



**Dr. A. Arun**  
**Professor and Head**

**Contact**

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**Academic and Additional Responsibilities**

<b>Degree</b>	<b>Institution</b>	<b>Year</b>	<b>Branch</b>	<b>Class</b>
Ph.D.	Madurai Kamaraj University, Madurai	2010	Microbiology	Highly Commended
M.Phil.	Bharathidasan University, Trichy	2005	Biotechnology	I
M.Sc.	Madurai Kamaraj University, Madurai	1999	Microbiology	I

M.Phil.	Bharathidasan University, Trichy	1997	Botany	I
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Total Teaching Experience : 22 Years

Position	Institution	Duration
Professor and Head	Department of Microbiology, Alagappa University, Karaikudi	2019 - Till date
Associate Professor and Head (i/c)	Department of Microbiology, Alagappa University, Karaikudi	2016-2019
Assistant Professor	Department of Energy Science, Alagappa University, Karaikudi	2013-2016
Assistant Professor	Thiagarajar College, Madurai	2000-2013

### Research Experience

Total Research Experience : 22 Years

Position	Institution	Duration
Professor and Head	Department of Microbiology, Alagappa University, Karaikudi	2019 - Till date
Associate Professor and Head (i/c)	Department of Microbiology, Alagappa University, Karaikudi	2016-2019
Assistant Professor	Department of Energy Science, Alagappa University, Karaikudi	2013-2016
Assistant Professor	Thiagarajar College, Madurai	2000-2013

## Academic and Additional Responsibilities

S.No	Position	UniversityBodies	Period	
			From	To
1.	Chief Warden	Men's hostels, Alagappa University, Karaikudi	25.05.2023	Till date.
2.	Editorial Board Member	Microbiological Research (Impact Factor 6.7)	13.06.2023	Till date
3.	Book Editor	Biodegradable Polymers, Blends and Biocomposites: Trends and Applications. CRC Press Taylor and Francis Group (USA) (9781032302492).	2023	2023
4.	Book Editor	Enzymes incorporated nanoparticles their fundamentals concepts, synthesis & applications, Elsevier Academic Press (The Netherlands).	2023	2023
5.	Book Editor	K. Arunkumar, <b>A. Arun</b> , Ramasamy Palaniappan, Rathinam Raja. Algae Materials – Applications Benefitting Health. 2023. Published on 24 February 2023. Paperback ISBN: 9780443188169. eBook ISBN: 9780443188176. Elsevier Science, UK.	2023	2023
6.	Journal Guest Editor – Recent Advancements in Microbial Fuel Cells. 2022. Energies (Impact Factor 3.004).	Energies	2023	-
7.	Dean	Industry and Consultancy, Alagappa University, Karaikudi	07.10.2022	Till date
8.	Co-Ordinator	Business Collaboration Centre	05.11.2022	Till date
9.	Local Co-Ordinator	SPARC Scheme (scheme for Promotion of Academic and Research Collaboration),	20.09.2022	Till date

		Ministry of Education		
10.	Campus Director	Faculty of Science Campus	25.1.2021	24.05.23
11.	Member of Senate	Alagappa University	22.02.2021	Till date
12.	Head of the Department.	Department of Microbiology, Alagappa University	30.01.2019	Till date
13.	Head of the Department In charge	Department of Microbiology, Alagappa University	30.01.2016	29.01.2019
14.	Coordinator	Establishment of Bio-Plastic centre, Alagappa University, Karaikudi	12.5.2020	25.08.2023
15.	Internal Expert	Institutional Biosafety Committee (IBSC), Alagappa University	22.10.2020	22.10.2023
16.	Journal Guest Editor- Environmental Science and Pollution Research (ESPR) - (Impact Factor 4.223).	3 <sup>rd</sup> International Conference on Recent Trends in Microbiology (RTM-2019) - Environmental Science and Pollution Research (ESPR) / Vol. 28 issue 26, special issue "RTM2019". From Page 33866 to 33966, Springer Publications.2020	2020	-
17.	Journal Guest Editor- Burgeoning trends in Microbiology and Agriculture Sciences - Biocatalysis and Agricultural Biotechnology – Elsevier (Impact Factor 4.0).	Guest Editor -3 <sup>rd</sup> International Conference on Recent Trends in Microbiology (RTM-2019)- Burgeoning trends in Microbiology and Agriculture Sciences - Biocatalysis and Agricultural Biotechnology – Elsevier Publications.2020.	2020	-
18.	Deputy coordinator	Intellectual property cell, Alagappa University	2018	2019
19.	Journal Editor	Alagappa University Journal of Biological Sciences (AUJBS), Alagappa University, Karaikudi.	2017	2017 1Y
20.	Coordinator	Journal club Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date
21.	Member	Coaching scheme for NET exam-, UGC schemes, Alagappa University, Karaikudi	2016	2017
22.	Editor	Chief- ALU-Micro Fanzine, Departmental Magazine, Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date

23.	Deputy Coordinator	Cultural club- Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date
24.	Convener	Department Research Committee - Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date
25.	Convener	Department purchase Committee - Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date
26.	Convener	Department IQAC Committee - Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date
27.	Convener	Department student affairs and counseling - Department of Microbiology, Alagappa University, Karaikudi.	30.01.2016	Till date
28.	Chairman	Valuation board for M.Sc., and M.Phil., Microbiology, Alagappa University	30.01.2016	Till date

## Areas of Research

- **Bioenergy – Microbial Fuel Cell, Microbial Electrolysis Cell, Biohydrogen, Biodiesel, Bioethanol.**
- **Bioremediation of PAHs, Wastewaters**
- **Biomass and Bioplastic composites**
- **Bioactive compounds and biosensor materials**

## Patents Filed

### Patent– 02

1.	Application No.202241020077 A (India)- A System for Refining Salt Effluent.Publication Date: 15/04/2022 -Indian Patent Office.
2.	Application No. 202341081243- Compositied Proton Exchange Membrane for a Microbial Fuel.Journal Number- 01/2024, Journal Date: 05/01/2024 -Indian Patent Office.

### Patent under Preparation:

1.	Natural CQDs with anticancer and Folic acid sensing assets.
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2.	Extraction of $\beta$ -carotene from <i>Dunaliella salina</i> grown in Pig Manure.
3.	A hybrid system for continuous production of hydrogen from wastewater.

### Research Supervision/Guidance

Programme of study		Completed	Ongoing
Research	PDF	1	1
	Ph.D	8	10
	M.Phil	10	1
Project	PG	72	15
	UG/Others	-	-

### Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books/Chapters/Monographs/Manuals
69	95	9	23	32

**Cumulative Impact Factor(asperJCR)** : 463.267

**h-index** :30

**i10 index** : 61

**Total Citations** :2900

### Publications

**Thesis Evaluated** : 20

**Vivavoce Examiner** : 15

## Funded Research Projects

### Ongoing Projects:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In Lakhs )
		From	To		
1	DST	2022	2025	DST Bioenergy & H <sub>2</sub> MAP	1140.8705
2	RUSA EIR	2023	2024	Waste to Energy: Large-scale Sewage Treatment Plant (STP) and Production of Green Hydrogen and Bioelectricity Using an Innovative Process	97.00
3	RUSA EIR (Co-PI)	2023	2024	Biochar based inoculum development for sustainable agriculture	9.00
4	RUSA EIR (Student Project)	2023	2024	Novel Proton Exchange Membrane (PEM) for the 96% Overall Cost Reduction In Microbial Fuel Cell (MFC) Based Bioelectricity Generation.	2.00
5	RUSA EIR (Student Project)	2023	2024	Biodegradable Plastic Films From Lignin, Ligno Cellulosic Wastes And Their Biodegradability In Soil And Water.	2.00
6	MHRD – SPARC (SPARC/2018-2019/P485/SL)	2019	2023	Cost Effective, Modified Microbial Bioplastics [Poly Hydroxyl Butyrate (PHB) And Poly Lactic Acid (PLA)] as an Alternative for the Petroleum Derived Plastics	56.57673

### Completed Projects:

S. No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	To		
1	RUSA Phase 2.0 2 <sup>nd</sup> phase grant	2022	2023	Theme based project in Bioenergy production	4.44
2	RUSA Phase 2.0 1 <sup>st</sup> phase grant	2019	2021	Utilization of various lingo cellulosic wastes for the biodiesel production by microalgae under heterotrophic condition using Response surface	5.88

				methodology (RSM).	
3	UGC (MICR-2013-19708)	01.06.2015	01.06.2018	Biodegradable plastic (Poly – $\beta$ – Hydroxybutyrate) production by marine microorganisms isolated from Tamilnadu coastal area	14.8
4	DST-SERB (SB/YS/LS-47/2013)	Nov 2013	Nov 2016	Sequential Two-Stage Fermentation Process Producing Biohydrogen And Bioplastic (PHB) From Industrial Wastes	20.5
5	AURF (AU:SO (P&D): Interdepartmental Research: 2017)	2017	2019	Utilization of <i>Pedalium murex</i> for Biodiesel and Silver Nanoparticles Production	3.0
6	MBAI	2017	2018	Study on the enhancement of bioelectricity production by marine bacteria	0.2
7	UGC	March 2004	March 2005	Production of Poly hydroxybutyrate by using various industrial wastes	0.8
8	UGC	March 2009	March 2011	Polycyclic Aromatic Hydrocarbons (PAHs) Biodegradation by the Wild Basidiomycetes Fungi, Bacterial Isolates from Oil Spilled Soil, and their co-cultures: Comparative <i>In Vivo</i> and <i>In Silico</i> Approach	7.028
9	TNSCST	2002	-	Utilization of different industrial wastes for the production of biopolymer (Polyhydroxy butrate) by using <i>Ralstonia eutropha</i>	0.05
10	FLORA	2003	-	Microbial power generation by using marine sea mud – sea water interface and dairy industry waste – sea water interface	0.05



11	TNSCST	2004	-	Comparison and calibration of microbial power generation by utilizing biowaste	0.05
12	TNSCST	2005	-	Bio degradation of PAH by oil degrading bacteria	0.05
13	TNSCST	2007	2008	Comparative study on cyclosporine production by actinomycetes in liquid state and solid state conditions	0.05
14	TNSCST	2009	2010	A decolourization study of textile dye using ligninolytic enzyme of basidiomycetes fungi	0.05
15	TNSCST	2010	2011	Biohydrogen production by using keratin degraded effluent	0.05
16	TNSCST	2012	2013	Carbon sequestration (Flue gas utilisation) biohydrogen and biodiesel production using algal isolates	0.1
17	TNSCST	2017	2018	Assessment of Various pretreatment methods for enhanced biohydrogen production utilizing various industrial wastes	0.1
18	TNSCST	2018	2019	Biohydrogen and bioplastic (PHB) production from dairy industry wastewater by phototrophic bacteria	0.075

**Other Fund Received as Research Mentor:** Ongoing DST-INSPIRE Fellowship under my Supervision

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1.	DST-INSPIRE (IF220563) Ms. SUBIDSHA S.U	2024	2029	Microbial fuel cell (MFC) and microbial electrolysis cell (MEC) configuration for low cost bioenergy production utilizing wastewater.	25.00
2.	DST-INSPIRE (IF190230)	2019	2024	Utilization Of Various Industrial Wastes For Different Bioenergy Production	21.088

	Ms. Abishpha Bora			Using Aerobic Photohetero Micro Algal Isolates	
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### Consultancy Projects:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	To		
1.	Sustainable Hydrogen for Valuable Application (SHYVA), France	10.05.2023	10.10.2023	Highly efficient electrodes for hydrogen production from water	0.8
2.	Galaxy Research Technologies, Karaikudi	15.05.2019	15.05.2020	Poly-hydroxyl-Alkonates (PHA) biopolymer research	3.6
3.	TNPCB, TN	2008	2009	Microbial analysis of Vaigai river	1.0

**Others:**Ongoing/Completed Post doc Fellowship under my Supervision

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	To		
1.	DST SERB nPDF Dr. A. Priyadharshini	2024	2026	Application of MFC and MEC	26.928
2.	RUSA 2.0 PDF Dr. R. Karthik Raja	07.08.2019	07.08.2021	Synthesizing of novel bioactive metallic nanoparticles using <i>Xenorhabdus</i> & <i>Photorhabdus</i> and evaluation of their therapeutic potential (antioxidant, antimicrobial and cytotoxic properties)	14.50

## Distinctive Achievements / Awards

1. Appreciation certificate recognizing the research excellence in acquiring the projects during the academic years 2020-21 to 2022-23, Alagappa University, Karaikudi, 05.09.2023.
2. Letter of appreciation for contribution for NAAC related work done, Alagappa University, Karaikudi, 30.04.2018.
3. Travel grant (Rs 51,000/-) by DBT, India – (DBT/CTEP/02/20230253947) to attend “International Conference on Solid Wastes 2023: Waste Management in Circular Economy and Climate Resilience (ICSWHK2023)” at Hong Kong organized by Hong Kong Baptist University and Zhejiang University, Hong Kong; May 31<sup>st</sup> June – 3<sup>rd</sup> June 2023.
4. Travel grant (Rs1,00,000/-) by Alagappa University under RUSA 2.0 scheme to present a research paper at Sixth International Symposium Frontiers in Polymer Science organized by Elsevier Publications and Materials today at Budapest, Hungary on May 05-08<sup>th</sup> 2019.
5. Travel grant (Rs1,95,400/-) by Alagappa University under RUSA 2.0 scheme to for visiting the collaborating SPARC PI Institution and to give Invited lecture at Tianjin University, Tianjin, China from 25.10.2019 to 04.11.2019.
6. Dr. APJ Abdul Kalam Award for scientific excellence -2018 by Marina Labs, Chennai, Tamilnadu, India on 13.10.18.
7. Travel grant (Rs 1, 17,383/- by DBT (DBT/CTEP/02/201600307 dated Apr 1, 2016) to attend International Conference on Environmental science and Technology. Paper title: Anaerobic and subsequent photosynthetic process for biohydrogen and Bioplastic (PHB) production at Houston, US, American academy of sciences, Texas, Houston, USA; June 06-10, 2016.
8. Travel grant (Rs10,000/-) by Centre for International Co-operation in Science (CICS) – (DO\Lr.\TF-V\2015-16 dated 3.2.16) to attend 5<sup>th</sup> annual International Conference on sustainable energy and environmental sciences-2016 (SEES 2016) at Singapore organized by Global science and technology forum, Singapore (GSTF); 22– 23Feb, 2016.
9. Young scientist award – DST-SERB-YSS-2013.
10. Radio talk - About microbial Power generation in AIR- Madurai on 13.12.2004.

**NumberofSeminars /Conferences /Workshops/ Eventsorganized:30**

<b>Position</b>	<b>Programme</b>	<b>Duration</b>	<b>Institution</b>
Convener and organizing secretary	in 5 <sup>th</sup> International conference on Recent Trends in Microbiology RTM-2024	26 <sup>th</sup> Feb and 27 <sup>th</sup> Feb, 2024	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	Two days International Symposium of Bioplastics (ISB- 2023)	12 <sup>th</sup> Sep and 13 <sup>th</sup> Sep,2023	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	IPR and Industry- Institutional- MSME Collaboration.	10 <sup>th</sup> Apr, 2023	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	one day national level workshop on patenting and collaborations with industries	30 <sup>th</sup> Jan, 2023	Industry and consultancy wing and university business collaboration centre.
Convener and organizing secretary	Two days International Conference on Recent Trends in Microbiology (RTM-2023)	05 <sup>th</sup> – 06 <sup>th</sup> Jan, 2023	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	International Online Short-Term Course on “Recent Applications of Polymers”,	03 <sup>rd</sup> – 5 <sup>th</sup> May, 2021.	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	International Webinar on Mahatma Gandhi (IWMG-2020),	18 <sup>th</sup> August, 2020.	Department of Microbiology, Alagappa university, Karaikudi
Convener	One Day Webinar on Trends in Microbiology	28 <sup>th</sup> May, 2020	Department of Microbiology, Alagappa university, Karaikudi
Organizing Secretary	Webinar on Biopolymers: Renewable Resources for Human Utilization, Organized by Department of Microbiology, Alagappa University	27 <sup>th</sup> May, 2020.	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	Recent Trends in Bioplastics (RTB-2019), Organized by Department of Microbiology, Alagappa University	9 <sup>th</sup> & 10 <sup>th</sup> December, 2019	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	Convener and Organizing Secretary – International Conference on Bioplastics (BIOP-2019), Organized by Department of Microbiology, Alagappa University	2 <sup>nd</sup> April, 2019	Department of Microbiology, Alagappa university, Karaikudi
Convener	Convener – Distinguished Lecture Programme, Organized by Department of Microbiology, Alagappa University	1 <sup>st</sup> April, 2019	Department of Microbiology, Alagappa university, Karaikudi
Convener	Convener – 3 <sup>rd</sup> International Conference on Recent Trends in Microbiology (RTM 2019), Organized by Department of Microbiology, Alagappa University	24 <sup>th</sup> & 25 <sup>th</sup> January, 2019	Department of Microbiology, Alagappa university, Karaikudi

Convener and organizing secretary	Convener and Organizing Secretary – 2 <sup>nd</sup> International Conference on Recent Trends in Microbiology (RTM 2018), Organized by Department of Microbiology, Alagappa University	11 <sup>th</sup> & 12 <sup>th</sup> January, 2018	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	Convener - International Conference on Recent Trends in Microbiology (RTM 2016), Organized by Department of Microbiology, Alagappa University	20 <sup>th</sup> & 21 <sup>st</sup> December, 2016	Department of Microbiology, Alagappa university, Karaikudi
Organizing Committee member	Organizing Committee member in International Conference on recent trends in Biosciences (ICRTB 2016). Organized by	7 <sup>th</sup> – 9 <sup>th</sup> April, 2016.	Biosciences Departments, Alagappa University, Karaikudi
Convener	Convener - National Level Workshop on Commercialization Prospects of Microbial Formulates, Organized by Department of Microbiology, Alagappa University	22 <sup>nd</sup> – 25 <sup>th</sup> January, 2018	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	Convener and Organizing Secretary - National Level Conference on Trends in Microbiology (NCTM-2017), Organized by Department of Microbiology, Alagappa University	27 <sup>th</sup> September, 2017	Department of Microbiology, Alagappa university, Karaikudi
Convener and organizing secretary	Convener and Organizing Secretary - National level Workshop on Gas Chromatography, Organized by Department of Microbiology, Alagappa University	15 <sup>th</sup> December, 2016	Department of Microbiology, Alagappa university, Karaikudi
Organizing Committee member	Organizing Committee member in National Seminar cum Workshop on Molecular Informatics and Drug Designing (MIDD-2012) sponsored by UGC, TNSCST & DBT, Organized by Thiagarajar College, Madurai, Madurai	19 <sup>th</sup> - 21 <sup>st</sup> March, 2012.	Thiagarajar College, Madurai, Madurai
Organizing Committee member	Organizing Committee member in National Seminar on Environmental Biotechnology: Opportunities & Challenges sponsored by CSIR (Govt. of India), Organized by Thiagarajar College, Madurai, Madurai	22 <sup>nd</sup> & 23 <sup>rd</sup> February 2007	Thiagarajar College, Madurai, Madurai
Coordinator	Coordinator in National work shop on recent techniques in Biotechnology sponsored by DBT, CSIR and TNSCST. Organized by Thiagarajar College, Madurai	11 <sup>th</sup> March, 2005	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Intercollegiate Students' Seminar on Biological Control under UGC Autonomy Grant, Organized by Thiagarajar College, Madurai, Madurai	26 <sup>th</sup> September, 2012	Thiagarajar College, Madurai

Organizing Committee member	Organizing Committee member in State Level Intercollegiate Students' Seminar on Climate Change: A Global scenario under UGC Autonomy Grant, Organized by Thiagarajar College, Madurai, Madurai	26 <sup>th</sup> September, 2011	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Intercollegiate Students' Seminar on Mining the microbes: a new frontier for natural products under UGC Autonomy Grant, Organized by Thiagarajar College, Madurai, Madurai	23 <sup>rd</sup> February, 2011	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Intercollegiate Students' Seminar on Microbial Diversity – Exploring the unexplored, Organized by Thiagarajar College, Madurai	6 <sup>th</sup> October, 2010	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Intercollegiate Students' Seminar on Man & Environment under UGC Autonomy Grant, Organized by Thiagarajar College, Madurai, Madurai	26 <sup>th</sup> February, 2010	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Intercollegiate Students' Seminar on Emerging and Re-Emerging infectious diseases – Global trend and Challenges under UGC Autonomy Grant, Organized by Thiagarajar College, Madurai Madurai	23 <sup>rd</sup> September, 2009	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Student Seminar on Evolution – From Molecules to Mankind, Organized by Thiagarajar College, Madurai	26 <sup>th</sup> February, 2009	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in State Level Intercollegiate Student Seminar on Global Warming, Organized by Thiagarajar College, Madurai, Madurai	28 <sup>th</sup> February, 2008	Thiagarajar College, Madurai
Organizing Committee member	Organizing Committee member in First regional conference on Bioresources under UGC Autonomy Grant, Organized by Thiagarajar College, Madurai, Madurai	5 <sup>th</sup> March, 2012	Thiagarajar College, Madurai

**Number of Conferences/Seminars/Workshops attended:162**

**Special training undergone, additional skills acquired etc.: 22**

<b>S.No</b>	<b>Name of programme</b>	<b>Training/Skills</b>	<b>Name of the Institution</b>	<b>Period</b>
1.	Faculty Development (Enrichment) Program	Training	Internal quality assurance cell, Alagappa University, Karaikudi	6 <sup>th</sup> - 12 <sup>th</sup> Jan, 2017
2.	Faculty Development Program – Accreditation Preparedness Engagement	Training	Internal quality assurance cell, Alagappa University, Karaikudi	18 - 23 <sup>th</sup> Sep, 2016
3.	Work shop on Metrohm Autolab Electrochemical instruments for Biosensor, Energy and corrosion applications	Skills	Department of Bioelectronics and Biosensors, Alagappa University-Karaikudi	16 <sup>th</sup> Feb, 2015
4.	International workshop on Frontier Areas in Chemical Technologies (FACTs-2014)	Training	Department of Industrial Chemistry, Alagappa University, Karaikudi, Tamilnadu	21-22 <sup>nd</sup> Feb, 2014
5.	Participated in University-Industry interface meet-II	Training	Industry, consultancy cell and centre for university business collaboration, Alagappa University,	28 <sup>th</sup> April, 2014
6.	World Standards Day (WSD-2014)	Training	Department of Nanoscience and Technology, Alagappa	14 <sup>th</sup> Oct, 2014
7.	Training Programme on “Educational Ethos” organized by NAAC-IQAC	Training	Thiagarajar College, Madurai	29 <sup>th</sup> Mar, 2012
8.	Panel Discussion on Online Examination	Training	Thiagarajar College, Madurai	6 <sup>th</sup> Sep, 2012
9.	Work shop on Molecular diagnostic methods for ocular and systemic pathogens	Training	Aravind medical research foundation, Madurai	31 <sup>st</sup> Oct –4 <sup>th</sup> Nov, 2011 (5 days)
10.	International workshop on Bioremediation	Training	BITS Pilani Campus, Goa campus and Rutgers – The state University of New Jersey, USA	4 <sup>th</sup> -16 <sup>th</sup> January, 2010 (12 days)

11.	Work shop on structural bioinformatics and molecular modelling	Training	Centre of excellence in Bioinformatics, School of Biotechnology, MKU, Madurai	25 <sup>th</sup> – 26 <sup>th</sup> March, 2009
12.	Work shop on electron microscopy	Training	Central electrochemical research institute, Karaikudi	31.7.09-01.8.09 (2days)
13.	Molecular genetic methods in diabetic retinopathy	Training	Aravind eye research institute Madurai	4th – 14th Feb 2008 (Ten days)
14.	Class room communication skills enhancement training	Training	Thiagarajar College, Madurai	11 <sup>th</sup> Nov, 2008
15.	Teacher competence enhancement programme	Training	Thiagarajar College, Madurai	22nd – 29 <sup>th</sup> Nov, 2005 (Eight days)
16.	Modern instrumental methods of analysis	Training	Central electrochemical research institute, Karaikudi	26.9.05 – 1.10.05 (Seven days)
17.	Chromatographic analysis (Gas chromatography)	Training	Advance Training Institute, Ministry of Labour, Directorate General of Employment & Training, Chennai	22-26 Nov 2004 (Five Days)
18.	Spectrophotometric analysis (UV-Vis)	Training	Advance Training Institute, Ministry of Labour, Directorate General of Employment &	21-25 April 2003 (Five Days)
19.	Electrophoresis techniques	Training	The Electrophoresis Institute, Yerkaud	12-17th Dec 2003(6days)
20.	Symposium on Biotechnology at the turn of the millennium	Training	Anna University, Chennai.	4 <sup>th</sup> and 5 <sup>th</sup> Feb, 2002
21.	Training in medical Microbiology Lab	Training	Meenakshi Mission Hospital and Research Center, Madurai	15th July – 14th Sep- 1998. (Two Months)
22.	Crash course on applied biology – An update	Training	K.S.R. College of Arts & Science, Tiruchengode.	10 <sup>th</sup> – 11 <sup>th</sup> October, 1998

## Overseas Exposure/ Visits



1. Visited China from 25.10.2019 to 04.11.2019 as SPARC PI and gave Invited lecture at Tianjin University, Tianjin, China (31.10.2019) and at Beijing Forestry University, Beijing, China (1.11.2019).
2. Visited Hungary to present a research paper in Sixth International Symposium Frontiers in Polymer Science organized by Elsevier Publications and Materials today at Budapest, Hungary on May 05-08<sup>th</sup> 2019.
3. Visited Singapore to present a research paper in 5<sup>th</sup> annual International Conference on sustainable energy and environmental sciences-2016 (SEES 2016) at Singapore organized by Global science and technology forum, Singapore (GSTF); 22– 23 Feb, 2016.
4. Visited America to present a research paper in International Conference on Environmental science and Technology. Paper title: Anaerobic and subsequent photosynthetic process for biohydrogen and Bioplastic (PHB) production at Houston, US, American academy of sciences, Texas, Houston, USA; June 06-10, 2016.

### **ProfessionalBodies**

1. Life Member: Association of Microbiologists of India (Life Membership No. 1354/2001).
2. Life Member: American Society for Microbiology (Membership ID: 56653553)
3. Life Member: South Indian Microbiologist Association (Life Membership No. SIMAMDU00040).

### **AdvisoryBoard**

<b>Year/Period</b>	<b>Name of the BoS / Administrative Committee / Academic Committee</b>	<b>Role</b>
28.04.2017	Expert, Member of Inspection committee to give affiliation to B.Sc Microbiology at Vidhyaa Giri college of arts and science, Puduvayal.	B.Sc. Microbiology
2017-18 to 2019-20	Chair person- Board of studies in B.Sc Microbiology in ALU affiliated colleges, 2017-18 to 2019-20	B.Sc. Microbiology
2017-18 to 2019-20	Chair person- Board of studies in B.Sc Microbiology & Clinical Lab Technology in ALU affiliated colleges, 2017-18 to 2019-20	B.Sc. Microbiology
2017-18 to 2019-20	Chair person- Board of studies in M.Sc Microbiology in ALU affiliated colleges, 2017-18 to 2019-20	PG Microbiology
10.01.2017	Inspection Team Member to visit Pasumpom Thiru Muthuramalinga Thevar Memorial College (Affiliated to Alagappa University) and assess the infrastructure and institutional facilities available in Department of Botany	PG
2016 onwards	Convener - Broad Based Board of Studies (BBOS) for M.Sc., and M.Phil Microbiology,	PG Microbiology

	<b>Alagappa University, Karaikudi</b>	
28.10.2016.	Inspection Team Member to visit M/s. Annai Khadeeja Arts and Science College, Edaiyathimangalam road, Kandanivayal, Manamelkudi Taluk, Pudukottai District and assess the infrastructure and institutional facilities available for offering of B.Sc Nutrition and Dietetics Programme through Collaborative mode of Alagappa University ,	B.Sc Nutrition and Dietetics Programme

**Academic Bodies in Other Institutes/Universities**

<b>Year/Period</b>	<b>Name of the BoS/Administrative Committee / Academic Committee</b>	<b>Role</b>
2019-20 to 2021-22	University Nominee- Board of Studies in Microbiology and Biotechnology at Thaseem Beevi Abdul Kader college of Women, Kilakarai	PG Microbiology
02.02.2019 to 01.02.2022	Member as a Subject Expert to the Board of Studies in Microbiology (U.G & P.G) – J.J. College of Arts and Science (Autonomous), Pudukkottai	UG & PG Microbiology
2017-2020	Member, Board of studies in Biology, Madurai Kamaraj University, Madurai.	PG
2017-2019	Subject Expert- M.Sc Biotechnology Board of Studies, Department of Microbiology, Thiagarajar College, Madurai	PG Microbiology
23.07.2018	Member, Board of studies meeting – UG & PG Microbiology, Bharathidasan university	UG & PG Microbiology
21.05.2018	Member – Board of Studies – School of life sciences, Bharathidasan University	PG
26.04.2018	Subject Expert- Board of studies in M.Sc Biotechnology, Dept. of Biotechnology (MHRD), Thiagarajar College, Madurai	M.Sc Biotechnology
05.09.2017	Chairman, Board of studies , DDE Microbiology, Alagappa University, Karaikudi	PG Microbiology
	Expert, Member of Inspection committee to give affiliation to B.Sc Microbiology at Vidhyaa Giri college of arts and science, Pudevayal on 28.04.2017	
15.03.2017	Academic Auditor to evaluate M.Sc Microbiology revised syllabus (2017-2020),	M.Sc Microbiology

**Ph.D. Thesis Guided**

<b>S.No</b>	<b>Name of theScholar</b>	<b>TitleoftheThesis</b>	<b>Year ofCompletion</b>
1.	Mr. N. Premnath	Polycyclic Aromatic Hydrocarbon (PAHs) degradation by marine microorganisms by under liquid state fermentative condition	<b>2022</b>
2.	Mr. T. Boobalan	Biodegradation of PAHs and cytotoxicity effects of wild mushrooms from Western Ghats region: Identifying the active ingredients and pathways	<b>2022</b>
3.	Mrs. N. Rashiya	Screening and characterization of Bioactive compounds from sponge associated micro organisms against infectious human pathogens sss and inhibition of tumour cell growth.	<b>2023</b>
4.	Mr. R. SatheeshMurugan	Identification of Potential Pre-treatment and substrate for Anaerobic Bio-Hydrogen production	<b>2021</b>
5.	Mr. G. Sivaprakash	Biodiesel and silver nanoparticle from seaweed	<b>2021</b>
6.	Mr. K. Mohan Rasu	Biodecolorization of Textile Effluent and Biodiesel Production by Micro algal isolates	<b>2021</b>
7.	Mr. G. H. Dinesh	A two stage modelling and optimization of Biohydrogen and PHB production	<b>2021</b>
8.	Mrs. V. Ananthi	A comparative study on the production and evaluation of Biodiesel using Lignocellulosic waste by microalgae and yeast isolates	<b>2020</b>

**Ph.D. Thesis Guiding**

<b>S.No</b>	<b>Name of the scholar</b>	<b>Year of registration</b>	<b>Title of the work</b>
1.	Subidsha S.U	2024	Microbial Fuel cell (MFC) and Microbial electrolysis cell (MEC) Configuration for low cost bioenergy production utilizing wastewater
2.	Suba .G	2022	Marine sponge associated bacterial mediated poly cyclic aromatic hydrocarbon (PAHs) Biodegradation

3.	A. Abubakkar Siddik	2022	Cost-effective durable and efficient proton exchange membrane (PEM) For microbial fuel cells (MFC) and microbial electrolysis cells (MEC)
4.	Aswaja P	2021	Biohydrogen production using microbial electrolysis cell (MEC)
5.	Angelin Swetha .T	2020	Optimization of Polylactic acid production utilizing various organic wastes
6.	Nithya. R	2020	Evaluation of various natural resource derived electrodes in microbial fuel cell system
7.	D. Suresh Lingam	2020	Evaluation of wild mushrooms for their bioactive and bioremediation potential: integrated <i>in vivo</i> and <i>insilico</i> approach
8.	Abhispa Bora	2019	Utilization of various industrial wastes for different bioenergy production using aerobic photohetero microalgal isolates
9.	E. James Obeth	2018	Evaluation of Microbial Fuel cell systems for Bioelectricity generation utilizing septic tank waste water
10.	Ajilda	2014	Backwater microbial exopolysaccharides; synthesis, production, Molecular characterization and its biotechnological applications

### List of Research Articles / Recent Publications

S. No	Authors/Titleofthepaper/Journal	Impact Factor
1.	James Obeth Ebenezer Samuel, Nithya Rathinavel, Ananthi Veleeswaran, Boobalan Thulasinathan, Karthik Raja Ramalingam, Yuvakkumar Rathinam and <b>Arun Alagarsamy</b> , New insight on the influence of surface-modified clay cup with stirring effect for bioelectricity production by utilizing septic tank wastewater, Process Safety and Environmental Protection, (2024) <a href="https://doi.org/10.1016/j.psep.2024.03.110">https://doi.org/10.1016/j.psep.2024.03.110</a>	7.8
2.	V.Ananthi, Abhispa Bora, U.Ramesh, R. Yuvakkumar, Karthik Raja, Kumar Ponnuchamy, Govarthanam Muthusamy, <b>A.Arun</b> .A review on the technologies for sustainable biohydrogen production, Process Safety and Environmental	7.8

	Protection, (2024) Accepted ref. No PSEP-D-23-04853R1	
3.	Raju, C. V., Ramya, R., Imran, K., Basha, C. K., Wilson, J., Boobalan, T., <b>Arun, A.</b> , Basu, M. J., and Saravanan, S. (2024). Simultaneous electrochemical detection of dopamine and uric acid based on tri-composite of poly-pyrrole and $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> embedded MoS <sub>2</sub> sheets modified electrode. <i>Microchemical Journal</i> , 110189. <a href="https://doi.org/10.1016/j.microc.2024.110189">https://doi.org/10.1016/j.microc.2024.110189</a>	4.8
4.	Swathi, Srinivasan; Rathinam, Yuvakkumar; Ganesan, Ravi, <b>Arun, Alagarsamy</b> . 2023. Construction of Fe <sub>2</sub> O <sub>3</sub> nanoparticles decorated for a highly efficient OER activity. <i>Energy &amp; Fuels</i> . <a href="https://doi.org/10.1021/acs.energyfuels.3c01672">https://doi.org/10.1021/acs.energyfuels.3c01672</a>	5.3
5.	Thirumal. V, R. Yuvakkumar, P. Senthil Kumar, G. Ravi, <b>A. Arun</b> , Ramesh K. Guduru, Dhayalan Velauthapillai. 2023. Bayberry-like Cu <sub>3</sub> BiS <sub>3</sub> with 2D layered nanosheets of rGO and g-C <sub>3</sub> N <sub>4</sub> for effective electrochemical HER activity. <i>International Journal of Hydrogen Energy</i> , ISSN 0360-3199.	7.139
6.	Mohanasundaram, Y., Arumugam, N., Sarangam, B., <b>Alagarsamy, Arun.</b> , Raja, R. (2023). An Introduction to <i>Haematococcus</i> . In: Raja, R., Hemaiswarya, S., Narayanan, M., Kandasamy, S., Jayappriyan, K. (eds) <i>Haematococcus</i> . Springer, Singapore. August 2023. <a href="https://doi.org/10.1007/978-981-99-2901-6_1">https://doi.org/10.1007/978-981-99-2901-6_1</a>	Book chapter
7.	Parvathavarthini Murugaperumal, Praveena Rajendran, Sengottuvelan Nallathambi, Siva Ayyanar, Franc Perdih, Ashokkumar Balasubramaniam and <b>Arun Alagarsamy</b> . 2023. An oxalamide-bridged imidazole based 'turn off' fluorescent receptor for copper(II) and iron(III) ions. <i>New J. Chem.</i> The Royal Society of Chemistry. 28 July, 2023. Doi - <a href="http://dx.doi.org/10.1039/D3NJ02444J">http://dx.doi.org/10.1039/D3NJ02444J</a>	3.925
8.	Kulanthaisamy, M., R. Guru Raj Rao, G. Sivaprakash, T. Angelin Swetha,, Abhispa Bora, P. Balaji, Logeshwaran Panneerselvan and <b>A. Arun</b> . 2023. Bioplastics from microbial and agricultural biomass. Mohanrasu Kulanthaisamy. In Book- Green Sustainable Process for Chemical and Environmental Engineering and Science.413-438. ISBN 978-0-323-95183-8, <a href="https://doi.org/10.1016/B978-0-323-95183-8.00007-X">https://doi.org/10.1016/B978-0-323-95183-8.00007-X</a>	Book chapter
9.	Bora, A., Angelin Swetha, T., Mohanraasu, K., Sivaprakash, G., Balaji, P., <b>Arun, A.</b> , 2023. Chapter 17. Microbial production of biohydrogen (BioH <sub>2</sub> ) from waste-activated sludge: Processes, challenges and future approaches. In Book: <i>Advanced Functional Materials for Hydrogen Production, Conversion and Storage</i> . Wiley publication.511-538.Print ISBN:9781119829348, Online ISBN:9781119829584. <a href="https://doi.org/10.1002/9781119829584.ch17">https://doi.org/10.1002/9781119829584.ch17</a>	Book chapter
10.	Swathi, S., Yuvakkumar, R., Ravi, G., <b>Arun, A.</b> , & Velauthapillai, D. 2023. Reaction time influence on copper tin sulfide micro flowers for enhanced electrochemical hydrogen evolution reaction (HER) performance. <i>Electrochimica Acta</i> , 142502. Aug, 2023. <a href="https://doi.org/10.1016/j.electacta.2023.142502">https://doi.org/10.1016/j.electacta.2023.142502</a>	7.336

11.	Tamilselvan Gokul, Kamatchi Ramesh Kumar, Paulpandian Prema, <b>Alagarsamy Arun</b> , Paulraj Balaji. 2023. Particulate Pollution and its Toxicity to Fish: An Overview. Comparative Biochemistry and Physiology, Part C. Aug, 2023. <a href="https://doi.org/10.1016/j.cbpc.2023.109646">https://doi.org/10.1016/j.cbpc.2023.109646</a>	4.52
12.	Gokul, T., Kumar, K. R., Veeramanikandan, V., <b>Arun, A.</b> , Balaji, P., & Faggio, C. 2023. Impact of particulate pollution on aquatic invertebrates. Environmental Toxicology and Pharmacology, 100, 104146. June 2023. <a href="https://doi.org/10.1016/j.etap.2023.104146">https://doi.org/10.1016/j.etap.2023.104146</a> .	5.785
13.	Boobalan Thulasinathan , G. Veerapandi , Pandiaraj Manickam , Ponnuchamy Kumar, Muthusamy Govarthanam, C. Sekar , <b>Arun Alagarsamy</b> . 2023. Simultaneous electrochemical determination of persistent petrogenic organic pollutants based on AgNPs synthesized using carbon dots derived from mushroom. Science of the Total Environment. Volume 884, 1 August 2023, 163729. <b>DOI:</b> <a href="https://doi.org/10.1016/j.scitotenv.2023.163729">https://doi.org/10.1016/j.scitotenv.2023.163729</a>	10.754
14.	K. Rameshkumar, V. Ananthi, <b>A. Arun</b> , P. Prema, V. Veeramanikandan, Van-Huy Nguyen, P. Balaji. 2023. <i>Trianthema portulacastrum</i> leaf extract mediated synthesis of silver nanoparticles and elucidation of their larvicidal and antibacterial activities, Materials Today Communications,2023,105980, ISSN 2352-4928, June 2023. <a href="https://doi.org/10.1016/j.mtcomm.2023.105980">https://doi.org/10.1016/j.mtcomm.2023.105980</a> .	3.662
15.	T. Angelin Swetha, V. Ananthi, Abhispa Bora, Nallathambi Sengottuvelan, Kumar Ponnuchamy, Govarthanam Muthusamy, <b>A. Arun</b> . 2023. A review on biodegradable polylactic acid (PLA) production from fermentative food waste - its applications and degradation. <i>International Journal of Biological Macromolecules</i> . Volume 234, 15 April 2023, 123703 <a href="https://doi.org/10.1016/j.ijbiomac.2023.123703">https://doi.org/10.1016/j.ijbiomac.2023.123703</a>	8.025
16.	T. Angelin Swetha, Abhispa Bora, K. Mohanrasu, P. Balaji, Rathinam Raja, Kumar Ponnuchamy, Govarthanam Muthusamy, A. Arun. 2023. A Comprehensive review on Polylactic Acid (PLA) – Synthesis, Processing and Application in Food Packaging. <i>International Journal of Biological Macromolecules</i> . Volume 234, 15 April 2023, 123715 (Accepted Ref. No. BIOMAC_123715) <a href="https://doi.org/10.1016/j.ijbiomac.2023.123715">https://doi.org/10.1016/j.ijbiomac.2023.123715</a>	8.025
17.	Rathinam Raja, Shanmugam Hemaiswarya, Kulandaiyesu Arunkumar, N. Mathiyazhagan, K. Sabariswaran , A. Arun and P. Ramasamy. 2023. Efficacy of <i>Eisenia bicyclis</i> phlorotannins in the treatment of diabetes and reducing inflammation. Food Bioscience. Volume 52, April 2023, 102381 <a href="https://doi.org/10.1016/j.fbio.2023.102381">https://doi.org/10.1016/j.fbio.2023.102381</a>	5.318
18.	Thirumal. V, R. Yuvakkumar, P. Senthil Kumar, G. Ravi, A. Arun, Ramesh K. Guduru, Dhayalan Velauthapillai. 2021. Heterostructured two dimensional materials of MXene and graphene by hydrothermal method for efficient hydrogen production and HER activities. <i>International Journal of Hydrogen Energy</i> , ISSN 0360-3199, <a href="https://doi.org/10.1016/j.ijhydene.2021.12.045">https://doi.org/10.1016/j.ijhydene.2021.12.045</a> .	7.139
19.	Arockiya Anita Margret, S.Aishwarya, A. Arun, R. Jasmine. 2023. Chapter 7 - Interface of ‘meta-omics’ in gut biome remediation to unravel the	Book

	complications of environmental pollutants. In Book- Metagenomics to Bioremediation, Applications, Cutting Edge Tools, and Future Outlook. Developments in Applied Microbiology and Biotechnology. Edts. Vineet Kumar, Muhammad Bilal, Sushil Kumar Shahi and Vinod Kumar. Pages 183-206. <a href="https://doi.org/10.1016/B978-0-323-96113-4.00024-X">https://doi.org/10.1016/B978-0-323-96113-4.00024-X</a>	<b>chapter</b>
20.	T. Angelin Swetha, K. Mohanrasu, Muniyasamy Sudhakar, Rathinam Raja, Kumar Ponnuchamy, Govarthanam Muthusamy, A. Arun.2022. A comprehensive review on techniques used in conversion of biomass into bioeconomy. Sustainable Energy Technologies and Assessments. Volume 53, Part C, 102682, ISSN 2213-1388, <a href="https://doi.org/10.1016/j.seta.2022.102682">https://doi.org/10.1016/j.seta.2022.102682</a> ,12.11.22.	<b>7.632</b>
21.	Anandhi, V., Ramesh, U., Balaji, P., Kumar, P., Muthusamy Govarthanam., <b>Arun, A.</b> , 2022. A Review on the Impact of Various Factors on Biohydrogen Production. International Journal of Hydrogen Energy. <a href="https://doi.org/10.1016/j.ijhydene.2022.08.046">https://doi.org/10.1016/j.ijhydene.2022.08.046</a>	<b>7.139</b>
22.	Bora, A., Mohanrasu, K., Angelin Swetha, T., Ananthi, V., Sindhu, R., Nguyen Thuy Lan Chi , Pugazhendhi, A., <b>Arun, A.</b> , Mathimani, T., 2022. Microbial electrolysis cell (MEC): Working principle, reactor configurations, recent advances and strategies in biohydrogen production. Fuel. <a href="https://doi.org/10.1016/j.fuel.2022.125269">https://doi.org/10.1016/j.fuel.2022.125269</a>	<b>8.035</b>
23.	Vignesh, B.K., Muthumari, B., Kavitha, M., Praveen Kumar, J.K.J., Thavamurugan, S., <b>Arun, A.</b> , Jothi Basu, M., 2022. Studies on Optimization of Sustainable Lactic Acid Production by <i>Bacillus amyloliquefaciens</i> from Sugarcane molasses through Microbial Fermentation. Sustainability, 14, 7400. <a href="https://doi.org/10.3390/su14127400">https://doi.org/10.3390/su14127400</a> .	<b>3.251</b>
24.	Chidhambaram, M., Natchimuthu, K., Muniyandi, B., <b>Arun, A.</b> , Kheraif, A.A., Kim, W., Kumar, P., 2022. Extraction, identification, and environmental risk assessment of microplastics in commercial toothpaste. Chemosphere. 296: 133976. <a href="https://doi.org/10.1016/j.chemosphere.2022.133976">https://doi.org/10.1016/j.chemosphere.2022.133976</a>	<b>8.943</b>
25.	Boobalan, T., Tamilmani, J., Arumugam, N., Mohan Rasu, K., Kim, W., Kumar, P., Govarthanam, M., <b>Arun, A.</b> , 2022. Wastewater substrates in microbial fuel cell systems for carbon-neutral bioelectricity generation: An Overview. Fuel. <b>Volume 317</b> , 1 June 2022, 123369. <b>DOI:</b> <a href="https://doi.org/10.1016/j.fuel.2022.123369">https://doi.org/10.1016/j.fuel.2022.123369</a>	<b>8.035</b>
26.	Maya, M.R., Ananthi, V., <b>Arun, A.</b> , Kumar, P., Govarthanam, M., Rameshkumar, R., Veeramanikandan, V., Balaji, P., 2022. Protective efficacy of <i>Capsicum frutescens</i> fruits in pancreatic, hepatic and renal cell injury and their attenuation of oxidative stress in diabetic rats. Journal of Taibah University for Science (TUSC). 15:1, 1232-1243, DOI: <a href="https://doi.org/10.1080/16583655.2021.2024998">https://doi.org/10.1080/16583655.2021.2024998</a>	<b>2.688</b>
27.	Sethupathi, M., Boobalan, T., Sengottuvelan, N., Kumar, P., Perdih, F., <b>Arun, A.</b> , Karthikeyan, M., 2021. Macrocyclic “tet a”-Derived Cobalt(III) Complex with a N,N'-Disubstituted Hexadentate Ligand: Crystal Structure, Photonuclease Activity, and as a Photosensitizer. ACS Omega. DOI: <a href="https://doi.org/10.1021/acsomega.1c05306">https://doi.org/10.1021/acsomega.1c05306</a>	<b>4.132</b>

28.	Maya, M.R., Rameshkumar, K., Veeramanikandan, V., Boobalan, T., Kumar, M., Eyini, M., <b>Arun, A.</b> , Pugazhendhi, A., Balaji, P., 2022. Evaluation of Antioxidant, anti-inflammatory, and anti-hyperglycemic effects of <i>Wattakaka volubilis</i> Linn. f. Process Biochemistry. 112. 183–191 <b>DOI:</b> <a href="https://doi.org/10.1016/j.procbio.2021.12.001">https://doi.org/10.1016/j.procbio.2021.12.001</a>	<b>4.885</b>
29.	Mohanrasu, K., Guru, R.R., Dinesh, G.H., Zhang, K., Sudhakar, M., Pugazhendhi, A., Jeyakanthan, J., Kumar, P., Govarthanan, M., <b>Arun, A.</b> , 2021. Production and Characterization of biodegradable Polyhydroxybutyrate by <i>Micrococcus luteus</i> isolated from marine environment. International Journal of Biological Macromolecules. DOI: <a href="https://doi.org/10.1016/j.ijbiomac.2021.07.029">https://doi.org/10.1016/j.ijbiomac.2021.07.029</a> .	<b>8.025</b>
30.	Barik, A., Biswal, D., <b>Arun, A.</b> , Balasubramanian, V., 2021. Biodetoxification of Heavy Metals Using Biofilm Bacteria. In Environmental and Agricultural Microbiology (eds B.B. Mishra, S.K. Nayak, S. Mohapatra and D. Samantaray). Pages- 39-61. 24 August 2021. ISBN:9781119526230. Scrivener Publishing LLC. DOI: <a href="https://doi.org/10.1002/9781119525899.ch3">https://doi.org/10.1002/9781119525899.ch3</a>	<b>Book chapter</b>
31.	Karthik Raja, R., Hazir, S., Govindan, R., Balasubramani, G., <b>Arun, A.</b> , 2022. Chapter 22: Green nanotechnology for the environment. In Handbook of Microbial Nanotechnology. (Ed. Chaudhery Hussain). P-461-478. ISBN: 9780128234266, Academic Press, Publishing Date: March 2022. DOI: <a href="https://doi.org/10.1016/B978-0-12-823426-6.00006-1">https://doi.org/10.1016/B978-0-12-823426-6.00006-1</a>	<b>Book chapter</b>
32.	Angelin Swetha, T., Mohanrasu, T., Bora, A., <b>Arun, A.</b> , 2022. Chapter 20: Enzyme-incorporated nanotechnology in wastewater treatment. In Handbook of Microbial Nanotechnology. (Ed. Chaudhery Hussain). P 415-438. ISBN: 9780128234266, Academic Press, Publishing Date: March 2022. DOI: <a href="https://doi.org/10.1016/B978-0-12-823426-6.00021-8">https://doi.org/10.1016/B978-0-12-823426-6.00021-8</a>	<b>Book chapter</b>
33.	Mohanrasu, K., Guru, R.R., Sivaprakash, G., Dinesh, G.H., <b>Arun, A.</b> , 2022. Chapter 16: Microbial bio-based polymer nanocomposites for food industry applications. In Handbook of Microbial Nanotechnology. (Ed. Chaudhery Hussain). P – 331- 354. ISBN: 9780128234266, Academic Press, Publishing Date: March 2022. Doi: <a href="https://doi.org/10.1016/B978-0-12-823426-6.00012-7">https://doi.org/10.1016/B978-0-12-823426-6.00012-7</a>	<b>Book chapter</b>
34.	Sivaprakash, G., Mohanrasu, K., Dinesh, G.H., <b>Arun, A.</b> , 2022. Chapter 15: Microbial nanotechnology in food Industry: Antimicrobial packaging. In Handbook of Microbial Nanotechnology. (Ed. Chaudhery Hussain). P 311-329. ISBN: 9780128234266, Academic Press, Publishing Date: March 2022. DOI: <a href="https://doi.org/10.1016/B978-0-12-823426-6.00002-4">https://doi.org/10.1016/B978-0-12-823426-6.00002-4</a>	<b>Book chapter</b>
35.	Bora, A., Mohanrasu, K., Angelin Swetha, T., <b>Arun, A.</b> , 2022. Chapter 21: Microbes incorporated nanomaterials for water purification. In Handbook of Microbial Nanotechnology. (Ed. Chaudhery Hussain). P- 439-459. ISBN: 9780128234266, Academic Press, Publishing Date: March 2022. DOI: <a href="https://doi.org/10.1016/B978-0-12-823426-6.00001-2">https://doi.org/10.1016/B978-0-12-823426-6.00001-2</a>	<b>Book chapter</b>



36.	Ananthi, V., Mohanrasu, K., Dinesh, G.H., <b>Arun, A.</b> , 2022. Chapter 17: Pathogen identification through surface marker recognition methods. In Handbook of Microbial Nanotechnology. (Ed. Chaudhery Hussain). P-415-438. ISBN: 9780128234266, Academic Press, Publishing Date: March 2022. DOI: <a href="https://doi.org/10.1016/B978-0-12-823426-6.00014-0">https://doi.org/10.1016/B978-0-12-823426-6.00014-0</a>	<b>Book chapter</b>
37.	Karthik Raja, R., Nguyen-Tri, P., Balasubramani, G., <b>Arun, A.</b> , Hazir, S., Ladhari, S., Saidi, A., Pugazhendhi, A., Anthoni Samy, A., 2021. SARS-CoV-2 and its new Variants: A Comprehensive Review on Nanotechnological Application Insights into Potential Approaches. Applied Nanoscience. DOI: <a href="https://doi.org/10.1007/s13204-021-01900-w">https://doi.org/10.1007/s13204-021-01900-w</a>	<b>3.869</b>
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### Resource persons in various capacities

National Conferences : 09

International Conferences : 09

Invited Lectures : 50

Date : 15.03.24

Place : Karaikudi

Dr. A. Arun  
Professor and Head