rubini, D., FarisaBanu, S., Prabha, S., Vedhahari, B.N., Gowrishankar, S., Pandian, S.K., Wilson, A., Nithyanand, P., 2019. Extracted chitosan disrupts quorum sensing mediated virulence factors in urinary tract infection causing pathogens. *Pathogens and Disease* [FEMS, Oxford University Press, USA] 77(1). pii: ftz009. https://doi.org/10.1093/femspd/ftz009	3.166
22.	Sri Abirami Saraswathi, A., Rana, D., Alwarappan, S., Gowrishankar, S., Kanimozhi, P., Nagendran, A., 2019. Cellulose acetate ultrafiltration membranes customized with bio-inspired polydopamine coating and in situ immobilization of silver nanoparticles. *New Journal of Chemistry* [Royal Society of Chemistry, England]. 43, 4216-4225. https://doi.org/10.1039/C8NJ04511A	3.591
21.	Gowrishankar, S*., Pandian, S.K., Balasubramaniam, B., Balamurugan, K., 2018. Quorum quelling efficacy of marine cyclic dipeptide -cyclo(L-leucyl-L-prolyl) against the uropathogen *Serratia marcescens*. *Food and Chemical Toxicology* [Elsevier, France] 123, 326-336. https://doi.org/10.1016/j.fct.2018.11.013	4.679
20.	Chokpaisarn, J., Y, Kanyatorn., Sanpinit, S., Pandian, S.K., Nandhini, J.R., Gowrishankar, S., Limsuwan, S., Kunworarath, N., Voravuthikunchai, S.P., Chusri, S., 2019. Effects of a traditional Thai polyherbal medicine 'Ya-Samarn-Phlae' as a natural anti-biofilm agent against *Pseudomonas aeruginosa*. *Microbial Pathogenesis* [Elsevier, London] 128 (2019): 354 – 362. https://doi.org/10.1016/j.micpath.2019.01.036	2.914
19.	Rameshkumar, R., Satish, L., Pandian, S., Rathinapriya, P., Rency, P.S., Gowrishankar, S., Pandian, S.K., Leung, W.M.D., 2018. Manikandan Ramesh. Production of squalene with promising antioxidant properties in callus cultures of *Nilgirianthus ciliates*. *Industrial Crops and Products* [Elsevier, Netherlands] 126, 357 – 367. https://doi.org/10.1016/j.indcrop.2018.10.031	4.244
18.	Rengasamy, K.R.R☯., Khan, H☯., Gowrishankar, S☯., Lagoa, R.J.L., Mahomoodally, F.M., Khan, Z., Suroowan, S., Tewari, D., Zengin, G., Hassan, S.T.S., Pandian, S.K., 2018. The role of flavonoids in autoimmune diseases: therapeutic updates. *Pharmacology and Therapeutics* [Elsevier, France] 194:107-131. https://doi.org/10.1016/j.pharmthera.2018.09.009 ☯Equally Contributed.	10.557
17.	Hassan, S.T.S., Šudomová, M., Berchová-Bímov, K., Gowrishankar, S., Rengasamy, K.R.R., 2018. Antimycobacterial, enzyme inhibition and molecular interaction studies of psoromic acid on *Mycobacterium tuberculosis*: Efficacy and safety investigations. *Journal of Clinical Medicine* [MDPI AG, Switzerland] 20;7(8). pii: E226. https://doi.org/10.3390/jcm7080226	5.583
16.	Fang, J., Chen, Q., He, B., Ca, J., Yao, Y., Xu, S., Gowrishankar, S., Pandian, S.K., 2018. Tanshinone IIA attenuates TNF-α induced PTX3 expression and monocyte adhesion to endothelial cells through the p38/ NF-κB pathway. *Food and Chemical Toxicology* [Elsevier, France] 121: 622-630. https://doi.org/10.1016/j.fct.2018.09.063	4.679
15.	Rubini, D., FarisaBanu, S., Vellingiri, V., RamyaDevi, D., Gowrishankar, S., Pandian, S.K., Nithyanand, P., 2018. Chitosan extracted from marine biowaste mitigates staphyloxanthin production and biofilms of Methicillin- resistant *Staphylococcus aureus*. *Food and Chemical Toxicology* [Elsevier, France] 118:733-744. https://doi.org/10.1016/j.fct.2018.06.017	4.679
14.	FarisaBanu, S., Rubini, D., Murugan, R., Vellingiri, V., Gowrishankar, S., Pandian, S.K.,	4.006

	Nithyanand, P., 2018. Exploring the antivirulent and sea food preservation efficacy of Essential oil combined with DNase on *Vibrio paraholyticusaem*. *LWT Food Science and Technology* [Elsevier, France] 95 (2018): 107-115. https://doi.org/10.1016/j.lwt.2018.04.070	
13.	FarisaBanu, S., Rubini, D., Shanmugavelan, P., Murugan, R., Gowrishankar, S., Pandian, S.K., Nithyanand, P., 2018. Effect of patchouli and cinnamon essential oil on biofilm and hyphae formation by *Candida* spp. *Journal of Medical Mycology* [Elsevier, France] (2):332-339. https://doi.org/10.1016/j.mycmed.2018.02.012	1.606
12.	Satish, L☯., Santhakumari, S☯., Gowrishankar, S☯., Pandian, S.K., Ravi, A.V., Ramesh, M., 2017. Rapid biosynthesized AgNPs from *Gelidiella acerosa* aqueous extract mitigates quorum sensing mediated biofilm formation of *Vibrio* species -An *in vitro* and *in vivo* approach. *Environmental Science and Pollution Research* [Germany (Berlin): Springer] 24(35):27254-27268. https://doi.org/10.1007/s11356-017-0296-4 ☯Equally Contributed.	3.056
11.	Kannappan, A., Gowrishankar, S., Srinivasan, R., Pandian, S.K., and Ravi, A.V., 2017. Antibiofilm activity of *Vetiveria zizanioides* root extract against methicillin- resistant *Staphylococcus aureus*. *Microbial Pathogenesis* [Elsevier, London] 110 (2017): 313e324. https://doi.org/10.1016/j.micpath.2017.07.016	2.581
10.	FarisaBanu, S., Rubini, D., Rakshithaa, S., Sekar, C.K., Wilson, A., Gowrishankar, S., Pandian, S.K., and Nithyanand, P., 2017. Antivirulent properties of underexplored Cinnamomum tamala essential oil and its synergistic effects with DNase against *Pseudomonas aeruginosa* biofilms - an *in vitro* study. *Frontiers in Microbiology* [Lausanne: Frontiers Media SA] https://doi.org/10.3389/fmicb.2017.01144	4.259
9.	Gowrishankar, S., & Pandian, S.K, 2017. Modulation of *Staphylococcus epidermidis* (RP62A) extracellular polymeric layer by marine cyclic dipeptide-cyclo(L-leucyl-L-prolyl) thwarts biofilm formation. *Biochim Biophys Acta Biomembranes* [Elsevier, The Netherlands] 14;1859(7):1254-1262. https://doi.org/10.1016/j.bbamem.2017.04.009	3.79
8.	Sivaranjani, M, Prakash, M, Gowrishankar., S, Nandhini, J.R, Pandian, S.K, 2017. *In vitro* activity of α-mangostin in killing and eradicating *Staphylococcus epidermidis* RP62A biofilms. *Applied Microbiology and Biotechnology*. [Springer International, New York] 101(8):3349-3359. [Impact Factor: 3.67]. https://doi.org/10.1007/s00253-017-8231-7	3.67
7.	Gowrishankar, S., Kamaladevi, A., Balamurugan, K., and Pandian, S.K., *In vitro* and *in vivo* biofilm characterization of community-acquired methicillin-resistant *Staphylococcus aureus* from patients associated with pharyngitis infection. *BioMed Research International* [Hindawi Publishing Corp., New York] 2016, 1-14 Article ID 1289157. https://doi.org/10.1155/2016/1289157	2.583
6.	Sivaranjani, M., Gowrishankar, S., Kamaladevi, A., Pandian, S.K., Balamurugan, K., and Ravi, A.V., 2016. Morin inhibits biofilm production and reduces the virulence of *Listeria monocytogenes*- An *in vitro* and *in vivo* approach. *International Journal of Food Microbiology* [Elsevier, The Netherlands] 237, 73-82 [Impact Factor: 4.006]. https://doi.org/10.1016/j.ijfoodmicro.2016.08.021	4.006
5.	Gowrishankar, S., Sivaranjani, M., Kamaladevi, A., Ravi, A.V., Balamurugan, K., Pandian, S.K., 2016. Cyclic dipeptide cyclo(l-leucyl-l-prolyl) from marine *Bacillus amyloliquefaciens* mitigates biofilm formation and virulence in *Listeria monocytogenes*. *Pathogens and Disease* [FEMS, Oxford University Press, USA] 74, 4, 49-60. https://doi.org/10.1093/femspd/ftw017	2.483
4.	Gowrishankar, S., Kamaladevi, A., Ayyanar, K.S., Balamurugan, K., Pandian, S.K., 2015.	3.840

	Bacillus amyloliquefaciens-secreted cyclic dipeptide – cyclo(L-leucyl- L-prolyl) inhibits biofilm and virulence production in methicillin-resistant *Staphylococcus aureus*. *RSC Advances* [Royal Society of Chemistry, England] 5, 95788-95804. https://doi.org/10.1039/C5RA11641D	
3.	Gowrishankar, S., Poornima, B., Pandian, S.K., 2014. Inhibitory efficacy of cyclo(L-leucyl-L-prolyl) from mangrove rhizosphere bacterium-*Bacillus amyloliquefaciens* (MMS-50) toward cariogenic properties of Streptococcus *mutans*. *Research in Microbiology* [Elsevier, New York, USA] 165, 278-289. https://doi.org/10.1016/j.resmic.2014.03.004	3.217
2.	Gowrishankar, S., Thenmozhi, R., Balaji, K., Pandian, S.K., 2013. Emergence of methicillin-resistant, vancomycin-intermediate *Staphylococcus aureus* among patients associated with group A Streptococcal pharyngitis infection in southern India. *Infection, Genetics and Evolution* [Elsevier, New York, USA] 14, 383-389 https://doi.org/10.1016/j.meegid.2013.01.002	3.264
1.	Gowrishankar, S., Mosioma, N.D., and Pandian, S.K., 2012, Coral-associated bacteria as a promising antibiofilm agent against methicillin-resistant and -susceptible *Staphylococcus aureus* biofilms. *Evidence-Based Complementary and Alternative Medicine* [Hindawi Publishing Corp., New York] 2012, 862374 https://doi.org/10.1155/2012/862374	4.774

*** Corresponding author; ☯ Equal First author**

ABSTRACTS PUBLISHED IN CONFERENCES

1. **Gowrishankar, S.,** and Pandian, S.K., (2012). Inhibitory effect of coral-associated bacterial extracts on methicillin-resistant and susceptible *Staphylococcus aureus* biofilms. ***Clinical Microbiology and Infection*** 18(S3): R2416 [Wiley, Paris] (**Impact Factor 14.2**). DOI: 10.1111/j.1469-0691.2012.03803.x
2. Pandian, S.K., and **Gowrishankar, S.,** (2012). Molecular characterization of methicillin-resistant *Staphylococcus aureus* with emergence of epidemic clone of sequence type (ST) 772 and novel ST 2129 in southern India. ***Clinical Microbiology and Infection*** 18(S3): R2531 [Wiley, Paris] (**Impact Factor 14.2**). DOI: 10.1111/j.1469-0691.2012.03803.x.
3. **Gowrishankar, S.,** Karthika, C., and Pandian, S.K., (2012). Understanding the proteome changes in *Listeria monocytogenes* upon treatment with marine cyclic dipeptide-cyclo(l-leucyl-l-prolyl) ***Journal of Proteins and Proteomics***, 9 (Special issue): JPP 95 **[Impact Factor: 1.0]**.

BOOK CHAPTERS

1. Kanimozhi, R., and **Gowrishankar, S*.** (2026) Nanoencapsulation of Next-Generation Probiotics. In: Dharumadurai D. (eds) "***Next Generation Probiotics: Food and Feed Industry***" Protocols, Springer Nature publications. Chapter 36 (Accepted).
2. Malligarjunan, N.,ψ, Sangavi, R ψ., and **Gowrishankar, S*.** (2023) Antibiofilm activity of Postbiotics. In: Dharumadurai D. (eds) "***Protocol Book on POSTBIOTIC***". Springer Nature Publications.

   ψ Equally Contributed
3. **Gowrishankar, S*.**, Kamaladevi, A., Pandian, S.K. (2022) MALDI-TOF Analysis of Actinobacterial Peptides with Respect to MASCOT Database. In: Dharumadurai D. (eds) ***Methods in Actinobacteriology***. Springer Protocols Handbooks. Humana, New

York, NY. https://doi.org/10.1007/978-1-0716-1728-1_36.

4. Jothi, R., Karthika, C., Kamaladevi, A., Satish, L., Pandian, S.K., and **Gowrishankar, S*.** CRISPR based bacterial genome editing and removal of pathogens. In: ***Reprogramming of the Genome: Applications of CRISPR-Cas in non-mammalian systems Volume 180,*** Vijaisingh (Ed.) [Elsevier Press, Cambridge MA]. Chapter 03.
5. Satish, L., Lavanya, G., Kasthuri, T., Kalaivaani, A., Shamili, S., Muthuramalingam, P., **Gowrishankar, S.,** Pandian, SK., Singh, V., Sitrit, Y., and Kushmaro, A. CRISPR based development of RNA editing and the diagnostic platform. In: ***Reprogramming of the Genome: Applications of CRISPR-Cas in non-mammalian systems Volume 180,*** Vijaisingh (Ed.) [Elsevier Press, Cambridge MA]. Chapter 05.
6. **Gowrishankar, S*.,** Kamaladevi, A., & Pandian, S.K., 2020. Prebiotics Mechanism of Action: An Overview In: ***Advances in Probiotics: Microorganisms in Food and Health,*** D Dhanasekaran (Ed.) [Elsevier Press, Cambridge MA]. Chapter 11.
7. **Gowrishankar, S*.,** Kamaladevi, A., & Pandian, S.K., 2020. Structure and functional role of microbiome associated with specific organs of healthy individuals. In: ***Microbiome-Host Interactions,*** D Dhanasekaran (Ed.) [CRC Press, Taylor and Francis Group, USA]. Chapter 33.
8. Kamaladevi, A., **Gowrishankar, S.,** & Balamurugan, K., 2017. *Klebsiella* spp. as a pathogen: Epidemiology, pathogenesis, identification, treatment and prevention. In: A bacterial infection Series, ***Handbook of Foodborne Diseases***, Dongyou Liu (Eds.) [CRC Press, Taylor and Francis Group, USA]. Chapter 33.
9. **Gowrishankar, S.,** & Pandian, S.K., 2017. Flavonoids in the Treatment of Pulmonary Lung Diseases. In: ***Recent Advances in the Molecular Mechanism of Flavonoids***, K Pandima Devi (Ed.) [Studium Press (India) Pvt. Ltd. ISBN: 978-93-85046-21-6].

*** Corresponding author**

PAPERS & POSTERS PRESENTED IN NATIONAL & INTERNATIONAL CONF.

1. Delivered a Special Lecture on the title "**Targeting virulence, not viability: A paradigm shifts in biofilm therapy at clinical settings"** in the International Conference on '**Breaking Barriers in Antimicrobial Resistance: Innovations in Antimicrobial and Biofilm Research -2026'** organised by the PG Department of Microbiology, Syed Ammal College of Arts & Science (Affiliated to Alagappa University), Ramanathapuram on 13.02.2026.
2. Presented and won **Excellence in Interdisciplinary Research Award** for the paper entitled "Harnessing Brown Seaweed Bioactives to Suppress *Streptococcus mutans* Virulence: A Novel Approach to Dental Caries Prevention" in the "**International Seagrass–Climate Resilience Conference (ISCR 2025)**" organised by the Centre for Ocean Research, Sathyabama Institute of Science and Technology, Chennai between 03rd and 05th December 2025.
3. Presented a poster entitled "Chitosan encapsulated bacteriophage cocktail: a promising strategy for managing gastrointestinal infections caused by *Klebsiella aerogenes*" at the **American Society for Microbiology (ASM)-MICROBE-2024**, an International Conference held during June 13th -17th, 2024 at Georgia World Congress Centre (GWCC) Atlanta, USA.
4. Presented and won **Best Oral Presentation Award** for the paper entitled "Unravelling the anticariogenic mechanism of cyclo(L-leucyl-L-prolyl) in dental caries causing *Streptococcus mutans* through proteomic approach" in the "**International Conclave on Antimicrobial**

Resistance" organised by the Centre of Excellence in Life Sciences, PSGR Krishnammal College for Women (Autonomous), Affiliated to Bharathiar University, Coimbatore between March 04th & 5th, 2024.

5. Presented a paper entitled "Harnessing chitosan-encapsulated phage cocktail: an alternative approach to combat *Klebsiella aerogenes* mediated gastrointestinal infections" in the 5th International Conference on "**Recent Trends in Microbiology - 2024**" organized by the Department of Microbiology, Alagappa University, Karaikudi between 26th & 27th February 2024.
6. Presented and won **Best Oral Presentation Award** for the paper entitled "Exploring Brown Seaweeds as Promising Anticariogenic Agent in Attenuating Virulence of Oral Pathogen – *Streptococcus mutans*" at the International Conference on "**Algae: FOOD, FEED, FUELS & FINE CHEMICALS – ICAF⁴ 23**" organized by the Department of Microbiology, Bharathidasan University, Tamil Nadu during September 06th & 08th, 2023.
7. Participated and own **Outstanding Researcher Award -2019** at the International Conference "**Horizon 2019"** ***The Epitome of Biomedical Research***, held during 28th February to 1st March 2019 organized by Saveetha Dental College & Hospitals, SIMATS, Chennai.
8. Presented a poster on "A marine cyclic dipeptide -cyclo(L-leucyl-L-prolyl) quenches the quorum sensing controlled virulence traits in uropathogen -*Serratia marcescens*" at the 2nd **International conference on "Contemporary Antimicrobial Research"** organized by Department of Biotechnology, Indian Institute of Technology Kharagpur, Kolkata on 15th to 17th, December 2018.
9. Presented a poster on "Understanding the proteome changes in *Listeria monocytogenes* upon treatment with marine cyclic dipeptide-cyclo(l-leucyl-l-prolyl)" at the (10th Annual Meeting of the Proteomic Society, India (PSI)) **International conference on "Proteomics for Cell Biology and Molecular Medicine"** organized by National Centre for Cell Science, Pune on 12th to 14th, December 2018.
10. Presented a poster on "Comparative evaluation and optimization of a simple method for lipid extraction from marine macroalgae for biodiesel production" at the "**International Conference on Current Trends in Biotechnology (ICCB-2016)**" held between 8th and 10th December 2016 at Vellore Institute of Technology (VIT), Vellore, India.
11. Presented a paper on **"**Marine cyclic dipeptide-cyclo(L-leucyl-L-prolyl) disrupts *Staphylococcus epidermidis* (RP62A) biofilm integrity by modifying its exopolymeric substance**"** at the **"International Conference on Recent Trends in Biosciences"** held between 7th and 9th April 2016 at Alagappa University, Karaikudi, India.
12. Presented a poster on **"**Cyclo(L-leucyl-L-prolyl) of *Bacillus amyloliquefaciens* attenuates *Staphylococcus epidermidis* (RP62a) biofilm by modifying its exopolymeric substance**"** at the **International conference on "New Horizons in Biotechnology"** held during November 22th-25th, 2015 at Thiruvananthapuram, India.
13. Presented a poster on **"***Bacillus amyloliquefaciens*-secreted cyclic dipeptide-cyclo(L-leucyl-L-prolyl) inhibits biofilm formation of *Listeria monocytogenes*" **at** the 25th **European Congress of Clinical Microbiology and Infectious Diseases** (ECCMID 2015) held during April 25th-28th, 2015 at the Bella Center, Copenhagen, Denmark. (P1348).
14. Presented a paper on **"**Inhibitory efficacy of cyclic dipeptide-cyclo(L-leucyl-L-prolyl) toward biofilm and virulence production of the foodborne pathogen *Listeria monocytogenes***"** at the **National Conference on "Bioactive Peptides-Application in Veterinary, Medical**

and Food Sciences (NBAP-TANUVAS-2014) held during December 18th-19th, 2014 at Department of Animal Biotechnology, Madras Veterinary College, Chennai – 600 007, Tamil Nadu, India.

15. Presented a poster on **"***In vitro*, *in vivo* and genotypic methods for the evaluation of biofilm formation among methicillin-resistant S*taphylococcus aureus* from patients with pharyngitis infection" at the "**International Conference on Emerging Trends in Biotechnology (ICETB 2014)"** held during November 6th-9th, 2014 at Jawaharlal Nehru University, New Delhi.
16. Presented a paper on **"**Antimicrobial and antibiofilm efficacy of mangrove sediment bacterium- *Bacillus pumilus* against Gram-positive bacterial pathogens" at the 3rd "**International Science Congress (ISC-2013)"** held during December 8th & 9th, 2013 at Karunya University, Coimbatore, Tamil Nadu, India.
17. Presented a poster as a co-author on **"**Study on the antimicrobial and anti-biofilm potential of a mangrove sediment bacterium *Bacillus pumilus* against Gram-positive bacterial pathogens**"** at the "**23rd European Congress of Clinical Microbiology and Infectious Diseases**" (ECCMID 2013), April 27-30, 2013, Berlin, Germany.
18. Presented a poster on **"**Efficacy of coral associated bacteria from Gulf of Mannar against biofilms of methicillin-resistant and-susceptible *Staphylococcus aureus***"** at the "**National Seminar on Microbes in Health, Agriculture and Industry**" held during February 27th-March 1st, 2013 at Department of Biotechnology, Alagappa University, Karaikudi – 630 004, Tamil Nadu, India.
19. Presented a poster on **"**Coral associated bacteria as a promising antibiofilm agent against methicillin-resistant and -susceptible *Staphylococcus aureus* biofilms" at the International conference on **"Regulatory Network Architecture in Bacteria"** held on March 9th-11th, 2012 at Sastra University, Thanjavur, Tamil Nadu, India.
20. Presented a poster on **"**Molecular typing of Methicillin-Resistant *Staphylococcus aureus* from throat swabs of pharyngitis patients**"** at the **International Conference on "Microbial Biotechnology for Sustainable Development"** held on November 3rd-6th, 2011 at Panjab University, Chandigarh-160014, India.

PAPERS & POSTERS PRESENTED IN NATIONAL & INTERNATIONAL CONF.

Presented by my Scholars and M.Sc., Students, in which myself as Corresponding Author

21. Presented the poster entitled **"Phage-Antibiotic Synergism: A Novel Strategy to Combat Multidrug-Resistant *Klebsiella pneumonia*"** at the **International Conference on "Microbiological Research for Health and Well-being "(ICMRHW-2026)"** organized by the Department of Microbiology, Periyar University, Salem during 29th & 30th January 2026. (By my Research Scholar, Mr. B. Sriram).
22. Presented the paper entitled **"Oral Phage Therapy Reinforced by Chitosan Encapsulation for Targeted Control of *Klebsiella aerogenes* in the Gastrointestinal Tract"** at the **International Conference on "Microbiological Research for Health and Well-being "(ICMRHW-2026)"** organized by the Department of Microbiology, Periyar University, Salem during 29th & 30th January 2026. (By my Research Scholar, Mr. N. Malligarjunan).

23. Presented and ***won Best Poster Presentation Award*** for the poster entitled "***In silico* validation, cloning & overexpression of PSPA- phage encoded endolysin"** at the International Conference on "FutureBio 2025: Smart Technologies and Sustainable Strategies in Biosciences (FSTSSB-2025)" organized by the Department of Animal Health and Management, Alagappa University, Karaikudi during 29th & 30th September 2025. (By my Research Scholar, Mr. B. Sriram).

24. Presented the paper entitled "**Chitosan-encapsulated bacteriophage cocktail for enhanced oral delivery against *Klebsiella aerogenes* gastrointestinal infections"** at the International Conference on "FutureBio 2025: Smart Technologies and Sustainable Strategies in Biosciences (FSTSSB-2025)" organized by the Department of Animal Health and Management, Alagappa University, Karaikudi during 29th & 30th September 2025. (By my Research Scholar, Mr. N. Malligarjunan).

25. Presented the paper entitled "**Screening, isolation, identification and evaluation of β-galactosidase producing bacteria with probiotic potential from traditional *Palmyra palm* nectar"** at the International Conference on "FutureBio 2025: Smart Technologies and Sustainable Strategies in Biosciences (FSTSSB-2025)" organized by the Department of Animal Health and Management, Alagappa University, Karaikudi during 29th & 30th September 2025. (By my Research Scholar, Mrs. R. Kanimozhi).

26. Presented the paper entitled "**Cyclo(L-leucyl-L-prolyl) targets virulence pathways to combat *Candida albicans*-associated Denture Stomatitis"** at the International Conference on "FutureBio 2025: Smart Technologies and Sustainable Strategies in Biosciences (FSTSSB-2025)" organized by the Department of Animal Health and Management, Alagappa University, Karaikudi during 29th & 30th September 2025. (By my Research Scholar, Mrs. R. Sangavi).

27. Presented the paper entitled "Marine-Derived Cyclo(L-leucyl-L-prolyl) attenuates *Streptococcus mutans* virulence by targeting D-alanylation of lipoteichoic acid: A promising anticariogenic strategy at the **National Conference on "Harnessing Biotechnology: Driving Innovation in Healthcare, Agriculture, and the Environment (NCBH-25)"** organized by the Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology, Chennai during August 08th & 09th, 2025. (By my Research Scholar, Mrs. R. Sangavi).

28. Presented and won **Best Oral Presentation Award** for the paper entitled "Marine Brown Macroalgae *Padina boergesenii* and Its Bioactive Compounds Suppress Cariogenic Traits of *Streptococcus mutans*, the Primary Causative Agent of Dental Caries" at the **National Conference on "Recent Innovation in Drug from Sea & Conservation of Marine Bioresources"** organized by the Department of Zoology, V.O. Chidambaram College, Thoothukudi, Tamil Nadu 628 008 during March 27th & 28th, 2025. (By my Research Scholar, Mrs. R. Sangavi).

29. Presented the paper entitled "Proteomic Insights into the Anticariogenic Action of Cyclo(L-Leucyl-L-Prolyl) Against *Streptococcus mutans* in Dental Caries at the **National Conference on "Recent Innovation in Drug from Sea & Conservation of Marine Bioresources"** organized by the Department of Zoology, V.O. Chidambaram College, Thoothukudi, Tamil Nadu 628 008 during March 27th & 28th, 2025. (By my Research Scholar, Mr. N. Malligarjunan).

30. Presented and won **Best Oral Presentation Award** for the paper entitled "Anticariogenic potential of Cetyltrimethylammonium chloride (CTAC) and its formulated mouthwash against *Streptococcus mutans* and *Candida albicans* in mono and dual species biofilms" at the Nation Conference on "**Fungal Frontier: Fungal Farming and Healthcare (NCFFFFH 2025**)" organized by the Department of Animal Health and Management, Alagappa University, Karaikudi during March 17th & 18th, 2025. (By my Research Scholar, Mrs. R. Sangavi).
31. Presented and won **Best Oral Presentation Award** for the paper entitled "Lupeol Suppresses Biofilm Formation and Hyphal Morphogenesis in *Candida albicans* and Non-albicans *Candida* Species" at the Nation Conference on "**Fungal Frontier: Fungal Farming and Healthcare (NCFFFFH 2025**)" organized by the Department of Animal Health and Management, Alagappa University, Karaikudi during March 17th & 18th, 2025. (By my Research Scholar, Mr. N. Malligarjunan).
32. Presented the paper entitled "Chitosan-Encapsulated Bacteriophage Cocktail: A Promising Oral Delivery System for Combating *Klebsiella aerogenes* Gastrointestinal Infections" at the **2nd International Conference on "Emerging Concepts in Biotechnological Innovations (ICECBI-2025)"**, organized by the Faculty of Science and Humanities, Department of Biotechnology, SRM Institute of Science and Technology during February 26th to 28th, 2025. (By my Research Scholar, Mr. N. Malligarjunan).
33. Presented the paper entitled "Cetyltrimethylammonium Chloride (CTAC) and its formulated mouthwash as potential anticaries agents against *Streptococcus mutans* and *Candida albicans* in mono- and dual-species states" at the **2nd International Conference on "Emerging Concepts in Biotechnological Innovations (ICECBI-2025)"**, organized by the Faculty of Science and Humanities, Department of Biotechnology, SRM Institute of Science and Technology during February 26th to 28th, 2025. (By my Research Scholar, Ms. R. Sangavi).
34. Presented a poster entitled "Proteomic profiling deciphers the molecular targets in dental caries causing *Streptococcus mutans* upon treatment with anticariogenic agent" at the 5th International Conference on "**Recent Trends in Microbiology - 2024**" organized by the Department of Microbiology, Alagappa University, Karaikudi between 26th & 27th February 2024. (By my Research Scholar, Ms. R. Sangavi).
35. Presented and won **Best Oral Presentation Award** for the paper entitled "Characterization and therapeutic evaluation of jumbo phages KSKp and KPKp against multidrug-resistant *Klebsiella pneumoniae*" at the International conference on "**Infectious Diseases and Antimicrobial Resistance (ICIDAR 2023**)" organized by the Department of Microbiology in association with Indian Association of Medical Microbiologist (IAMM) at Saveetha Dental College & Hospital, Chennai, Tamil Nadu during July 28th & 29th, 2023. (By my Research Scholar, Mr. N. Malligarjunan).
36. Participated and presented a posted entitled "**Potential Fatty acid(s) as promising anticariogenic agent against dental caries causing *Streptococcus mutans*: An *in silico* study**" at the International conference on "**Infectious Diseases and Antimicrobial Resistance (ICIDAR 2023**)" organized organized by the Department of Microbiology in association with Indian Association of Medical Microbiologist (IAMM) at Saveetha Dental College & Hospital, Chennai, Tamil Nadu during July 28th & 29th, 2023 (By my Research Scholar, Ms. R. Sangavi).
37. Presented a paper entitled "Isolation and characterization through physiological and genomic methods of novel phage PAP-1and evaluation of its therapeutic efficacy against

Pseudomonas aeruginosa" at "**Recent Trends in Microbiology (RTM-2023)**" organized by the Department of Microbiology, Alagappa University, Karaikudi on 05th & 6th, January 2023 (By my Research Scholar, Ms. C. Karthika).

38. Presented a paper entitled "Mechanistic insights on anticandidal efficacy of 3-Bromopyruvate and its formulation as vaginal cream in effective prevention of vulvovaginal candidiasis in mice model" at "**Recent Trends in Microbiology (RTM-2023)**" organized by the Department of Microbiology, Alagappa University, Karaikudi on 05th & 6th, January 2023 (By my Research Scholar, Mrs. R. Jothi).
39. Presented a paper entitled "Anticariogenic potential of marine macroalgae –*Padina boergesenii* towards oral pathogen -*Streptococcus mutans*" at "**Recent Trends in Microbiology (RTM-2023)**" organized by the Department of Microbiology, Alagappa University, Karaikudi on 05th & 6th, January 2023 (By my Research Scholar, Ms. R. Sangavi).
40. Participated the presented a paper on the title "Exploration of Nature's destroyer of MDR *Pseudomonas aeruginosa*- a novel bacteriophage PAP-1" at **International Conference on Infectious Diseases & Advances in Microbial Technology (MICROSUMMIT-2022)** organized by the Department of Microbiology in association with JMM- Microbiology Society, UK at Saveetha Dental College & Hospital, Chennai, Tamil Nadu during August 05th & 6th, 2022 (By my Research Scholar, Ms. C. Karthika).
41. Participated and own "**Best Poster Presentation**" Award for the paper/poster on "Phenotypic, genotypic and therapeutic characterization of novel phage PAP-1 infecting *Pseudomonas aeruginosa*" at **National Level Conference on Biotechnology and OMICS Sciences-2022 (BIO-OMICS-2022**) organized by the Department of Biotechnology, Alagappa University, Karaikudi during May 27 & 28, 2022 (By my Research Scholar, Mr. N. Malligarajunan).
42. Participated and presented a poster on "Exploring *in vitro* and *in vivo* anti-infective potential of lytic bacteriophage against planktonic and biofilm cells of *Enterobacter aerogenes*" at **National Level Conference on Biotechnology and OMICS Sciences-2022 (BIO-OMICS-2022**) organized by the Department of Biotechnology, Alagappa University, Karaikudi during May 27 & 28, 2022 (By my Research Scholar, Ms. C. Karthika).
43. Participated and presented a poster on "Cetyl trimethyl ammonium chloride (CTAC) as promising anticaries agent against dual-species biofilms of *Streptococcus mutans* and *Candida albicans*" at **National Level Conference on Biotechnology and OMICS Sciences-2022 (BIO-OMICS-2022)** organized by the Department of Biotechnology, Alagappa University, Karaikudi during May 27 & 28, 2022 (By my Research Scholar, Ms. R. Sangavi).
44. **"Best Poster Presentation Award**" for the paper/poster on "Phenotypic, genotypic and therapeutic characterization of novel phage PAP-1 infecting *Pseudomonas aeruginosa*" at National Level Conference on Biotechnology and OMICS Sciences-2022 (BIO-OMICS-2022) organized by the Department of Biotechnology, Alagappa University, Karaikudi during May 27 & 28, 2022. (By my Research Scholar, **Mr. N. Malligarjunan).**
45. Participated and own "**Best Paper Award**" for the paper on "Bacteriophage therapy as promising alternative to combat *Enterobacter aerogenes* infection: an *in vitro* and *in vivo* study" at **International Conference on Infectious Diseases & Advances in Microbial Technology (MICROSUMMIT-2022)** organized by the Department of Microbiology in association with JMM- Microbiology Society, UK at Saveetha Dental College & Hospital, Chennai, Tamil Nadu during August 05th & 6th, 2022. (By my Research Scholar, Ms. C. Karthika).

46. Participated as co-author and own "Best Poster Presentation" Award for the poster on "Cataloguing of Seaweed-epiphytic bacterial community with specific objectives of isolation, characterization and prevention of bacterial infections in the seaweeds cultivating in the Tamil Nadu coast" at **International Conference on Applied Phycology (ICAP-2022)** organized by CSIR – CSMCRI, Marine Algal Research Station, Mandapam Camp, Tamil Nadu on May 30, 2022.
47. Participated presented a poster on "Therapeutic efficacy of bacteriophages against multidrug-resistant *Klebsiella pneumoniae*" at **International Conference on Applied Phycology (ICAP-2022) organized by CSIR – CSMCRI,** Marine Algal Research Station, Mandapam Camp, Tamil Nadu on May 30, 2022 (By my Research Scholar, Mr. N. Malligarjunan).
48. Participated presented a poster on "Marine cyclic dipeptide- Cyclo(L-leucyl-L-prolyl) from mangrove rhizosphere bacterium- *Bacillus amyloliquefaciens* (MMS-50) hampers cariogenic properties of *Streptococcus mutans*" at **International Conference on Applied Phycology (ICAP-2022)** organized by CSIR – CSMCRI, Marine Algal Research Station, Mandapam Camp, Tamil Nadu on May 30, 2022 (By my Research Scholar, Ms. R. Sangavi).
49. Participated presented a poster on "Anti-infective potential of bacteriophages EAP-1 & 2 against planktonic and biofilm cells of *Enterobacter aerogenes*" at **International Conference on Applied Phycology (ICAP-2022) organized by CSIR –** CSMCRI, Marine Algal Research Station, Mandapam Camp, Tamil Nadu on May 30, 2022 (By my Research Scholar, Ms. C. Karthika).
50. Participated and own "**Best e-PPT Presentation Award**" for the paper on "Promising antivirulence efficacy of a pentacyclic triterpenoid against *Candida albicans*" at **International Virtual Conference on Emerging, Medical, Biomedical and Biological Sciences (IVCEMBBS-2020)** jointly organized by SynBiogenica Labs, India, ACE International Pte Ltd., Singapore and Pegaso Canton, Italy during October 24 – 26, 2020 (By my Research Scholar, Ms. C. Karthika).
51. Participated and own "**Best e-PPT Presentation**" Award for the paper on "Therapeutic characterization of bacteriophage against drug-resistant clinical isolates of *Pseudomonas aeruginosa* through *in vitro* and *in vivo* study" at **International Virtual Conference on Emerging, Medical, Biomedical and Biological Sciences (IVCEMBBS-2020**) jointly organized by SynBiogenica Labs, India, ACE International Pvt. Ltd., Singapore and Pegaso Canton, Italy during October 24 – 26, 2020 (By my Research Scholar, Ms. C. Karthika).
52. Presented a poster entitled "Isolation of sewage bacteriophage and its i*n vitro* and *in vivo* inhibitory efficacy against multidrug-resistant *Pseudomonas aeruginosa*" in **International conference on "Bacteriophage Research and Antimicrobial Resistance**" organized by Vellore Institute of Technology, Vellore, India on 12 to 13 December, 2019 (By my Research Scholar, Ms. C. Karthika).
53. Participated and presented a poster entitled "*In vitro* and *in vivo* efficacy evaluation of bacteriophage against multidrug-resistant *Pseudomonas aeruginosa*" in International conference on "**New Horizons in Biotechnology-2019" organized by Biotech Research Society, India, CSIR- NIIST**, Trivandrum, India on 20th to 24th, November 2019 (By my Research Scholar, Ms. C. Karthika).
54. Presented a poster entitled "Global Protein Profiling of *Listeria monocytogenes* upon treatment with marine cyclic dipeptide-cyclo(L-leucyl-L-prolyl)" in Third International conference on "**Recent Trends in Microbiology (RTM-2019)**" organized by Department of

Microbiology, Alagappa University, Karaikudi on 24th to 25th, January 2019 (By my Research Scholar, Ms. C. Karthika).

55. Presented a poster on "A cyclic dipeptide of marine origin thwarts biofilm assemblage and virulence secretion in the food borne pathogen- *Listeria monocytogenes*" at the **National conference on "Biotechnological Innovations for Socio-Economic Developments"** organized by PG & Research Department of Biotechnology, J.J. College of Arts and Science, Pudukkottai on 1st & 2nd, March 2018 (By my M.Sc., Student Ms C Karthika).
56. Presented a poster on "A pentacylic triterpenoid from *Wedelia calendulacea* (L.) inhibit *Candida* species biofilms and virulence dimorphism" at the **National conference on "Biotechnological Innovations for Socio-Economic Developments** organized by PG & Research Department of Biotechnology, J.J. College of Arts and Science, Pudukkottai on 1st & 2nd, March 2018 (By my M.Sc., Student Ms. Vidhya).
57. Presented a poster entitled "Inhibition of Biofilm formation and Virulence in *Listeria monocytogenes* by a Cyclic Dipeptide-Cyclo(L-leucyl-L-prolyl) from marine *Bacillus amyloliquefaciens*" in the "**National Conference on Enhancing Entrepreneurship and Innovation in Biotechnology for Sustainable Development**" organized by TNSRO, Pudukkottai held during 28th to 29th, July 2017 (By my M.Sc., Student Ms C Karthika).
58. Presented a poster as a co-author on "Green Synthesis of Silver Nanoparticles from Marine Seaweed and Antivirulence Activity against Vibrios" at the **National conference on "Innovations in Modern Biology & 48th AQUA-TERR Annual Conference**" organized by School of Biological Sciences, Madurai Kamaraj University, Madurai on 27 & 28, February 2017.
59. Presented a poster as a co-author on "Improvement of simple protocol for lipid extraction from marine macroalgae for increased biofuel productivity" at the **International conference on "Recent Trends in Microbiology (RTM-2016)**" organized by Department of Microbiology, Alagappa University, Karaikudi on 20-21st, December 2016.
60. Presented a poster as a co-author on "Green synthesis of AgNPs from marine macroalgae and its application against Vibriosis in *Artemia franciscana*" at the '**International conference on "Recent Trends in Microbiology (RTM-2016)'** organized by Department of Microbiology, Alagappa University, Karaikudi on 20-21st, December 2016.
61. Presented a poster as a co-author on **"***In vitro* efficacy of α-mangostin in killing and eradication *Staphylococcus epidermidis* RP62A biofilms**"** at the **"International Conference on Current Trends in Biotechnology (ICCB-2016)"** held between 8th and 10th December 2016 at Vellore Institute of Technology (VIT), Vellore, India.
62. Presented a poster as a co-author on **"**Development of rapid protocol for lipid extraction from seaweeds for biodiesel production and comparative assessment**"** at the **"5th International Conference Sustainable Utilization of Tropical Plant Biomass: Bioproducts, Biocatalysts & Biorefineray (SutB4)"** held between 17th and 18th November 2016 at TNAU, Coimbatore, India (sponsored by ICAR).
63. Presented a poster as a co-author on **"**Xanthone from *Garcinia mangostana* Linn eradicates mature biofilms of *Staphylococcus epidermidis***"** at the **"International Conference on Recent Trends in Biosciences"** held between 7th and 9th April 2016 at Alagappa University, Karaikudi, India.
64. Presented a poster as a co-author on **"**Green based AgNPs from red seaweed and its defensive effect to control Vibriosis in Brine shrimp: An environmentally friendly approach" at the **"International Conference on Frontier Areas in Chemical Technologies"** held between 21 and 23 March 2016 at Alagappa University, Karaikudi, India.

65. Presented a poster as a co-author on "Synthesis, characterization and antibacterial activity of silver nanoparticles synthesized from *Padina boergesenii*" at the **"International Conference on Frontier Areas in Chemical Technologies"** held between 21 and 23 March 2016 at Alagappa University, Karaikudi, India.
66. Presented a poster as a co-author on "Green synthesis of silver nanoparticles from marine macro algae and its defensive effect to control Vibriosis in *Artemia Fransiscana*: An eco-friendly approach" at the **"National Conference on Emerging Trends in Plant Science"** held during 10 & 11 March 2016 at Bharathidasan University, Trichy, India. (As co-author).

SEMINAR & WORKSHOPS ATTENDED & OTHER TRAINING PROGRAMMES

1. National Seminar on **"Cancer Prevention and Management "organized** by the Department of Biomedical Science, Alagappa University on 05th February 2024 on the occasion of WORLD CANCER DAY -2024.
2. One Day International Symposium on **"Advances in Laboratory Techniques for Biomedical Applications "organized** by the Department of Biomedical Science, Alagappa University on 31st January 2024.
3. Two-day Workshop on **"Single-Cell Omics"** organized by the Aravind Medical Research Foundation, Dr. G. Venkataswamy Eye Research Institution, Madurai on 12th & 13th, October 2023
4. **"International Symposium on Bioplastics – ISB-23"** organized by the Department of Microbiology, Alagappa University, Karaikudi on 12th & 13th, September 2023.
5. National Workshop on **"Electron Tomography of Biological Specimens"** organized by Electron Microscopy Facility, SAIF, Department of Anatomy, AIIMS, New Delhi from May 09th -13th, 2022.
6. "**Laboratory Animal Webinar Series (LAWS-2021)**" organized by Sathyabama Institute of Science and Technology during 22nd to 27th of November 2021 (between 4:30 PM & 6:00 PM) through Online mode (Meeting ID: vex-dopt-gmf).
7. Training programme on **"Empowering the Changemakers in Biopharma Sector"** organized by KIIT- Technology Business Incubator and BCIL for *National Biopharma Mission*, Department of Biotechnology, *Government of India* at Bhubaneswar during March 3-5, 2020.
8. **"ZEISS Microscopy Course"** held between 21st and 23rd May, 2015 organized by Carl Zeiss India (Bangalore) Pvt. Ltd. at **IIT Madras**.

GENBANK & MLST SUBMISSIONS

S. No	Culture and Sequence details	Accession No.
1.	**16S rRNA gene sequence of *Acinetobacter baumannii* isolated from clinical settings**	
	Acinetobacter baumannii AB-01 16S rRNA gene, partial sequence	MF443127
2.	*Acinetobacter baumannii* AB-02 16S rRNA gene, partial sequence	MF443128

3.	*Acinetobacter baumannii* AB-03 16S rRNA gene, partial sequence	MF443129
4.	*Acinetobacter baumannii* AB-04 16S rRNA gene, partial sequence	MF443130
5.	**16S rRNA sequence of Lactic Acid Bacteria (LAB) isolated from fermented curd**	
	Enterococcus faecium LAB-01 16S rRNA gene, partial sequence	MF443131
6.	*Enterococcus faecium* LAB-02 16S rRNA gene, partial sequence	MF443132
7.	*Bacillus tequilensis* PN-01 16S rRNA gene, partial sequence	PV915462
	Fructobacillus fructosus PN-21 16S rRNA gene, partial sequence	PV915463
8.	*Fructobacillus parabroussonetiae* PN-31 16S rRNA gene, partial sequence	PV915464
9.	*Fructobacillus parabroussonetiae* PN-35 16S rRNA gene, partial sequence	PV915465
10.	*Fructobacillus fructosus* PN-63 16S rRNA gene, partial sequence	PV915466
11.	*Fructobacillus durionis* PN-67 16S rRNA gene, partial sequence	PV915467
12.	*Staphylococcus hominis* PN-7216S rRNA gene, partial sequence	PV915468
13. 14.	**Internal transcribed spacer region (ITS) sequence of *Candida* species isolated from clinical settings**	
	Candida tropicalis GCT-01 ITS region, partial sequence	MF445103
15.	*Candida tropicalis* GCT-02 ITS region, partial sequence	MF445104
16.	*Candida tropicalis* GCT-03 ITS region, partial sequence	MF445105
17.	*Candida tropicalis* GCT-04 ITS region, partial sequence	MF445106
18.	*Candida tropicalis* GCT-05 ITS region, partial sequence	MF445107
19.	*Kluyveromyces marxianus* GKM-01 ITS region, partial sequence	MF445108
20.	*Kluyveromyces marxianus* GKM-02 ITS region, partial sequence	MF445109
21.	*Candida glabrata* GCG-02 ITS region, partial sequence	MF445110
22.	*Candida glabrata* GCG-03 ITS region, partial sequence	MF445111
23.	*Candida glabrata* GCG-04 ITS region, partial sequence	MF445112
24.	*Candida albicans* GCA-01 ITS region, partial sequence	MF445113
	Candida albicans GCA-02 ITS region, partial sequence	MF445114
25.	*Candida albicans* GCA-03 ITS region, partial sequence	MF445115
26.	*Candida albicans* GCA-04 ITS region, partial sequence	MF445116
27.	*Candida albicans* GCA-05 ITS region, partial sequence	MF445117
28.	*Candida albicans* GCA-06 ITS region, partial sequence	MF445118
29.	*Candida albicans* GCA-07 ITS region, partial sequence	MF445119
30. 31.	**16S rRNA sequence of bacteria associated with marine rhizosphere sediment from Palk Bay**	
	Bacillus amyloliquefaciens MMS-50 16S rRNA gene, partial sequence	KC122355
32.	*Vibrio proteolyticus* MMS-05 16S rRNA gene, partial sequence	KC122356
	Vibrio proteolyticus MMS-10 16S rRNA gene, partial sequence	KC122357
33.	*Vibrio natriegens* MMS-11 16S rRNA gene, partial sequence	KC122358
34.	*Vibrio proteolyticus* MMS-20 16S rRNA gene, partial sequence	KC122359
35.	*Bacillus pumilus* MMS-4016S rRNA gene, partial sequence	KC122360
36.	*Vibrio harveyi* MMS-06 16S rRNA gene, partial sequence	KC122361
37.	*Vibrio proteolyticus* MMS-48 16S rRNA gene, partial sequence	KC122362
38. 39.	**16S rRNA sequence of *Staphylococcus aureus* isolated from throat swabs of pharyngitis patients from Tamil Nadu**	
	Staphylococcus aureus GSA-84 16S rRNA gene, partial sequence	JN390831.1

40.	*Staphylococcus aureus* GSA-395 16S rRNA gene, partial sequence	JN390832.1
41.	*Staphylococcus aureus* GSA-20 16S rRNA gene, partial sequence	JN315147.1
42.	*Staphylococcus aureus* GSA-44 16S rRNA gene, partial sequence	JN315148.1
43.	*Staphylococcus aureus* GSA-45 16S rRNA gene, partial sequence	JN315149.1
44.	*Staphylococcus aureus* GSA-410 16S rRNA gene, partial sequence	JN315150.1
45.	*Staphylococcus aureus* GSA-79 16S rRNA gene, partial sequence	JN315151.1
46.	*Staphylococcus aureus* GSA-A8 16S rRNA gene, partial sequence	JN315152.1
47.	*Staphylococcus aureus* GSA-46 16S rRNA gene, partial sequence	JN315153.1
48.	*Staphylococcus aureus* GSA-51 16S rRNA gene, partial sequence	JN315154.1
49.	*Staphylococcus aureus* GSA-A16 16S rRNA gene, partial sequence	JN315155.1

Multilocus sequence types (ST) and clonal complexs (CC) derived from sequencing of 7 housekeeping genes (*arcC, aroE, glpF, gmk, pta, tpi* and *yqiL*) for MRSA strains recovered from pharyngitis patients from southern India

S. No.	MLST ID	Strain Identity	MLST (CC-ST)
1	4149	GSA-410	CC15- ST772
2	4150	GSA-86	CC15- ST772
3	4151	GSA-45	CC5- ST368
4	4152	GSA-88	CC15- ST772
5	4153	GSA-32	CC5- ST1801
6	4154	GSA-20	CC15- ST772
7	4155	GSA-A4	CC15- ST772
8	4156	GSA-A8	CC5- ST240
9	4157	GSA-83	CC15- ST772
10	4158	GSA-A6	CC15- ST772
11	4159	GSA-16	CC672- ST672
12	4160	GSA-22	CC15- ST772
13	4161	GSA-297	CC15-ST1713
14	4164	GSA-58	CC5- ST368
15	4165	GSA-44	CC22-ST217
16	4174	GSA- 46	SINGLETON-ST571
17	4175	GSA- 63	CC22-ST1137
18	4176	GSA-414	CC15-ST2129
19	4181	GSA-395	CC15-ST772
20	4182	GSA-70	CC15-ST772
21	4183	GSA-54	CC5-ST368
22	4184	GSA-81	CC15-ST474
23	4185	GSA-51	CC5-ST585
24	4186	GSA-79	CC22-ST1137
25	4187	GSA-291	CC15-ST1713
26	4188	GSA-47	CC22-ST217
27	5449	GSA-140	ST-772
28	5450	GSA-310	ST-30

Multilocus sequence types (ST) and clonal complexs (CC) derived from sequencing of 7 housekeeping genes (*arcC, aroE, glpF, gmk, pta, tpi* and *yqiL*) for MSSA strains recovered from pharyngitis patients from southern India

S. No.	MLST ID	Strain Identity	MLST (CC-ST)
29	4189	GSA-415	CC15-ST15
30	4177	GSA-48	CC15-ST1713
31	4178	GSA-300	CC30-ST433
32	4179	GSA-100	CC5-ST1294
33	4180	GSA-394	CC15-ST15

Faulty Profile Update as of 17.06.2026
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