

## Curriculum Vitae

**Dr. SRUTHY. P.B, Ph.D. Microbiology, ARS Net**

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### Education:

Ph.D. (Microbiology)                      Nehru Arts and Science College,  
(January 2016)                              Affiliated to Bharathiar University, Coimbatore,  
Tamil Nadu.

M.Sc. (Microbiology)                      Sree Narayana Guru College of Arts and Science,  
(April 2010)                              Affiliated to Bharathiar University, Coimbatore,  
Tamil Nadu.

B. Sc (Microbiology)                      Sree Narayana Guru College of Arts and Science,  
(April 2008)                              Affiliated to Bharathiar University, Coimbatore,  
Tamil Nadu.

**Ph.D Thesis:** Studies on Gut Microbiome and Coelomic Fluid of Earthworm *Eudrilus eugeniae* and their Therapeutic Applications.

### Membership:

Life member of AMI (All Indian Association of Microbiologists) with AMI ID Number- 3892-2014

### Work Experience:

- Working as Assistant Professor(C)- Microbiology in the Department of Processing and Food Engineering, Kelappaji College of Agricultural Engineering and Technology, Tavanur from 05/06/2023.
- Worked as Senior Research Fellow in ICAR-Indian Institute of Spices Research, Calicut in a DST Funded Project on "Aflatoxin Management in Spices: Development of novel preventive methods" from 22/09/2021 to 31/03/2023.
- Worked as Assistant Professor in the Department of Microbiology, SNGIST Arts and Science College, N. Paravur from 05.06.2017 till 21/09/2021.

- Worked as Research Assistant in the short term plan project “Identification of critical control points for quality improvement of Ice cream processed in KVASU dairy plant” at the Department of Dairy Microbiology, College of Dairy Science and Technology, Mannuthi from 05.04.2017 to 31.05.2017.
- Worked as Microbiologist (Trainee), from 1-07-2010 to 30-03-2011 in Polyclinic Pvt. Ltd., an ISO 9001-2000 certified company, Town Hall Road, Thrissur.

### **Research Skills:**

- Microbiology techniques-Staining Techniques, Media Preparation, Sterilization, Pure Culture Techniques, colony forming units (CFU) enumeration, Isolation and Identification of Clinical Specimens, Biochemical Assay, Anaerobic Culture Technique, and Screening of Microbes, Wine Production, Mushroom cultivation, and MBRT Test etc.
- Handling of pathogenic and non-pathogenic cultures.
- Packaging: Preparation of chitosan based biodegradable packaging membrane.
- Molecular biology techniques – DNA & RNA extraction from animal tissue and Cells, SDS-PAGE.
- Biochemistry- Qualitative and Quantitative Analysis of Carbohydrates, Proteins, Amino acids, Inorganic and organic salt Estimation, Chromatography.
- Immunology- ASO-Latex Test, ELISA Test, Widal test, RA Test, CRP Test, VDRL Test, Immunodiffusion, Blood Grouping and Differential Cell count.
- Environmental microbiology- Water Quality Tests (MPN), Determination of BOD.
- Pharmaceutical Science- Handling of experimental animals like-Mice and rat

### **Honors and Awards:**

1. Presented a paper entitled “**Biosynthesis of silver nanoparticles using *Eclipta alba* and *Alternanthera sessilis* and their antimicrobial efficacy**” and **won second prize** in a National level conference on “Innovative approaches in Biosciences” held on 15<sup>th</sup> February, 2012 conducted by Sree Narayana Guru College of Arts & Science, Coimbatore.
2. Presented a poster entitled “**Bioprotective activity of *Araucaria columnaris* resin and its application**” and **won second prize** in an International Symposium held on August 7<sup>th</sup> and 8<sup>th</sup> 2012, conducted by Dr. N.G.P. Arts & Science College, Coimbatore.

3. Successfully conducted **Hands on Training in Microbiology Techniques**, Organized by the Department of Microbiology, Nehru Arts and Science College, Coimbatore, on 12<sup>th</sup> and 13<sup>th</sup> February 2013.
4. A certificate of appreciation has been awarded for the research work done on **quality of potable water in Coimbatore city for the 'Neer Naadi Project'** to commemorate with World Water Day being celebrated on 22<sup>nd</sup> of March 2013.
5. Awarded as the **"Best Research Scholar - 2014"** by Nehru Arts and Science College, Coimbatore, Tamil Nadu.
6. Presented a poster entitled **"Wound Healing Potential of *Cymbopogon citratus* in Wistar rats"** and **received the best poster award** in an International Conference on "Emerging Trends in Drug Discovery - AICADD 2014" held on July 23 - 27, organised by Computational Chemistry Research Group, Amritha Vishwa Vidyapeetham, Amritanagar, Coimbatore.
7. Awarded with a Certificate for **Best performance in the Quiz** conducted by **ASM (American Society for Microbiology)** at the "Virtual Workshop on the Art of Science Communication" held at TNAU, Coimbatore on 13 November, 2014.
8. Presented a Poster entitled **"Development of Chitosan based Packaging Films Impregnated with Clove oil for Aflatoxin Management in Chilli and Nutmeg"** and **won Second Prize** in a National Seminar on Contemporary Challenges on Processing, Quality and Safety of Food" organized by KCAET, Tavanur, KSCSTE, Thiruvananthapuram and ICAR-AICRP on PHET held on October 16&17, 2023.

### **Publications:**

1. Published an article entitled **"Comparative Study on Chloroform and Aqueous extracts of *Mimusops elengi* and Its Pharmaceutical Application"** in an International journal of Research & Reviews: Journal of Herbal Science, Vol. 1(3), December 2012, ISSN: 2278 - 2257© STM Journals 2012. pp: 18-26.
2. Published an article entitled **"Biosynthesis of Silver Nanoparticles using Leaf and Stem Extracts of *Eclipta alba* and their Medical Applications"** in an International journal of Research & Reviews: Journal of Botany, Vol. 2 (1), ISSN: 2278 - 2222 © STM Journals 2013. pp: 1-9.
3. Published an article entitled **"Green Synthesis of Silver Nanoparticles using *Alternanthera sessilis* Leaf Extract and their Applications in Medical Field"** in Proceedings of "World Academy of Science, Engineering and Technology". Issue 69, September 2012. pp: 392-398. ISSN: 2010 - 376X.

4. Published an article entitled **“GC-MS Analysis of Phytocomponents in Resin of *Araucaria Columnaris* (Cook Pine) and its Medicinal Uses.”** in an International Journal of Applied biology and Pharmaceutical technology, Vol. 4 (3), July-Sept-2013, ISSN: 0976-4550. pp: 272-276.
5. Published an article entitled **“Evaluation of Earthworm Powder (*Eudrilus eugeniae*) and its Application in Cotton Crepe Bandage”** in International journal of Bioassays, Vol. 2 (9), ISSN: 2278- 778X. pp: 12501255.
6. Published an article entitled **“A Study on *In vivo* Evaluation of Haemostatic Potential of Earthworm Powder (*Eudrilus Eugeniae*)”** in Asian Journal of Pharmacy and Life Science, Vol. 3 (2), April-June, 2013, ISSN: 2231 – 4423. pp: 91-98.
7. Published an article entitled **“Phytochemical Screening and GC-MS Analysis of Bioactive Compounds from *Mimusops elengi*”** in Annals of Pharma Research, 2013, Vol. 01 (02), ISSN: 2347-1956. pp: 32-34.
8. Published an article entitled **“Screening of Earthworm (*Eudrilus eugeniae*) Gut as a Transient Microbial Habitat”** in Advances in Zoology and Botany, Vol. 1(3), 2013, DOI: 10.13189/azb.2013.010301. pp: 53 – 56.
9. Published an article entitled **“Study on antibacterial activity of natural dye from the bark of *Araucaria columnaris* and its application in textile cotton fabrics”** in Scholars Research Library - Journal of Microbiology and Biotechnology Research, Vol. 4 (3), ISSN: 2231 –3168. pp: 32 – 35.
10. Published an article entitled **“Isolation and Partial Characterization of Antagonistic Actinomycetes from Earthworm Gut”** in the World Journal of Pharmaceutical Research, Vol. 3 (9): 1058-1070, ISSN: 2277– 7105.
11. Published an article entitled **“The Role of Red Pigment Prodigiosin from Bacteria of Earthworm Gut as an Anticancer Agent”** in the Journal of Microbiology, Biotechnology and Food Sciences, in the issue December-January 2014/15, Vol. 4 (3): 246-251, ISSN: 1338 - 5178.
12. Published an article entitled **“*In vitro* Evaluation of Glycolipoprotein Powder from Earthworm *Eudrilus Eugeniae*”** in the International Journal of Pharmacy and Pharmaceutical Sciences, Vol. 7 (8), 2015, ISSN:0975-1491. pp: 377-379.
13. Published an article entitled **“Identification of Bioactive Compounds and Toxicity Study of *Araucaria columnaris* Bark Extract on Human Embryonic Kidney Cell Line”** in the Asian Journal of Biotechnology, Vol. 7 (3), 2015, ISSN 1996-0700 / DOI: 10.3923/ajbkr.2015.129.136. pp: 129-136.

14. Published an article entitled **“Pre Clinical Studies for the AntiInflammatory and Toxicity Evaluation of** in European Journal of Biomedical and Pharmaceutical Sciences, Vol. 4 (2), 2017, ISSN 2349-8870. pp: 291-296.
15. Published a popular article entitled **“Eugenol from Spices: Biological Properties and Prospects”** in the journal **“Spices India”**, Vol. 35(7), 2022, pp: 10-12.

### **Workshops and Training:**

1. Completed a short term course on **“Mushroom Technology”** at ‘Sree Narayana Guru College’, Coimbatore, during the year 2009-2010.
2. Has successfully passed the **“HACCP (Hazard Analysis and Critical Control Point) Awareness Training Programme”**, conducted by INDOCERT at Training Centre, Aluva from 10<sup>th</sup> June 2010 to 12<sup>th</sup> June 2010.
3. Successfully completed a one day training programme on **“Mushroom Cultivation”** held at the Agricultural College and Research Institute, Coimbatore on 05-07-2011.
4. Participated in an All India Workshop on **“Research Methodology for Research Scholars”** held at the Pondicherry University-Academic Staff College, Puducherry from 04-08-2011 to 05-08-2011.
5. Carried out an **“In-vivo acute toxicity and anti-inflammatory studies”** in KMCH College of Pharmacy, Coimbatore, under the guidance of G. Ariharasivakumar, Professor, Department of Pharmacology, during the period of December 2012 to March 2013.
6. Successfully carried out and passed the **“Level 3 Training, HACCP for Food Manufacturing”**, by **Royal Society for Public Health, UK**, conducted by Indocert at Training Centre, Aluva, from October 17-19, 2014 with license number 00409359.

### **Poster Presentations:**

1. Presented a poster entitled **“The Uniqueness of microorganisms in the gut of earthworm, *Eudrilus eugeniae*”** in an International conference of Association of Microbiologists of India on “Microbial Biotechnology for Sustainable Development” Organized by Panjab University, Chandigarh, during the year 2011.
2. Presented a poster Entitled **“Bioprotective activity of *Araucaria columnaris* resin and its application”** and won second prize in an International Symposium held on August 7<sup>th</sup> and 8<sup>th</sup> 2012, conducted by Dr. N.G.P. Arts & Science College, Coimbatore.

3. Presented a poster entitled **“GC-MS Analysis of Phytocomponents in Resin of *Araucaria columnaris* (Cook Pine) and its Medical Uses”**, during the Regional Science Congress on “Science for Shaping the Future of India”, held on December 15-16, 2012, Jointly Organized by Indian Science Congress Association, Coimbatore Chapter and Kongunadu Arts and Science College, Coimbatore.
4. Presented a poster entitled **“Evaluation of Earthworm powder (*Eudrilus eugeniae*) and its application in Cotton crepe bandage”**, during the Regional Science Congress on “Science for Shaping the Future of India”, held on December 15-16, 2012, Jointly Organized by Indian Science Congress Association, Coimbatore Chapter and Kongunadu Arts and Science College, Coimbatore.
5. Presented a Poster entitled **“Evaluation of Angiogenic and Cytotoxic potential of Glycolipoprotein powder from earthworm *Eudrilus eugeniae*”** in an International conference on “Emerging trends in Biotechnology 2014”, organized by Cochin University of Science and Technology, Kerala, during the year 2014.
6. Presented a Poster entitled **“Wound Healing Potential of *Cymbopogon citratus* in Wistar rats”** in an International Conference on **“Emerging Trends in Drug Discovery - AICADD 2014”** held on July 23 – 27, organised by Computational Chemistry Research Group, Amritha Vishwa Vidyapeetham, Coimbatore.
7. Presented a Poster entitled **“Red pigment prodigiosin from bacteria of earthworm gut as an anticancer agent”** in a National Conference on **“Empowering Mankind with Microbial Technologies (AMI-EMMT – 2014)”** held on November 12-14, 2014, organised by Association of Microbiologists of India Coimbatore Unit and Tamil Nadu Agricultural University, Coimbatore.
8. Presented a Poster entitled **“Development of Chitosan based Packaging Films Impregnated with Clove oil for Aflatoxin Management in Chilli and Nutmeg”** in a National Seminar on Contemporary Challenges on Processing, Quality and Safety of Food” organized by KCAET, Tavanur, KSCSTE, Thiruvananthapuram and ICAR-AICRP on PHET held on October 16 & 17, 2023.

#### **Paper Presentations:**

1. Presented a paper entitled **“Extraction and partial purification of Pectin Lyase from *Aspergillus flavus*”** at ‘Karpagam University’, Coimbatore, during the year 2010.

2. Presented a paper entitled **“Biosynthesis of silver nanoparticles using *Eclipta alba* and *Alternanthera sessilis* and their antimicrobial efficacy”** and won second prize in a National level conference on “Innovative approaches in Biosciences” held on 15<sup>th</sup> February, 2012 conducted by Sree Narayana Guru College of Arts & Science, Coimbatore.
3. Presented a paper entitled **“Isolation and Characterization of Antibacterial Actinomycetes from Earthworm”** in an International Symposium held on August 7<sup>th</sup> and 8<sup>th</sup> 2012, conducted by Dr. N.G.P. Arts & Science College, Coimbatore.
4. Presented a paper entitled **“Green Synthesis of Silver Nanoparticles Using *Alternanthera sessilis* Leaf Extract and Their Applications in the Medical field”** in an International Conference on Biotechnology and Biological Sciences organized by ICBBS 2012, Singapore.
5. Presented a paper entitled **“Screening of Earthworm (*Eudrilus eugeniae*) Gut as a Transient Microbial Habitat”**, during the Regional Science Congress on Science for Shaping the Future of India, held on December 15-16, 2012, Jointly Organized by Indian Science Congress Association, Coimbatore Chapter and Kongunadu Arts and Science College.