



**Dr.S.UMAMAHESWARI**  
**Assistant Professor**

### Contact

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

**Teaching Experience: 11 Years**

**Research Experience: 15 Years**

### Additional Responsibilities

1. Member of NIRF -2018 to 2021
2. Department placement coordinator -2018 to 2021
3. Organizing secretary of ECO-CLUB(2016 to2021)
4. Deputy Warden (Womens Hostel) 2018 to 2021
5. Joint secretary (BDU - Alumni) - still date

## Areas of Research

1. Biomaterials
2. Fermentation technology
3. Marine pharmacology

## Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	--	01
	M.Phil.	--	--
Project	PG	10	05
	UG / Others	03	--

## Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
09	--	02	--	02

<b>Cumulative Impact Factor (as per JCR) :</b>	<b>6.461</b>
<b>H-index</b>	<b>: 03</b>
<b>i10 index</b>	<b>: 02</b>
<b>Total Citations</b>	<b>: 130</b>

## Funded Research Projects

### Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST-SERB	2014	2017	Isolation of novel peptides from Ascidians (Tunicates) and its pharmaceutical applications	22.19
2	RUSA 2.0 Biological science	2021	2023	Development of marine Seaweeds based nano-particles for the delivery of chemotherapeutic drugs and peptides for cancer therapy	20

## Distinctive Achievements / Awards

1. **Young Scientist award** - Department of Science and Technology (SERB), India (2014-2017).
2. **Junior Research Fellowship** - Rajiv Gandhi National Fellowship, University Grants Commission, India (April 2009- September 2011).
3. **University Research Fellowship** - Bharathidasan University, Tiruchirappalli, India (April 2006 - March 2009).
4. **Class Topper Award**- Kandaswamy Kandar's College, Paramathi-velur, Namakkal, Tamilnadu, India (March-2002).

## Events organized in leading roles

1. UGC XII Plan extension activity for rural folks one day seminar on “**Awareness on Environmental Health and Environmental Issues**” held on 16th February, 2017 Department of Biotechnology, Bharathidasan University constitute college, Perambalur, Tamil Nadu, India.
2. “**Biotechnological solutions for Environmental Challenges (BITSFECs-2022)**” one day webinar and two days offline workshop held on 21.02.2022 at Department of Environmental Biotechnology, Bharathidasan University, and Tiruchirappalli-620024.
3. “**National Webinar on World Ozone Day**” held on 16th September, 2022 at Department of Environmental Biotechnology, Bharathidasan University, and Tiruchirappalli- 620024.
4. “**WORLD SCIENCE DAY**” Invited Lecture on “Inspiration to the youth of India” on 12.10.2021 at Department of Environmental Biotechnology, Bharathidasan University, and Tiruchirappalli-620024.

## Events Participated (optional)

### Conferences / Seminars / Workshops: xx

1. National Workshop on “**Climate Change Impact on the Marine Environment (CCIME2017)**” held at 2<sup>nd</sup>-3<sup>rd</sup> February 2017, Department of Marine Science, Bharathidasan University, Tiruchirappalli, India.
2. Paper presented International Conference on “**Translational Medicine and Imaging**” held at 29<sup>th</sup> -30<sup>th</sup> August 2017, School of Electrical Engineering and school of Bioscience & Technology, Vellore institute of Technology, Vellore, Tamilnadu, India. □
3. Paper presented world congress on “**Genetics, Genomics and personalized Medicine**” held at 15<sup>th</sup> -17<sup>th</sup> November 2017, J. N. Tata Auditorium, Indian institute of science, Bangalore, Karnataka, India.

4. National seminar on **“Challenges in Animal Biotechnology and Environmental Management Research”** held on 23<sup>rd</sup> June, 2011 at Department of Animal Science, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.

5. Colloquium on **“3R Concept and its practice in Academia and Research”** held on 2<sup>nd</sup> October 2011 at Bharathidasan University, Tiruchirappalli, Tamilnadu, India.

6. Participated UGC Sponsored 79<sup>th</sup> orientation programme from 04<sup>th</sup> -31<sup>th</sup> July 2013, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.

7. State Level Workshop on **“Phytochemistry for Health and Environment”** held at 8<sup>th</sup> - 11<sup>th</sup> February 2016, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India

8. International Conference on **“Environment and Health in Changing Climate (CCIME2017) (Re-emerging Disease and Human Health Risks)”** held at 14<sup>th</sup> -16<sup>th</sup> September 2016, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, India.

9. Science Academies’ refresher course on **Modern Trends in Evolution and Biodiversity** organized by Department of Bontany , Periyar University , Salem during 02 -17 April 2024.

### **Other Training Programs**

1. Summer Training Programme on **“Advanced Molecular Techniques in Biological Sciences”** Held on 8<sup>th</sup>-28<sup>th</sup> May 2012, University of Madras, Chennai, Tamilnadu, India.

2. Short time Training course **"Molecular Approaches for Diagnosis of Animal cancers and strategies for Developing cancer vaccines"** held on 1<sup>st</sup> – 10<sup>th</sup> November 2014, Division of Veterinary Biotechnology, Indian Veterinary Research Institute, IVRI, Izzatnagar. India.

3. DBT- sponsored short term training course on **“Techniques for bioprocess & downstream process engineering and tools for systems metabolic engineering”** held on 1<sup>st</sup> -19<sup>th</sup> December 2014, Department of Biotechnology, Sri Venkateswara College of Engineering Pennalur, Irungattukottai, Sripeumbudur, Tamilnadu, India.

4. Online workshop on **“Next Gen Fuels: Sustainable approach”** held at National institute of technology, Tiruchirappalli. Tamilnadu, India.

5. National Seminar on **“Recent science scenario in Blue Biotechnology – RSSBB’22”**, held

at 23.03.2022 to 24.03.2022 Bharathidasan University, Tiruchirappalli.

6. National workshop on “**Animal cell culture & Transfection Techniques**” held from 24 to 26 July, 2024 Sponsored by RUSA 2.0 Biological Sciences in Department of Biochemistry, Bharathidasan University, Tiruchirappalli, India.

### Overseas Exposure / Visits

1. Post-Doctoral fellow, Institute of Green Environmental Research, University of Incheon, South Korea (22<sup>nd</sup> June to 17<sup>th</sup> December 2012).

### Membership in

#### Professional Bodies

1. Life Member: Deccan Environmental Research organization, India.
2. Life Member: International Institute of Chemical, Biological and Environmental Engineering, Malaysia.

#### Editorial Board

#### Advisory Board

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

1. Board Member of Environmental Biotechnology

### Resource persons in various capacities

Number of Invited / Special Lectures delivered: 06

### Others

1. Articles published in Newspapers / Magazines :--
2. Products developed : --
3. No. of PhD Thesis evaluated : --
4. No. of PhD Public Viva Voce Examination conducted : --
5. Sequences submitted in GenBank:17

\*\*Social Interests and Initiatives / Articles in Newspapers etc. can also be included

### Recent Publications

1. Mohanasundari C, Natarajan D, Srinivasan K, **Umamaheswari S**, and Ramachandran A (2007). Antibacterial properties of Passiflora foetida L – A common exotic medicinal plant.

African Journal of Biotechnology Vol.6 (23), pp. 2650-2653

2. **Umamaheswari S**, Dheen PS, Govindraj S, Krishna Kumar S , Sri Murali S, Sri PriyaJ, Babu Rajendran R. Isolation and Identification of Polyhydroxyalkanoates (PHAs) Producing Bacteria *Pseudomonas aeruginosa* EB4 from Petroleum Oil Contaminated Soil". Indian Journal of Natural Sciences, 2012, (3)1086-1092
3. **Umamaheswari S**, Dheen PS, Govindraj S, Kishna Kumar S, Sri Murali S, Sri Priya J, Babu Rajendran R. Isolation and Characterization of Polyhydroxyalkanoates (PHAs) Producing Bacteria from Sago Industrial Wastewater. Indian Journal of Natural Sciences, 2012, (3) 1153-1158
4. Selvaraj KK, Sivakumar S, Sampath S, Shanmugam G, **Sundaresan U**, Ramaswamy BR. Paraben resistance in bacteria from sewage treatment plant effluents in India. Water Science and Technology. 2013 Nov 1; 68(9): 2067-73. (IF.1.247).
5. Kumar PS, Kumar DS, **Umamaheswari S**. A perspective on toxicology of *Conus* venom peptides. Asian Pacific journal of tropical medicine. 2015 May 1; 8(5):337-51(IF.0.00).
6. Palanisamy SK, Giacobbe S, **Sundaresan U**. Marine ascidians potential source for new class of anti-cancer drugs. World J Pharm Pharm Sci. 2015 Jun 10; 4(8):474-85(IF.0.00).
7. Arumugam V, Venkatesan M, Ramachandran S, **Sundaresan U**. Bioactive Peptides from Marine Ascidians and Future Drug Development–A Review. International Journal of Peptide Research and Therapeutics. 2018 Mar 1; 24(1):13-8(IF: 1.12).
8. Palanisamy SK, Arumugam V, Peter MD, **Sundaresan U**. Patterns of chemical diversity in the marine ascidian *Phallusia* spp.: anti-tumor activity and metabolic pathway inhibiting steroid biosynthesis. 3 Biotech. 2018 May 1; 8(5):251(IF: 1.49).
9. Palanisamy SK, Arumugam V, Rajendran S, Ramadoss A, Nachimuthu S, Peter D M, **Sundaresan U**. Chemical diversity and anti-proliferative activity of marine algae. Natural product research. 2018 Sep 25:1-5(IF: 1.928).
10. **Umamaheswari Sundaresan**, Gopinath Kasi (2023). Synthesis of ZnO nanoparticles using *Sargassum wightii* ethanol extract and their antibacterial and anticancer applications. Biomass Conversion and Biorefinery. DOI: 10.1007/s13399-023-04977-1 (IF: 4.03)
11. Preethi Pedha Sathiyamurthy; Srimuarali Sampath; **Uma Maheswari S**; Rajesh Pandiyan Synergistic Remediation Of Hydrocarbons Using A Hybrid Approach: Harnessing Biosurfactant And Silver Nanoparticles, International Journal of Nano-Structures & Nano-Objects.2024.