

CURRICULAM VITAE



Dr. S.SHANTHI M.Sc., M.Phil., Ph.D., SLET

EDUCATIONAL QUALIFICATION

Ph.D.,	Microbiology	(2012)	Highly commended
M.Phil.,	Biotechnology	(2005)	Distinction
SLET	Microbiology	(2000)	(State Level Eligibility Testing)
M.Sc.,	Microbiology	(1995)	University First Rank (GOLD MEDAL)
B.Sc.,	Zoology	(1993)	University Second Rank

ACADEMIC EXCELLENCE

- ◆ Awarded with **Gold Medal for** Securing **University First Rank** in M.Sc
- ◆ Sri Sivasailapathi **Merit Prize** in M.Sc for having Secured highest marks in the aggregate of all papers.
- ◆ Obtained **Merit certificates** and **prizes** for **proficiency** in UG & PG.

AWARDS

- ◆ **Best oral presentation award** for the paper entitled Pine Apple & Beet Root Peels – Natural Source of Ethanol in National Symposium at A.V.V.M. Sri Pushpam College, Poondi, Tamilnadu.
- ◆ **Received a Special award from Dr. Manju Sharma, Secretary, DBT, and New Delhi for the work done on Vermicomposting in the year 2001.**
- ◆

TEACHING EXPERIENCE

- ❖ **20 Years** of teaching experience at undergraduate, Post graduate and Master of Philosophy (Research) level in colleges **affiliated to Bharathidasan University, Tamilnadu, South India.**
- ❖ **1 year-** Handled Microbiology for DMLT (Diploma in Medical Laboratory Technology) students.

AREA OF SPECIALIZATION IN TEACHING

- ❖ Microbial Genetics
- ❖ Molecular Biology
- ❖ Biotechnology
- ❖ Genetic Engineering
- ❖ Industrial Microbiology
- ❖ Environmental & Agricultural Microbiology
- ❖ Virology
- ❖ General Microbiology

RESEARCH EXPERIENCE

- ❖ **17 Years** Of Research Experience

AREA OF SPECIALIZATION IN RESEARCH

- Bioethanol production
- Antibacterial activity of medicinal plant extracts on human and plant pathogens
- Role of botanicals , Sea weed and cow urine extracts on Human and plant pathogens
- **Efficacy of cow urine as growth promoter in Agriculture, etc.,**
- Standardization and assay of the effect of Liquid organic fertilizers *Viz., Jeevamirtham, Beejamirtham, Meen Amino Amilam, Pancha Kavya, Pazhak Karaisal, Modified Pancha Kavya, Azolla etc .*, in crop plants like Paddy, ladies finger and raddish .
- Qualitative & Quantitative phytochemical analysis of secondary metabolites

- Purification and identification of secondary metabolites from plant extracts.
- Effect of herbal insecticides and pesticides on plant pathogens.

RESEARCH MENTORSHIP

Official recognition for Research Mentorship to Junior Scholars and students
(obtained from Bharathidasan university)

- **M.Phil - Ref.No.013035/R.A/M.Phil/Mic.Bio/2007/Date:15.05.2007**
- **Ph.D - Ref.No.27873/Ph.D.K1/Microbiology/R.A./Date:30.08.2013.**

MENTORED:

- **Ph.D – 2 Students Pursuing (Registered in the Academic year (2013 – 2014).**
- **M.Phil – 55 Students completed (From 2007 onwards)**
- **M.Sc – 75 Students completed (From 2001 onwards)**

RESEARCH OUTPUTS:

NATIONAL AND INTERNATIONAL PATENTS

• PATENT : I

- **Indian patent obtained for a 3 in 1 BIOFORMULATION KKKP- *Krimi Kathak Krishi Poshak*. (KKKP). It is a three in one liquid organic fertilizer which can increase the growth, yield and control the pests also. Shelf life time is 1.5 years. It is tested on different vegetables, greens, pulses, mulberry and tea. Patent No: 3535/CHE/2013.**

• PATENT : II

- **International patent obtained for a compound named 3-(2-hydroxyphenyl)-7-methyl-2,3-dihydro-4H-pyran-4-one Benzoxazin-4-one useful for providing wide spectrum**

antibacterial activity against multidrug resistant bacteria, and bacteria causing respiratory tract infection including *Escherichia coli* Patent Number: IN201403030I4.

- **PATENT : III**

- **International patent obtained for a novel Eco friendly Organic Plant Bactericide (EOPB) formulation from less expensive substrates against plant pathogenic Bacterial strains and method for making such formulation.**

EXTERNAL RESEARCH GRANT

- ❖ **Co Principal Investigator** in a Project entitled “Studies on Anti cancer protein synthesized by marine Lactobacilli” Sponser: **UGC, New Delhi. Amount: 10.79 Lakh - Completed**
- ❖ **Principal Investigator** in a Project entitled, “*In-Vitro* and *In-Silico* analysis of the efficacy of medicinal plants against bacterial pathogens infecting *Oryzae sativa* of Cauvery Delta Region in TamilNadu state”. It is short listed in UGC – Major Research Project 2013 and **invited for Interface meeting at New Delhi. Amount : 14 Lakh**
- ❖ Seed money project on “Isolation and identification of *Xanthomonas oryzae* pv *oryzae* from Cauvery delta region and their control through medicinal plants and cow urine. **Amount: 1.25 Lakh. - Completed**
- ❖ Seed money project on “Isolation ,identification genetic characterization of MDR pathogens from clinical samples and effect of bio active compounds isolated from marine algae *Sargassum weightii*. **Amount: 3.25 Lakh. – Completed**
- ❖ **Applied for a Major Research Project to UGC** entitled, “ A three dimensional approach in the efficacy of bio- formulation against microbes infecting *Oryzae sativa* of Cauvery Delta Region”As **Principal Investigator . Amount : 23,35,888.**

BOOK PUBLICATION

- **Molecular Biology and Molecular Genetics.** (Power Book publisher 2011. ISBN NO – 81-909300 – 4 -4 **Authors: Dr.S.Shanthi & Dr.K.Rajapandiyan.**
- **Mooligai Saagupadi – At Zero Budget (Herbs- Quality Control and Marketing) 2001. Authors: Dr.S.Shanthi, Dr.S.Rajan, and Dr.P.Brindha**

RESEARCH ARTICLES PUBLISHED IN REFEREED JOURNALS

NO.OF PUBLICATIONS: 24

- K. Raja Pandiyan, **S. Shanthi**, P. Raja, J.S. Gnanaraj Jesudian and S. Madhavan. Prevalence and Multi Drug Resistance Pattern of Uro Pathogens in Tribal and Tea Garden Workers in Assam. Journal of pure and applied Microbiology. Vol-3(2): 617-624, 2009.
- ♦ P.Sumithra, T. Selvaraj and **S.Shanthi**. Antibacterial And Phytochemical Screening Of *Sphaeranthus Amaranthoides* (L.Burm) Against Human Pathogenic Bacteria. Journal of Pharmacy Research, Vol 4(7), 2206-2208,(2011).
- ♦ **S. Shanthi**, Thiagarajan, C, Panneerselvam, A. *In –Silico* Docking Investigation of DHPF Compound Isolated from *Pongamia pinnata* linn Leaves Against *Xanthomonas* Species. Journal of Pharmacy Research. Vol 4(10), (2011).
- ♦ A. M. Murugan, **S. Shanthi**, C. Arunachalam, N. Sivakumar, S. Elamathy and K.Rajapandian. Study on cow urine and *Pongamia pinnata* linn Seed – a Natural, Cost Effective, Ecofriendly Remedy to Bacterial Leaf Blight of Paddy (BLB)” African Journal of Biotechnology.Vol11 (40), 9591-9598,(2012).
- ♦ K. Rajapandiyan, **S.Shanthi**, A.M.Murugan, G.Alagu Muthu and A. J. A. Ranjit Singh .Prevalence of Intestinal Parasitic Infections among Tea Tribes of North East Assam .Journal Of Pharmacy Research.Vol 4(10), 3477-3479. 2011.

- ◆ R. Venkatesh , **Shanthi.S** , Rajapandiyan.K ,Elamathi S,Thenmozhi S. Radha N
“Preliminary Study On Antixanthomonas Activity, Phytochemical Analyses, and
Characterization Of Antimicrobial Compounds From *Kappaphycus Alvarezii*” Asian
Journal Of Pharmaceutical And Clinical Research.Vol.4(3),46-51,(2011).

- ◆ **S. Shanthi** ,Elamathy S, Panneerselvam. A ,Radha N. Anti *Xanthomonas* Activity
of *Pongamia Pinnata* Leaves Cow Urine Extract –A Natural Cost Effective
Ecofriendly Remedy to Bacterial Leaf Blight Of Paddy (BLB). Journal of pharmacy
research, Vol 4(3), 650-652, (2011).

- ◆ S.Thenmozhi and **S.Shanthi**. Antibacterial Activity and Phytochemical Analysis
of *Aloe vera* Against Clinical Isolates. Journal of pharmacy Research. Vol 5(2), 1044-
1045, 2012.

- ◆ C. Thiagarajan, **S.Shanthi** and Thiruneelakandan.G. Molecular Docking Studies Of
APOE4 Inhibitors For Alzheimer’s Disease. Online Journal of Biosciences And
Informatics, 5 (1), 362-375, 2013.

- ◆ K. Rajapandiyan, **S. Shanthi** and S. Vidya . Assessment of microbial quality in
marketed herbal drugs sold in Trichy city. International journal of pharmaceutical,
chemical and biological sciences. Vol 3 (3). 894-898.2013.

- ◆ G.Thiruneelakandan , Vidya S, Vinola Jenifer S, Babu V, **Shanthi S** and Kathiresan
K.Identification of *Lactobacilli* Isolated From Mangroove Biotopes Of East Coast Of
India. Global Educational Research Journal, Vol 2 (2), 033-037, 2014.

- ◆ C. Thiagarajan, **S. Shanthi**, M. Karthikeyan and
G. Thiruneelakandan. Molecular Modeling and Docking Studies Of Murb Inhibitors
For *Klebsiella pneumonia* Infections. Drug Invention Today, Vol 6 (1), 46-52, 2014.

- ◆ K. Rajapandiyan , **Shanthi S**, Vijayalakshmi P, Daisy P, Murugan M, Ranjitsingh AJ. Prevalence of Extended-Spectrum β -Lactamase-Producing Multidrug-Resistant *Escherichia coli* Among Isolates from Community-Acquired Infections and *In Silico* Structural Modeling of an ESBL Protein. Microbial Drug Resistance, Vol 20(2), 170-176, 2014.
- ◆ **S. Shanthi**, V. Bharathi, G. Hemalatha and E. Rajeshwari. Phytochemical analysis and antibacterial efficacy of *Adathoda vasica*. World Journal of Pharmacy and Pharmaceutical Science, Vol. 5 (3):2016; 799-808.
- ◆ K. Anandhi, S. L. Anuja and **S. Shanthi**. Biodegradation of hair dye by marine fungal isolates .World Journal of Pharmacy and Pharmaceutical Sciences. Vol.5 (9): 2314-2331. 2016.
- ◆ V. Bharathi, **Shanthi. S.** and G. Hemalatha: In-vitro screening of antibacterial efficacy of *Cadaba fruticosa* (L.) Against common human Pathogens: World Journal of Pharmaceutical Research Vol 5, Issue 4, 2016.
- ◆ **S. Shanthi** and V. Bharathi. Synthesis of silver nanoparticles from flower extract of *Abutilon indicum* and its Characterization". World Journal Of Pharmacy And Pharmaceutical Sciences. Vol 6. (6) ; 1752-1756, June 2017.
- ◆ V. Bharathi and **S. Shanthi**. Green synthesis of silver nanoparticles from flower extract of *Nerium oleander* and its characterization. World Journal Of Pharmaceutical Research, Vol.6 (6). 1410- 1417. June 2017.
- ◆ V Bharathi **Shanthi.S.** Vijaya Anand . Green Synthesis Of *Achyranthes aspera* Silver Nano Particles And Confirmation Of Them Through Microscopy And Spectrophotometric Techniques. European Journal of Biomedical and Pharmaceutical sciences.2017. Vol 4, (12);:348-315.
- ◆ K.Manoj kumar , **Shanthi .S** Rajapandiyan .K and Kavitha. P. Field evaluation of

bioformulation KKKP and biopesticides against brinjal shoot and fruit borer

Leucinodes arbonalis Guenee under semiarid conditions of Tamilnadu. 2017.

International journal of pure and applied biosciences. Vol 5, (1): 840-843.

- ◆ Bharathi Vadivelu , Vijaya Anand Arumugam , **Shanthi Subbarayan** , Ali A. Alshatwi , Rajapandiyan Krishnamoorthy. Effect of *Macrotyloma uniflorum* on antiobesity in rats fed with a high fat diet .Saudi Journal of Biological Sciences xxx (2018) .1- 7. (Elsevier)
- ◆ Rajapandiyan Krishnamoorthy , Ali Alshatwi , **Shanthi Subbarayan** , Bharathi Vadivelu, Vaiyapuri Subbarayan, Periyasamy , Mohammed A. Al-Shuniaber and Jegan Athinarayanan. Impact of farm-made liquid organic nutrients jeevamirtham and fish amino acid on growth and nutritional status in different season of *Abelmoschus esculentus*—a self-sustainable field trial .Organic agriculture (springer Journal). Vol 4 , 1-15. 2018.
- ◆ J. Jayachitra, K. Pavithra, R. Suja pandian, V. Bharathi and **S. Shanthi** . "Green Synthesis of Silver Nano Particle Using *Senna alata*", World Journal of Pharmaceutical Research. Vol 7, Issue 15. 507-517, July 2018.
- ◆ J. Jayachitra, K. Pavithra, R. Suja pandian V. Bharathi, **S. Shanthi**. "Phytochemical and Antimicrobial Analysis of *Senna alata* Leaves Extract", World Journal of Pharmaceutical Research. Vol 7, Issue 14, 1030-1044, July 2018.

NON REFEREED JOURNALS

NO.OF PUBLICATIONS: 10

- ◆ **S.Shanthi** and K. Rajapandiyan. Management of Soft Rot of Chilli through Cow Urine and Medicinal Plants Scientific Validation of Traditional Formulation. Research Journal of Biological Sciences. October/ December. Vol 1, 13-19, 2009.

- ◆ **Shanthi.S** and K. Rajapandiyan. Pathogenic Bacterial Profile Of Street Vended Fruits In Trichirappalli City. Journal of Ecobiology, vol 26, 73-79, 2010.

- ◆ **S.Shanthi**, P.Sumithra and A.Panneer Selvam. Preliminary Phytochemical Screening and Antixanthomonas Activity of Cow Urine Extract of *Calotropis gigantea* (L.) Ant.f. Journal of Basic and Applied Biology.Vol 5 (1&2), 252-258, 2011.

- ◆ K. Rajapandiyan, **S.Shanthi**, A.M.Murugan, G.Alagu Muthu andA. J. A. Ranjit Singh *Azadirachta indica* – Cow Urine Extract, a Novel Controlling Agent towards Clinically significant Multi Drug Resistant Pathogens. Journal of Applied Pharmaceutical Science Vol 01(10):107 – 113. 2011.

- ◆ **S.Shanthi** and K. Rajapandiyan. Identification Of Ecofriendly Alternate Botanical Bactericide In The Management Of Bacterial Leaf Blight Of Paddy (BLB). Research Journal of Biological Science. January- march. Volume III, 26-34 2011.

- ◆ Varalakshmi. S, Karthik.S and **S.Shanthi**. Biopotentials of *Mimosa pudica* Extracts as a Valuable Antibacterial and Antioxident Resources. International Journal of Research Instinct, 1(1), 193-207, 2014.

- ◆ **Subbarayan Shanthi**, Nallusamy Sivakumar, K. Rajapandian, Annamalai Panneerselvam, Natarajan Radha"Antibacterial activity of cow urine extract of neem against *Xanthomonas oryzae* - the causative agent of bacterial leaf blight disease of paddy. Asian Journal of Microbiology, Biotechnology and Environmental Sciences.Vol.17, (1): 169-177, 2015.

- ◆ Bharthi.V, Hemalatha.G and **Shanthi.S**. Antihelminthic activity and phytochemical screening of *Cucurbita maxima* and *Momordica charantia* seeds . International Journal of Institutional Pharmacy and Life Sciences 6(1): 22-31.January-February 2016.

- ◆ G.Hemalatha V. Bharathi, A. Vijaya Anand, S. **Shanthi.S.** Changes in Antioxidant level in *Macrotyloma uniflorum* L. Grown under lead toxicity. International Journal of pharmacy & Technology.ISSN:0975-766X Vol(8):Issue (3):18971-18977,2016.
- ◆ V. Bharathi A. Vijaya Anand P. Anitha and **S. Shanthi.** Chemical Characterization of GC-MS Analysis of *Tabernaemontana divaricata*. European Journal of Biomedical and Pharmaceutical sciences. Vol 5,(4): 451-454. 2018.

NCBI- PUBLICATIONS – USA

TOTAL GENE SUBMISSIONS: 6

- 16S rRNA sequence of Multi Drug Resistant Bacteria isolated from Tea Tribes of North East Part of Assam & community acquired infections.. Submission Year -2011 & 2012.
 - *E.coli* - JQ303326
 - *P.aeruginosa* - JQ303330
 - *P. mirabilis*- JQ303327
 - *S. aureus* - JQ303331.
 - *Salmonella entrica* -JX406151
 - *Klebsiella pneumoniae* - JX406150.

PROTEIN MODEL DATA BANK – PUBLICATIONS – USA

TOTAL SUBMISSIONS: 4

- ❖ **PMDB Accession no : PM0077897** - Extended spectrum β -lactamases Protein Tertiary structure Produced by *P. aeruginosa*
- ❖ **PMDB Accession no : PM0077898** - Extended spectrum β -lactamases Protein Tertiary structure Produced by *E.coli*
- ❖ **PMDB Accession no : PM0077901** - Extended spectrum β -lactamases Protein Tertiary structure Produced by *K. pneumoniae*
- ❖ **PMDB Accession no : PM0077902** - Extended spectrum β -lactamases Protein Tertiary structure Produced by *P. mirabilis*

PAPERS PRESENTED IN WORKSHOPS/SEMINARS/ SYMPOSIUMS/ CONFERENCES	TOTAL NO OF PAPERS PRESENTED: 15
--	---

- “Bio ethanol production from banana and beetroot peel” in National Symposium on recent trends in Biological research conducted by A.V.V.M. Sri Pushpam College, Poondi.
- Antibacterial effect of *Azadirachta indica*, *Aloe vera*, on *Xanthomonas campestris* pv *oryzae* “ in National level Seminar on “ Emerging Trends in Biochemistry” – Health & Disease (NSHD-2007) conducted by Department of Biochemistry, Periyar University, Salem TamilNadu, South India.
- “Antibacterial effect of *Aloe vera*, *Cissus quadrangularis*, and *Vitex negundo* on *Xanthomonas campestris* pv *citrii* “ in National level Seminar on “ Emerging Trends in Biochemistry” – Health & Disease (NSHD-2007) conducted by Department of Biochemistry, Periyar University, Salem, TamilNadu, South India..
- “Effect of cow urine and medicinal plant on plant pathogen” in international conference conducted by Indian Association Of Biomedical Scientist IABMS at Trichy, TamilNadu, South India.
- “ Role of aqueous and cow urine extracts of botanicals in the management of bacterial leaf blight of paddy” in “National seminar on advances in Microbiology” of organized by PG and Research Department of Microbiology of Kurinji College of arts and Science, Trichy, TamilNadu, South India.
- **Presented** a paper in “state level seminar on scope of organic farming and sustainable agriculture” organized by model organic farm & NFMC, Bharathidasan University Trichy., TamilNadu, South India.
- “Bactericidal effect of *Oscimum sanctum* against plant pathogens such as *Xanthomonas oryzae* and *Xanthomonas citrii* in state level seminar on Animal biotechnology sponsored by UGC, New Delhi, India, conducted at Jamal Mohamad College Trichy, TamilNadu, South India.

- “Anti bacterial effect of *Adathoda vasica* against plant pathogens such as *Xanthomonas oryzae* and *Xanthomonas citrii* in state level seminar on Animal biotechnology sponsored by UGC, New Delhi, India, conducted at Jamal Mohamad College Trichy, Tamil Nadu, India.
- “Isolation & Characterization of few vibrio species from marketed marine fishes and effect of onion on their survival rate” state level seminar on Animal biotechnology conducted by Jamal Mohamed College, Trichy, TamilNadu, South India.
- “Bio ethanol production from pine apple and beetroot waste” in National Symposium on “Current Scenario in Microbial Technology” conducted by Jamal Mohamed College, Trichy, TamilNadu, India.
- “Effect of *Cassia auriculata* against few Urinary Tract pathogens in National level Seminar on “Herbal Focus – 2016” conducted at Srimad Andavan Arts & Science College, Trichy, TamilNadu, India.
- “Post Harvest effect of *banana* in earthen pot cool chamber” in National level Seminar on “Herbal Focus – 2016” conducted at Srimad Andavan Arts & Science College, Trichy, TamilNadu, India.
- “Preservation of Sapotta without electricity and pollution free earthen pot cool chamber” at Regional Seminar on Recent Trends, in Bio technology, Sponsored by UGC, New Delhi India conducted at Sri Paramakalyani College, Trinelvei, Tamil Nadu India.
- “Post harvest effect of banana in the earthen pot cool chamber with reference to biochemical and Microbial load” at Regional Seminar on Recent Trends, in Bio technology, Sponsored by UGC, New Delhi India conducted at Sri Paramakalyani College, Trinelvei, Tamil Nadu, South India.
- Presented a paper on “ Cow urine extract of *Pongamia Pinnata* Linn leaves a promising drug candidate for Urinary Tract Infection” in an International conference at of Shrimati Indira Gandhi College, Tiruchirappalli, Tamil Nadu, South India.

WORKSHOPS/SEMINARS/ SYMPOSIUMS/ CONFERENCES PARTICIPATED
TOTAL NO OF SEMINARS PARTICIPATED: 21

Participated in the science Academies “ Refresher Course on Bioprospection of Bioresources: Land to Lab approach” from 4th to 18th January at PG & Research Department of Botany, St.Joseph College (Autonomous), Tiruchirappalli, TamilNadu.

SERVICE TO THE PROFESSION

FREE& PAID CONSULTANCY

- **Paid Consultancy** - Under the scheme of “Swarna Jayanthi Sahari Rojgar Yojana” of Government of INDIA, through Trichy City Corporation – 39 Days Training program was provided to 130 Self Help Group women on “Vermicomposting, Mushroom cultivation, EM Solution, Probiotics preparation, herbal and Terrace gardening”.

INCOME GENERATED RS.1.94, 805.

- **Paid Consultancy** – A 3 days training program was conducted Under the scheme of “Youth Led Sustainable Development Programme (YLSDP) Sponsored by “Rajiv Gandhi National Institute of Youth Development (RGNIYD), (Institute of National Importance by the Act of Parliament No. 35/2012) Sriperumbudur, Tamil Nadu, Ministry of Skill Development, Entrepreneurship Youth Affairs & Sports, Government of India” jointly with the Entrepreneur Development Cell of “Shrimati Indira Gandhi College, Tiruchirappalli” in the title “HEALTH AND HEALTHY LIFE STYLE”. Training was provided to 100 students from National college, Kurinji college, Srimad Andavan Arts and Science College and Shrimati Indira Gandhi college on
- **Nutrition and Balanced Diet**
- **Preparation of Indigenous Food**
- **Fireless Cooking**

- **Healthy Diet for different Stages of Growth**
- **Organic manure production - Vermicomposting**
- **Growing Organic Vegetables – Terrace & Kitchen garden**
- **Yoga and meditation**

INCOME GENERATED RS.2,00, 000.

- Consultancy provided to CENTRAL UNIVERSITY, Thiruvapur, to establish and recycle the campus waste into nutrient rich “vermicompost” in an eco-friendly manner.

INCOME GENERATED RS.5, 000.

- Free Consultancy to farmers on **“Organic farming”** at villages like Konalai, Thottiyam, Kavundampatti, pothavur etc **in Tamilnadu, South India.**

SERVICE TO THE STUDENTS COMMUNITY

- Acted as resource Person in State Level Seminar on **“Echoes on Ecosystem”** organized by Department of Microbiology, Dr.MGR Janaki College of Arts & Science for Women, Chennai, **Tamilnadu, South India.**
- Acted as Resource person for a certificate course on **“Mushroom Cultivation and Herbal Insecticide production”** conducted at **Cauvery College for Women, Tiruchirappalli** and provided **“hands on training”** to 90 under graduate students.
- Resource person on **“Environmental awareness programme”** for Under Graduate Students (300 Nos.) at **Urumu Dhanalakshmi College, Tiruchirappalli, tamil Nadu, South India.**
- Resource person in **NSS camps** conducted by **Srimad Andavan Arts & Science College, Tiuchirappalli, Tamilnadu, South India** and **Kongu Nadu Engineering**

College, Thuraiyur. Enlighten the students on Health and hygiene, Mushroom cultivation and organic cultivation.

- Resource person to under graduate girls and boys of Srimad Andavan Arts & Science College, Trichy and **created awareness** about **“Healthy food habits, ill effects of skipping meals”**.
- Resource person to under graduate and school students and **created awareness on environmental protection sponsored by Government of Tamilnadu.**
- Resource person in **“summer course cum hands on training on Vermi composting to create awareness among students on environmental protection”** for students of Jayendra Matriculation School, Tiruchirappalli (27.4.2015).
- Trained 100 UG and PG students of Department of Microbiology, Shrimati Indira Gandhi College, Tiruchirappalli on recycling of campus wastes into nutrient rich vermicompost through ecofriendly vermicomposting.
- **Resource Person in NSS Camp 2015-2016** of Shrimati Indira Gandhi College, Tiruchirappalli and trained 200 students in the topic **“An Alternate low cost feed for cattles and vermicomposting”** at Anthanallur, Tiruchirappalli held on 11.03.2016.
- **Resource Person in “Sustainable Development Through waste Management: Concept and Practice”** at Department of Social work, Central University of Tamil Nadu held on 03.04.2017.

SERVICE TO THE SOCIETY

ACTED AS RESOURCE PERSON IN

- Resource person in a program titled as **“AARAICHI ARANGIL”** telecasted by **DOORDARSAN KENDRA** on 15.11.13. It is a program to the public, especially to the students providing information regarding Research in Biological Sciences.

- Resource person for **Karnataka NBA Government Officials** and enlighten them on **“Solid and liquid waste management”**. The program was sponsored by **Ministry of Drinking water and Sanitation**.
- Resource person for **Entrepreneurial Development cell members** at STET Women College, Mannargudi, **Sponsored by Government of Tamilnadu**.
- Resource person on “Solid waste management” for APOs of DRDA **health Officials sponsored by Ministry of Drinking water and Sanitation. (2014)**.
- Resource person to plantain **farmers of Thottiyam** and provided hands on training on Azolla cultivation, **Biofertilizer production** and herbal insect repellent preparation **at their farmyard**.
- Resource person in **“summer course cum hands on training on Vermi composting to empower SHG women as Entrepreneurs”** for the members of SEVAI (NGO), Allur, Tiruchirappalli (28.4.2015).
- **Resource Person in an** outreach program entitled as **“Organic Farming- Basics and advanced techniques”** on 21.07.2015 at Singalapuram, Pothavur, Srirangam Taluk, Tiruchirappalli Tamilnadu, where **150 farmers are trained and benefitted**.

ADDITIONAL CREDENTIALS

- ◆ **Acted as reviewer in ELSEVIER journal “Saudi Journal Of Biological Sciences”** awarded since March 2019.
- ◆ **Acted as Doctoral Committee member** for Ph.D Student.
- ◆ **Chief Superintendent** - Bharathidasan University Examinations. November 2012.
- ◆ **Academic council member** of Srimad Andavan Arts and Science college, Trichy, Tamil Nadu, South India from 2014-2016.
- ◆ **Member in Board of Studies in Microbiology**, A.V.V,M . Sri Pushpam College, as Poondi, Thanjavur, Tamil Nadu, South India from 2014-2016.

- ◆ **Member in Board of Studies in Microbiology, Bharathidasan University, Tamil Nadu, South India from 2019.**
- ◆ **Acted as Subject expert in the Question Paper Scrutiny Board** from 4.4.2015 to 9.4.2016 in P.S.G college of arts and science, Coimbatore, Tamil Nadu, South India.
- ◆ **Acted as Convener and conducted a “Workshop on Microbial Application and Other Techniques”** at Srimad Andavan Arts and Science college, Trichy, Tamil Nadu, South India in January 2014.
- ◆ **Acted as Organizing Committee member and conducted a National seminar on“ Medicinal Plant Research -Prospects and Challenges”** at Srimad Andavan Arts and Science college, Trichy, Tamil Nadu, South India in February 2014.
- ◆ **Established cultivation & training units for Azolla ,Mushroom and vermicompost** in the college premises.
- ◆ **Established Terrace garden** in the college Premises.
- ◆ **Provided several hands on training for students, SHG women and Farmers** on Organic farming, Mushroom Cultivation, Vermicomposting, and Azolla production.
- ◆ **Very good experience in “Herbal Insecticides, Pesticides, Pancha Kavya, Nava Kavya & Aatu Ootam”** preparation and their applications.

SKILLS

- ◆ Isolation and Identification of all types of bacteria, fungi and actinomycetes from different sources.
- ◆ Molecular Biology and Biochemical Methods
- ◆ Antibacterial Assay
- ◆ Medicinal plant related works- Extraction of medicinal plants, phytochemistry, isolation of active principles, secondary metabolites through **Column Chromatography, Thin Layer Chromatography**, etc.,
- ◆ **Biotechnology and Molecular Biology:** Isolation of chromosomal DNA and plasmid DNA ,Restriction Digestion of DNA, Agarose gel electrophoresis, SDS-PAGE, Conjugation, Transformation, etc.,
- ◆ **Environmental:** Estimation of Nitrates, chlorides, Phosphorus, Analysis of water, Assessment of Air quality, etc,

- ◆ **Food microbiology:** Analysis of grains, vegetables and fruits, Analysis of the quality of Milk.
- ◆ **Industrial Microbiology:** Bioethanol Production, Wine production, Amylase production, cell immobilization.

KNOWLEDGE IN COMPUTER

- ◆ Application oriented usage of MS Word, MS Excel, MS Power point etc.

PERSONAL DETAILS

- ◆ **Spouse Name** : G.Kandasamy
- ◆ **Date of birth** : 22.02.1972
- ◆ **Gender** : Female
- ◆ **Nationality** : Indian
- ◆ **Religion** : Hindu
- ◆ **Permanent Address** : 23 B/5A, Selva mari amman Koil Street,
Woriur, Tiruchirappalli – 620003.
- ◆ **Address for Communication** : **23B/5A**, Selva Mari Amman Koil Street,
Woriur, Tiruchirappalli- 620003.
Tamil Nadu, South India.
Mobile: +91 9150606050
Email ID : keertishanthi@gmail.com