

CURRICULUM VITAE

Dr. S. RAJAKUMAR

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Academic Background

- ◆ **Ph. D. Environmental Sciences**, Bharathiar University, Coimbatore – 641046, India (2006)
- ◆ **M. Sc., Environmental Sciences**, Bharathiar University, Coimbatore – 641046, India (2001)
- ◆ **B. Sc., Zoology**, Pachaiyappa's College, Chennai – 600030, Tamil Nadu, India (1997)
- ◆ **Hr. Sec. S.B.K. H.S.S**, Kallurani – 626105, Virudhunagar (Dt.) Tamil Nadu, India (1993)
- ◆ **S.S.L.C. S.B.K. H.S.S**, Kallurani – 626105, Virudhunagar (Dt.) Tamil Nadu, India (1991)

Teaching & Research Experience

S. No	Designation	University/ Institute	From	To	Nature of Job
1	Associate Professor & Head	Department of Marine Biotechnology Bharathidasan University, Tiruchirappalli – 620 024. India	01.10.2024	Till Date	Teaching & Research
2	Associate Professor	Department of Marine Biotechnology Bharathidasan University, Tiruchirappalli – 620 024. India	26.02.2023	30.09.2021	Teaching & Research
3.	Assistant Professor (Stage III)	Department of Marine Biotechnology Bharathidasan University, Tiruchirappalli – 620 024. India	26.02.2020	25.02.2023	Teaching & Research
4.	Assistant Professor (Stage II)	Department of Marine Biotechnology Bharathidasan University, Tiruchirappalli – 620 024. India	26.02.2015	25.02.2020	Teaching & Research
5.	Assistant Professor (Stage I)	Department of Marine Biotechnology Bharathidasan University, Tiruchirappalli – 620 024. India	25.02.2011	25.02.2015	Teaching & Research
6.	Guest Faculty	Department of Environmental Management, Bharathidasan University, Tiruchirappalli – 620 024. India	01.07.2010	25.02.2011	Teaching & Research
7.	Guest Faculty	Department of Environmental Management, Bharathidasan University, Tiruchirappalli – 620 024. India	06.07.2009	30.04.2010	Teaching & Research
8	Post Doctoral Researcher	Division of Civil and Environmental Engineering, Korea Maritime University, Busan 606 791, S. Korea	18.07.2007	18.03.2009	Teaching & Research

9	Lecturer	Department of Microbiology Nehru Arts & Science College, Coimbatore 641 104. India	05.06.2006	14.06.2007	Teaching & Research
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Administrative Experience

- ♦ Head, Dept. of Marine Biotechnology, Bharathidasan University, Tiruchirappalli
- ♦ Member Senate, Bharathidasan University, Tiruchirappalli
- ♦ Liaison Officer, His Excellency the Governor of Tamil Nadu and The Chancellor of Bharathidasan University
- ♦ Member Interview Panel – Ph.D selection Committee, Bharathidasan University, Tiruchirappalli
- ♦ Nodal Officer, Swachhata hi Sewa, Govt. of India
- ♦ Nodal Officer, Bharathidasan University, Green Tamil Nadu Mission, Govt. of Tamil Nadu
- ♦ Additional Chief Superintant, University Exams, April 2023 – Queens College of Arts and Science
- ♦ Co-ordinator, Clean Green Initiative, Bharathidasan University, Tiruchirappalli.
- ♦ Co-ordinator, First Online Faculty Induction Programme, UGC–HRDC, BDU, Tiruchirappalli.
- ♦ Camp Officer, Central Valuation, Bharathidasan University, Tiruchirappalli.
- ♦ Co-ordinator (Exams), Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli.
- ♦ Member, National Institutional Ranking Framework (NIRF), Bharathidasan University, Tiruchirappalli.
- ♦ Member, National Assessment and Accreditation Council (NAAC), Bharathidasan University, Tiruchirappalli.

Area of Specialization

- ♦ Marine Microbiology, Environmental Microbiology, Bioremediation and Coastal Zone Management, Aquaculture

Post Doctoral Work

- ♦ Online monitoring and controlling of anaerobic digester for co-digestion of food waste and sewage sludge

Doctoral Work

- ♦ Prevalence of nitrate reducing heterotrophic bacteria in Ooty, Kodaikanal and Yercaud lakes and the efficiency of *Pseudomonas* sp. (KW1) and *Bacillus* sp. (YW4) in nitrate removal.

Project under taken

S. No	Project Title	Funding Agency	Duration	Amount (Rs.)
1	Development of Integrated Recirculating marine aquaponics system for the sustained Aqua–Agriculture production : A new avenue to enhance the rural livelihood (Principal Investigator)	TANSCH Govt. of Tamil Nadu	3 years (2021–2024)	65,31,000/–
2	Impact of Microplastic pollution in commercial important marine Crustaceans (Principal Investigator)	RUSA 2.0	2 Years (2021–2023)	4,50,000/–
3	Outdoor mass cultivation of marine microalgae for biodiesel production with improved solar conversion efficiencies (Co–Principal Investigator).	DBT, New Delhi	3 years (2019–2022)	79,33,143/–
4	Development of amphiphilic titanium oxide – silicon oxide coatings for anti–biofouling applications (Co–Principal Investigator)	DRDO, New Delhi	3 years (2018–2021)	21,16,550/–

5	Biomethanation and bioconversion of marine weeds (<i>Ulva</i> sp. and <i>Laminaria</i> sp.) under natural and halophilic condition (Principal Investigator)	DBT, New Delhi	3 years (2013 –2016)	23,66,200/-
6	Detoxification of Benzene, Toluene, Ethyl benzene and Xylene (BTEX) and its derivatives from ground water and soil through bioreactor designing (Principal Investigator)	DST, New Delhi	3 years (2012 –2015)	19,35,000/-
7	Detoxification of arsenic and iron from ground water and soil through a bioreactor designing and differing treatment columns (Co-investigator)	CSIR, New Delhi	3 years (2012 –2015)	15,93,600/-
8	Assessing drinking water quality in schools of Tiruchirappalli region and mapping of common flu and diarrhoea among school children (Co-investigator)	UGC, New Delhi	3 years (2009 –2012)	07,07,300/-

Academic achievements / Awards

- **Young Scientist Award**, DST , New Delhi for the project “Detoxification of Benzene, Toluene, Ethyl Benzene and Xylene (BTEX) and its derivatives from groundwater and soil through bioreactor designing
- **Best Paper Award** in “The 1st EIT International Conference on Water Resources Engineering” organized by The Engineering Institute of Thailand, Bangkok (18–19th August, 2011)
- **University Research Fellowship** (2004 to 2006) by Bharathiar University, Coimbatore

Guidance of research students

Ph.D. Research Scholars

S. No	Name	Research work	Date of Registration	Date of Completion	Duration
1	Mr. S. Ashok	Bioremediation of Benzene, Toluene, Ethyl benzene and Xylene (BTEX) from petroleum polluted soil and water	01.04.2012	09.06.2017	2012–17
2	Ms. S. Umadevi	Bioinformatic approach to identify drug leads from marine metabolites against retinal angiogenesis in proliferative diabetic retinopathy	01.10.2012	09.06.2017	2012–17
3	Ms. V. Akila	Biomethanation and bioconversion of marine weed (<i>Ulva</i> sp.) from gulf of manner coastal region	01.07.2014	25.09.2019	2014–19
4	Ms. D. Sahaya Sukeetha	Exploration of nitrifying bacteria from mangrove ecosystem and its application in aquaculture ponds	03.07.2014	25.09.2019	2014–19
5	Mr. T.S. Kumar	Production of multi high value added products from the biomass of marine microalgae <i>Chlorella vulgaris</i>	01.10.2016	01.04.2022	2015–22
6	Mr. A. Manikandan	Exploration of Biocarrier for Bioremediation of Crude Oil Polluted Environment – A Sustainable Approach.	01.01.2016	19.02.2021	2016–21
7	Mrs. Sreevidya Prakash	Studies on Monitoring, Assessment and Bioremediation of Toxic Heavy Metals in Water and Sediment Collected from River Periyar, Kerala	01.01.2016	23.08.2023	2016–22
8	Ms. S. Selvapriya	Exploring the cyanobacteria and biotechnological potentials	27.02.2020	Ongoing	2020–25

9	Ms. Aiswarya, K.P	Occurrence and impacts of Microplastic pollution in commercial important crustaceans	03.01.2022	On going	2022–27
10	Ms. R. Sagaya Princy	Captive breeding, mass production and utilization of Amphipod as an alternative live feed for the culture of marine ornamental fish	31.05.2023	On going	2023–28

M.Sc. Project Work

S. No	Name	Research work	Status	Year
1	Ms. S. Abinaya	A Bioinformatic Approach for Estimation of Toxicity and Biodegradation of Aromatic Hydrocarbons	Completed	2013
2	Ms. M. Arunya	Biodegradation of ethyl benzene by bacteria isolated from petroleum polluted soil	Completed	2014
3	Ms. R. Meena	Effects of carbon, temperature and pH on xylene degradation by bacterial consortium	Completed	2014
4	Ms. C. Abinaya	Biodegradation of toluene	Completed	2014
5	Mr. S. Aalfin Emmanuel	A statistical based experimental approach for biodegradation and optimization of heavy metals	Completed	2015
6	Ms. U. Sangeetha	Synthesis and extraction of biosurfactant by bacteria isolated from petroleum polluted soil	Completed	2015
7	Ms. S. Rohini	Biochemical characterization and antibacterial activity of marine weed (<i>Ulva</i> sp.) against human pathogens	Completed	2015
8	Mr. A. Manikandan	Seaweeds as a biofertilizer	Completed	2016
9	Ms. R. Ilakkiya	Biodegradation of crude oil	Completed	2017
10	Mr. S. Jegan	Isolation and screening of potential probiotic bacteria from the commercially important marine fishes	Completed	2017
11	Ms. R. Janani	Isolation of multidrug resistant bacteria from marine fishes <i>Lates calalifer</i> and <i>Sphyrneae jello</i>	Completed	2017
12	Mr. P. Mathavan	Exploration of biocarrier material by potent bacterial consortium for crude oil contamination in marine environment	Completed	2019
13	Ms. B. Suruthi,	Isolation and cloning of phytoene desaturase and calcium dependent protein kinase for cucumber plant	Completed	2019
14	Ms. Swathi,	Potential of <i>Agaricus biosporus</i> synthesized nano particles and microextract against biofilm forming agent	Completed	2019
15	Ms. M. Mythili Divya	Study of Biofouling on different materials and antifouling.	Completed	2020
16	Mr. U. Prasannakumar	Isolation, identification and adhesion study of biofilm forming bacteria from stainless steel sample	Completed	2021
17	Ms. R. Hema,	Isolation and Identification of multi drug resistant bacteria from marine sea water and antibiotic susceptibility efficiency of MDR Bacteria	Completed	2021
18	Ms. R. Sagaya Princy	Effect of different diets on the survival, population density and pronimate composition of marine copepod <i>Dioithona rigida</i>	Completed	2021
19	Mr. Mainak Roy	Fish diversity of the Piyali estuary of Sundarbans, India and biology of food fish <i>Mystus gulio</i> (Hamilton 1822)	Completed	2022

20	Ms. Shrestha Dutta	Quantitative assessment of stress enzyme in various organs of commercial important Penaeidae shrimp by artificially feeding low density polyethelene	Completed	2022
21	Ms. Somdatta Dakshy	Estimation of effect on digestive enzymes, quantitatively by feeding microdimensional polyethylene in mud crab <i>Scylla serrata</i>	Completed	2022
22	Mr. Souvik Nyaya	Bioenrichment of wild mixed zooplankton with probiotics and evaluation of its application on the growth, survival and biochemical composition of shrimp (<i>Litopenaeus vannamei</i>)	Completed	2022
23	Ms. Hemalatha, D	Studies on low density polyethylene microplastic toxicity in reference with oxidative stress response and biochemical parameters of <i>Scylla serrata</i>	Completed	2022
24	Ms. Amrutha, V	Bioprospection of pigment producing bacteria from seamount sediments and evaluation of their applications	Completed	2023
25	Mr. Dinesh Kumar, R	Comparative study of heavy metal toxicity in different fish species and its environmental perspective along the Tamil Nadu coast	Completed	2023
26	Ms. Harini, V	Biodegradation of Polyethylene by marine bacterial consortium isolated from the seamounts of Arabian Sea	Completed	2023
27	Ms. Kayalvizhi, E	Establishment of lab scale marine aquaponics with <i>Penaeus vannamei</i> (Indian white legged shrimp) and <i>Gracilaria</i> sp. (red seaweed).	Completed	2023
28	Mr. Lenin, S	Screening, Production, and Molecular characterization of L – Glutaminase from Marine <i>Bacillus</i> sp. NIOT 30	Completed	2023
29	Ms. Rohini, A	Developing a model aquaponics system to increase the growth and nutritional value of <i>Lates calcarifer</i> (Asian Seabass) with the <i>Kappaphycus alvarezii</i>	Completed	2023
30	Mr. Sham Sankar, A.S.	Process optimization for microwave-assisted hydrothermal liquefaction of mass-cultured marine chlorella sorokiniana (niot-2)	Completed	2023
31	Ms. Shilpa Sunny	Exploring Bacterial Community Composition in Arabian Deep-Sea Sediments and Characterization of Exopolysaccharides	Completed	2023
32	Ms. Sisira, P.S.	Development of improved Aquaponic system for <i>Cirrhinus cirrhosus</i> (Mrigal) with <i>Eclipta prostrate</i> (Bringaraj), <i>Memordica charantia</i> (Bitter guard) and <i>Solanum procumbers</i> (Climbing brinjal)	Completed	2023
33	Ms. Sivaranjani, A	Diversity and Ecology of Diatom Communities as Biomonitoring Indicators for Coastal Pollution in Tamil Nadu	Completed	2023
34	Mr. Sayan Maity	By-catch Marine Ornamental Fauna from Digha Mohana Fish Landing Centre, West Bengal	Completed	2023
35	Ms. R. Karthika	Experimental studies on factors favouring adsorption and combined toxicity of polyethylene microplastics and antifouling biocide in brine shrimp nauplii	Completed	2024
36	Ms. D. Logeswari	Functional screening and characterisation of lipase from metagenomic clone libraries of Arabian sea sediment	Completed	2024
37	Mr. Srijit Goswami	Isolation, optimization and purification of novel fibrinolytic protease enzyme from marine sediment bacteria of south andaman india	Completed	2024

38	Ms. T. Janani	Ongoing	2025
39	Mr. Anirban Pal	Ongoing	2025
40	Mr. S. Santhosh kumar	Ongoing	2025

Orientation / Refresher course / Training program completed

- Training Programme on Hatchery Techniques & Seed Production of *Penaeus monodon*, GIFT & *Etroplus suratensis*, Nursery Rearing of *Lates Calcarifer* and Disease Diagnostics in Aquaculture (17.10.2023 to 19.10.2023) Multispecies Aquaculture Complex (MAC) of MPEDA & Rajiv Gandhi Centre for Aquaculture (RGCA) Vallarpadam, Kochi, Kerala.
- Faculty Development program on Research Methodology: Data Analysis, Reporting & Publication Perspectives, (20.07.2020 to 26.07.2020) Bharathiar School of Management and Entrepreneur Development (BSMED), Bharathiar University, Coimbatore 641046.
- Two weeks Faculty Development programme on Advanced Concepts for Developing MOOCS (02.07.2020 to 17.07.2020). Teaching and learning Centre, Ramanujam College, University of Delhi, Delhi.
- Faculty Development Programme on Enhancing learning outcomes through effective teaching, IQAC and UGC–HRDC, Bharathidasan University, Tiruchirappalli (28.11.2018).
- International Training Workshop on Hybrid Rice Technology (05.10.2017 to 25.10.2017), Hunan Rice Research Institute, Changsha, China.
- Hands on Training programme on Taxonomic Identification of Coastal and Oceanic Copepods (TICOC–2017) (12.07.2017 to 14.07.2017), Department of Marine Science, Bharathidasan University, Tiruchirappalli.
- **Refresher courses** in life sciences, Academic Staff College, Bharathidasan University, Tiruchirappalli–620 023 (03.03.2016 – 23.03.2016)
- **Refresher courses** in life sciences, Academic Staff College, Bharathidasan University, Tiruchirappalli–620 023 (18.07.2014 – 07.08.2014)
- 77th UGC sponsored **Orientation programme**, Academic Staff College, Bharathidasan University, Tiruchirappalli–620 023 (15.11.2012 – 12.12.2012).
- Training workshop on Microbial transformations in rice soil ecosystem (01.10.2004 to 21.10.2004), Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

Conferences/ Workshop organized

- XLVI Indian Social Science Congress, Bharathidasan University, Tiruchirappalli, 27th – 31st January, 2023 “Patent Laws and intellectual Property rights” (Convener).
- National Level Training Programme on “Environmental Monitoring Using Advanced Analytical and Molecular Tools” 09th – 15th November, 2022 (Organizing secretary).
- National level Training Program on “Marine Bioresources and Pollutant Biomarkers” 13th – 19th October, 2022 (Organizing secretary).
- National Workshop on “Biomolecules Separation Techniques”, Bharathidasan University, 7th – 11th March, 2022 (Organising Secretary)

- International conference on “Biodiversity and Biotechnology”, Bharathidasan University, 25–27 February, 2016 (Co–Convener).
- National Workshop on “High Performance Liquid Phase Separation Technique”, Bharathidasan University, 23rd January, 2015 (Convener)
- International Conference on “Advances in Biotechnology and Patenting”, Bharathidasan University, 18–21st January, 2013 (Coordinator)
- National Seminar on “Advances in Genomics and Proteomics”, Bharathidasan University, 5th November, 2012 (Coordinator)
- International conference on “Biomolecules and their prospects”, 8th July, 2016. Selvamm College of Arts and Science, Namakkal (Member of advisory committee)

Member ship

- Life Member – Association of Microbiologist of India (from October, 2012), Marine Biological Association of India (from March, 2018), Indian Science Congress Association (from March, 2018), Ocean Society of India (from August, 2023).

Editor (Book)

- Prashanthi Devi, M., **S. Rajakumar**, J. Aravind and K. Thamaraiselvi, 2021. Bioremediation and Green Technologies, Springer International Publishing, AG, Cham, ISBN:978–3–030–64121–4 (Hardcover), 978–3–030–64121–4 (eBook). (Apr. 2021)
- Aravind, J., K. Kamaraj, M. Prashanthi Devi and **S. Rajakumar**, 2021. Strategies and Tools for Pollutant Mitigation. Springer International Publishing, AG, Cham, ISBN :978–3–030–63574–9 (Hardcover), 978–3–030–63575–6 (eBook). (Mar. 2021)
- Umadevi, S. and **S. Rajakumar**, 2019. Diabetic retinopathy under Bioinformatics scope. Lambert Academic Publishing, ISBN: 978–613–5–85701–6.
- Prashanthi Devi, M., **S. Rajakumar**, J. Aravind and K. Thamaraiselvi, 2017. Bioremediation and sustainable technology for cleaner environment, Springer International Publishing, AG, Cham, ISBN:978–3–319–48438–9 (Hardcover), 978–3–319–48439–6 (eBook).
- Prashanthi Devi, M. and **S. Rajakumar**, 2016. Integrated Waste Management in India – Status and Future Prospects for Environmental Sustainability, Springer, ISBN: 978–3–319–27228–3 (e–Book), 978–3–319–27226–9 (Hard cover).

Reviewer in Journals

African Journal of Microbiology Research, Biochemical Engineering Journal, Bioresource Technology, Chemosphere, Ecotoxicology and Environmental Safety, Environmental Science & Policy, Food Research International, International Journal of Hydrogen Energy, Journal of Environmental Management, Journal of Computational Science, Journal of Taibah University for Science, Marine Pollution Bulletin, Process Safety and Environmental Protection, Science of the Total Environment, BioMed Research International, Biotechnology and Food Sciences, Brazilian Journal of Microbiology, Chemical Product and Process Modeling, Current Microbiology, Current World Environment, Ecological Indicators, Ecotoxicology and Environmental Safety, Exposure and Health, Food Research International, Foodborne Pathogens and Disease, Free Radicals and Antioxidants, Frontiers Marine Science, Indian Journal of Experimental Biology, International Journal of Bioinformatics Research, International Journal of Biotechnology Applications, International Journal of Energy Research, International Journal of Environmental Science and Technology, Journal of Basic Microbiology,

Journal of Biosciences and Medicines, Journal of Ecology and Environmental Sciences, Journal of the Energy Institute, Journal of Environmental Biology, Journal of Microbiology, Marine Pollution Bulletin, Microscopy Research and Technique, Research and Reviews, Water Quality, Waste Management.

Paper publications in Journals (National / International)

UGC Listed Journal

1. Mary Deva Prasanna, M.A., **S. Rajakumar** and P.M. Ayyasamy (2023). Bioextraction of magnesium as plant minerals from magnesite mine wastes collected from Salem district of Tamil Nadu, India. J Pure Appl Microbiol., doi:10.222207/JPAM.17.4.46 (IF. 0.157).
2. Sreevidya Jayaram, P.M. Ayyasamy, M. Prashanthi Devi and **S. Rajakumar**, 2023. Use of potential bacterial strains to remove hexavalent chromium from aqueous medium and sediments of the Periyar River. Inter. Journal of Ecology and Environmental Sciences, 49: 289–301. ISSN: 2320–5199.
3. Sreevidya Jayaram, P.M. Ayyasamy, M. Prashanthi Devi and **S. Rajakumar**, 2022. Effect of sources of Nitrogen, pH and Temperature on the Reduction of Hg(II) in a Bioreactor by the Bacterial strain, *Alcaligenes*., Science and Technology Journal, Vol. 10, 1–8. ISSN: 2321–3388.
4. Sreevidya Jayaram, P.M. Ayyasamy, K.P. Aiswarya, M. Prashanthi Devi and **S. Rajakumar**, 2022. Mechanism of microbial detoxification of heavy metals: A. Review, J Pure Appl Microbiol.,16(3):1562–1574. (IF. 0.157)
5. Josephine, A., T.S. Kumar, B. Surendran, **S. Rajakumar**, R. Kirubakaran and G. Dharani, 2022. Evaluating the effect of various environmental factors on the growth of marine microalgae, *Chlorella vulgais*. Frontiers in Marine Science, 9: 954–622. (IF. 5.24)
6. Menagaa, D., Pattanathu K.S.M. Rahman, **S. Rajakumar** and P.M. Ayyasamy (2021). Antioxidant and Cytotoxic Activities of A Novel Isomeric Molecule (PF5) Obtained from Methanolic Extract of *Pleurotus florida* Mushroom. Journal of Bioresources and Bioproducts 6 (4), 338–349. (IF. 14.6)
7. Annadurai Sakthi Thesai, Govindan Nagarajan, **Sundaram Rajakumar**, Arivalagan Pugazhendhi, Pudukadu Munusamy Ayyasamy, 2021. Bioaccumulation of fluoride from aqueous system and genotoxicity study on *Allium cepa* using *Bacillus licheniformis*. Journal of Hazardous Materials 407 (2021) 124367. (IF. 14.22)
8. Kumar, T.S., A. Josephine, D. Swathi, I. Lawrance, K. Thirupathi, G. Dharani, R. Kirubakaran and **S. Rajakumar**, 2021. Effect of different light/dark cycle on the growth of *Chlorella vulgaris* under phototrophic and mixotrophic conditions, Indian Hydrobiology, 19(1&2): 159–170 (ISSN 0971–6548).
9. Manikandan, A., V. Rajeshkannan, P.M. Ayyasamy and **S. Rajakumar**, 2020. Optimization of potential bacterial consortium for bioremediation in crude oil contaminated sites. Indian Journal of Natural Sciences,10:61–27583–27592. (ISSN 0976–0997). (IF–1.98)
10. Manikandan, A., V. Akila, K. Kannan, R. Ramya, V. Rajeshkannan, P.M. Ayyasamy and **S. Rajakumar**, 2020. Antimicrobial Activity of Green Seaweed *Ulva* sp against pathogenic microorganisms. Indian Journal of Natural Sciences,10:61–27600–27606. (ISSN 0976–0997)
11. Kumar, T.S., A. Josephine, T. Sreelatha, V.N. Azger Dusthacker, B. Mahzaveni, G. Dharani, R. Kirubakaran, **S. Rajakumar**, 2020. Fatty acids–carotenoid complex: An effective anti–TB agent from the chlorella growth factor–extracted spent biomass of *Chlorella vulgaris*. J. of Ethnopharmacology. 249:112392. (IF–4.36)
12. Sahaya sukeetha, D., S. Dineshkumar, A. Manikandan, V. Akila, P. Santhanam and **S. Rajakumar**, 2019. Effect of Immobilized nitrifying bacterial consortium on ammonia biodegradation in aquaculture pond and enhanced growth of *Labeo rohita* : An in vitro and In Vivo studies. Arabian Journal for Science and Engineering. ISSN:1319–8025 (IF–2.33)

13. Vanitha, G., **S. Rajakumar** and P.M. Ayyasamy, 2019. Synergistic of bacterial consortium on the biodegradation of nitroglycerin in aqueous medium through laboratory scale bioreactor process. *Bioremediation Journal*, 10.1080/1088, 9868.2019.1638340. ISSN: 1547-6529. **(IF-1.90)**
14. Akila, V., A. Manikandan, D. Sahaya Sukeetha, S. Balakrishnan. P.M. Ayyasamy and **S. Rajakumar**, 2019. Biogas and biofertilizer production of marine macro algae : An effective anaerobic digestion of *Ulva* sp. and Biocatalysis Agricultural Biotechnology, 18. ISSN:1878-8181. **(IF:4.26)**
15. Sakthi Desai, A., A. Pugazhendhi, **S. Rajakumar**, M.Rajan, P.M. Ayyasamy, 2019. Batch and column approach on biosorption of fluoride from aqueous medium using live, dead and various pretreated *Aspergillus niger* (FS18). *Surfaces and Interfaces*. ISSN: 2468-0230. **(IF-5.85)**
16. R. Seenivasagam, R. Kasimani, O. Babalola, A. Karthika and **S. Rajakumar**, 2017. Effect of various carbon source, temperature and pH on nitrate reduction efficiency in mineral salt medium enriched with *Bacillus weinstephanensis* (DS45). *Groundwater for Sustainable Development*, 5: 21-27. ISSN:2352-801X. **(IF-6.27)**
17. Rajeswari, M., R. Seenivasagan, P. Prabhakaran, **S. Rajakumar**, PM. Ayyasamy, 2017. Lab scale process on the removal of nitrate in ground water enriched with denitrifying bacterium and starch as a sole carbon source *Journal of Water Process Engineering* . ISSN:2214-7144. **(IF-6.93)**
18. Seenivasagan, S., R. Kasimani, **S. Rajakumar**, R. Kalidoss, PM. Ayyasamy, 2016. Comparative modelling and molecular docking of nitrate reductase from *Bacillus weihenstephanensis* (DS45) *Journal of Taibah University for Science* 10 (4), 621-630. ISSN: 1658-3655. **(IF-2.68)**
19. Umadevi, S., K. Premkumar, S. Valarmathi, P.M. Ayyasamy and **S. Rajakumar**, 2016. Identification of novel genes related to diabetic retinopathy using protein-protein interaction network and gene ontologies. *Journal of Biological Systems*, 24(1): 117-127, ISSN: 1793-6470. **(IF-1.82)**
20. Meenakshi Sundaram, K., S. Umadevi, P. Manivannan, **S. Rajakumar**, G. Muralidharan and M. Sundararaman, 2015. In Silico Discovery of Seaweed Molecules against Matrixmetalloproteinase-26. *Journal of Advanced Bioinformatics Applications and Research*, 6(2): 52-6, ISSN 0976 2604. **(IF - 4.84)**
21. Umadevi, S., S. Ashok, P. M. Ayyasamy and **S. Rajakumar**, 2014. An *in silico* approach towards the prediction of drug likeness properties of inhibitors of plasminogen activator inhibitor1. *Advances in bioinformatics*, 2014, Article ID: 385418. ISSN: 1687-8035. **(IF-2.83)**
22. Silambuselvi, M., D. Malini, **S. Rajakumar** and P. Malliga, 2014. Study on bacterial and fungal growth expending the supernatant and pellet released during the degradation of coir pith by Cyanobacterium (*Oscillatoria annae*). *International journal of advanced biotechnology and research*, 5(4): 619-627, ISSN 2278-599X.
23. Seenivasagan, R., **S. Rajakumar**, R. Kasimani and P.M. Ayyasamy, 2014. Screening of assimilatory and dissimilatory denitrifying microbes isolated from nitrate contaminated water and soil. *Preparative Biochemistry and Biotechnology*, 44(6): 586-597. ISSN 1532-2297. **(IF-2.36)**
24. Palanivelan, R.A., **S. Rajakumar**, S.S. Suresh, C. Raja and P.M. Ayyasamy (2014). Optimization of prime parameters for textile dye decolorization by design of experiments (DOEs) using *Lysinibacillus Fusiformis* M1. *Desalination and Water Treatment*, 1-13. ISSN 1944-3986. **(IF-1.234)**
25. Menaga, D., **S. Rajakumar** and P.M. Ayyasamy, 2013. Free radical scavenging activity of methanolic extract of *Pleurotus florida* mushroom. *International Journal of Pharmacy and Pharmaceutical Sciences*, 5(4):601-606. ISSN 0975-1491. **(IF-6.64)**

26. Abinaya, S., S. Umadevi, S. Ashok, S.P. Anusha and **S. Rajakumar**, 2013. In silico prediction of toxicity in aquatic biota and biodegradation rate of aromatic hydrocarbons. Research and Reviews: Journal of Computational Biology, 2(2): 6–13. ISSN 2319–3433. (IF–2.029)
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32. Nandhakumar, K., K. Karthikeyan, C.K. Venil, S. Sivakumar, **S. Rajakumar**, Young-Chae Song, P. Lakshmanaperumalsamy, 2009. Simple reactor system for the treatment of textile dye waste water by bacterial consortium associated with termite *Macrotermes* Sp. Korean society of environmental Engineering, 30 April – 1 May, 2009. Pp. 239.
33. Korean society of environmental Engineering, 2008 (Co-Author).
34. Young-Chae Song, **S. Rajakumar**, Chae Young Lee and Min Sun Kim, 2008. Anaerobic co-digestion of foodwaste and sewage sludge in lab scale reactor. Autumn Conference of Korea Society of Waste Management, Songdo Conventia, Incheon, Seoul, Korea, Nov 12–14, 2008. pp 256–258.
35. Young-Chae Song, Kyu Seon Yoo, **S. Rajakumar**, S.K. Lee, C.Y. Lee and J.W. Chung, 2008. A Novel horizontal flow surface air cathode microbial fuel cell for electricity production during wastewater treatment. First International Symposium on Microbial Fuel cell in China, Organised by State Key Lab of Urban Water Resource & Environment, National Engineering Research Center of Urban Water Resources, Harbin, China during Nov 3–4, 2008, pp 122–123.
36. Shanthi, K., P.M. Ayyasamy, **S. Rajakumar**, P. Thavamani and P. Lakshmanaperumalsamy, 2005. Diversity of nitrate reducers in aquatic ecosystem. International conference on Microbial Diversity: Current Perspectives and Potential Applications, Dept. of Microbiology, University of Delhi (South Campus), New Delhi. April 16–18, 2005, pp.94.
37. **Rajakumar, S.**, P. Velmurugan, K. Shanthi, P.M. Ayyasamy P. Lakshmanaperumalsamy, 2004. Water quality of Kodaikanal lake, Tamil Nadu in relation to physico-chemical and bacteriological characteristics. International Conference on Conservation, Restoration and Management of Lakes and Coastal Wetlands (Lake 2004), at Berhampur University, Bhubaneshwar, INDIA held on December 9–13, 2004. pp.34.

Papers Presented Conferences / Seminars / Symposia:

National :

1. Selvapriya S, V. Rashmi, L. Uma, T. Sivasudha, **S. Rajakumar** and D. Prabakaran, 2023. Identification and isolation of marine cyanobacteria for lipid production. National Conference on “Recent Trends in Microbial Biotechnology”(RTMBT), 24th February, 2023 at Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli-620024.
2. Sivaranjani, A., K. Nitharsan and **S. Rajakumar**, 2023. Diversity and Ecology of Diatom communities as Biomonitoring Indicators for Coastal Pollution in Tamil Nadu. “Recent Trends in Microbial Biotechnology”(RTMBT), 24th February, 2023 at Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli-620024.
3. Nitharsan K, N. Vivek, V. Rashmi, N. Thajuddin, L. Uma, **S. Rajakumar** and D. Prabakaran, 2023. Strategies and Opportunities for Next-Generation Marine Microalgae-Based Biofuel: A View of the Possible Bioenergy Feedstock. “Recent Trends in Microbial Biotechnology” (RTMBT), 24th February, 2023 at Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli-620024.
4. Selvapriya S, V. Rashmi, L. Uma, T. Sivasudha, **S. Rajakumar** and D. Prabakaran, 2023. Survey and isolation of marine cyanobacteria in view of lipid Production. XLVI Indian Social Science Congress (January 27–31, 2023, Bharathidasan University, Tiruchirappalli 620024, Tamil Nadu.
5. Sinduja, S., M. Vignesh, P. Santhanam, **S. Rajakumar** and P. Perumal, 2023. Small scale aquaponics system for....of *Cirrhinum cirrhosis* and *Vigna radiate*. National conference on “Current perspectives for sustainable development in life sciences, Environment and Agriculture”, Periyar University, Salem during 23–25, January.

6. Aiswarya, K.P, and **S. Rajakumar**, 2022, Microplastic Pollution and Commercial important crustaceans of Gulf of Mannar, , Annual National Conference on Sustainable Ecosystems, Aquaculture, Fisheries and Fisherfolk (ANCOCEFF), January 28–29, University of Kerala, Karyavottom, Tiruvananthapuram.
7. Sahaya Sukeetha, D., P.M. Ayyasamy, P. Santhanam and **S. Rajakumar**, 2018. Exploration of ammonia oxidizing bacteria and molecular characterization of optimized isolates from mangrove ecosystem. National Seminar on Recent advances in microbial technology for renewable energy, bioremediation, health and sustainable agriculture. Department of Microbiology, Periyar University Salem during 24–25, January, 2018. pp. 37
8. Manikandan, A and **S. Rajakumar**, 2018. Screening of potential crude oil degrading bacteria from the crude oil contaminated sites. National Seminar on Recent advances in microbial technology for renewable energy, bioremediation, health and sustainable agriculture. Department of Microbiology, Periyar University Salem during 24–25, January, 2018. pp.102.
9. Vaishnavee , S., V. Vimali and **S. Rajakumar**, 2018. Isolation identification and adhesion study of biofilm forming microorganisms from different materials. National Seminar on Recent advances in microbial technology for renewable energy, bioremediation, health and sustainable agriculture. Department of Microbiology, Periyar University Salem during 24–25, January, 2018. pp.125.
10. Manikandan, A., P.M. Ayyasamy and **S. Rajakumar**, 2018. Investigation of Biocarriers Development in Sustainable Approach. International conference on Biodiversity and Sustainable Resources Management (ICBSRAM– 2018), organized by centre for Environmental sciences, centre for water resources managements, Madras University, Chennai held on March, 12–13, 2018.pp–176
11. Ashok, S., **S. Rajakumar**, S. Kousalya and M. Anitha 2018. Biodegradation of crude oil by bacterial consortium. Recent Advances in Microbial Technology for Renewable Energy, Bioremediation, Health and Sustainable Agriculture (RAMT for REBHSA – 2018) organized by department of microbiology, Periyar University, Salem held on 24–25 January 2018. pp–40
12. Rajeshwari, M., **S. Rajakumar** and P.M. Ayyasamy 2018. Bioreduction of Hg(II) through lab scale processes by using Hg resistant bacterial strains. Recent Advances in Microbial Technology for Renewable Energy, Bioremediation, Health and Sustainable Agriculture (RAMT for REBHSA – 2018) organized by department of microbiology, Periyar University, Salem held on 24–25 January 2018. pp–97.
13. Navamani, S., **S. Rajakumar** and P.M. Ayyasamy 2018. Screening and optimization of biosurfactant producing bacterial and fungal strains in crude oil contaminated soil. Recent Advances in Microbial Technology for Renewable Energy, Bioremediation, Health and Sustainable Agriculture (RAMT for REBHSA – 2018) organized by department of microbiology, Periyar University, Salem held on 24–25 January 2018. pp–98.
14. Akila, V., **S. Rajakumar**, T. Muralishankar, P. Santhanam and P.M. Ayyasamy. Evaluation of partial and total replacement of formulated feed developed from *Ulva* sp. on the productive and nutritional reaction of *Poecilia latipinna*. IInd International Conference in Recent Trends in Microbiology (RTM, 2018). Department of Microbiology, Alagappa University, Karaikudi, 2018. pp 130–131.
15. Akila, V., P.M. Ayyasamy and **S. Rajakumar**, 2016. Biomethanation and bioconversion of marine weed *Ulvasp.* from Gulf of Mannarcoastal region, Tamil Nadu – A Lab scale study. National conference on Recent Trends in Biotechnology (Biotrends–2016) and Annual meet of the society for bioechnologists (India) jointly organized by NIOT and the society for biotechnologists (India), Chennai during 19th–21st October, 2016.
16. Akila, V.,P.M. Ayyasamy and **S. Rajakumar**, 2016. Effect of Seaweed Liquid Fertilizer (SLF) on the growth and biochemical constituents of *Vignaradiata* (L.). National conference on Advances in Biological and Environmental Sciences (NCABES–2016) organized by Department of Biology, GandhigramRural Institute–Deemed University, Gandhigram during February 25–26th, 2016. pp148.

17. Sakthi Thesai, A., **S. Rajakumar** and P.M. Ayyasamy, 2016. Biosorption of fluoride from aqueous solution onto various pretreated *Aspergillus niger* (BFS-8) biomass, National Seminar on Production and Applications of Microbial Products In Diverse Sectors, Conducted by Selvamm College of Arts and Science, Namakkal during April 6-7, 2016, pp. 111.
18. Vanitha, G., **S. Rajakumar** and P.M. Ayyasamy, 2016. Synergistic effects of bacterial consortium on detoxification of nitroglycerin in synthetic medium through lab scale bioreactor process, National Seminar on Production and Applications of Microbial Products In Diverse Sectors, Conducted by Selvamm College of Arts and Science, Namakkal during April 6-7, 2016, pp. 112.
19. Rajeswari, M., **S. Rajakumar** and P.M. Ayyasamy, P.M, 2016. Influence of mercury in bacterial growth rate in aqueous medium, National Seminar on Production and Applications of Microbial Products In Diverse Sectors, Conducted by Selvamm College of Arts and Science, Namakkal during April 6-7, 2016, pp. 115.
20. S. Navamani, **S. Rajakumar** and P.M. Ayyasamy, 2016. Screening of potential crude oil degrading microbes from crude oil contaminated site, National Seminar on Production and Applications of Microbial Products In Diverse Sectors, Conducted by Selvamm College of Arts and Science, Namakkal during April 6-7, 2016, pp. 116.
21. Ashok, S., A. Manikandan, P.M. Ayyasamy and **S. Rajakumar**, 2016. Bioremediation of benzene from contaminated soil by *Pseudomonas* sp. BDU-SRA2 and BDU-SRA6 and the effects of biosurfactants on benzene degradation, National Seminar on Production and Applications of Microbial Products In Diverse Sectors, Conducted by Selvamm College of Arts and Science, Namakkal during April 6-7, 2016, pp. 122.
22. Manikandan, A, V.Akila, V. Rajesh Kannan, R.Sangeetha Devi and **S.Rajakumar**, 2016. Triclosan degradation by *Pseudomonas pudita* (SK1) isolated from cosmetics expulsion sites, National Seminar on Production and Applications of Microbial Products In Diverse Sectors, Conducted by Selvamm College of Arts and Science, Namakkal during April 6-7, 2016, pp. 123.
23. Akila, V., P.M. Ayyasamy and **S. Rajakumar**, 2016. Effect of seaweed liquid fertilizer (SLF) on the growth and biochemical constituents of *Vigna radiata* (L.). National conference on "Advances in biological and environmental sciences" conducted by The Gandhigram Rural Institute, Dindigul, during 25-26 February, 2016, pp. 148.
24. Manikandan, A., V. Akila, P.M. Ayyasamy and **S. Rajakumar**, 2016. Comparative study of seaweed liquid fertilizer (SLF), Sea weed extract and chemical fertilizer in the growth of *Vigna mungo* (L). National conference on "Advances in biological and environmental sciences" conducted by The Gandhigram Rural Institute, Dindigul, during 25-26 February, 2016, pp. 144.
25. Aalfin E.S., S. Umadevi, P. M. Ayyasamy and **S. Rajakumar**, 2016. Indigenous bacterial degradation of heavy metals: A report in water samples from estuaries of Poompuhar, Tamil Nadu. National seminar on "Frontiers in bioprocess technology and microbial ecology" organized by Periyar University, Salem, held during 28-29 January, 2016, pp. 46.
26. Ashok, S., P.M. Ayyasamy and **S. Rajakumar**, 2016. Detoxification of xylene by lab scale bioreactor. National seminar on "Frontiers in bioprocess technology and microbial ecology" organized by Periyar University, Salem, held during 28-29 January, 2016, pp.47.
27. Manikandan, A., V. Rajesh Kannan, R. Sangeetha Devi and **S. Rajakumar**, 2016. Bioremediation of triclosan through intrinsic bacteria from cosmetics substance expulsion environmental sites. National seminar on "Frontiers in bioprocess technology and microbial ecology" organized by Periyar University, Salem, held during 28-29 January, 2016, pp.47-48.
28. Umadevi, S., S. Aalfin Emmanuel, P.M. Ayyasamy and **S. Rajakumar**, 2016. SilicoDegradation: A hub of bioinformatic tools that prompt the microbial degradation. National seminar on "Frontiers in bioprocess

technology and microbial ecology” organized by Periyar University, Salem, held during 28–29 January, 2016, pp.48.

29. Priyadharshini, U., **S. Rajakumar** and P.M. Ayyasamy, 2016. Influence of carbon source on biotransformation of arsenite. National seminar on “Frontiers in bioprocess technology and microbial ecology” organized by Periyar University, Salem, held during 28–29 January, 2016, pp.106.
30. Akila, V., P.M. Ayyasamy and **S. Rajakumar**, 2015. Analysis of biochemical characterization and theoretical estimation of biogas from marine weed *Ulva fasciata*. National seminar on “Green India Economy: Issues, Challenges and Opportunities”, organized by Centre of advanced study in Economics, Utkal University, Odisha, held during 27–28 March, 2015, pp.4.
31. Aalfin Emmanuel, S., V. Akila, S. Umadevi and **S. Rajakumar** (2015). Water quality analysis in estuaries of river Cauvery at Poombuhar. National seminar on “Water resources, development and sustainable management”, organized by JSS University, Mysore and Bharathiyar University, Coimbatore, held on 23 March, 2015, pp.1.
32. Navamani, S., M. rajeshwari, P. Prabhakaran, **S. Rajakumar** and P.M. Ayyasamy (2015). Bioremediation of crude oil contaminated soil using fungal biosurfactant produced by *Aspergillus fumigatus* (Pn1). National seminar on “Water resources, development and sustainable management”, organized by JSS University, Mysore and Bharathiyar University, Coimbatore, held on 23 March, 2015, pp.6.
33. Nagarajan, G., **S. Rajakumar** and P.M. Ayyasamy (2015). Microbial approach on vegetable waste management by acquiring biogas and biocomposts. National seminar on “Water resources, development and sustainable management”, organized by JSS University, Mysore and Bharathiyar University, Coimbatore, held on 23 March, 2015, pp.7.
34. Sakthi Thesai, A., **S. Rajakumar** and P.M. Ayyasamy (2015). Studies on difluoridation in aqueous solution and ground water using fungal biosorbents. National seminar on “Water resources, development and sustainable management”, organized by JSS University, Mysore and Bharathiyar University, Coimbatore, held on 23 March, 2015, pp.9.
35. Umadevi, S., P. M. Ayyasamy and **S. Rajakumar**, 2014. Phylogenetic analysis of antigenic variability in *Klebsiella pneumoniae* against antibacterial ocular drugs, 55th Annual conference of Association of Microbiologists of India on “Empowering mankind with Microbial Technologies, organized by Tamil Nadu Agricultural University, Coimbatore, held during 12–14 November, 2014. pp.18 (MM11).
36. Umadevi, S., P. M. Ayyasamy and **S. Rajakumar**, 2014. Relative effectiveness of inhibition strategies to identify effective drug target for retinal angiogenesis: Computational simulation of mathematical model. National conference on Role of Biotechnology in Development of Therapy/ Drug and Vaccines, organized by JSS college of Pharmacy, Ooty, held during 13–14 August, 2014. pp.6.
37. Prabhakaran, P., S. Navamani, M. Rajeshwari, **S. Rajakumar** and P. M. Ayyasamy, 2014. Bioremediation of crude oil in contaminated soil through a lab scale process using biosurfactant produced by *Aspergillus fumigatus* (PN–1). National conference on Ecotechnologies for wastewater treatment: Present challenges and future horizons, Bharathiyar University, Coimbatore, 21–22 January, 2014. pp 15.
38. Ashok, S., M. Arunya, R. Meena, P.M. Ayyasamy and **S. Rajakumar**, 2014. Bioremediation of benzene by pseudomonas sp. isolated from petroleum polluted soil. National conference on Ecotechnologies for wastewater treatment: Present challenges and future horizons, Bharathiyar University, Coimbatore, 21–22 January, 2014. pp 18.
39. Seenivasagan, R., **S. Rajakumar** and P. M. Ayyasamy, 2014. Comparative modeling for nitrate reductase from *Bacillus weihenstephanensis* and docking with nitrate molecules using autodock. National conference on

Ecotechnologies for wastewater treatment: Present challenges and future horizons, Bharathiyar University, Coimbatore, 21–22 January, 2014. pp 52.

40. Palanivelan, R., **S. Rajakumar** and P. M. Ayyasamy, 2014. Studies on decolorization of remazol golden yellow dye in aqueous solution using salt tolerant bacteria. National conference on Ecotechnologies for wastewater treatment: Present challenges and future horizons, Bharathiyar University, Coimbatore, 21–22 January, 2014. pp 84.
41. Priyadharshini, U., **S. Rajakumar** and P. M. Ayyasamy, 2014. Isolation and screening for arsenic resistant bacteria from industrial sites in Ranipet and Salem. National conference on Ecotechnologies for wastewater treatment: Present challenges and future horizons, Bharathiyar University, Coimbatore, 21–22 January, 2014. pp 100.
42. Umadevi, S., S. Ashok, S. P. Anusha and **S. Rajakumar**, 2013. A bioinformatic approach to identify potential therapeutic targets in ocular pathogen *Chlamydia trachomatis*, National conference on New opportunities and challenges in microbial research, organized by Dept. of Microbiology, Bharathidasan university, Tiruchirappalli, held during 5–6 September, 2013. pp.110.
43. Ajay Sharma, J., S. Asha, v. Madhana and **S. Rajakumar**, 2011. Assessment of arsenic pollution and treatment technologies. National seminar on Spatial Strategies for sustainable Management from 14–16 February, 2011 organised by Department of Environmental Management, Bharathidasan University, Tiruchirappalli. pp 24.
44. **Rajakumar, S.**, P.M. Ayyasamy, K. Shanthi, P. Thavamani and P. Lakshmanaperumalsamy, 2006. Effect of various carbon substrates on nitrate removal in synthetic medium by bacterial consortium (*Pseudomonas* sp. and *Bacillus* sp.). National Seminar on Current Trends in Advanced Biological Research (CTAB 2006), held on January 24 – 25 at Nehru Arts and Science College, Coimbatore. Pp. 52
45. Jeya Shobana, V., **S. Rajakumar**, P. Velmurugan, P. Thavamani, K. Shanthi and P. Lakshmanaperumalsamy, 2005. Studies on nitrate reduction using bioinoculum. National Conference on “Frontiers in Environmental Sciences and Engineering in India” September, 15–17, 2005. Dept of Environmental Sciences, Bharathiar University, Coimbatore – 641 046. pp.195.
46. Lakshmanaperumalsamy, P., P. Velmurugan, **S. Rajakumar** and K. Shanthi, 2004. Biocolours – Biotechnological approach. National seminar on “Biodegradation and bioremediation”, Sourashtra college, Madurai, September 17–18, 2004. Pp. 4.
47. Vijaya Chitra, A., P.M. Ayyasamy, **S. Rajakumar**, K. Shanthi and Lakshmanaperumalsamy, P., 2004. Biodegradation of trinitrophenol using *Pseudomonas* sp. and *Corynebacterium* sp. National seminar on “Biodegradation and bioremediation”, Sourashtra college, Madurai, September 17–18, 2004. Pp. 36.
48. **Rajakumar, S.**, K. Shanthi, P. M. Ayyasamy, K. Usharani, P. Velmurugan and P. Lakshmanaperumalsamy, 2004. Studies on sediment quality of Kodaikanal Lake. National seminar on Safety–Health–Environment (SHE, 2004). Feb, 27–28, 2004. DDE, Annamalai University, Annamalai Nagar. pp. 32.
49. Velmurugan, P., **S. Rajakumar**, K. Shanthi and P. Lakshmanaperumalsamy, 2004. Natural colorants from microorganisms. National seminar on Rural biotechnology for sustainable development. Feb, 19–20, 2004. Gandhigram Rural Institute (Deemed University), Gandhigram. pp. 37.
50. **Rajakumar, S.**, K. Usharani, P. M. Ayyasamy, P. Sundaramoorthy and P. Lakshmanaperumalsamy, 2003. Microbiological quality of lake Kodaikanal. 44th Annual Conference of AMI, Microbes and Human sustenance. UAS, Dharwad. Nov 12–14, 2003. pp. 112.

51. Nithya Priya, P.M., **S. Rajakumar**, P.M. Ayyasamy and P. Lakshmanaperumalsamy, 2002. Impact of dyeing effluent on lake water. 2nd National Seminar on “Environmental awareness, education and management for sustainable rural development”. Sri Venkateswara University, Tirupati, August 26–28, 2002. Pp. 39.
52. Usha Rani, k., P.M. Ayyasamy, **S. Rajakumar**, K. Shanthi and P. Lakshmanaperumalsamy, 2002. Impact of Noyyal river water on the quality of ground water and effect of ground water on the germination of seeds (*Dolichos* – bean). 2nd National Seminar on “Environmental awareness, education and management for sustainable rural development”. Sri Venkateswara University, Tirupati, August 26–28, 2002. Pp. 40.
53. Nandhini, N., V.S. Rajan, Anbazhagan, **S. Rajakumar** and P. Lakshmanaperumalsamy, 2002. Biogas production from distillery waste water. 2nd National Seminar on “Environmental awareness, education and management for sustainable rural development”. Sri Venkateswara University, Tirupati, August 26–28, 2002. Pp. 41.
54. **Rajakumar, S.** and P. Lakshmanaperumalsamy, 2001. “Recovery of *Aeromonas hydrophilla* from Retail Lamb, Meat, Chick, Egg and Control”. Ninth Seminar cum Exhibition on Student Projects Scheme (TNSCST) – 2000–2001. Noorul Islam College of Engineering, Kumaracoil. 629 180, Tukkalay, Kanyakumari. pp. 84–85.
55. **Rajakumar, S.**, G. Vivekanandhan and P. Lakshmanaperumalsamy, 2001. *Aeromonas hydrophilla*–a new emerging pathogen State level collegiate student’s seminar on Modern Approaches in Life Sciences January 6, 2001. FLORA. Pp.15

Seminars / Conference / Workshops / Training programme participated:

1. Integrated Training on culturing GIFT, Seabass and Pearlscale, 16–20.10.2023. Multispecies Aquaculture Complex (MAC) of RGCA, Vallar Padam, Kochi.
2. World Mangrove Day – 2023, Gujarat Institute of Desert Ecology, Bhuj–Kachchh, Gujarat, 26.07.2023 (Online).
3. International conference on “Emerging trends in Biotechnology and Bioeconomy”, 9th & 10th March, 2023, Department of Biotechnology, Manonmaniam Sundaranar University, Tirunelveli – 627 012.
4. 62nd Annual International Conference of Association of Microbiologists of India, September 21st – 23rd, 2022, University of Mysore, Mysuru.
5. National symposium on Relevance of libraries and higher education research, August 12th, 2022, Department of Library and Information Science, Bharathidasan University, Tiruchirappalli – 620024.
6. Recent Science Scenario in Blue Biotechnology (RSSBB–22), 23–24, March 2022, Department of Marine Science, Bharathidasan University, Tiruchirappalli–620024.
7. Exhibition cum plenary lectures on Immunology and Immunotechnology. 12–13 March 2019, Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli–620 024.
8. Hands on Training programme on Taxonomic Identification of Coastal and oceanic copepods (TICOC–2018). 25–28th September, 2018. Department of Marine Science, Bharathidasan University, Tiruchirappalli.
9. Science academies lecture workshop on Biodiversity for Human Welfare: Current and Future trends. 24–25th September, 2018. Department of Botany, Bharathidasan University, Tiruchirappalli.
10. National Seminar on Emerging trends in Cancer and Stem Cell Biology, 20th March 2018. Department of Biomedical Science, Bharathidasan University, Tiruchirappalli.
11. National Seminar on Technologies and prospects of fisheries and aquaculture, 19th March 2018. Department of Animal Science, Bharathidasan University, Tiruchirappalli.

12. National conference on Impact of climate change on public health (ICCPH 2018), 6–7, March, 2018. Centre for Climate Change Research, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli–620024.
13. Special workshop on memory enhancement, , 28, February , 2018. Department of Microbiology, Bharathidasan University, Tiruchirappalli–620 024.
14. Two day national seminar on Recent advances in Microbial Technology for Renewable Energy, Bioremediation, Health and sustainable Agriculture. 24–25, January, 2018, Department of Microbiology, Periyar University, Salem.
15. Special workshop on “Memory Enhancement”, 20th February, 2018. Department of Microbiology, Bharathidasan University, Tiruchirappalli.
16. One day national workshop on “Utilizing Internet Resource in class Room Instruction” . 12 January 2018, Department of Education, Bharathidasan University, Tiruchirappalli–620 024.
17. Eye and General Health Awareness camp, 14th March, 2017. NFMC, Bharathidasan University Constituent Arts & Science College, Trichy.
18. Science Academies’ Lecture Workshop on ‘Plant Diversity and Phytoremediation’, 6–7th February, 2017. Dept. of Environmental Science, Periyar University, Salem.
19. National seminar on Management of urban biodiversity – Issues, Challenges and solutions. 1–2, September, 2014. Christ University, Bangalore.
20. Work shop for research supervisor on Quality research report writing. 28 February, 2014. Curriculum Development cell, Bharathidasan University, Tiruchirappalli.
21. National conference on Eco technologies for wastewater treatment: Present challenges and future horizons, 21–22 January, 2014. Department of Environmental Sciences, Bharathiar University, Coimbatore.
22. National workshop on Drug Discovery and Development. 2–3, November, 2011. Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli.
23. Post seminar workshop on Spatial techniques for environmental sustainability, February 17–18, 2011. Department of Environmental Management, Bharathidasan University, Tiruchirappalli.
24. National Conference on Biological Wastewater Treatment towards Green Environment, 28–29 January, 2011. Department of Chemical Engineering, National Institute of Technology, Calicut, Kerala
25. National Seminar on Environmental Bioremediation Technologies, 5–6 November, 2009. Department of Environmental Management, Bharathidasan University, Tiruchirappalli–620 024.
26. National seminar on New trends in Bioinformatics. 12 February, 2007. Department of Bioinformatics, Bharathiar University, Coimbatore – 641 046.
27. International conference on Biomarkers in health and Environmental Management. 10–12 January, 2007. Department of Environmental Science, PSG College of Arts and Science, Coimbatore.
28. Training of Environmental Management in the river basins. 10–11 February, 2005. Public Works Department, Water Resources Organisation, Coimbatore.

29. National seminar on Biodegradation and Bioremediation, 17–18th September, 2004. Sourashtra College, Madurai.
30. National Seminar on Environmental Management, Mar 27, 2003. Dept of Environmental Sciences, Bharathiar University, Coimbatore – 641 046.
31. National conference on Recent trends in insect control. 22–24, January, 2003. Department of Zoology, Bharathiar University, Coimbatore.
32. National conference on Microbes in peace and war. 21–22, February, 2002. Sengunthar Institute of post graduate study and research in microbiology, Tiruchengode.
33. 42nd Annual Conference of Association of Microbiologists of India, 9–11 November, 2001. Department of Microbiology, Gulbarga University, Gulbarga – 585 106, Karnataka
34. National Symposium on Male Reproduction. 10–12 November, 2000. Department of Zoology, Bharathiar University, Coimbatore – 641 046.
35. National Conference on Eco Friendly Technologies for Sustainable Development. 27– 29 March, 2000. P.S.G. College of Arts and Sciences, Coimbatore – 14.
36. National Workshop on Environmental Awareness on Quality Management of Irrigation Water, February 2000, Dept. of Environmental Sciences, Bharathiar University, Coimbatore– 641 046.

Resource person / Invited Lecture delivered

- Served as Resource Person in one day Awareness program on Bio–entrepreneurship, Bishop Heber College, Tiruchirappalli (23.11.2024).
- Served as a Judge for World Science Day celebration, Srimad Andavan Arts and Science college, Tiruchirappalli (22.11.2024)
- Served as Guest Speaker at Dept. of Zoology, Nirmala College for Women, Coimbatore (25.10.2024).
- Served as Resource Person in National Seminar in Microplastics: Sustainable challenges and Solutions, Sri Ramakrishna Engineering College, Coimbatore (20.09.2024)
- Served as Judge in Sci – flicks, CENITTERZ 2K24, Dept. of Microbiology, Bharathidasan University (29.02.2024).
- Served as Resource Person in Faculty Development Program on “ Healthy Practices for Sustainable environment, Economy and Society”, Periyar University, Salem (20.02.2024)
- Served as chief guest in intercollegiate Technical fest “BIO–DE–FIESTA–2023”, St. Joseph’s College, Tiruchirappalli (22.09.2023).
- Special Lecture on “Guidelines for Competitive Exams”, Department of Biomedical Science, Bharathidasan University , Tiruchirappalli (30.03.2023).
- Served as Co–chair in National conference on “Current Perspectives for Sustainable Development in Life Science, Environment and Agriculture”, Periyar University, Salem (23.01.2023 – 25.01.2023).
- Served as a member in venue arrangements committee in XLVI Social Science Congress – Bharathidasan University, Tiruchirappalli (27.01.2023 – 31.01.2023)

- Lecture on “ Environmental monitoring using advanced analytical and molecular tools”, School of Marine sciences and Environmental sciences, Bharathidasan University, Tiruchirappalli (09.11.2022 – 15.11.2022)
- Lecture on “Montreal Protocol@35: Global cooperation protecting life on Earth”, Dept. of Environment and Climate change, Govt. of Tamilnadu, (17.09.2022)
- Served as resource person in National Workshop on Biomolecule Separation Techniques 7th – 11th March, 2022. Dept. of Marine Biotechnology, Bharathidasan University (7.03.2022 – 11.03.2022)
- Lecture on Impact of Microplastics on Coastal Environment, Virtual conference on Impact of global warming on environment and biodiversity – IGWEB, Dept. of Environmental and Herbal Science, Tamil University, Thanjavur – 613010. (24.02.2022)
- Lecture on Marine Food Processing and Preservation Technology, A.D.M. College for Women (Autonomous), Nagapattinam (26.10.2021).
- Lecture on Marine Bioresources, status and constraints, UKF College of Engineering, Kollam, Kerala (16.02.2019).
- Lecture on “Seaweed and its application”. Department of Botany, PSGR Krishnammal College for Women, Peelamedu, Coimbatore (24.08.2018).
- Lecture on “Integrated farming”. National Facility for Marine Cyanobacteria, Bharathidasan University, Tiruchirappalli (16.11.2017).
- Lecture on “Hidden resources in microbes” Department of Microbiology, Selvamm College of Arts and Science, Namakkal (06.04.2016 – 07.04.2016).
- Lecture on “Non Renewable Energy in Human Welfare”. Department of Environment and Herbal Sciences, Tamil University, Tanjore (28.09.2012).
- Lecture on “Wild life management and environmental geo sciences” JSS University, Mysore (05.12.2011–07.12.2011)
- Lecture on “Role of molecular biology on environmental samples” Department of Marine Biotechnology, Bharathidasan University, QUEST, 2011 (18.09.2011).
- Lecture on “Bioremediation – An integrated approach on removal of nitrate in drinking water”. PG. & Research Department of Zoology, Periyar EVR College, Tiruchirappalli (30.09.2011).