

CURRICULUM VITAE

Dr. Shanthipriya Ajmera

Assistant Professor

Department of Microbiology

Palamuru University

Mahabubnagar-509001

Telangana State

E-mail: sreeja.poorvi@gmail.com

Cell: (091) 9866457142

(091) 9963690428

Educational Qualifications

- M.Sc, Ph.D [Microbiology]
- Computer skills: **PGDCA (Post Graduation in Computer Applications)**



Thesis Title : Studies on thermophilic coprophilous fungi.

Fellowship Awards : UGC RGNF-JRF/SRF (F1-17.1/2012-13/RGNF-2012-13-ST-AND-28098) (during PhD)

Brief Outlines of Research Work:

- Isolation and identification (Molecular) of thermophilic coprophilous fungi from herbivore animal dung and poultry samples from different regions.
- Production of Industrial enzymes and other metabolites by thermophilic fungi.
- Decomposition of plant residues (Banana plant) by adding herbivore dung and urine. The various biochemical changes studied during the growth of thermophilic fungi.
- HPLC analysis & Biotransformation of therapeutic drugs by using thermophilic fungi.
- Antibacterial activity of thermophilic coprophilous fungi.
- Extraction and purification of thermophilic fungal Metabolites by different chromatographic techniques

Microorganisms Identified and sequences deposited in NCBI Gene Bank:

1. *Humicola fuscoatra* Strain GSMPKUMB KJ210854.1
2. *Thermomyces lanuginosus* Strain KJ432867.1
3. *Scytalidium thermophilum* Strain GSMBKU KT253886.1
4. *Malbranchea cinnamomea* strain GSMBKU KT279416.1
5. *Thielavia terrestris* Isolate GSMBKU KT216561.1

Research Experience : 2012 – till date

Teaching Experience

1. Assistant Professor, Department of Microbiology, Palamuru University, Mahabubnagar, Telangana State, India. May 2017 – Till Date.

Teaching Subjects (M.Sc)

1. Research Methodology and Techniques
2. Food Microbiology and Toxicology
3. Microbial Physiology and Metabolism
4. Industrial Microbiology
5. General Microbiology
6. Medical Bacteriology
7. Medical Virology and parasitology

Associate Fellow in Telangana Academy Sciences-2019

Other scientific Experience

1. Attended one week hands on training skill development program on various chromatographic techniques at Dept. of Biotechnology, NIT, Warangal, 2019
2. Attended hands on training in the areas of DNA isolation (from body fluids, bones, hair and FTA paper), DNA quantification, PCR analysis during two months dated 19 May- 15th July 2008 under the guidance of Dr. Sathyan, Senior scientist at Central Forensic Science Laboratories, Ramanthapur, Hyderabad .
3. Attended training on “Tissue culture of banana” for three weeks at K.N.Biotech/K.N.Biosciences, HYD, 2007

List of Publications in Journals

1. **Shanthipriya Ajmera^{1*}**, Divya Ajmeera, Kadari Rajyalaxmi, Girisham Sivadevuni and S. M. Reddy. Studies on prevalence of thermophilic coprophilous fungi isolated from the dung samples of herbivores in Telangana region. International Journal of Botany Studies. Accepted(Web of science)
2. **Shanthipriya Ajmera^{1*}**, Vasavi Dathar, P Shivakumar Singh, S Girisham. Production and optimization of Cellulases by thermophilic coprophilous fungus *Malbranchea cinnamomea*. International Journal of Botany Studies Volume 5; Issue 4; 2020; Page No. 116-120. (Web of science)
3. **Shanthipriya Ajmera^{*1}**, V. Koteswara Rao, Ramchander Merugu, Sivadevuni Girisham. Isolation and molecular characterization of thermophilic coprophilous fungus *Malbranchea cinnamomea* GSMBKU from goat dung. Journal of Pure and Applied Microbiology.vol.13.No. 4. Dec. 2019. (scopus)
4. **Ajmera Shanthipriya^{*1}** and Sivadevuni Girisham. Studies on decomposition of banana leaf and mixture

- of cattle dung and urine by thermophilic coprophilous fungi. Has been accepted for publication in Nature Environment and Pollution Technology. vol.19.N0.2. June. 2020. (scopus)
5. Divya Ajmeera, Sarangapani Manda, Krishnaveni Janapareddi, Susmitha Kolluri, **Shanthipriya Ajmera** 2020. Design and Optimization of Ciprofloxacin Hydrochloride Nanoemulsion for Effective Ocular Delivery: In Vitro, Ex Vivo and In Vivo Characterization. *International Journal of Advanced Science and Technology*. 29, 3 (Apr. 2020), 7036 - 7054.(scopus)
 6. V. Ranipadmini Ramchander Merugu, Swetha Garimella, **Shanthipriya Ajmera**, Madhuri Kurakula*. Synthesis, characterization and biological evaluation of bimetallic silver and copper nanoparticles using fruit pulp aqueous extracts of *Moringa oleifera*. Asian journal of pharmaceutical and clinical chemistry (**Scopus**) Communicated & is in review Acknowledgement No: AJPCR 35113 (2019).
 7. A. Divya, M. Sarangapani, **A. Shanthipriya**, 2018. Formulation and Development of Paclitaxel Nanocarrier and its Appraisal for Targeting: A Complete HPLC Analysis. *International Journal of Research and Analytical Reviews*. Vol.5. P- ISSN 2349-5138. (in Scopus while, published time)
 8. **Ajmera Shanthipriya**^{1*} Girisham, Shyam Prasad and Chandra Sekhar Rao. Biotransformation of diclofenac by thermophilic coprophilous fungus *scytalidium thermophilum* isolated from sheep dung. *International Journal of Current Advanced Research*. 4594-4597 (2017).
 9. **Ajmera Shanthipriya**^{1*} Study of anticancer and antioxidant activity of *wrightia tinctoria roxb*. *World journal of pharmaceutical and life sciences*. Vol.3:2454-2229 (2017).
 10. **Ajmera Shanthipriya**¹ V.Koteswara Rao, B.Sreelatha, S.Girisham and S.M.Reddy. Effect of nutritional factors on growth and L-asparaginase production by three thermophilic coprophilous fungi. *Current Research in Microbiology and Biotechnology*. 707-712 (2015)
 11. **Shanthipriya A.**,¹ V.Koteswara Rao, S.Girisham and S.M.Reddy. Factors influencing L-asparaginase production by three thermophilic coprophilous Fungi. *Inter. J.Pharma Sci*. Vol.5:1242-1248 (2015).
 12. **Ajmera Shanthipriya**^{1*} Kalyani Jatoth, T.Mangilal, Kishan Bookya. Comparative Pharmacological Antimicrobial screening of aqueous and alcohol root extracts of shoots of *dendrophthoe falcate*. *World J. pharmacy and pharmaceutical Science*. vol.4:773-778 (2015).
 13. T.Mangilal, **Ajmera Shanthipriya**, Kalyani jatoth, M.Satish Kumar, L.Thirupathi P.Veeresh Kumar. Ebola Virus Disease: A Brief Review. *International J. Pharmaceutical Research & Allied Sciences (scopus)* vol.4:2277-3657 (2015).
 14. Kalyani jatoth, **Ajmera Shanthipriya**, T.Mangilal and Sunil Junapudi. Optimization for the productions of Extracellular Alkaline Phosphatase from *Bacillus Subtilis*. *Inter.J.Current Microbio. Appli. Sciences*. vol.4:829-838 (2015).
 15. Veeresh Kumar, **Ajmera Shanthipriya**, Kalyani jatoth, T.Mangilal. Phytochemical and pharmacological

screening of *Caesalpinia Bonduc*. International J. Pharmaceutical Research & Allied Sciences (**scopus**) vol.4:136-141 (2015).

16. P.Veeresh Kumar, **Ajmera Shanthipriya**, Kalyani jatoth, M.Satish Kumar, L.Thirupathi, T.Mangilal. Evaluation of Antimicrobial Activity of Ethanolic Extract of *Chlitoria ternatea*. World Journal of Pharmaceutical Research. vol.4:2277-7105 (2015).
17. P.Veeresh Kumar M.Satish Kumar, Kalyani jatoth, **Ajmera Shanthipriya**, T.Mangilal, Thirupathi. Swine Origin Influenza: A Brief Review. International Journal of Pharmaceutical Research & Allied Sciences. (**Scopus**) vol.4: 86-92 (2015).
18. Sreelatha B, **A.Shanthi Priya** and S.Girisham. Incidence of thermophilic fungi in different dung samples of Warangal District of AP. J.Pharmacy Biological Sci. vol.3: 355-359 (2013).

Book Chapters:

1. **Ajmera Shanthipriya**^{*1} and V. Rani Padmini, 2018. "Achievements of Women in Science and Technology" Inspirational Indian Women book. Research India Press publishers, ISBN. No: 978-93-5171-160-5.
2. M. Suresh and **A. Shanthipriya**, 2020. Antioxidant activity with total phenolic contents and phytochemical screening of medicinal plants. 'Marine Biology and Ecology' book, House Media, Delhi, India. ISBN: 9789389996586. P: 203-211.
3. Sana Shanawaz¹ and **Shanthipriya Ajmera**^{*}, 2020 "Hydrocarbon-Eating Bacteria to Control Pollution" Education for future book. Publishers Media House Delhi. ISBN:978-93-88989-61-9
4. RaniPadmini velemakanni^{1*} Priyanka Vuppugalla¹ Ramchander Merugu¹, **Shanthipriya Ajmera**², 2020 "Covid 19 and Role of Nanotechnology in Combating the Disease" Education for future book. Publishers Media House Delhi. ISBN:978-93-88989-61-9
5. Divya Ajmeera^{1*}, Sarangapani Manda² Susmitha Kolluri³ and **Shanthipriya Ajmera**⁴, 2020 "Glaucoma- A Silent Blinding Disease: Route Cause, Diagnosis, Treatment and the Potential of Nanoemulsions as Topical Ophthalmic Drug Delivery Systems" Education for future book. Publishers Media House Delhi. ISBN:978-93-88989-61-9
6. Ramchander Merugu¹, **Shanthipriya Ajmera**^{2*}, RaniPadmini velemakanni¹, Priyanka Vuppugalla¹, 2020. "Bacterial Biosurfactants and their Applications" Education for future book. Publishers Media House Delhi. ISBN:978-93-88989-61-9

Books

Associate Editor "Education for future" book; An Archive of Humanities, Science and Technology for Sustainable Development, 2020. Publishers; Media house Delhi. ISBN:978-93-88989-61-9

National and International conference oral and poster presentations

S.No	Author's name	Title	Name of the conference	Year
1.	Shanthipriya Ajmera^{1*} , H. B. Ranjitha, Divya Ajmeera ² , D. Jayasree, Ramchander Merugu	An Insight into Pandemic Covid-19	International e- conference on Covid 19 impact on human and environment. Department of environmental science, Osmania University, Hyderabad	2020 (oral)
2.	T.Sahithya, Shanthipriya Ajmera*	How the COVID 19 pandemic does effects us?	International e- conference on Covid 19 impact on human and environment. Department of environmental science, Osmania University, Hyderabad	2020 (poster)
3.	Shanthipriya Ajmera* , Sana Shanawaz, Shivani Gudipally	Studies on decomposition of agricultural waste and structure of cattle dung and urine by thermophilic coprophilous fungi	International Conference on Advances in Microbial Biotechnology and bio therapeutics (AMTB) Department, Osmania University, Hyderabad	2020 (oral)
4.	Divya A ¹ , Shanthi Priya A² , Susmitha K ³ , Krishnaveni J ⁴ , Sarangapani M ⁵ .	Design And Optimization Of A New Cationic Nanoemulsion As An Effective Topical Ophthalmic Drug Delivery System For Ciprofloxacin: In Vitro, Ex Vivo And In Vivo Characterization	International Conference on Advances in Microbial Biotechnology and bio therapeutics (AMTB) Department, Osmania University, Hyderabad	2020 (poster)
5.	Divya A ¹ , Sarangapani M ² , Krishnaveni J ³ , Susmitha K ⁴ , Shanthipriya A⁵	Development of Nanoemulsions To Improve The Ocular Bioavailability And Patient Compliance In Postoperative Treatment Using Indomethacin Eye Drops	2nd International conference Integrative Biology & Applied Genetics (ICIBAG) Genetics Department, Osmania University, Hyderabad.	2020 (oral)
6	Shanthipriya Ajmera* , Shivani Gudipally, Deepa	Biosynthesis and Characterization of Silver Nanoparticles	2nd International conference Integrative Biology & Applied Genetics (ICIBAG) Genetics	2020 (poster)

	Palthyavath, Sana Shanawaz,	Using Thermophilic Fungi	Department, Osmania University, Hyderabad.	
7	V. Ranipadmini, V. Priyanka, Ramchander Merugu, Shanthipriya Ajmera*	Nnotoxicology: A Study on Health Hazards	National Seminar on Environmental Conservation Sustainable Development Coolabration With Telangana Academy Sciences At Palamuru University, Mahabubnagar.	2020 (poster)
8.	Sana Shanawaz, M. Krupender Nath Babu, Shanthipriya Ajmera*	Biosynthesis of Silver nanoparticles using Thermophilic fungi	National Seminar on Environmental Conservation Sustainable Development Coolabration With Telangana Academy Sciences At Palamuru University, Mahabubnagar.	2020 (oral)
9.	Shanthipriya Ajmera*	Antibacterial activity of <i>Malbranchea cinnamomea</i> strain GSMBKU KT279416.1 extract on <i>Staphylococcus aureus</i>	International Conference on Microbial Pathogenesis and New Frontiers (IMTECH-CSIR, CHANDIGARH, INDIA)	2019 (poster)
10	A. Shanthipriya, Narasimha Rao and S. Girisham	Management of Mycotoxigenic Fungi Associated With Finger Millet by Using Natural Essential Oils, Leaf Extracts and Spices	National Seminar on Recent Trends in Plant Disease Management (Indian Phytopathological Society, New Delhi) at Kakatiya University.	2018 (oral)
11	A. Shanthipriya^{*1}, P. Deepa and S. Girisham	Production and Characterization of protease from <i>Malbranchea cinnamomea a</i> GSMBKU (KT279416.1)	Telangana State Science Congress-2018 at NIT-Warangal.	2018 (poster)
12	Shanthipriya Ajmera^{*1}, Azka Zabeen and S. Girisham	The production and activity of Amylase by thermophilic coprophilous fungi <i>Scytalidium thermophilum</i>	National conference on Research advances in chemical sciences (Indian science congress) at Palamuru University.	2018 (poster)
13	Shanthipriya Ajmera^{*1}, and S. Girisham	Production of Cellulases from thermophilic coprophilous fungi.	National conference on Plant Diversity: Challenges in conservation and sustainale utilization. Dept.of Botany at Kakatiya University	2016 (oral)

14	A. Shanthipriy*1, B. Sreelatha, S. Girisham and S.M.Reddy	Production of amylases α and β by three thermophilic coprophilous fungi	International conference on “Emerging Biotechnologies” organized by Dept. of Biotechnology, Kakatiya University	2016 (oral)
15	B. Sreelatha, A. Shanthipriya, and S. Girisham	Isolate and characterization of glutaminase producing thermophilous fungus <i>Thermomyces lanuginosus</i> from decomposing wastes	National seminar on Challenges, opportunities and emerging trends in microbial technology. Dept.of Microbiology, Kakatiya University.	2012 (oral)

Online Programs:

Webinars [National & International]: More than 15

Faculty Development Program (FDP): 02

Quiz: More than 7

* **MyeClass Online Faculty Development Program-** Development and Management of MOOCs and Online Courses using LMS- MOODLE “Organized in collaboration with GAD TLC of MHRD, during 30th June to 4 h July, 2020.

*Attended 2 days online workshop entitled ‘**online teaching- learning using LMS- MOODLE**’ organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of MHRD on 17th-18th July 2020 (This is equivalent to a regular National Workshop)

* "National Webinar on “ICT Enabled Science Education In India” Organized by Telangana Academy of Sciences on 28-June-2020.

Attended Orientation course:

Attended **orientation course (UGC-HRDC)** at Academic College of Osmania University from 14-10-2019 to 02-11-2019.

Attended two days “**Rural immersion training program on community engagement**” held from 30-10-2019 to 31-10-2019 was organized by Mahatma Gandhi National council of Rural Education, Hyderabad in collaboration with UGC-HRDC, Osmania University.

Workshop and Conference Participated

1. Attended Seven Days National Training workshop on “Molecular Biology Techniques with special emphasis on Virology (TMV-2020)” at SV University, Tirupati.
2. Attended workshop on “Research Methodology” organized by Research and development center, Kakatiya University, 2012.
3. Attended six days workshop on purification techniques at Department of Biotechnology, NIT, Warangal, 2019
4. National seminar on Recent Advances in Molecular Microbiology & Microbial Technology organized by Dept. of Microbiology, Kakatiya University, 2009.
5. National seminar on Ethics in Microbiology organized by Dept. of Microbiology, Kakatiya University, 2015.

Memberships of Educational Bodies

- Life Member, **Association of Microbiologist** (AMI). Membership No.:4904
- Life Member, **Indian Science Congress Association** (ISCA). Membership No.: L33535

Invited Talks: Invited as a speaker on National Science day- 2020 Organized by Telangana Academy of Science at ZPHS Boys School, Jadcherla, Mahabubnagar topic is “Microorganisms, their effects and prevention-hygiene”.

Biotechnological Skills

- Biotransformation and Extraction of microbial metabolites
- Biosynthesis of Nanoparticles by thermophilic fungi
- Plasmid isolation, southern & Western blotting, Gel electrophoresis, SDS-PAGE
- Virus cultivation methods including Embryonated three routes inoculation
- Cell culture, isolation & virus cultivation
- ELISA, PCR techniques
- Preparation of leaf extracts of medicinal plants and working on their antimicrobial activity.
- Plant drafting methods
- Experience in Sterilization techniques using autoclave, hot air oven, ultra violet radiation, membrane filters and chemical disinfectants.
- Isolation of microorganisms from soil, water, air, dung, sewage and effluents, their cultivation, identification and pure culture preservation.
- Estimation of biomass, metabolites and hydrolytic enzymes using Spectrophotometer and Viscometer.
- Culturing microorganisms from clinical specimens, their identification by staining techniques, biochemical tests, serological tests and antimicrobial activity..
- Decomposition of plant residues by thermophilic fungi & their Biochemical testing.
- Electrophoretic and chromatographic techniques and DNA isolation.
- Fermentation of industrially useful products, examination of raw and spoiled foods.
- Testing for sanitary quality of water by MPN method and confirmation tests.
- Testing the quality of milk by MBRT and Resazurin method