

**Dr.A.Avila Jerley**  
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Trichy



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### Career Abstract

- A keen learner with exposure of 18 years in teaching field as an Assistant Professor in various disciplines of Biology
- Skilled professional at interpreting research outcome & completed **5 projects approved by Tamil Nadu State Council for Science and Technology (TNSCST) under Students Projects Scheme and a Minor Research Project by University Grant Commission**
- Profound ability to prepare research reports for publications and published fourteen papers in International Journals and **reviewer of two international journals.**
- Positive thinking, cheerful in nature with high commitment, good team worker and sincerity

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### Teaching Experience

Name of the Institution	Years of Experience
Holy Cross College, (Autonomous), Tiruchirappalli	June'14 – till date
Dr. N.G.P College of Arts & Science, Coimbatore	June '13 – May'14
N.M.S.S.V.N. College, Madurai.	June '05 – Aug ,12
Lady Doak College, Madurai.	July – August '04

### Academic Qualifications

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Year	Degree	Institution
2014	Ph.D	Manonmaniam Sundaranar University, Tirunelveli
2005	M.Phil Microbiology	Annamalai University, Chidambaram
2004	M.Sc Microbiology	Thiagarajar College, Madurai

2001	B.Sc., Botany (spl Microbiology)	Lady Doak College, Madurai
1998	HSC	St. Joseph Matriculation Higher Secondary School, Madurai
1996	SSLC	St. Joseph Matriculation Higher Secondary School, Madurai

### **Awards & Achievements**

- **Har Gobind Memorial Best Young Scientist Award** by Bose Science Society under Tamil Nadu Scientific Research Organization, Pudukkottai, affiliated with Vigyan Prasar, DST, Government of India, New Delhi.
- Provisional Specification have been filed with Indian Patent Office for Vermichar – Ecofertilizer, dated 31/05/2022
- **Best Outgoing Student Award** – Thiagarajar College, Madurai, 2004.
- Guided nearly 30 projects for post graduates students and 5 projects are approved by **Tamil Nadu State Council for Science and Technology (TNSCST) under Students Projects Scheme.**
- Completed **Minor Research Project of Rs.90000 by UGC, New Delhi during 2019.**
- Completed project titled A Student – Led Entrepreneurship to improve livelihood through production of Vermichar an Eco – Fertilizers for soil Remediation and received amount of **Rs.50,000 under UGC STRIDE** component of Holy Cross College, Trichy.(2019-2022)

<b>Project code</b>	<b>Title</b>	<b>Year &amp; Amount sanctioned</b>
BS-02 (TNSCST Scheme)	A Study on Synthesis and properties of Chitosan as a Biological Adhesive	2010, Rs.6000/-
CHE- 010 (TNSCST Scheme)	Biosynthesis and Antimicrobial characterization of silver based crystalline nanoparticles	2009, Rs.5000/-
ES-11 (TNSCST Scheme)	Production of PHB- Bioplastic using industrial waste as substrate by <i>Alkaligenes eutropus</i>	2006, Rs.5000/-

ES-17 (TNSCST Scheme)	Production of bioplastics such as PHB by methylotrophic organism using methanol.	2005, Rs.5000/-
F.NO:4-4/2015-16(UGC-SERO) Proposal No.1905 dated October, 2016-Reg	Investigation on Synthesis of Chitosan Nanobiopolymer from Mushroom and analysis its wound healing property to develop hydrogel in therapeutics	2016, Rs.90000/-
<b>Under UGC STRIDE</b> component of Holy Cross College, Trichy	A Student – Led Entrepreneurship to improve livelihood through production of Vermichar an Eco – Fertilizers for soil Remediation	2019-2022, Rs 50,000/-
ES-375 (TNSCST Scheme)	Zinc nanoparticles as environment stressors evaluating their impact on snail as sentinels for biomonitoring	2023-24, Rs.7500/-

## Paper Publication

(Google Scholar - Citation: 63; h index: 4; i10-index-3; Scopus h index: 1)

1. **Kannan, R.R., Jerley A.J.A, Ranjani M, and Vincent, S.G.P.** (2011). Antimicrobial silver Nanoparticle induces organ deformities in the developing Zebrafish (*Danio rerio*) embryos. **J. Biomedical Science and Engineering**, Vol 4, No 4: 246-252.
2. **Avila Jerley. A., A. Annalakshmi, and M. Sakthivel.** (2012). Purification, Characterization and Antitumour Properties of C-Phycocyanin from *Spirulina Platensis*. **Journal of Ecobiology**, Vol 30, No 1: 43-51.
3. **Avila Jerley. A & Anita Margret. A.** (2012). Mycosynthesis of silver Nanoparticles and its antibacterial effects in wound dressings. **International Journal of Pharmaceutical sciences and Research**. Vol 3(6): 1698-1704. **Impact Factor-0.14.**
4. **Avila Jerley. A & Nisha Jayasankar.** (2014). Production, Characterization and antimicrobial Activity of Monascorubramine from *Monascus purpureus*. **International journal of universal pharmacy and Biosciences**. Vol 3(1): 67-82. **Impact factor: 1.89**
5. **Avila Jerley. A & Magesh prabu .D.** (2015). Purification, characterization and antioxidant properties of C-Phycocyanin from *Spirulina platensis*. **Scrutiny International Research journal**

of agriculture, plant biotechnology and bio products. Vol 2(1):8-15.

**6. vila Jerley. A & Nivetha.S.** (2015). Evaluation of phytoconstituents, antibacterial assay and molecular docking of leaf extracts from *Clitoria ternatea*. **International Journal of Universal Pharmacy and Bio Sciences** 4(6):17-29.

**7. Avila Jerley A, M. Dhivya Bharathi and S. Rini Khanna.** (2016). Synthesis and Characterization of Carotenoids from *Micrococcus luteus* and its Impacts in Human Health. **Journal of Natural Sciences. Vol 6:35, 10722-10733.**

**8. Gayathri Murugan Vairamuthu, Josephin Jancy Rani Peter, Avila Jerley, Srinivasan Dhandapani.** (2017). Effect of Chitosan in Radical Scavenging and Bactericidal Activity Isolated from *Agaricus bisporus* Mushroom. **Int. J. Life. Sci. Scienti. Res.**4,(4):3102-3108.

**9. Anita Margret A, Kalaiarasan M, Avila Jerley A, Jeevaraj T.**(2019).Appraising the neuroprotective competence of nitrogen- enriched *Arthrospira platensis* in comparison to commercial Resource in Depressed mice model. **J. Rep.Pharm.Sci.,8:139-48**

**10. Avila Jerley.A,** Josephin Jancy Rani.P, Rajalakshmi.M, Shalini Gnanam.T. (2020). Impact of mushroom *Pleurotus ostreatus* on synthesis of chitosan & its effects in antioxidant & antibacterial activity. **Journal of Emerging Technologies and Innovative Research (JETIR).** 7(4): 399-415.

**11. Thamizhpriya M, Avila Jerley A, Shalini Gnanam T, Jeyakani M, Indu S, Rajalakshmi M.** (2020). In vitro and in silico approaches on the antibacterial activity of *Tinospora cordifolia* methanolic stem extract. **Asian Journal of Pharmaceutical and Clinical Research.**13(10):126-131.

**12. Arockiya Anita Margret, R. Mareeswari, K. Arun Kumar, Arockiya Avila Jerley.** (2021). Relative profiling of L-tryptophan derivatives from selected edible mushrooms as psychoactive nutraceuticals to inhibit P-glycoprotein: a paradigm to contest blood-brain barrier. **Journal of Biotechnology, Computational Biology and Bionanotechnology.** 102 (1): 55–64.

**13. Avila Jerley, Govindaraj Swetha , Velu Harini And Rathinam Priscila.**(2021). Effects of Biochar & Vermichar as a Soil Supplement to improve Maize Plant Growth. **Asian Journal of Advances in Research,** 10(3): 37-45.

**14. Anita Margret A, Nivetha I, Avila Jerley A. and Aishwarya S.** (2022). Subtilisin an Eminent Microbial Product as a Potential Skin Care Regulator of Melanogenesis –A Paradigm Synchronized With In Vitro / In Silico Approach. **Journal of Microbiology Biotech Food Science.**

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### Book Chapter

1. Authored Book Chapters in ‘Practical Zoology Book’; ISBN No.978-81-953014-2-3 , publication by Holy Cross College (Autonomous), Tiruchirappalli - 2.

2. Authored Book Chapter titled "Extraction and Partial Characterization of Collagen from Scales and Skin of Fish Tilapia" of published book entitled "Current Research in

Life Sciences (Volume - 5)" having ISBN 978-93-6135-427-4.

## **Academic Credentials**

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### **Memberships in academic bodies**

1. Member in PG board of studies in Thiagarajar College, Madurai.
2. Life Membership in Indian Association of Applied Microbiologist.
3. Life Membership in Bose Scientific Society, Pudukkottai.

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### Professional Course

- Completed Online course on “Remote Sensing Applications in Agricultural Water Management” sponsored by ISRO, Indian Institute of Remote Sensing, Dehradun, 3.8.2020 to 7.8.2020
- Completed Adaptive Design for Learning: Professional Certificate Course sponsored by United Board for Christian Higher Education in Asia and organized by Ateneo SALT Institute, Philippines from September to December 2021.
- Completed NPTEL online 8 weeks course from August to October 2022 on Ecology and environment conducted by Indian Institute of Technology, Madras in Swayam platform.

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### Conference/Seminar/Workshop/ Training Programme attended

Theme	Sponsored by/ Place	International / National / State level	Year	Paper Presentation / Participation
Two day Capacity building workshop for Faculty on SOGs and CBPR through service learning	United board for Christian higher education in Asia organized by LiFE, at Lady Doak College, Madurai	National	22 & 23 August 2022	Participated
Global Academic Rankings - Strategies to Improve Performance	Centre for Education Beyond Curriculum (CEDBEC) and School of Business and Management (SBM) Christ University, Bangalore.	National	10 May 2022	Participated
In Service Teacher Training Programme	TANSICHE, Chennai held at H.H Rajahs College, Pudukkottai	State level	5 <sup>th</sup> – 6 <sup>th</sup> May, 2022	Participated
Online Two – Week Refresher Course in Zoology	University of Delhi in collaboration with Department of Zoology, PSGR	National	December 2021	Participated

	Krishnammal College for Women, Coimbatore, Tamil Nadu under the aegis of ministry of education- PMMMMNMTT			
Three days Faculty Development Programme on Research Methodology	Bon Secours College for women, Tanjore,	National	April 2020	Participated
National Level FDP on Building a Predictive Understanding of Microbial Communities	Nirmala College for Women, Coimbatore		May,2020	Participated
One week online International Faculty Programme on Artificial Intelligence and IoT- Heuristic Transdisciplinary Perspectives	CICRSD, Holy Cross College Trichy	International	July 2020	Participated
Online course on “Remote Sensing Applications in Agricultural Water Management”	Indian Institute of Remote Sensing, Deharadun,	National	August 2020	Participated
Webinar on “Is Artificial Intelligence a Perfect Match for Nanotechnology	Centre for Molecular and Nanomedical Sciences, Sathyabama Institute of ScienceTechnology Chennai	National	August 2020	Participated
Webinar on National Digital Library of India User Awareness	National Digital Library of India	National	May 2020	Participated
BIRAC -Webinar on Nutrigenetics & Nutriogenomic: Ready	Organogenic biotech PVT Ltd Chennai	National	June 2020	Participated

for clinical use or still way to go?				
UGC Sponsored Refresher course in Life Sciences	HRDC, Bharathidasan University, Trichy	State		Participated
UCG Sponsored Current Trends in biological sciences	Department of Botany, St. Xaviers College, Pudukottai	National	March 2019	Participated
3 <sup>rd</sup> International Conference on recent trends in microbiology(RTM-2019)	Dept. of Microbiology Alagappa University, Karaikudi-3	International	Dec 2019	Participated
International Conference on “Networking, Research and Innovation in Higher Education for a Sustainable Society: Challenges and Channels” – <i>ICNRI 2018</i>	Holy cross College Trichy	International	July 2018	Participated
Three Days Training Programme on “Aquaculture Genetics and Pathology with Exposure to seed Production Facility of RGCA Hatcheries”	Rajiv Gandhi Centre for Aquaculture, Sirkazhi, Nagapatinam, TN	State	Jan 2018	Participation
Workshop on Research Methodology	Trichy SRM Medical Hospital and research Centre, Trichy	National	Mar 2018	Participated
International Conference on Biomedical Sciences Research	ICMR funded, Dept of Biotechnology, HolyCross College, Trichy	International	Dec 2017	Participation
Workshop on various aspects of prevention, acute care and rehabilitation	Dept of Biotechnology, HolyCross College, Trichy	State	Dec 2017	Participation



National conference on Youth and Values	Dept of Value Education, Holy Cross College, Trichy	National	Dec 2017	Participation
Training on QIAGEN Real time PCR	Dept of Biotechnology, HolyCross College,Trichy	State	Nov 2017	Participation
98 <sup>th</sup> Orientation Programme (UGC Sponsered)	Human Resource Development Centre,BDU	State	Aug 2017	Participation
National Conference on Enhancing Entrepreneurship and Innovation in Biotechnology for Sustainable Development	H.H. The Rajah's College, Pudukkottai.	National	Jun 2017	Participation
9 <sup>th</sup> symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design	Dept. of Bioinformatics. Alagappa University, Karaikudi	National	Feb 2017	Participation
National Conference on Transitional and Translational Scenarios in Biological Sciences (3I's – <i>In vitro</i> to <i>In vivo</i> to <i>In Silico</i> )	Dept. of Microbiology, Dr. N.G.P. Arts and Science College, Coimbatore.	National	Sep 2016	Participation
Better Environment and Better Future	Holy Cross College, Trichy	National	Aug 2016	Participation
National Seminar on Bio-Entrepreneurship	Department of Botany, Holy Cross College, Trichy.	National	Feb 2016	Participation
Achievements, Challenges and Opportunities in environmental Biotechnology for Sustainable Livelihood Security	TNSRO, Pudukottai	National	Feb 2016	Participation

Stem cell as regenerative Medicine	N.M.S.S.V.N College, Madurai	Guest Lecturer	2016	Resource Person
Workshop on immunohistochemistry and computational tools in biology	Holy Cross College, Trichy	State	Feb 2016	Resource Person
National conference on Natural sciences		National	Jan 2016	Participation
CSIR- NET Coaching Class	St.Joseph's College,Trichy	State	2015	Resource person
Certificate program on Good laboratory Practices & Intellectual Property rights in Biosciences.	Holy Cross College, Trichy	National	Feb 2015	Participation
Three day workshop on immunological ,nano techniques and bioinformatics	Holy Cross College, Trichy	State	Jan 2015	Participated
Recent Trends in Life Sciences	Jamal Mohamed College, Trichy.	National	Feb 2015	Paper presentation.
Momentous Microbes from Menance to Marvel	Dr. N. G. P Arts & Science College, Coimbatore	State	Aug 2015	Presented and won Second Prize
Workshop on Basics of Bioinformatics & CADD	Holy Cross College, Trichy	State	2014	Participated
Bioprospecting for Today's World	Bharathiyar University,Coimbatore	National	2014	Paper Presentation and <b>Won First Prize</b>
DST Inspire Internship Science Camp	Dr.N.G.P Arts and Science College, Coimbatore	State Level	2013	Resource Person
Medicinal Plants and Products	Dr.N.G.P Arts and Science College, Coimbatore	National	2013	Participation
Biotechnology Present and Future	Dr.N.G.P Arts and Science College, Coimbatore	National	2013	Paper Presentation
Bioknowledge for Better Environment	Syed Hameedha Arts And Science College, Kilakarai	National	2012	Paper Presentation and <b>Won Best Paper Award</b>
Biotechnology its future advent and promises	Bishop Heber college, Trichy	National	2011	Paper presentation.
Two day workshop on enzyme kinetics, crystal growth & polymers	ANJAC, sivakasi.	National	2011	Participation

### **Invited lectures to other college**

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- Served as Resource person for the CSIR NET Coaching classes for life sciences in CSIR-UGC-NET Coaching Centre for Life sciences, School of Biological Sciences, St. Josephs College, Tiruchirappalli. (2015)
- Severed as resource person and delivered a lecture on Stem cell as regenerative medicine on 25.01.2016 in the Department of Microbiology and Biotechnology, N. M. S. S. Vellaichamy Nadar college, Madurai.
- Served as chair person in national conference on computational analysis of molecular data in synergy with biological Applications (CAMB-2017) organized by Department of Biotechnology and Bioinformatics held on 03.02.2017 at Bishop Heber College.
- Severed as resource person and delivered a lecture on Sleep Rhythm and its Disorders on 14.06.2022 for I Year B.Ed. students (Life Science) in Holy Cross College of Education, Tiruchirappalli.
- Served as Evaluator for oral presentation in National Children Science Congress- 2022 for school students on 26.11.2022 organized by Tamilnadu Science Forum, National Council for Science and Technology, Govt of India.

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#### **E-lessons developed:**

<b>S.No</b>	<b>Title of e-lessons</b>
<b>1.</b>	<b>Restriction Enzymes</b>
<b>2.</b>	<b>Basics of Stem cells</b>
<b>3.</b>	<b>Production of Golden Rice</b>
<b>4.</b>	<b>Design of Fermenter</b>
<b>5.</b>	<b>Polymerase Chain Reaction</b>
<b>6.</b>	<b>Pasteurization Process in milk</b>

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