

Dr. V. BALASUBRAMANIAN Assistant Professor

Contact

Address : Department of Microbiology

Alagappa University Karaikudi – 630 003 Tamil Nadu, INDIA

Employee Number : 54407

Date of Birth : 11-03-1982

Contact Phone (Office) : -

Contact Phone (Mobile) : +91 9994304752

Contact e-mail(s) : <u>balasubramanianv@alagappauniversity.ac.in</u>

microbaalu8211@gmail.com

Skype id : -

Academic Qualifications: M.Sc., Ph.D.

Teaching Experience: Six Years

Research Experience: Twelve Years

Additional Responsibilities

- 1. Coordinator VVP Programme Department of Microbiology, Alagappa University, Karaikudi.
- 2. Coordinator- Student Seminar Club, Department of Microbiology, Alagappa University, Karaikudi.
- 3. Coordinator Swachh Bharath, Department of Microbiology, Alagappa University, Karaikudi.
- 4. Coordinator Book Club, Department of Microbiology, Alagappa University, Karaikudi.

- 5. Member- Department Research Committee Department of Microbiology, Alagappa University, Karaikudi.
- 6. Member- Department Purchase Committee Department of Microbiology, Alagappa University, Karaikudi.
- 7. Member Question Paper Setter, M.Sc., Microbiology, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu, India

Areas of Research

- Screening of Novel Antibiotics from marine organisms
- ➤ Marine Biofilm and Biofouling Control Strategies
- Microbial Ecology
- Ocean Microbial Metegenomics
- Small Protein Ligand Interactions
- ➤ Heavy Metal Bioremediation

Research Supervision / Guidance

Progra	m of Study	Completed	Ongoing
Research	Ph.D.	-	2
	M. Phil.,	1	-
Project	PG	20	-
,	UG / Others	-	-

Publications

Intern	ational	Nati	Others	
Journals Conferences		Journals	Conferences	Books /
				Chapters /
				Monographs /
				Manuals
6	5	3	4	7

Cumulative Impact Factor (as per JCR): 8.5 h-index : 4 i10 index : 2 Total Citations : 103

Funded Research Projects

Completed Projects

	S.	_	Per	iod	Project Title	Budget
	No	Agency	From	То		(Rs. In lakhs)
	-	-	-	-	-	-

Ongoing Projects

S.	Agency	Per od		Project Title	Budget
No	0	From	To		(Rs. In lakhs)
1	AURF	2017	2018	"Antifouling potentials of marine biofilm bacteria from Palk Bay"	0.35

Consultancy Projects

S.		Peri	iod		Budget
No	Agency	From	То	Project Title	(Ks. In lakhs)
-	-	-	-	-	-

Others

Note: Budget must be rounded to two decimal places

Patents

Nil

Distinctive Achievements / Awards

- 1. "Science Academies' Summer Research Fellowship Programme for Students and Teachers 2017". Indian Academy of Science, Bengaluru, India
- 2. Recipient of JRF & SRF, University Grants Commission Fellowship, New Delhi (13.10.2009 to 29.01.2014).
- 3. Received Best Paper Award for ORAL PRESENTATION in "National Seminar on Coastal Typology" held during March 15–17, 2010 at Department of Marine Science, Bharathidasan University 620024. Title of the Paper "Biofouling on Marine Engineering Alloys"

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 06

- 1. ORGANIZING COMMITTEE MEMBER International Conference on Recent Trends in Bioplastics, RTB-2019, held on 9 & 10th December 2019, Organized by Department of Microbiology, Alagappa University, Karaikudi-630003.
- 2. ORGANIZING COMMITTEE MEMBER 3rd International Conference on Recent Trends in Microbiology, RTM-2019, held on 24 & 25 January 2019, Organized by Department of Microbiology, Alagappa University, Karaikudi-630003.
- 3. ORGANIZING COMMITTEE MEMBER National Level Workshop on Gas Chromotography-2016, held on December 2016, organized by Department of Microbiology, Alagappa University, Karaikudi-630003.
- 4. CO-ORGANIZING SECRETARY –Second International Conference on Recent Trends in Microbiology, RTM-2018, held on 11 & 12, January 2018, Organized by Department of Microbiology, Alagappa University, Karaikudi-630003.
- 5. ORGANIZING COMMITTEE MEMBER First International Conference on Recent Trends in Microbiology, RTM-2016, held on 21, 22 December 2016, Organized by Department of Microbiology, Algappa University, Karaikudi-630003.
- 6. ORGANIZING COMMITTEE MEMBER National Level Workshop on Commercialization Projects Microbial Formulates 22-25, Jan 2018, Organized by Department of Microbiology, Alagappa University, Karaikudi-630003.

Events Participated (optional)

Conferences / Seminars / Workshops: 40

- 1. International -8
- 2. National 28

Other Traning Programme

1. Participated in One month multi disciplinary Cruise for "SWATH BATHYMETRIC SURVEY OF LACADIVE REGION IN THE ARABIAN SEA (SKV-275)" onboard the National Flagship ORV-SAGAR KANYA from 12th August 2010 to 13th September 2010.

Overseas Exposure / Visits

1. Visited MALAYSIA and presented a paper entitled at the "International Congress of the Malaysian Society for Microbiology ICMSM-2011, leveraging on Microbial Diversity for a Sustainable Future" held during 8-11 December, 2011, @ Bayview Beach Resort, Batu Ferringhi, Penang, MALAYSIA.

Membership in

Professional Bodies

- 1. Life Member: -
- 2. Coordinator for Karaikudi Region: Indian Imitative for Management of Antibiotic Resistance (IIMAR)

Advisory Board

-

Academic Bodies (such as Board of Studies etc.,)

- 1. Member Board of Study, B.Sc., (Microbiology and Clinical Lab Technology), Dr. Umayal Ramanathan College for Women, Karaikudi-630 003, Tamil Nadu, India
- 2. Member Question Paper Setter, M.Sc., Microbiology, Bharathidasan University, Tiruchirappalli-620 024, TN, India
- 3. Member- Editorial Board in Journal of "Recent Advances in Microbial Technology and Immunology (RTMI)"
- 4. Member Question Paper Setter, M.Sc., Microbiology, Annamalai University, TN, India

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 4

- 1. Delivered Invited Lecture on "Introduction to Internship" held on 01.12.2020 organized by Department of Biochemistry, Karpagam Academy of Higher Education, Coimbatore.
- 2. Delivered Invited lecture on "General Awareness on Corona" held on 31-07-2020, Organized by Agastya International Foundation.
- 3. Delivered Invited lecture "Marine Biofouling & Biofilms" held on 20.08.2020, Organized by Department of Zoology, St. Joseph University, Nagaland, India
- 4. Delivered Invited lecture on "CURRENT TRENDS AND FUTURE SCOPE ON SCIENCE AND TECHNOLOGY" held 15-09-2019, at Seethalakshmi Achi College for Women, Pallathur.

Others

- 1. Products developed: -
- 2. No. of PhD Thesis evaluated: -
- 3. No. of PhD Public Viva Voce Examination conducted: -
- 4. Sequences submitted in GenBank: 12- 16S rRNA gene sequence

GenBank Submission (16S rRNA)

- 1. **Balasubramanian, V.**, R. Rajaram and K. Mathivanan. *Vibrio alginolyticus* VBM-01 JQ260828, partial CDD, 16s rRNA 1078bp.
- 2. **Balasubramanian, V**., R. Rajaram and K. Mathivanan. *Kocuria rosea* VBSKNY-01 KC505190, partial CDD, 16s rRNA 875 bp.
- 3. **Balasubramanian, V.**, R. Rajaram and K. Mathivanan. *Enterobacter cloacae* VBS-D JX424421, partial CDS, 16s rRNA 566 bp.
- 4. **Balasubramanian, V.**, R. Rajaram and K. Mathivanan. *Bacillus badius* VBSCH-01, partial CDS 16s rRNA 993 bp.
- 5. **Balasubramanian, V.,** R. Rajaram and K. Mathivanan. *Kocuria flava* VBSNAG-01 KF995733, partial CDS, 16s rRNA 1000 bp.
- 6. **Balasubramanian, V.,** R. Rajaram and K. Mathivanan. *Pseudomonas stutzeri*-KC148530, partial CDS, 16s rRNA 866 bp.
- 7. Mathivanan, K., Rajaram, R. and **Balasubramanian, V**. *Acinetobacter baumannii strain KMNCRB-10* (2013) 16S ribosomal RNA gene, partial sequence. LOCUS KC119494, 942 bp DNA linear BCT 09-JAN-2013.
- 8. Mathivanan, K., Rajaram, R. and **Balasubramanian**, V. *Lysinibacillus fusiformis strain KMNTT-10* (2013) 16S ribosomal RNA gene, partial sequence. LOCUS KC152467, 802 bp DNA linear BCT 14-JAN-2013.
- 9. Mathivanan, K., Rajaram, R. and **Balasubramanian**, V. *Pseudomonas stutzeri strain KMNTT-01* (2013) 16S ribosomal RNA gene, partial sequence. LOCUS KC148530, 866 bp DNA linear BCT 14-JAN-2013.
- 10. Rajapriya R, **V. Balasubramanian**, et al. *Staphylococcus xylosus* strain VBS-DMB-ALU-02 (2019) 16S ribosomal RNA gene, partial sequence, 949 bp DNA linear BCT 12-MAR-2019 (Ac. No: MK600386).
- 11. Rajapriya R, **V. Balasubramanian**, et al. *Staphylococcus succinus* strain VBS-DMB-ALU-03 16S ribosomal RNA gene, partial sequence, 1137 bp DNA linear BCT 25-FEB-2019 (Ac. No: MK537395).

12. Arputha M, **V. Balasubramanian** et al. *Bacillus halotolerans* strain VBS-DMB-ALU-01 16S ribosomal RNA gene, partial sequence, 913 bp DNA linear BCT 25-FEB-2019, (Ac. No: MK537391)

**Social Interests and Initiatives / Articles in News papers etc can also be included

Publications

- Sunandha Jeeva Bharathi G, Sumathi C. Samiappan, A. Arthy, Sanjeev Kumar Sing, Kokilavani Krishnamoorthi, R. Akila, Parthiban Marimuthu, Rajesh Pandiyan, Balasubramanian Vellaisamy (2021) Mitigating Biophores Curcumin and their Derivatives use as Inhibitors of the SARS-CoV2 3CL Protease against COVID-19: An In-silico Analysis. Journal of Biomolecular Structure and Dynamics (Accepted)
- 2. **Balasubramanian**, *V**. R Rajaram, S. Palanichamy, G Subramanian, K Mathivanan, A Pugazhendhi (2018) Lanosterol expressed bio-fouling inhibition on Gulf of Mannar coast, India. Journal of Progress in Organic Coatings (115)100–106, Elsevier, (IF-4.5)
- 3. Mathivanan, K., R. Rajaram, *V. Balasubramanian** and G. Annadurai, (2016), "Removal of Cd(II) and Cu(II) from Aqueous Solutions by *Pseudomonas stutzeri* KMNTT-01 Biomass. Environ. Process, 3(4) 857-874,
- 4. *Balasubramanian, V.**, R. Rajaram and P. Rajesh (2016) Antifouling Potentials of Mangrove *Rhizophora apiculata* against *Vibrio alginolyticus* strain VBM-01. Indian Journal of Geo-Marine Science, 44(10) 1654-1661 (IF-0.5), ISSN: 0379-5136.
- 5. Mathivanan, K., R. Rajaram and *V., Balasubramanian** (2015) Biosorption of Cd(II) and Cu(II) ions using *Lysinibacillus fusiformis* KMNTT-10: equilibrium and kinetic studies, Desalination and Water Treatment, 57(47),22429-22440 doi: 10.1080/19443994.2015.1129508 (IF-1.6).
- 6. Sengol Jenifer, S. *Balasubramanian V**. and R. Rajaram (2014) Chemical Characterization and Bioactivity Evaluation of Bacteriocin from Biofilm Forming Bacteria. African Journal of Microbiology Research, 8(41), 3617-3624, (ISSN: 1996-0808). https://doi.org/10.5897/AJMR2014.7022
- 7. **Balasubramanian V*.,** S., Palanichamy, G. Subramanian, and R. Rajaram. (2012) Development of Polyvinyl chloride biofilm for succession of selected marine bacterial populations. Journal of Environmental Biology, 33:57–60, ISSN: 0254-8704, (IF-1.0)
- 8. **Balasubramanian V***., S. Palanichamy, and R. Rajaram (2011) Effects of certain seaweed extracts on the primary biofilm forming bacteria. Journal of Marine Biological Association of India, 53(1):104–110.
- 9. Prabhaharan, S., R. Rajaram, *V. Balasubramanian**, and K. Mathivanan (2012) Antifouling Potentials from Seaweeds, Seagrass and mangroves against primary biofilm forming bacteria. Asian Pacific Journal of Tropical Biomedicine, S316–S322, (Elsevier, IF-1.2).

10. Mathivanan K., *V. Balasubramanian** and R. Rajaram (2010) Bacterial Resistance to Mercury Pollution through Genetic Transformation. World Applied Sciences Journal, 8 (4): 400–403, ISSN:1818-4952, (IF-0.5).

Book Chapters/Reports/Review etc.,

- Adaysa Barik, P. Rajesh, M. Malathi, Balasubramanian, V, (2020) Potential Antimicrobial Peptides Elucidation From the Marine Bacteria. A thematic issue on "Natural Products Chemistry and Drug Design in Journal of Cardiovascular and Hematological Agents in Medicinal Chemistry, Bentham Science Publishers, DOI: 10.2174/1871525718666200512074400.
- 2. V. Ananthi, K. Mohan Rasu, T. Boobalan, K. Anand, M. Sudhakar, Anil Chuturgoon, R. Yuvakkumar, V. Balsubramanian and A. Arun. Chapter.5. An Overview of Nanotoxicological Effects Towards Plants, Animals, Microorganisms and Environment. In book: Integrative Nanomedicine for New Therapies. Krishnan, Anand, Chuturgoon, Anil (Eds.).2020. Engineering Materials. ISSN: 1612-1317. Chapter DOI: Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-030-36260-7 5
- 3. Adaysa Barik, **Balasubramanian**, **V**, and A. Arun (2021) Biodetoxification of heavy metals using biofilm bacteria. Book Chapter in "Environmental and Agricultural Microbiology: Advances and Applications. Scrivener Publishing, USA (**Accepted**).
- 4. *Balasubramanian*, V., P. Rajesh, R. Rajaram, V. Rajesh Kannan (2014) A Review on Rhizophora Genus: Therapeutically Important Perspective Phytochemical Constituents. Book Chapter in "Bioactive Phytochemicals: Perspectives for Modern Medicine. Daya Publication, pp, 211-234.
- 5. Chandra, R., *V. Balasubramanian**, R. Rajaram (2011) Tributyltin (TBT) resistant marine bacteria and evaluation of detoxification. In "Proceedings of the International Congress of the Malaysian Society for Microbiology-ICMSM-2011, Malaysian Society of Microbiology Publisher
- 6. Rajaram, R., *V. Balasubramanian** (2010) Biofilm Nanotechnology Antifoulants from marine Bacteria. Proceedings of "National level Brainstorming session on Nanotechnology, Department of Marine Science Publisher

Book Edited

- 1. Co-Editor- SPARC and RUSA 2.0 Sponsored International Conference on Recent Trends in Bioplastics (RTB-2019), Shanlax publications, Madurai, (ISBN: 978-93-89658-09-5)
- 2. Co-Editor –Recent trends in Microbiology, Poocharam Printers, ISBN: 978-93-84193-72-0.
- 3. Editor Recent trends in Microbiology, Poocharam Printers, ISBN: , ISBN: 978-93-

4. Co-Editor - Recent trends in Microbiology, Shanlax Publication, ISBN: 978-93-88398-26-8.

Paper Presented in International Conferences

- 1. International Conference on Recent Trends in Bioplastics, RTB-2019, held on 9 & 10th December 2019, organized by Department of Microbiology, Science Campus, Alagappa University, Karaikudi -630 003, Tamil Nadu, India.
- 2. 3rd International Conference on Recent Trends in Microbiology, RTM-2019, held on 24 & 25 January 2019, organized by Department of Microbiology, Science Campus, Alagappa University, Karaikudi -630 003, Tamil Nadu, India.
- 3. Second International Conference on Recent Trends in Microbiology, RTM-2018, held on 11 & 12 January 2018, organized by Department of Microbiology, Science Campus, Alagappa University, Karaikudi -630 003, Tamil Nadu, India.
- 4. First International Conference on Recent Trends in Microbiology, RTM-2017, held on 20 & 21 January 2017, organized by Department of Microbiology, Science Campus, Alagappa University, Karaikudi -630 003, Tamil Nadu, India.
- 5. International Congress of the Malaysian Society for Microbiology-ICMSM-2011, Bayview Beach Resort, Batu Ferringhi, Penang, Malaysia, 8 to 11-December, 2011, Vol. 1, pp 127–130.

Paper Presented in National Conferences

- **1.** Paper presented in National Conference on "Research Methodology for Life Sciences" (RESMET' 2020), held on 4th and 5th March 2019. Title "Necessitate of In-Silico Approach in the Research Design" Organized by Karpagam Academy of Higher Education, Department of Biochemistry, Coimbatore 641021.ISBN: 978-93-5406-344-2
- 2. Paper Presented in "National Seminar on Coastal Typology" held on March 15-17, 2010 at Department of Marine Science, Bharathidasan University 620024. Title of the Paper "BIOFOULING ON MARINE ENGINEERING ALLOYS"
- 3 Paper Presented in "National Seminar on Recent Trends in Microbial Technology With Reference to Extremophiles (EXTREMO'S 2010)", held October 21–22, 2010 at Department of Microbiology, Periyar University, Salem 636 011. Title of the Paper "Studies on Corrosion and Biofouling Characteristics Features of Marine Engineering Alloys"
- **4.** Paper Presented in "National Symposium on Animal Biotechnology Recent Trends", held February 3 & 4 2011 at Department of Animal Science, Bharathidasan

University, Tiruchirappalli – 636 011. Title of the Paper "ANTI-BIOFILM ACTIVITY OF CERTAIN SEAWEED EXTRACTS ON THE PRIMARY BIOFILM FORMING BACTERIA".

Conference/Workshop Attended

- 1. Participated in Three day international webinar "New Perspectives in Life Sciences" held on 29th to 31st July 2020, Organized by Srimad Andavan Arts & Science College, Trichirappallai.
- 2. Participated in National Webinar on "Online Capacity Building Programme" held on 12-06-2019 to 23-06-2019, Organized by STRIDE Component I Scheme, Alagappa University.
- 3. Participated in "Technical and Academic Writing" I Scheme, Alagappa University.
- 4. Participated in International Webinar on "Biotechnology: Application Areas and Development Process" held on 31.05.2020 to 02.06.2020DDE-Biotechnology Wing, Alagappa University,
- 5. Participated in International Webinar on Mahtma Gandhi (IWMG-2020), held on 18.08.2020, organized by Department of Microbiology, Alagappa University
- 6. Participated in one day workshop on "WATER CONSERVATION" held on November 22nd 2019, organized by JAL SAKTHI & ENVIORMENTAL AWARENESS CLUB, Alagappa University Karaikudi 630 003, Tamil Nadu, India.
- 7. Attended 3 days Workshop of "Faculty development Programme on Entreprenership organized by Department of Women studies, 3-5 August 2019, Algappa University
- 8. Participated in "1ST Two days National workshop on " Indigenous cow management and their value added products (ICMVAP-2K18)" held on December 18 & 19, 2018, Science Campus, Department of Animal Health Management, Alagappa University Karaikudi 630 003, Tamil Nadu, India.
- 9. Participated in "Two days Training Programme on Business Resource of Solid Waste Management Through Vermicomposting, held on 14th and 15th March, 2017, Science Campus, Department of Animal Health Management, Alagappa University Karaikudi 630 003, Tamil Nadu, India.
- 10. National Seminar on "Exploring Commercialization of Biosensors in India", held on 14th March 2017, at Department of Bioelectronics and Biosensors, Alagappa University, Karaikudi-630003, TN, India
- 11. National Seminar on "Nanomaterials for Specilaized Applications (NMSA- 2017)", held on 9th and 10th February 2017, Department of Nanoscience and Technology, Alagappa University, Karaikudi-630003, TN, India.

- 12. Participated in "International Conference on Environmental and Health in Changing Climate (ICEHCC-2016)", held on September 14, 15 & 16, 2016 at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli– 620024, Tamil Nadu, India.
- 13. Participated in "International Workshop on Molecular Physiology, Therapeutics and Ecperimental Medicine (MPTEM' 2016), held on 6th and 7th September 2016, Science Campus, Department of Animal Health Management, Alagappa University Karaikudi 630 003, Tamil Nadu, India.
- 14. Participated in "International Conference on Recent Trends in Biosciences (ICRTB-2016), held on 7th to 9th April, Alagappa University Karaikudi 630 003, Tamil Nadu, India.
- 15. Participated in "International Conference on Environmental and Health in Changing Climate (ICEHCC-2016)", held on September 14, 15 & 16, 2016 at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli– 620024, Tamil Nadu, India.
- 16. Participated in "International Workshop on Molecular Physiology, Therapeutics and Ecperimental Medicine (MPTEM' 2016), held on 6th and 7th September 2016, Science Campus, Department of Animal Health Management, Alagappa University Karaikudi 630 003, Tamil Nadu, India
- 17. Participated in *"International Conference on Recent Trends in Biosciences (ICRTB-2016)*, held on 7th to 9th April, Alagappa University Karaikudi 630 003, Tamil Nadu, India.
- 18. Attended five days Industry Oriented Technology Course held during 28-08-2006 August to 02-09-2006 September with the Course Entitled of "PAINTS FOR CORROSION PROTECTION" at Central Electrochemical Research Institute (CECRI-(CSIR), Karaikudi-630 006, Tamilnadu, India.
- 19. Participated in "Science Academies Lecture Workshop on Challenges in Environmental Restoration (SAWCER 2012) held on 5 to 6th Mar-2012, at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli 620 024, Tamilnadu, India.
- 20. Participated in "One Day Regional Workshop on Recent Trends in University Industry Relations" held on 16th Feb-2012, at Department of Environmental Management, Bharathidasan University, Tiruchirappalli 620 024, Tamilnadu, India
- 21. Participated in "National Training cum Workshop on Analytical and Technical Advancement in AAS and GC (WATA-AG)" held during 24, 25-01-2012 at Department of Marine Science, Bharathidasan University, Tiruchirappalli-620 024, Tamilnadu, India
- 22. Participated in "A Training Programme on Reduction of CO2 and Other Air Pollutants through Phyto-remediation" held during 29, 30-12-2011 at Department

- of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli-620 024, Tamilnadu, India
- 23. Participated in "National Workshop on Marine Corrosion and Surface Engineering" held during 24-11-2011 to 26-11-2011 at Center for Advance Study in Marine Sciences, Annamalai University, Parangipettai, Tamilnadu, India 7 7. Participated in "National