Curriculum Vitae

Given name : Arulazhagan

Fathers Name or Surname : Pugazhendi

Date of Birth : 20.11.1979

Nationality : Indian

Office Address : Centre of Excellence in Environmental Studies (CEES) and
Department of Marine Biology,
Faculty of Marine Sciences,
King Abdulaziz University,
Jeddah-21589, Saudi Arabia

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Phone Number : +966-508215360 (Mobile)

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Scopus ID : 16833577500 (H-Index – 30)

ORCID ID : https://orcid.org/0000-0002-8848-2125

Premium residency cardholder in Saudi Arabia

Educational Qualification

Degree	*Specialization*	*Institution and Year of Passing*	*Class obtained*
Ph.D	Environmental Science (Environmental Microbiology and Biotechnology)Topic entitled **"Biodegradation of polycyclic aromatic hydrocarbons by a bacterial consortium from marine environment"**	Centre for Environmental Studies, Anna University, Chennai, India (2009)	Degree Awarded
M.Sc	Environmental Science	Anna University, Chennai, India (2002)	First Class (CGPA – 8.0)
B.Sc	Microbiology	Muthayammal College of Arts and Science affiliated to University of Madras, Chennai, India (2000)	First Class (CGPA – 7.5)

Additional Qualification: Completed Diploma in Computer Programming (1999) with First class at Centre for Development of Advanced Computing (CDAC), – A Scientific society of department of electronics, Govt. of India.

Area of Specialization

- Biological treatment of domestic and industrial wastewater under extreme conditions (Petroleum, Pharmaceutical, Cosmetic, Olive oil, Textile and Tannery)
- Microbial Fuel Cells (wastewater treatment coupled with bioenergy production)
- Biohydrogen production from algae (Micro/macroalgae)
- Molecular Microbiology in wastewater treatment

Marine and Environmental Expertise

- Extensive experience in marine ecology, environmental microbiology, and coastal ecosystem assessment through academic, industrial and environmental research activities.
- Skilled in marine water quality analysis, environmental monitoring, biodiversity assessment and pollution impact evaluation in coastal and marine environments.
- Experienced in conducting field sampling, laboratory analysis, environmental data interpretation and preparation of scientific and technical environmental reports.

- Strong expertise in environmental sustainability, marine ecosystem conservation and compliance with environmental regulations for industrial and coastal projects.

Research Experience

1. Experience on analysis of chemical and microbiological parameters of drinking water, domestic and industrial wastewater.

2. Enriched bacterial consortium utilizing different polycyclic aromatic hydrocarbons (PAHs)

3. Studied biological treatment of crude oil contaminated saline wastewater using bacterial consortium from saline environment.

4. Isolated and identified hydrocarbon degrading bacterial strains using molecular techniques.

5. Biological treatment of micropollutants in industrial wastewater.

6. Current research works on petroleum hydrocarbon degrading extremophilic bacterial consortia, Sludge reduction with various pretreatment methods to enhance biogas generation, Microbial Fuel Cells, Biohydrogen production from marine macroalgae and microalgae.

7. Head-Environmental Microbiology and Biotechnology Unit, Water Pollution Group at Center of Excellence in Environmental Studies, King Abdulaziz University, Jeddah, Saudi Arabia (2011 to till date)

Work Experience

Year	Position	Title of project /Work Description	Institute
Mar 2011-Present	Associate Professor*	Head-Environmental Microbiology and Biotechnology Unit	Center of Excellence in Environmental Studies, King Abdulaziz University, Jeddah, Saudi Arabia
Feb 2010- Jan 2011	Post-Doctoral Researcher/ Lecturer	Biological treatment of emerging micropollutants	Department of Civil and Environmental Engineering, Sung Kyun Kwan University (SKKU), Suwon, South Korea

Sep 2008- Dec 2008	Research Associate	Link between size of microbial ecosystem and diversity	Laboratorie de Biotechnologie de l'Environnement, Institut National de la Recherche Agronomique (INRA), Narbonne, France
Apr 2004 - March 2007	Junior Project Assistant	Isolation and Characterisation of selected polycyclic aromatic hydrocarbon degrading bacterial consortium from marine environment	Center for Environmental Studies, Anna University, Chennai, India
Oct 2003 – March 2004	Microbiologist	Rejuvenation of ooranies and ponds in Thirukalukundram	Center for Environmental Studies, Anna University, Chennai, India
Aug 2003- Sep 2003	Wastewater Analyst	Biological treatment of Raava produced water	Center for Environmental Studies, Anna University, Chennai, India
Jan 2003 - April 2003	Analyst	Biological treatment of High TDS wastewater from pharmaceutical industry	Center for Environmental Studies, Anna University, Chennai, India

*** Promoted as Associate Professor on Feb 2019 by the Committee of Scientific Council of King Abdulaziz University, Jeddah, Saudi Arabia (Upgrade of position under process in university website).**

Reviewer in Marine Pollution Bulletin, Chemosphere, Bioresource Technology, FEMS, Journal of Hazardous Materials, Scientific Reports, Journal of Cleaner Production, International Journal of Environmental Science and Technology, Journal of basic microbiology, Annals of Microbiology (2008 to till date).

Associate Editor in E-prime Advances in Electrical Engineering, Electronics and Energy, Elsevier (2022 to 2024)
https://www.journals.elsevier.com/e-prime/editorialboard/arulazhagan-pugazhendi

Awards and Recognitions

- Twice Recipient of **French Embassy Fellowship** (2004 and 2008) on IndoFrench Exchange Programme.

- Recognized **scientific collaborator** with Helmholtz Center for Environmental Research-UFZ, Leipzig, Germany (2015).

- Recognized for Guiding Ph.D students at AMET (Academy of Maritime Education and Technology) University, Chennai, India

- **Outstanding Scientist Award** (2016) in the field of bioremediation by Venus Research Foundation, Chennai, India

- Recognized as **Potential Scientist** for guiding and supporting MAWHIBA selected potential students from Ibn Al-Nafees Secondary School and Manarat Jeddah Secondary School participated in National Olympiad for Scientific Creativity 2019, Ministry of Education, Saudi Arabia.

Teaching Experience

- Assisted in Microbiology Practical class for M.E (Environmental Engineering) and M.Sc students in Environmental science (Jan 2003 to Oct 2008)
- Mentored Post graduate (M.E and M.Sc) students in research
- As Lecturer for M.E Civil and Environmental Engineering taught Environmental Organic chemistry (ECA5905-41/ECA5909) and co-guided research projects at Sung Kyun Kwan University, Suwon, South Korea (Feb 2010 to Jan 2011).

Teaching load in Marine Biology-2025-2026

Course code	Name of the course	Credits	Bachelors/Masters
MB-315	Marine Microbiology	2	Bachelors
MB-317	Marine Physiology	3	Bachelors
MB-495	Marine Biodiversity	2	Masters
MB-499	UG Project	4	Bachelors
MB-603	Marine Pollution	3	Masters
MB-416	Marine Biotechnology	2	Bachelors
MB-615	Advanced Marine Microbiology	3	Masters
MB-726	Marine Experimental Design	2	Ph.D

Project Guidance and achievements

- Guiding post graduate students in projects.

- Student from Regional center for Anna University, Tirunelveli, India won scholarship prize for her project on petroleum hydrocarbon degradation

- One of the post graduate student got first prize for poster presentation and third prize in oral presentation in sixth scientific forum by Ministry of Education, Saudi Arabia.

MAWHIBA Guidance

Guided around 12 selected talented school students to participate in national scientific competition funded by Ministry of Education, Saudi Arabia.

Research Projects

Project Tenure	Project Details	Funding Agency	Industrial and International Institute Partner/collaborator
2025-2026	Principle Investigator-**"Harnessing biohydrogen a next generation ecofriendly green energy by application of different economical pretreatment methods in marine macroalgal biomass integrated with artificial intelligence (AI) technology" (IPP-708-150-2025)**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	
2025-2026	Principle Investigator-**"AI (Artificial Intelligence)-driven treatment of organic-rich industrial wastewater and sustainable energy generation in extremophile bioaugmented microbial fuel cells" (IPP-771-150-2025)**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	
2022-2023	Principle Investigator-**"Cosmetic industrial wastewater treatment coupled with bioelectricity production in upflow microbial fuel cell (UMFC) using extremophilic bacterial consortium" IFPIP: 206-150-1443**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	Central University of Tamilnadu, Thiruvarur, India
2022-2023	Principle Investigator-**"Sustainability of macroalgal biomass for energy efficient and cost-effective biofuel production through a novel surfactant induced microwave pretreatment" IFPIP: 403-150-1443**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	University of Stavanger, Norway, Central University of Tamilnadu, Thiruvarur, India

2022-2023	Co-Investigator- **"Biohydrogen production coupled with wastewater treatment using selected microalgae." IFPIP: 896-150-1443**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	Kyonggi University, South Korea
2020-2021	Principle Investigator-**"Bioaugmentation of electrogenic halophiles in the treatment of pharmaceutical industrial wastewater and energy production in microbial fuel cell under saline condition" IFPHI-260-980-2020**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	Central University of Tamilnadu, Thiruvarur, India
2020-2021	Principle Investigator-"**Macroalgae derived biohydrogen recovery through mild biosurfactant induced energy and cost efficient dispersion pretreatment technology" - IFPHI-261-980-2020**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	University of Stavanger, Norway, Central University of Tamilnadu, Thiruvarur, India
2020-2022	Co-Investigator-**" A novel conversion of marine macroalgal biomass to biofuel (biohydrogen) via calcium hypochlorite induced dispersion"- IFPHI-340-155-2020**	Ministry of Education and DSR (Deanship of Scientific Research), KAU	Faculty of Environmental Science
2020-2023	Senior Researcher- **"Self-healing concrete"**	South Ural State University (SUSU), Russia	SUSU, Chelyabinsk, Russia
2020-2021	Co-Investigator –**"Biodegradation of petroleum hydrocarbons and treatment of refinery wastewater using integrated extremophilic (Halo-alkalo-thermophilic) consortium under extreme condition"**	DSR (Deanship of Scientific Research), KAU	Faculty of Environmental Science

2020-2021	Co-Investigator-**Treatment of olive oil industrial wastewater with electricity production using Upflow Microbial Fuel Cells (UMFC) under saline condition**	DSR (Deanship of Scientific Research), KAU	Faculty of Marine Science
2019-2020	Co-Investigator – **"Application of halophiles in air cathode microbial fuel cells (AC-MFC) for the treatment of aquaculture saline wastewater and energy production"**	DSR (Deanship of Scientific Research), KAU	Faculty of Marine Science and Saudi Aquaculture Society
2020-2021	Co-Investigator – **"Isolation and characterization of halophilic bacterial consortium from seagrass, Jeddah coast and treatment of boat fuel station wastewater"**	DSR (Deanship of Scientific Research), KAU	Faculty of Marine Science
2020-2021	Co-Investigator – **"Treatment of fish market wastewater and energy production using halophiles"**	DSR (Deanship of Scientific Research), KAU	Faculty of Marine Science
2020-2022	International Collaborator **"A novel integrated biorefinery for conversion of lignocellulosic agro waste into value added products and bioenergy (biohydrogen and methane)"**	DBT (Department of Biotechnology) Government of India	Regional center for Anna University, Tirunveli, Tamil Nadu, India
2017-2018	Co-Investigator **"Biodegradation of petroleum hydrocarbons by halophilic bacterial consortia enriched from red sea Jeddah, Saudi Arabia"**	DSR (Deanship of Scientific Research), KAU	Faculty of Marine Science
2017-2019	Principle Investigator - **"Advanced biological treatment of micropollutants in industrial wastewater"**	CEES, KAU	SABIC (Saudi Arabia Basic industrial company), SKKU, South Korea
2013-2015	Principle Investigator - **"Biodegradation of petroleum hydrocarbons using extremophilic bacterial consortia from contaminated sites"**	KACST	Saudi Aramco Saline water conversion company (SWCC), MAADEN, UFZ, Germany INRA, Narbonne, France

2013-2016	Principle Investigator - **"Effect of sludge pretreatment on sludge reduction and nutrient removal using lab scale Anaerobic/Anoxic/Oxic (A2O) system for domestic wastewater".**	CEES, KAU	Jeddah Municipality
2012-2013	Co-Investigator - **"Treatment of Retting pond water and generation of electricity using Microbial Fuel Cells"**	CEES, KAU	Regional center for Anna University, Tirunveli, Tamil Nadu, India
2011-2012	Co-Investigator - **"Remediation of heavy metal containing wastewater by modified Agricultural waste".**	CEES, KAU	

KACST – King Abdulaziz City of Science and Technology, Saudi Arabia

Consultancy Project

Project Tenure	Role	Project Details	Funding Agency
Jan 2018 to June 2018	Environmental Microbiologist - Research Consultant	Study the causes of pollution in fish lagoon located in Abhour, Jeddah	The General Authority of Meteorology and Environmental Protection (GAMEP) or National Center for Environmental Compliance (NCEC), Jeddah, Saudi Arabia
Feb 2022 to May 2022	Environmental Microbiologist - Research Consultant	Study on identification of the blockage problem inhibit the desalination plant operation	Kindasa Water Services Jeddah, Saudi Arabia
Feb 2022 to October 2022	Environmental Research Consultant	Annual Marine Environmental Compliance Survey and Bioaccumulation Study - 2021-2022	Petrorabigh, Rabigh, Saudi Arabia

Feb 2023 to August 2023	Environmental Research Consultant	Annual Marine Environmental Compliance Survey and Bioaccumulation Study - 2022-2023	Petrorabigh, Rabigh, Saudi Arabia
September 2024 to December 2024	Environmental Research Consultant	Annual Marine Environmental Compliance Survey and Bioaccumulation Study - 2023-2024	Petrorabigh, Rabigh, Saudi Arabia
September 2025 to December 2025	Environmental Research Consultant	Annual Marine Environmental Compliance Survey and Bioaccumulation Study - 2023-2024	Petrorabigh, Rabigh, Saudi Arabia

Industrial Wastewater Treatment Research

- PetroRabigh
- Saudi Aramco
- SWCC (Saline Water Conversion Company)
- Al Jouf Oliver Oil Company
- Kindasa Water Services, Jeddah
- Binzagar Unilever
- Al Dhagal factory for leather and tanning products

NCEC (National Center for Environmental Compliance), Jeddah

Training

1. Industrial training (June 2001) at Together Textile Mills, Coimbatore, India. Experience on the analysis of chemical parameters for textile wastewater

2. Training on molecular microbiological techniques (Aug and Sep 2004) in INRA, Narbonne, France.

3. Training on DNA fingerprinting, MATLAB, NANO Quant (DNA quantification) at INRA, Narbonne, France (Sep 2008-Dec 2008).

4. Training on Microbial Fuel cell technology for industrial wastewater treatment in Regional Center for Anna University, Tirunelveli, India (June 2018).

5. Training on Biomethane production from seaweed in Regional Center for Anna University, Tirunelveli, India (June 2019).

6. Training on biohydrogen production from marine algae in Central University of Tamilnadu, Thiruvarur, India (June 2023)

7. Training on "Generative AI Tools for Academia: Learning, Teaching, Research and Evaluation"- MBSI (Microbiologist Society of India)-24 th to 28 th October 2025.

Instruments Handled during research

- High Performance Liquid Chromatography (HPLC) (Agilent)
- Gas Chromatography-Mass Spectrometry (GC-MS) (Agilent)
- Ion Chromatography (Dionex)
- Bioreactor (Infors, Switzerland)
- Lyophilizer (Lyovac, Germany)
- Phase Contrast Microscope (Leica, Germany)
- Scanning Electron Microscope (SEM) (Jeol)
- Fluorescence Microscope (Carl Zeiss)
- Zeta Potential Analyser (Malvern, USA)
- Surface-tensiometer (Kruss, Germany)
- Polymerase Chain Reaction Machine (Effendorf, Germany)
- Next Generation Sequencing (NGS) – data analysis

Organization Skills

Year	Activity organized	Title	Place/Institute
31 Mar 2015	Workshop	Bioremediation of petroleum hydrocarbons under extreme conditions	King Abdulaziz University, Jeddah, Saudi Arabia
1 April 2015	Training Programme	Biodegradation of hydrocarbons	King Abdulaziz University, Jeddah, Saudi Arabia
2 Dec 2015	Workshop	Role of Extremophiles on biodegradation of petroleum hydrocarbons	King Abdulaziz University, Jeddah, Saudi Arabia
3 Dec 2015	Training Programme	Biodegradation of petroleum hydrocarbons and molecular techniques	King Abdulaziz University, Jeddah, Saudi Arabia

Laboratory and industrial safety expertise

- Expertise in laboratory and industrial safety management, including risk assessment, hazard identification, biosafety, chemical safety, and emergency response planning.

- Experienced in implementing HSE (Health Safety Environment) policies, conducting safety audits, and ensuring compliance with environmental, occupational, and international safety standards.

- Skilled in developing SOPs, safety training programs, and waste management procedures for laboratories, industrial facilities, and environmental operations.

- Familiar with ISO standards, environmental compliance systems, and quality assurance procedures related to laboratory and industrial safety management.

<u>Student Supervision</u> (Supervisor/co-supervisor)

*Expected

Currently 2 Master Students joined under my supervision for the thesis work – 2025

Total Number of Master Course Thesis Student – 21 (Ongoing and Completed)

S.No	Degree	Name of the Student	Thesis title	Institute	Status	Publication	Conf
1	**M.Sc (2025)**	Rana Ali Ahmed Badhrah	Application of economical pretreatment methods for liquefaction of marine macroalgae (*Ulva intestinalis*) for biohydrogen production	King Abdulaziz University, Jeddah, Saudi Arabia	Under progress		
2	**M.Sc. (2024)**	Maryam Fahad Alsehli	Biohydrogen production from macroalgal biomass using energy efficient pretreatment methods	King Abdulaziz University, Jeddah, Saudi Arabia	Thesis preparation		1
3	**M.Sc. (2023)**	Shaikhah Saeed Alsharif	Acceleration of biohydrogen production using different cost effective pretreatment methods on marine macroalgae	King Abdulaziz University, Jeddah, Saudi Arabia	Thesis preparation		1
4	**M.Sc. (2023)**	Rawan Alarishi	Bioaugmentation of halophilic consortium in the treatment of phenol contaminated saline industrial wastewater integrated with energy yield in air cathode microbial fuel cell	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded		1

5	**M.Sc. (2023)**	Noura Abdulaziz Almansour	Biological treatment of fruit juice wastewater and electricity production using Microbial Fuel Cells (MFC)	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1*	1
6	**M.Sc. (2022)**	Ghadeer Abdulbaset Abotaleb	Effect of probiotic *Lactobacillus acidophilus* on dark chocolate bars: Bacterial viability and physicochemical properties analysis	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1*	1
7	**M.Sc. (2022)**	Rawan Esmat Ali Ghorab	Bioenergy production and treatment of tannery wastewater in uplfow MFC (Microbial Fuel Cell) under saline condition	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
8	**M.Sc. (2022)**	Aisha Saeed Al Qarni	Treatment of cosmetic industrial wastewater and electricity production using extremophilic (halophilic) microbial fuel cells	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
9	**M.Sc. (2021)**	Ohuod Mudid Al Zahrani	Biodegradation of 1,4 Dioxane an emerging micropollutant in industrial wastewater by a novel bacterial consortium under extreme conditions	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
10	**M.Sc. (2021)**	Rehab Mohammed Al Wahbi	Biodegradation of phenolic compounds and treatment of phenolic wastewater using integrated extremophilic (haloalkalothermophilic) consoritum	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1*	1

11	**M.Sc. (2020)**	Ghada Ghaze Al-Reeshi	Bioenergy production and treatment of aquaculture wastewater using upflow microbial fuel cells (MFC)	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
12	**M.Sc. (2020)**	Khairya Hassan Bkhsh	Treatment of phenolic wastewater and electricity production using microbial fuel cells (MFC)	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1*	1
13	**M.Sc. (2020)**	Faridah Waleed Tayib	Enrichment of algae from contaminated high saline coastal lagoon for production of beta carotene	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1*	1
14	**M.Sc. (2020)**	Reem Mohammad Bahatheq	Biodegradation of hydrocarbons present in industrial wastewater by acidophilic bacterial consortium enriched from volcano sample	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1*	1
15	**M.Sc. (2019)**	Ramzi Haider Esmail Amran	Biodegradation of petroleum hydrocarbons in seawater and bacterial communities associated with degradation	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	2	1
16	**M.Sc. (2018)**	Roqaya Jaber Asiri	Effect of functional ingredients on the viability of Lactobacillus acidophilus bacteria in nondairy probiotic products	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1

17	**M.Sc. (2018)**	Afnan Eid	Treatment of sea food processing industrial wastewater and electricity production using microbial fuel cells (MFC) in Air cathode reactor	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
18	**M.Sc. (2017)**	Eman Abdullah Al-Zharani	Biodegradation of petroleum hydrocarbons present in air craft service station wastewater, Jeddah, Saudi Arabia	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
19	**M.Sc. (2017)**	Aminah Jaze Alshaikh	Biodegradation of petroleum hydrocarbons by halophilic bacterial consortia enriched from red sea Jeddah, Saudi Arabia	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	-	1
20	**M.Sc. (2016)**	Hadeel Abbad Wazin	Biodegradation of petroleum hydrocarbons by thermophilic bacterial consortia isolated from oil drilling site in eastern region of Saudi Arabia	King Abdulaziz University, Jeddah, Saudi Arabia	Degree Awarded	1	1
21	**M.Eng (2011)**	Charithasri Vanam	Biodegradation of selected HMW PAH via co-metabolism using bacterial consortium under saline conditions	Regional center for Anna University, Tirunelveli, India	Degree Awarded	-	-
22	**M.Eng (2010)**	Nyang Ha	Biodegradation of 1,4 dioxane by a bacterial consortium	Sung Kyun Kwan University (SKKU), Suwon, S. Korea	Degree Awarded	-	-

Ph.D Student:

1. **Abeer Dhafer Al Qahtani (2022)**
   Title: Energy efficient biohydrogen recovery from seaweed biomass through integrated pretreatments prior to fermentation by methanogenic bacterial consortium

Conferences

1. Poster presentation on "Role of plasmid in the degradation of hexadecane by Pseudomonas *fluorescens NS1*" in 47th Annual conference of Association of Microbiologists of India (AMI) held on December 6-8, **2006** at Barkatullah University, Bhopal, India.

2. Participated in the workshop on "Sustainable Landfill Management" on Dec 3-5, **2003** at Centre for Environmental Studies, Anna University, Chennai India.

3. Participated in the International Conference on "Advances in Industrial Wastewater Treatment on Feb 9-11, **2005** at Centre for Environmental Studies, Anna University, Chennai India.

4. Participated seminar on "Industrial-Academic Interfacia - Petrotech 2007" on Jan 17-18, **2007** at New Delhi, India

5. Participated in the 48th Annual Conference of Association of Microbiologists of India (AMI) held on December 18-21, **2007** at Indian Institute of Technology, Madras, Chennai, India.

6. Poster presentation on "Degradation of polyaromatic hydrocarbons by a halophilic bacterium" in International Symposium on Environmental Biotechnology, July 9-13, **2006** at Leipzig, Germany.

7. Poster presentation on "Link between size of microbial ecosystem and diversity?" in National conference on anaerobic digestion and renewable energy through microbes (ADREM 2009) Jan 13-15, **2009** at BITS, Goa, India.

8. Oral Presentation on "Role of halotolerant bacterial consortium in biodegradation of polyaromatic hydrocarbons under saline condition" (Microbes in wastewater treatment – IWA) Jan 24-27, **2011** at BITS, Goa India.

9. Poster presentation on "Biodegradation of petroleum hydrocarbons using extremophilic bacterial consortia from contaminated sites" Oct 8, **2015** at scientific forum for KACST funded projects, King Abdulaziz University, Jeddah, Saudi Arabia.

10. Participated in faculty development programme on "Measures to Mitigate Climate Change" conducted from 12th to 16th October **2020** at Central University of Tamilnadu, Thiruvarur, Tamilnadu, India.

11. Poster presentation on "Treatment of cosmetic industrial wastewater and electricity production using extremophiles in microbial fuel cells under saline condition" 1st International Conference on Pollution Prevention and Clean Technologies and "Taiwan-India Workshop on Emerging Environment and Energy Challenges of Technology Exchange held on 6th and 7th of December, **2021**, in New Delhi, India.

12. Participated in "E-Lecture workshop on innovation in biotechnology & Inauguration of Nano and Biomaterials Association (NBA)" held on January 1920, **2022** organized by School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, India in association with the Biotech Research Society, India (BRSI).

13. Poster presentation on "Sustainability of macroalgal biomass for energy efficient and cost-effective biofuel production through a novel surfactant induced microwave pretreatment" 2nd International Conference on Pollution Prevention and Clean Technologies (ICPPCT) on 1 – 2 December **2022** at Warsaw University of Technology, Poland.

14. Poster presentation on "Amelioration in biogas production efficiency of waste activated sludge by calcium peroxide induced microwave disintegration" 2nd International Conference on Pollution Prevention and Clean Technologies (ICPPCT) on 1 – 2 December **2022** at Warsaw University of Technology, Poland.

List of publications

1. Vasudevan, N. Bharathi, S and **Arulazhagan, P.** (2007) Role of plasmid in the degradation of petroleum hydrocarbon by *Pseudomonas fluorescens NS*1. Journal of Environmental Science and Health Part A, 42, 11411146. **(IF-2.582) Q3** (SCIE)

2. Vasudevan, N and A**rulazhagan P.** (2007) Surfactants mediated recovery of anthracene and pyrene from contaminated soil. Asian Journal of Microbiol. Biotech. Environ. Sci. 9(2), 237-242.

3. **Arulazhagan, P*** and Vasudevan, N (2009) Role of moderately halophilic bacterial consortium in biodegradation of polyaromatic hydrocarbons. Marine Pollution Bulletin. 58 (2), 256-262. **(IF-7.001) Q1** (SCIE)

4. **Arulazhagan, P***, Vasudevan, N and Yeom I.T (2010) Biodegradation of polycyclic aromatic hydrocarbons by a halotolerant bacterial consortium from

marine environment. International Journal of Environmental Science and Technology. 7 (4), 639-652. **(IF-3.519)** Q3 (SCIE)

5. **Arulazhagan, P*** and Vasudevan. N (2011). Biodegradation of polycyclic aromatic hydrocarbons by a halotolerant bacterial strain *Ochrobatrum sp.* VA1. Marine Pollution Bulletin. 62 (2), 388-394. **(IF-7.001)** Q1 (SCIE)

6. **Arulazhagan, P*** and Vasudevan. N (2011). Role of nutrients in the utilization of PAHs by halotolerant bacterial strain. Journal of Environmental Sciences. 23 (2), 282-287. **(IF-6.796)** Q1 (SCIE)

7. Sivaraman. C, A**rulazhagan. P**, Dirk walther, Vasudevan. N (2011). Feasibility studies for reuse of constructed wetlands treating simulated nickel containing groundwater. Universal Journal of Environmental Research and Technology. 1(3), 293-300.

8. Uan D.K, Yeom I.T, A**rulazhagan P**, Rajesh Banu. J. (2013). A study on the effects of sludge pretreatment on sludge reduction in a lab-scale anaerobic/anoxic/oxic system treating domestic wastewater. International Journal of Environmental Science and Technology. 10, 495-502. **(IF-3.519)** Q3 (SCIE)

9. **Arulazhagan. P*,** Yeom I.T, Sivaraman C, Srikanth M, Rajesh Banu J (2013) Role of additional carbon substrate on biodegradation of 1,4 dioxane using bacterial consortium. Advances in Environmental Biology, 7(9): 2081-2090.

10. Mohd Aslam, Sumbul Rais, Masood Alam, and **Arulazhagan P** (2013) Adsorption of Hg(II) from Aqueous Solution Using Adulsa (*Justicia adhatoda*) Leaves Powder: Kinetic and Equilibrium Studies. Journal of Chemistry. 2013 Article ID 174807, 11. **(IF-3.241)** Q3 (SCIE)

11. Vimala Ebenezer. A, **Arulazhagan. P**, Rajesh Banu. J, Adish Kumar. S. (2013) Coupled ozonation with aerobic sequential batch reactor for treatment of distillery wastewater. International Journal of Current Microbiology and Applied Sciences. 2 (6), 137-145.

12. Logakanthi. S, **Arulazhagan. P**, Vasudevan N. (2013). Degradation of Pentachlorophenol by a bacterial consortia and the effect of cured soil on *Phaseolus mungo*. International Journal of Current Microbiology and Applied Sciences. 2(6), 97-105.

13. **Arulazhagan. P***, Sivaraman C, Adish kumar S, Aslam M, Rajesh Banu J. (2014). Co-metabolic degradation of benzo(e)pyrene by halophilic bacterial consortia at different saline conditions. Journal of Environmental Biology, 35 (3), 445-452. **(IF-0.781)** ESCI

14. Balaji. V, **Arulazhagan P**, Ebenezer P. (2014) Enzymatic bioremediation of polyaromatic hydrocarbon by fungal consortia enriched from petroleum contaminated soil and oil seeds. Journal of Environmental Biology, 35 (3), 521529. **(IF-0.781)** ESCI

15. Jayashree C, **Arulazhagan P**, Adish Kumar S, Kaliappan S, Ick Tae Yeom, Rajesh Banu J (2014) Bioelectricity generation from coconut husk retting wastewater in fed batch operating microbial fuel cell by phenol degrading microorganism. Biomass and Bioenergy 69, 249-254. **(IF-5.774)** Q1 SCIE

16. Suresh Karthik Kumar M, Krishna Kumar T, **Arulazhagan P**, S. Adish Kumar, I.T. Yeom and J. Rajesh Banu (2015) Effect of alkaline ozone pretreatment on sludge reduction potential of a membrane bioreactor treating high-strength domestic wastewater. Desalination and Water Treatment 55, 1127-1134. **(IF-1.273)** Q4 SCIE

17. Rajesh Banu J, **Arulazhagan. P**, Adish Kumar S, Kaliappan S, Lakshmi A.M (2015) Anaerobic co-digestion of chemical and ozone pretreated sludge in hybrid upflow anaerobic sludge blanket reactor. Desalination and Water Treatment 54, 3269-3278. **(IF-1.273)** Q4 SCIE

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IF-Impact Factor of Journals
*** Indicates Corresponding Author**
Apart from the above publications 5-6 more article under preparation.
Total Number of articles in **Scopus** listed journals: **63**

Total Number of articles in **web of science**-listed journals: **62**

Total Number of articles in **non-ISI journals**: **5**

Book Chapters

1. **Arulazhagan P***, Sami Mnif, Rajesh Banu J, Huda Q, Jalal M A B (2017) Biodegradation of hydrocarbons by extremophiles. HC-0B-01, Biodegradation and Bioconversion of Hydrocarbons –Research advances and recent developments Editors: K. Heimann, O.P. Karthikeyan and S.S.Muthu, Springer Publications (online) eBook ISBN 978-981-10-0201-4. pp 137-162.

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4. Khac-Uan Do, Le Cao Cuong, **Arulazhagan Pugazhendi** (2025) Reduction of energy and cost for disinfection in wastewater treatment by using ozonation processes. (Under Review)

Other details

1. Annual member in International Water Association (IWA)
2. Life member in Association of Microbiologists of India.
3. Life member in The Biotech Research Society (BRSI), India.
4. Life member in The Academy of Sciences, Chennai, India.
5. International Advisory committee member in ICWR (International Consortium of Water Researchers), India http://icwr.mozello.com/about-us/
6. Held the post of Block Representative in Anna University Hostel, India (2005).
7. Scientific Committee member in 1st International Conference on Pollution Prevention and Clean Technologies and "Taiwan-India Workshop on Emerging Environment and Energy Challenges of Technology Exchange 6 and 7th December 2021. http://icppct.com/committee.php