SRI SANKARA ARTS & SCIENCE COLLEGE ENATHUR, KANCHIPURAM STAFF PROFILE



DEPARTMENT OF MICROBIOLOGY

1.	Name of the Staff	Dr. S. Kumaran
2.	Designation	Assistant Professor
3.	Date of Joining	05-07-2023
4.	Mobile Number	9943215332
5.	E-Mail ID	kumarun23@gmail.com
6.	Nationality	Indian
7.	Academic Qualification	M.Sc., M.Phil., Ph.D.
8.	Field of Specialization	Nano biotechnology,
		Aquaculture feed development
		Drug Discovery
9.	Ph.D Thesis Title	Biodegradation of chitin and concomitant production of chitinase and N-acetyl-D-glucosamine by Achromobacter xylosoxidans as enriching diet enhanced the immunestatus and disease resistance in sea bass (Latescalcarifer)
	Awarding University, Year of Award.	Annamalai University, 2013

10. Work Experience (in chronological order):

S.No.	Name of the Institution	Designation	Period
1	Department of Microbiology, Sri Sankara Arts & Science College Kanchipuram	Assistant Professor	July 2023 - till date
2	Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology Chennai – 600 119.	Assistant Professor/ Research	June 2019 – June 2023
3	Department of Microbiology, Sri Sankara Arts & Science College Kanchipuram	Assistant Professor	July 2013 – May 2019

11. Other Academic and Administrative Responsibilities:

S.No.	Name of the Institution/ Committee	Position	Period
1.	Sri Sankara Arts and Science College / NAAC committee	Member	2018-
	(Research criterion -3)		2019
2.	Sri Sankara Arts and Science College / Internal	Member	2013-
	Examination committee		2018
3.	Sri Sankara Arts and Science College/ Autonomous	Member	2013-
	committee		2014
4.	Sri Sankara Arts and Science College/ Research committee	Member	2014-
			2016

12. Publications:

Publication Citation: 1600 and H index: 22

Google Scholar : https://scholar.google.co.in/citations?user=nrdAlvwAAAJ&hl=en
Scopus : https://www.scopus.com/authid/detail.uri?authorId=33267794200
Web of Science : https://publons.com/researcher/4250215/kumaran-subramanian/

Research papers (Total numbers = 78)

- 1. K. Kumaravel, S. Kumaran, T.Rajasekar, V., Ramesh Kumar, et al., 2023. Antibacterial wound dressing with hydrogel from chitosan and polyvinyl alcohol from the red cabbage extract loaded with silver nanoparticles" Green Processing and Synthesis, vol. 12, no. 1, 2023, pp. 20230035. https://doi.org/10.1515/gps-2023-0035 (Impact Factor: 4.6)
- 2. Mahmoud K, S. Latha, **Kumaran S,** D. Rennita, Rajasekar T, V. Ramesh, Guru Prasad S, Abdullah I. Al-Mubarakc. 2023. Chitosan/Alginate Nanocomposite with Fe Nanoparticles for the Efficient Removal of Hexavalent Chromium Pollutant. **Journal of Nanomaterials**, vol. 2023, Article ID 1713690, 8 pages, 2023. (**Impact Factor: 3.791**)
- 3. Rajasekar T, Sabarika S, Muralitharan G, Maryshamya A, Karthika K., Anbarasu S., Revathy K., Kumaran S., et al., Silver nanoparticles synthesized from the seaweed *Sargassum polycystum* and screening for their biological potential. Scientific report 12 (Nov 2022) Article number: 14757 (Impact Factor: 4.99)
- **4.** Srinivasan R, Rohini Karunakaran. Swarnalatha Yanamadala, Sivakumar Shanthirappan, Sidhika Kannan, Narendran Chiterasu**,Kumaran Subramanian**, Lamya Ahmed Al-Keridis, Tarun Kumar Upadhyay, Nawaf Alshammari. Mohd

- Saeed, Guru Prasad. Biological Activity of Cyclic Peptide Extracted from Sphaeranthus amaranthoides Using De Novo Sequencing Strategy by Mass Spectrometry for Cancer. Biology 2023, 12, 412. (Impact Factor: 5.16).
- **5.** Subramani S, Varshney N, Anand MV, Soudagar MEM, Al-keridis LA, Upadhyay TK, Alshammari N, Saeed M, **Subramanian K**, Anbarasu K and Rohini K (2023) Cardiovascular diseases prediction by machine learning incorporation with deep learning. *Front. Med.* 10:1150933. doi: 10.3389/fmed.2023.1150933. (**Impact factor: 5.01**).
- **6.** M Muthuchamy, **Subramanian Kumaran**, C Padhiar, DA Kumar, D Swathi. 2023. Assessment of biological properties for decellularized human umbilical cord tissue: Biomaterials in regenerative medicine. Research Journal of Biotechnology Vol 18, 7.
- **7.** Manimaran, D., Elangovan, N., Mani, P. **Kumaran Subramanian** *et al.* Isolongifolene-loaded chitosan nanoparticles synthesis and characterization for cancer treatment. *Sci Rep* 12, 19250 (2022). https://doi.org/10.1038/s41598-022-23386-4. (**Impact Factor: 4.99**).
- **8.** Pitchiah Sivaperumal, Kannan Kamala, **Kumaran Subramanian**, Wilson Aruni, Rajeshkumar Shanmugam, Rajendran Rajaram, Baseline assessment of marine actinobacterial diversity around the nuclear power plant sites, India and its application to uranium remediation, Environmental Research, Volume 212, Part A,113135. 2022. https://doi.org/10.1016/j.envres.2022.113135. (Impact Factor: **8.431**).
- **9.** Muthuchamy M, **Subramanian Kumaran**, Padhiar C, Dhanraj AK, Desireddy S. Feasibility study on intact human umbilical cord Wharton's jelly as a scaffold for human autologous chondrocyte: In-vitro study. *The International Journal of Artificial Organs*. 2022;45(11):936-944. doi:10.1177/03913988221118102 (**Impact Factor: 1.631**).
- **10.** Ramaswamy K, Jule LT, N. N, **Subramanian K**, R. S, L. PD, et al. (2022) Investigation on Pollution Control Device (PCD) in iron foundry industry to reduce environmental chemicals. PLoS ONE 17(7): e0271032. https://doi.org/10.1371/journal.pone.0271032. (**Impact Factor: 3.752**).
- 11. Antonyraj Matharasi Perianaika Anahas, Subramanian Kumaran, Mahmoud Kandeel, Gangatharan Muralitharan, Jenifer Silviya, Geja Lakshmi Adhimoolam, Mani Panagal, Sampath Renuka Pugazhvendan, Gopal Suresh, A. Wilson Aruni, Senthil Rethinam, Nainangu Prasannabalaji, "Applications of Natural Violet Pigments from Halophilic *Chromobacterium violaceum* PDF23 for Textile Dyeing with Antimicrobial and Antioxidant Potentials", *Journal of Nanomaterials*, vol. 2022, 13 pages, 2022. https://doi.org/10.1155/2022/3885396. (Impact factor: 3.792)
- **12.** H. Jemmy Christy, Swetha Vasudevan, S. Sudha, Mahmoud Kandeel, **Kumaran Subramanian**, S. R. Pugazhvendan, P. Ronald Ross, Velmurugan, "Targeting Streptomyces-Derived Streptenol Derivatives against Gynecological Cancer Target PIK3CA: An In Silico Approach", *BioMed Research International*, vol. 2022, Article ID 6600403, 15 pages, 2022. https://doi.org/10.1155/2022/6600403. (**Impact factor:**

- **13.** Saka, A., Enkosa, E., Jule, L.T. Leta Tesfaye, Nagaprasad, N, **Subramanian, Kumaran**, Ramaswamy, Krishnaraj *et al.* Biofuel production from mango (*Mangifera indica*) seed extracts through zinc oxide nanoparticle. *Biomass Conv. Bioref.* (2022). https://doi.org/10.1007/s13399-022-03005-y. (**Impact factor: 4.05**).
- 14. Mathalaimuthu Baranitharan, Mahmoud Kandeel, Govindan Shanmugavel, Kumaravel Kaliyaperumal, Kumaran Subramanian, Kuppusamy Elumalai, Jayapal Gokulakrishnan, Hari Irrusappan, Senthil Rethinam, S. Velmurugan, "Fabrication of Silver Nanoparticles Using *Fimbristylis miliacea*: A Cheap and Effective Tool against Invasive Mosquito Vector, *Aedes albopictus*", *Journal of Nanomaterials*, vol. 2022, Article ID 4083663, 9 pages, 2022. https://doi.org/10.1155/2022/4083663. (Impact factor: 3.792)
- **15. Kumaran Subramanian**, Deivasigamani Balaraman, Kumaravel Kaliyaperumal, V. Devi Rajeswari, K. Balakrishnan, P. Ronald Ross, Elumalai Perumal, Pugazhvendan Sampath Renuga, Mani Panangal, Y. Swarnalatha, S. Velmurugan, "Preparation of an Intelligent pH Film Based on Biodegradable Polymers for Monitoring the Food Quality and Reducing the Microbial Contaminants", *Bioinorganic Chemistry and Applications*, vol. 2022, Article ID 7975873, 12 pages, 2022. https://doi.org/10.1155/2022/7975873. (Impact factor: 4.724).
- **16.** Jule Leta Tesfaye, N . Nagaprasad, **Subramanian Kumaran**, R. Shanmugam, L. Priyanka Dwarampudi,Seenivasan Venkatesh. Reduction of environmental chemicals, toxicity and particulate matter in wet scrubber device to achieve zero emissions. *Sci Rep* 12, 9170 (2022). https://doi.org/10.1038/s41598-022-13369-w. (**Impact factor: 4.99**)
- **17.** Saka Abel, Jule Leta Tesfaye, Gudata Lamessa, Shuma Soressa, Nagaprasad N, **Subramanian Kumaran**, Afessa Geleta, Ramaswamy Krishnaraj. Preparation of biobutanol via coffee bean harsh extracts by zinc oxide nanoparticle as catalyst. *Biomass Conv. Bioref.* (2022). https://doi.org/10.1007/s13399-022-02749-x. (**Impact factor: 4.05**).
- **18.** Jerrine Joseph, Kaari Manigundan, Mary Shamya Arokia Rajan, Manikkam Radhakrishnan, Venugopal Gopikrishnan, **Subramanian Kumaran**, Rajasekar Thirunavukkarasu, Wilson Aruni, Velmurugan Shanmugam, "Conversion of Aquaculture Waste into Biomedical Wealth: Chitin and Chitosan Journey", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 2897179, 12 pages, 2022. https://doi.org/10.1155/2022/2897179. (**Impact factor: 2.098**).
- **19.** Sambandam Padmanabhan, K. Giridharan, Balasubramaniam Stalin, Subramanian Kumaran, V. Kavimani, N. Nagaprasad, Leta Tesfaye Jule & Ramaswamy Krishnaraj, Energy recovery of waste plastics into diesel fuel with ethanol and ethoxy ethyl acetate additives on circular economy strategy. *Sci Rep* **12**, 5330 (2022). https://doi.org/10.1038/s41598-022-09148-2. (Impact factor: **4.99**).
- 20. Krishnaraj Ramaswamy, Saka Abel, JuleLeta Tesfaye, N. Nagaprasad, Kumaran

- **Subramanian**, Mahendrakumar Mani, R. Shanmugam, L. Priyanka Dwarampudi, Arpita Roy, B. Stalin. Biobutanol preparation through sugar rich Biomass by Clostridium *Saccharaoper butylacenium* Conversion Using Zno Nano particle Catalyst. Biomass Conv. Bioref. (2022). https://doi.org/10.1007/s13399-022-02424-1. (**Impact factor: 4.05**).
- 21. Rajasekar Thirunavukkarasu, Priyadarshin Pandi, Deivasigamani Balaraman, Fadwa Albalawi, Naushad Ahmad, Mani Panagal, Tentu Nageswara Rao, Kumaran Subaramnaian, Edward Gnana Jothi George & MaryShamya Arockia Rajan, Sampath Renuga Pugazhvendan, Wilson Aruni 1&., Suliman Yousef AlOma. Influence of extracellular protein isolated from fish gut associated bacteria as an enhancerof growth and innate immune system in *Mugil cephalus*. 2022. Nature Scientific Reports *Sci Rep* 12, 3217 (2022). https://doi.org/10.1038/s41598-022-05779-7. (Impact Factor: 4.99).
- **22. Kumaran Subramanian**, Deivasigamani Balaraman, Mani Panangal Tentu Nageswara Rao, Ellumalai Perumal, Amutha R, Alagappan Kumarappan, Pugazhvendan Sampath Renuka, Suresh Arumugam, Rajasekar Thirunavukkarasu, Wilson Aruni, Suliman Yousef. Bioconversion of chitin waste through Stenotrophomonas maltophilia for production of chitin derivatives as a Seabass enrichment diet. (2022). Nature Scientific Reports *Sci Rep* 12, 4792 (2022). https://doi.org/10.1038/s41598-022-08371-1. (**Impact Factor: 4.99**).
- **23.** JiananSun, ValliappanKaruppiah, YaqianLi, SivakumarPandian, **Subramanian Kumaran,** Jie Chen. Role of cytochrome P450 genes of *Trichoderma atroviride* T23 on the resistance and degradation of dichlorvos. Chemosphere. Volume 290, March 2022, 133173. https://doi.org/10.1016/j.chemosphere.2021.133173. (**Impact Factor: 8.943**).
- **24. Kumaran Subramanian**, Harshni Selvaraj, Balakrishnan K, Pugazhvendan Sampath Renuga, Velmurugan S, Wilson Aruni, "Anti-Quorum Sensing in Pathogenic Microbes Using Plant-Based Bioactive Phytochemicals", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 7532086, 7 pages, 2022. https://doi.org/10.1155/2022/7532086. (Impact Factor: **2.08**).
- **25. Kumaran Subramanian**, Harinakshi Logaraj, V. Ramesh, Mahendrakumar Mani, K. Balakrishnan, Harshni Selvaraj, Sampath Renuga Pugazhvendan, S. Velmurugan, Wilson Aruni, "Intelligent pH Indicative Film from Plant-Based Extract for Active Biodegradable Smart Food Packing", *Journal of Nanomaterials*, vol. 2022, Article ID 4482114, 8 pages, 2022. https://doi.org/10.1155/2022/4482114. (Impact Factor: 3.7).
- 26. Bharathi Kumar, Siva Vijayakumar Tharumasivam, Vasuki Boominathan, Elumalai Perumal, Prabu Dhandapani, Kumaravel Kaliyaperumal, Suresh Arumugam, Kumaran Subramanian, Pugazhvendan Sampath Renuga, Vasanth Shakthivel, Bupesh Giridharan, Wilson Aruni, Lokesh Kumar Boopathy, "A Pilot Study on Nanotherapy of *Momordica charantia* against Trimethyltin Chloride-Induced Neurotoxicity in *Danio rerio* (Zebrafish)", *Journal of Nanomaterials*, vol. 2021, Article ID 2180638, 12 pages, 2021. https://doi.org/10.1155/2021/2180638 (Impact factor: 3.79).

- **27.** Baskaran Abirami, Manikkam Radhakrishnan, **Subramanian Kumaran**, Aruni Wilson. Impacts of global warming on marine microbial communities. 2021.147905. Science of the Total Environment. https://doi.org/10.1016/j.scitotenv.2021.147905. (**Impact factor: 10.753**).
- **28.** Bharathi, S., Ramesh, B., **Kumaran, S**. M. Radhakrishnan, D. Saravanan, P. Saravanan, S. R. Pugazhvendan & M. S. Nalinasundari Development of nanobiomaterial for wound healing based on silver nanoparticles loaded on chitosan hydrogel. *3 Biotech* 11, 490 (2021). https://doi.org/10.1007/s13205-021-03030-0. (**Impact Factor: 2.893).**
- **29.** Valliappan Karuppiah, Lu Zhixian, Hongyi Liu, Vallikkannu Murugappan, **Subramanian Kumaran**, Anthonyraj Matharasi Perianaika Anahas, Jie Chen. Cocultivation of *T. asperellum* GDFS1009 and *B. amyloliquefaciens* 1841: Strategy to regulate the production of ligno-cellulolytic enzymes for the lignocellulose biomass degradation. Journal of Environmental Management 301 (2022) 113833. https://doi.org/10.1016/j.jenvman.2021.113833. (**Impact factor: 8.91**)
- **30. Subramanian Kumaran**, Antonyraj Matharasi Perianaika Anahas, Nainangu Prasannabalaji, Muthuramalingam Karthiga, Selvaraj Bharathi, Thirunavukarasu Rajasekar, Jerrine Jospeh, Srinivasan Guru Prasad, Siva Kumar Pandian, Sampath Renuka Pugazhvendan, Wilson Aruni Chitin derivatives of NAG and chitosan nano particles from marine disposal yards and their use for economically feasible fish feed development. 2021. Chemosphere. 130746 (**Impact Factor: 8.94**).
- **31.** Panneerselvam Saravanan, **Subramanian Kumaran**, Selvaraj Bharathi, Padmanaban Sivakumar, Padian Sivakumar, Sampath Renuka Pugahvendan, Wilson Aruni, Sahadevan Renganathan Bioremediation of Synthetic Textile Dyes Using Live Yeast *Pichia pastoris*. Environmental Technology & Innovation. 20 February 2021, 101442 (**Impact Factor:7.758**).
- 32. Tentu Nageswara Rao, A.P.B. Balaji, Mani Panagal, Botsa Parvatamma, Bharathi Selvaraj, Saravanan Panneerselvam, Wilson Aruni, Kumaran Subramanian, Pugazhvendan Sampath Renuga, Sivakumar Pandian. Nanoremediation of dimethomorph in water samples using magnesium aluminate nanoparticles. Environmental Technology & Innovation 20 (2020) 101176. (ImpactFactor: 7.758).
- 33. Kumaran Subramanian, Balamurugan Sadaiappan, Wilson Aruni, Alagappan Kumarappan, Rajasekar Thirunavukarasu, Guru Prasad Srinivasan, Selvaraj Bharathi, Prasannabalaji Nainangu, Pugazhvendan Sampath Renuga, Anandajothi Elamaran, Deivasigamani Balaraman & Mahendran Subramanian. Bioconversion of chitin and concomitant production of chitinase and N-acetylglucosamine by novel Achromobacter xylosoxidans isolated from shrimp waste disposal area. Nature Scientific Reports, (2020) 10:11898,doi.org/10.1038/s41598-020-68772-y. (Impact Factor:4.99)

- **34.** Zhenjiang Li, Vishnu Priya Veeraraghavan, Krishna Mohan Surapaneni, Srinivasa Rao Bolla, Sulaiman Alharbi, Hariprasath Lakshmanan, **Kumaran Subramanian**, Aruni Wilson, Aref Ali Mohammed Aladresi, Omar H. M. Shair. Apoptotic induction and antimetastatic activity of eugenol encapsulated chitosan nanopolymer on rat glioma C6 cells via alleviating the MMP signaling pathway. Journal of photo chemistry and Photobiology B: Biology. 2020. Volume 203- 111773. (**Impact Factor: 6.814**).
- **35.** Jinmei Yang, Qiang Wang, Chunxiao Wang, Ruiyi Yang, Mukhtar Ahmed, **Subramanian Kumaran**, Periyannan Velu & Bo Li. *Pseudomonas aeruginosa* synthesized silver nanoparticles inhibit cell proliferation and induce ROS mediated apoptosis in thyroid cancer cell line (TPC1). Artificial Cells, Nanomedicine, And Biotechnology. 2019, vol. 48, no. 1, 800–809. (**Impact Factor:6.355**).
- **36.** T. Rajasekar, K. Karthika, G. Muralitharan & A. Maryshamya & S. Sabarika & S. Anbarasu1 & K. Revathy & N. Prasannabalaji & **S. Kumaran.** Green synthesis of gold nanoparticles using extracellular metabolites of fish gut microbes and their antimicrobial properties. Brazilian Journal of Microbiology (2020) 51:957–967. (**Impact Factor: 2.214**).
- **37. Kumaran.** S. S. Bharathi, Uttra. V. Rajasekar T. Gopi .V. Prasannabalaji. N. Pugazhvendan. S.R. Wilson Auni, Deivasigamani. B. Bioactive metabolites produced from Streptomyces enissocaesilis SSASC10 against fish pathogens. Biocatalysis and Agricultural Biotechnology. 2020,101802.
- **38.** Prasanna Balaji Niangua, Anahas Perianaika Matharasi Antonyraj, **Kumaran Subramanian**, Sowparthani Kaliyaperumal, Suresh Gopal, Pugazhvendan Sampath Renuka, Wilson Aruni. In vitro screening of antimicrobial, antioxida ,cytotoxic activities, and characterization of bioactive substances from freshwater cyanobacteria Oscillatoria sp. SSCM01 and Phormidium sp. SSCM02. Biocatalysis and Agricultural Biotechnology. (2020)29:101772.
- 39. Subramanian Kumaran, Anahas Perianaika Matharasi Antonyraj, Prasannabalaji Nainangu, Pugazhvendan Sampath Renuka, RajaSekar Thirunavukarasu1, Sadaiappan Balamurugan, Bharathi Selvaraj, Suresh Gopal, Guru Prasad Srinivasan, Praveen Kumar Elango, Balasubramaniyan Balakrishnan and Wilson Aruni. A. A Review On Ppathogenesis, Prevention And Control Of Novel Corona Virus Of Covid-19. Oriental Journal of Chemistry. 2020. Volume 36, Number 4. (Impact Factor:0.16).
- 40. Gopal Suresh, Dhanasegaran Kokila, Thirunavukarasu Chitrikha Suresh, Subramanian Kumaran, Palanivel Velmurugan, Kaliyappan Amballandi Vedhanayakisri, Subpiramaniyam Sivakumar, Arumugam Veera Ravi. Mycosynthesis of anticancer drug taxol by Aspergillus oryzae, an endophyte of Tarenna asiatica, characterization, and its activity against a human lung cancer cell line. Biocatalysis and Agricultural Biotechnology, 2020. Volume 24, March 2020,101525.

- **41.** S Bharathi, **S Kumaran**, G Suresh, M Ramesh, V Thangamani, SR PughazhventhanExtracellular synthesis of nanoselenium from fresh water bacteria Bacillus sp., and its validation ofantibacterial and cytotoxic potential. Biocatalysis and Agricultural Biotechnology, 2020. Volume 27, August 2020,101655.
- **42.** Rajeswari M.V, Annamalai N, **Kumaran S**, Wilson Aruni, Balasubramanian T. Effect of Probiotic Strain Bacillus firmus CAS 7 As Feed Supplement for Growth, Survival and Colour Enhancement of Smoke Angelfish Apolemichthys xanthurus. Biosc.Biotech.Res.Comm. 2020;13(1).
- **43. Kumaran.** S, Aruni W, Karthika. M, Anandajothi. E, Balaji. N. P, Pugazhvendan S. R, Rajeswari. V, Bharathi. S, Rajasekar. T, Guru Prasad. S. G. Trends in Aquaculture Feed Development with Chitosan Nano Particles— A Review. Biosc.Biotech.Res.Comm.2020;13(1).
- **44.** Santhiyaa RV, Wilson Aruni A, Suresh G, Prasanna Balaji N, Barathi S, Pugazhvendan SR, Rajasekar T, Karthikeyan DR and **Kumaran S**. Applications of Feather keratin hydrolyzate in divergent field. Biosc.Biotech.Res.Comm Vol 12 (4) 00-002019.
- **45.** Kaliannan Durairaj, Palaninaicker Senthilkumar, Palanivel Velmurugan, Kavitha Dhamodaran3, Krishna Kadirvelu, **Subramanian Kumaran**. Sol-gel mediated synthesis of silica nanoparticle from Bambusa vulgaris leaves and its environmental applications: kinetics and isotherms studies. *Journal of Sol-Gel Science*, (2019), and Technology. https://doi.org/10.1007/s10971-019-04922-7. (**Impact factor 2.0**).
- **46.** Balamurugan Sadaiappan, Chinnamani Prasannakumar, **Kumaran Subramanian** Mahendran Subramanian. Metagenomic data of vertical distribution and abundance of bacterial diversity in the hypersaline sediments of Mad Boon-mangrove ecosystem, Bay of Bengal. *Data in Brief*, (2019), 22:716–721.
- **47.** Bharathi .S, T. Ezhilarasi, **S.Kumaran**,G.Suresh, M.S.Nalina. Phytosynthesis of silver nanoparticles using Hygrophila auriculata leaf extract and assessment of their antibacterial and antioxidant properties. Sundari. *Journal of Applied Pharmaceutical Science*. ISSN- 0975-7058, 2018. *10*(6),112-118.
- **48.** G. Suresh, P. Raghu, U. Prakash, T. Chitrikha Suresh, **S. Kumaran**, S. Bharathi, K. Selvendiran and T. V. Poonguzhali. Screening of the Antibiotic Resistant Environmental Bacterialsolated from Selected Niches in and Around Kanchipuram Town, India.. Int.J.Curr.Microbiol.App.Sci, (2018), 7(6): 3665-3674.
- **49. Kumaran Subramanian**, Deivasigamani Balaraman, Dhayanithi Nagarajan Balachandran, Rajasekar Thirunavukarasu, Suresh Gopal, Pugazhvendan Sampath Renuka, Alagappan Kumarappan. Immune response of shrimp (Penaeus monodon) against V. furnissii pathogen. *Journal of Coastal Life Medicine*, 2014, 2(4):281-286.

- **50.** Rajasekar Thirunavukkarasu, Priyadharshini Pandiyan, **Kumaran Subaramaniyan**, Deivasigamani Balaraman, Sakthivel Manikkam, Balamurugan Sadaiyappan, George Edward Gnana Jothi. Screening of marine seaweeds for bioactive compound against fish pathogenic bacteria and active fraction analysed by gas chromatographymass spectrometry.. *Journal of Coastal Life Medicine*. 2014; 2(5):367-375.
- **51.** Guru Prasad Srinivasan, Asnar Sikkanthar, Anandajothi Elamaran, Caroline R Delma, **Kumaran Subramaniyan**, Somasundaram Thirugnanasambandan Somasundaram. Biodegradation of carcinogenic textile azo dyes using bacterial isolates of mangrove sediment. *Journal of Coastal Life Medicine*, 2014, 2(2):154-162.
- **52.** S.R. Pugazhvendan, M. Soundararajan, N. Kannan, **S. Kumaran** and K.M. Alagappa. Ultra Structural Studies of Liver Damage by Lead in Fresh Water Fish Cyprinus Carpio.. *American- Eurasian J. Agric. & Environ. Sci.*, 2013, 13 (10):1407-1411.
- **53.** Bharathi Selvaraj, **Kumaran Subramanian**, Suresh Gopal and Pugazhvendan Sampath Renuga. Nanotechnology as a novel tool for aquaculture industry: A review. World Journal of Pharmaceutical Sciences, 2014, 2(9):1089-1096.
- **54.** Priyadarshini Pandiyana, Deivasigamani Balaraman, Rajasekar Thirunavukkarasua, Edward Gnana Jothi Georgea, **Kumaran Subaramaniyan**, Sakthivel Manikkama, Balamurugan Sadayappana. **Probiotics in aquaculture**, *Drug invention today*, 2013, 5;55-59.
- **55.** Rajasekar Thirunavukkarasu, Priyadharshini Pandiyan, Deivasigamani Balaraman **Kumaran Subaramaniyan**, George Edward Gnana Jothi, Sakthivel Manikkam, Balamurugan Sadaiyappan. Isolation of bioactive compound from marine seaweeds against fish pathogenic bacteria *Vibrio alginolyticus* (VA09) and characterisation by FTIR.. *Journal of Coastal Life Medicine*, 2013, 1(1): 6-13.
- **56. Subramanian Kumaran**, Balaraman Deivasigamani, Uttara Vairagkar, Sadaiappan Balamurugan and Manikkam Sakthivel. Evaluation of Chitinase producing and antimicrobial properties of *Streptomyces* isolated from shrimp shell disposable area. *Asian Pacific Journal of Tropical Disease*, **2012**,1-4.
- **57.** M. Gopi, **S. Kumaran**, T. Ajith Kumar, B. Deivasigamani, K.M. Alagappan, S. Guru Prasad. Antibacterial potential of sponge endosymbiont marine *Enterobacter* sp at Kavaratti Island, Lakshadweep archipelago. *Asian Pacific Journal of Tropical Medicine*, 2012, 142-146. (Impact Factor:3.041).
- **58.** M. Sakthivel, B. Deivasigamani, **S. Kumaran**, S. Balamurugan and T. Rajasekar. Seasonal variation in immune organs andimmune response of catfish *Arius maculatus* in Parangipettai coastal area.. *Journal of Chemical and Pharmaceutical Research*, 2012,4(7):3342-3348.
- **59.** S. Balamurugan, b. Deivasigamani, **S. Kumaran**, M. Sakthivel, G. Edward and M.

- Ashiq ur rahman. Length-weight relationship, age and growth of wild catfish arius arius (hamilton, 1822) in parangipettai east coast of Tamil nadu. Thalassas, 2013, 29(1)17-23.(Impact factor: 0.64).
- **60.** NPrasannabalaji,GMuralitharan,R.N.Sivanandan,**SKumaran**andS.R.Pugazhvendan. Antibacterial activities of some Indian traditional plant extracts. *Asian Pacific Journal of Tropical Disease*, 2012, 1-5.
- **61.** M. Sakthivel, B. Deivasigamani*, K.M. Alagappan, **S. Kumaran**, S. Balamurugan and T. Rajasekar. Seasonal changes in selected immune response of Mystus gulio and Mystus vittatus. 2013. Journal of Environmental Biology, 2013, Vol. 34, 37-42. (**Impact factor: 0.72**).
- **62.** Thirunavukkarasu Rajasekar, Balaraman Deivasigamani, **Subaramanian Kumaran**, Manikam Sakthivel, Sadayappan Balamurugan, Edward Gnana Jothi and Pondiyan Priyadharshini. Antibacterial Activity of Cultivated Marine Seaweeds against Fish pathogenic bacteria *Vibrio harveyi.* 2012, *Asian Pac J Trop Biomed*, 1-5. (**Impact factor:1.51**)
- **63.** T. Rajasekar, S. Balaji, **S. Kumaran**, B. Deivasigamani, S. R. Pugzhavendhan. Isolation and characterization of Marine fungal metabolites against clinical pathogens. *Asian Pacific Journal of Tropical Disease*, 2012, S387-S392.
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- **65.** B. Deivasigamani, **S. Kumaran**, M. Sakthivel, S. Balamurugan, G. Edward Gnana Jothi, P. Priyadarshini. Non specific immune parameters and resistance to Aeromonas Hydrophilainfection in the asian dwarf cat fish (mystus vittatus, bloch 1974).. Theriogenology insights 2011, 1(2):70-83.
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- **68. S. Kumaran,** B. Deivasigamani, K.M. Alagappan, M. Sakthivel and D.R. Karthikeyan. Antibiotic resistant *E.coli* strains from seafood and its susceptibility to seaweed extracts. *Asian Pacific Journal of Tropical Medicine*, 2010. 412-420. (Impactfactor:3.041).
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- bass (Lates calcarifer) with fin rot. World Journal of Microbiology and Biotechnology, 2010, 26:359–363. (Impact factor:4.253)
- **70.** Alagappan K.M, B. Deivasigamani, S.T. Somoasundaram and **S. Kumaran**. Occurrence of *Vibrio parahaemolyticus* and its specific phages from shrimp ponds in East coast of India. *Current Microbiology*, 2010, 61:235–240. (Impact factor:2.343).
- **71. S. Kumaran**, B. Deivasigamani and K.M. Alagappan. Extraction of glycoprotein molecule (N- acetyl glucosamine) from chitin by chitinase producing marine bacteria. *International journal of Biological science and technology*, 2010, 2(2):11-25.
- **72.** S.R. Pugazhvendan, **S. Kumaran**, K.M. Alagappan and S. Guru Prasad.Inhibition of fish pathogens by antagonistic marine actinomycetes. *European Journal of applied Sciences*, 2010, 2 (2)41-43.
- **73.** Kamalakannan, K., **Kumaran**, **S**., Balakrishnan, S., Thenmozhi, C., Sampathkumar, P. Ocurrence of *Glaucus atlanticus* and glaucus marginata (blue ocean slug) from nagapattinam coastal waters, southeast coast of India. 2010. *International Journal of Current Research*, 2010, Vol. 5, pp.071-073.
- **74. S. Kumaran**, Deivasigamani. B, K.M. Alagappan and Sakthivel. M. Infection and immunization trails of Asian Seabass (*Lates calcarifer*) against fish pathogen *Vibrio anguillarum*. *J. Environ*. *Biology*, 2009, 31: 539-541.(Impact factor:0.7)
- **75.** S.R. Pugazhvendan, N. Jothi Narendiran, R.G. Kumaran, S. Kumaran, and K.M. Alagappan. Effect of malathion toxicity in the freshwater fish *Ophiocephalus puncatuts* A histochemical study. *World Journal of fish and Marine Sciences*, 2009, 1 (3):218-224.
- **76.** K.M Alagappan, B. Deivasigamani, **S. Kumaran** and M. Sakthivel. Histopathological Alterations in Estuarine Catfish (*Arius maculatus*; Thunberg, 1792) Due to *Aeronomas hydrophila* Infection. *World Journal of Fish and Marine Sciences*, 2009, 1 (3):185-189.
- 77. B. Deivasigamani, S. Kumaran, and K.M. Alagappan. Phagocytic activities of splenic macrophages in Asian Sea bass (*Lates calcarifer*). *J. Sci. Trans. Environ. Technov*, 2009, **2(4)**: 223-225.
- **78.** Deivasigamani. B, E. Maheswaran, K.M. Alagappan and **S. Kumaran**. Analysis of Genetic Diversity on Jackfruit using H-15 RAPD Marker *Asian J. Exp. Sci.*, 2009, 23(3)01-06.

Books/ Book Chapters Published (Total numbers =8)

1. Jayaraman, S., Sekar, D., Rajagopal, P., Periyasamy, V., Panangal, M., **Subramanian Kumaran**. (2022). Microbiology-Based Entrepreneurship. In: Amaresan, N., Dharumadurai, D., Cundell, D.R. (eds) Industrial Microbiology Based Entrepreneurship. Microorganisms for Sustainability, vol 42. Springer,

- Singapore. https://doi.org/10.1007/978-981-19-6664-4_1.
- 2. **Subramanian, Kumaran**., Periasmy, V., Kandeel, M., Umapathy, V.R. (2022). Mass Multiplication, Production Cost Analysis and Marketing of Pectinase. In: Amaresan, N., Dharumadurai, D., Cundell, D.R. (eds) Industrial Microbiology Based Entrepreneurship. Microorganisms for Sustainability, vol 42. Springer, Singapore. https://doi.org/10.1007/978-981-19-6664-4_5
- 3. Rajasekar Thirunavukkarasu, Priyadarshini Pandi, Sujith Pushparaj, **Kumaran Subramanian** and Mary Shamya Arokiarajan. Quorum sensing relationship analysis of microbial symbionts. Academic Press is an imprint of Elsevier. Page No. 831. 2022. ISBN: 978-0-323-99334-0
- 4. Rajasekar Thirunavukkarasu, Sujith Pushparaj, Mary shamya A, Priyadarshi Pandi, **Kumaran Subaramaniyan**. Jerrine Joseph. Microbial Symbionts From Algae. 2022. Preethi Sudhakara, S. Kumaran, and Wilson Aruni. Springer. 2021. Proteomics in the Study of Host-Pathogen Interactions. 978-981-16-0691-5.
- 5. **Subramanian Kumaran,** Wilson Aruni. A, Guru Prasad Srinivasan. Short notes on Microbial Diversity. Lambert publications. 2020. ISBN. 978-620-0-53925-0.
- 6. Sekar. R, **S. Kumaran**, G. suresh. National Level Workshop on Diagnostic Microbiology, In collaboration with Himedia Laboratories User manual. September 2017. LambertPublicaitons.
- 7. **S. Kumaran**, B. Deivasigamani, K.M. Alagappan, M. Vajith, S. Balamurugan and M. Sakthivel. Immune response of cat fish arius arius against bacterial pathogens advances in fish research, Pages 163–176 Edited by: U.C. Goswami, Copyright © 2012, Narendra Publishing House.
- 8. **S. Kumaran**, B. Deivasigamani and V. Uttara, Application of Chitinase review" (ISBN 978-3-8484-4920-0) Lambert Publication. 2012.

13. Awards/ Distinctions

S. No	Name of the award	Venue	Period
1.	DST sanctioned potential on research team engagement with Vietnam research team	DST (Govt. of India) and MOST (Govt. of Vietnam)	2012
2.	Best Research Mentor and Teacher award by IAAM	18 th International conference at Mannonmanium Sundaranar University, Tirunelveli	2023
3.	Entrepreneurship Development Innovator Award (2022) by	Government of Tamil Nadu	2022

4.	High Impact Appreciation award	Sathyabama Institute of Science and Technology	2021-22
5.	High Impact Appreciation award	Sathyabama Institute of Science and Technology	2020-21
6.	High Impact Appreciation award	Sathyabama Institute of Science and Technology	2019-20
7.	Best Researcher Award	Sri Sankara Arts and Science	2015
8.	First prize for best poster presentation	AlagappaUniversity Karaikkudi	26 -28, April 2007

14. Membership in Professional Bodies:

S.No.	Name of the Membership	Period
1	Indian association of applied microbiologist (IAAM)	Life Member
2	Associate Editor – Bhamathi Microbiology News Letter [Quarterly Newsletter]	2013 to till

15. Seminars Conferences organized /Participation:

Participation: 30

Programmes organized:

- 1. Organized 3 internship Programs (2021-2022)
- 2. Organized 26 days Internship program (04.09.2021 to 30.09.2021)
- 3. Organized 21 days Faculty development program (16.05.2021 to 06.06.2021)
- 4. Organized online virtual Research Internship tour (01.08.2020 to 12.09.2020).
- 5. Organized a webinar program on "National level Yoga for mental and Physical health "held on 19 -21, July2020.
- 6. Organising Member, All India Inter University Yoga Men & Women Championship 2018 -19 to University of Madras, Chennai. The Championship conducted at Sri Sankara Arts and Science College (Autonomous), Kanchipuram, Chennai, Tamil Nadu from 4th to 8th February 2019
- 7. Co-Organizing secretary of National Symposium on "Translational Biology"

16. Workshop & Training Programmes: 10

17. Participated as resource person

- 1. Delivered a invited talk SERB-DST sponsored entitle RTPCR Applications on October 2023 at Sathyabama Institute of Science and Technology, Chennai.
- 2. Delivered a invited talk entitle Marine Bio prospecting on September 2023 in DBT star Scheme Dr. NGP college, Coimbatore
- 3. Delivered a invited talk SERB-DST sponsored entitle "Nanotechnology Importance" on September 2023 at CAS in Marine Biology, Annamalai University, Parangipettai
- 4. Delivered a invited talk entitle Publications ticks on September 2023 in FDP program at Sathyabama Institute of Science and Technology, Chennai.
- 5. Delivered a invited talk entitle Advances in Nano Technology. 2021 in DST Purse Scheme at CAS in Marine Biology, Annamalai University
- 6. Delivered a invited talk entitle Marine Neutraceuticals on May 2021 in DBT star Scheme Dr. NGP college, Coimbatore.
- 7. Delivered a invited talk entitled Nutraceuticals let's to be your medicine, on October, 2018, in State level workshop for NSS students organized by Sri Sankara Arts and Science College, Kanchipuram.
- 8. Delivered a invited awareness program on Dengue for Enathur village people on February 6, 2018, organized by Enathur panchayat and NSS unit of Sri Sankara Arts and Science College, Kanchipuram.
- 9. Delivered an invited lecture and handled practical sessions for the participants in the DBT sponsored national workshop on advanced techniques in fish immunology and immunotechnology during 5th -9th September, 2013 at CAS in Marine biology, Annamalai University

18. Research Projects

Funding Agency	Amount	Description
	(Rs.)	
Seed grant by Sathyabama	1 75 000	Economically feasible Nano enriched feed
institute of science & technology (2020)	1,75,000	development from bio waste
teemology (2020)	PI	_
Entrepreneurship development innovation – IVP,	2,00,000	Food Wrapping Material : Smart Packaging
Government of Tamil nadu	, ,	
(2022-2023)	PI	
Ministry Of Earth Sciences (2023-2026)	26,00,000	Exploring fish gut associated bacteria for their aquaculture probiotic properties
	Co-PI	

ASEAN (DST) – Indo – Malaysia (2023-2024)	5,00,000	Anticancer – Biopolymer
	PI	

19. Any other details

Patents (International: 6, National: 5)

Patent Title	Status	Granted Year	National /International
Method for Immune stimulator fish feed though waste	Granted	2022	International
Gene expression Modulation (MAMP)	Granted	2022	International
Method for preparation of active ph and intelligent packaging in food packing industries	Granted	2021	International
Method for fish feed growth performance and immune respone in commercial aquaculture	Granted	2021	International
Method For Preventing Or Treating Infection Caused By Bacteriophage Cocktails In Shrimp Aquaculture System	Granted	2021	International
Method of fish probiotic production	Granted	2022	International
Fish tank	Granted	2023	National
Antimicrobial Bandage Dispensing Device	Granted	2022	National
Method for development of biodegradable byproducts of shrimp and feather waste	Published	2023	National

Method isolation identification and characterization of endophytic bacteria and actinomycetes from mangrove, banana and sugarcane	Published	2023	National
Method of invitro evaluation of seaweeds for antioxidant and UV-protection	Published	2023	National

Lead & Guest Editorial ship

- 1. E-Polymer (IF.3.0) (2023)
- 2. Frontiers in Bioengineering and biotechnology (IF.6.0)
- 3. Biomed Research International (IF. 3.3) (2022)
- 4. Bioinorganic chemistry and its Applications (IF. 4.4) (2021 2022)
- 5. Academic Editor Plos One (Impact 3.3) (2021 onwards)
- 6. Academic Editor in Bioinorganic Chemistry and its Applications (IF. 4.4) (2022 onwards)
- 7. Academic Editor in Journal of Nano material (Impact Factor 3.7) (2022 onwards)
- 8. Biomass conversion and Bio refinery (Impact Factor: 4.9) (2021)
- 9. Journal of Applied Biology and Biotechnology (Scopus and Web of Science)

Scientific Collaboration

- 1. School of Medicine, Loma Linda University, Loma Linda, CA 92350, USA
- 2. Vietnam Museum of Nature, Hanoi, Vietnam
- 3. College of Science, Kind Saud University, Riyadh-11451, Kingdom of Saudi Arabia
- 4. King Faizal University, Kingdom of Saudi Arabia
- 5. Hail University, Kingdom of Saudi Arabia
- 6. Centre for Nano Science and Technology, Anna University, Chennai, India
- 7. AMITY University, Mumbai, India
- 8. Department of Biotechnology, Alagappa University, Karaikudi, Tamil Nadu
- 9. Central Institute of Brackish water Aquaculture, Chennai, Tamil Nadu
- 10. CAS in Marine Biology, Annamalai University, Chidambaram
- 11. Dambi Dollo University, Ethiopia

- 12. School of Agriculture and Biology, Shanghai Jiao Tong University, Shanghai, PR China
- 13. Graduate School of Natural and Applied Science
- 14. Ege University, Izmir, Turkey.
- 15. National Institute of Oceanography, Dolapula, Goa

Research Projects Guided

Ph.D. Students (On-going)

- 1. Latha S. 2020. Development of feasible nano-based products from bio waste
- 2. Rubula Nancy 2021. Development of food wrapping material
- 3. Muthuraman 2021. Umblicalcord scaffold preparation

M. Phil. Guided (Total numbers =6)

- 1. Dinesh kumar G.A. 2019. Development of bacterial fertilizer for coproduction
- 2. Padmini .2018. Development of novel drug from marine Streptomyces against TB
- 3. Ramya. 2018. Anticancer activity of freshwater algae
- 4. Kotteswaran .2018. Economically cheaper aquaculture fish feed development from fisherywaste.
- 5. Malathy .D. 2017. Isolation and characterization of chitinase producing bacteria
- 6. Priyadharshini.K. 2016. Development of chitin nanoparticles loaded with anti TB drug for enhances the drug delivery system

Post graduate student project guided (Total numbers = 8)

- 1. Harsini: 2021. Nano based hydro gel
- 2. Vijayakanth K. 2018. Isolation and Characterization of Chitinase producing bacteria.
- 3. Dinesh.G.A. 2018. Isolation and characterization of keratinase Producing bacteria for poultry feed development
- 4. Razeena 2018. Development of Antifouling Compound
- 5. Mnajari .2017. Isolation and characterization of crude oil degrading bacteria
- 6. Ramya.K. 2017. Development of chitiosan coated Rifampicin against
- 7. Suganya. G, 2016. Development of Polymeric nanoparticles against Tuberclosis
- 8. Kokila .D. 2014. Biosynthesis of silver nanoparticles using aqueous solution of Polianthes tuberose flower extract and characterization of their antibacterial and cytotoxicity activity.

B.Tech Students guided (Total numbers = 10)

- 1. Rennita 2022. Nano based Forensic kit development
- 2. Vishnu. 2022. Nano particle for wound healing

- 3. Harinakshi.2022. food wrapping material
- 4. Devishree.2022. fish feed formulation
- 5. Kajal.2022. forensic kit development
- 6. Harshini .H 2021. Fish gut Microbiome
- 7. Harsha Rajabala. 2021. Polymeric based nano mat for wound healing
- 8. Karthika G. 2020.Development of Chitosan Nano particle loaded NAG Enriched fish feed from biowaste
- 9. Aparna. 2020. Nano Collagen scaffold for bio fabric.
- 10. Sruthi. 2020. Isolation and characterization of antiquorum sensing bacterial compound.

Undergraduate (B.Sc., students): 8 students (2022)

Extracurricular activities

- Typewriting Junior level
- Computer skills MS-Office, DTP, HTML, Origin
- Won the first prize in Ball badminton in BASH Academy, Kanchipuram
- Ballbadminton Secured second prize in division match conducted by University of Madras, Held at Satyabama University (2002).
- Junior level district match participated at Neyveli Conducted by ball badminton association, Federation of India (2001).
- Three times secured second place in Department matches held at Sri Sankara Arts and Science college, Kanchipuram.
- Athletic ability Won the II place in 800 meter and II place in 400 meters, conducted by Sri Sankara Arts and Science College, Kanchipuram (2003).