FACULTY PROFILE



Name: Mrs.K.C.M.Esther Rani

Designation: Assistant Professor

Department: Botany

Date of Joining: 04.07.2011

Email: estherrani@americancollege.edu.in

Educational Qualification: M.Sc., M.Phil with SET

Academic / administration positions: Coordinator, Department of Horticulture

Area of Specialisation: Environmental Biology, Ethnobotany

Years of Experience: Teaching____13 years_6 months Research___8 years_____

DEGREE	SUBJECT	COLLEGE / UNIVERSITY & PLACE	YEAR COMPLETED
B.Sc	Botany	Lady Doak College, (Affiliated to Madurai Kamaraj University). Madurai.	April,1997
M.Sc	Botany	Thiagarajar College, (Affiliated to Madurai Kamaraj University).Madurai	April,1999
M.Phil	Botany	Thiagarajar College(Affiliated to Madurai Kamaraj University)Madurai	April,2001
State Level Eligibility Test for Lecturership (TNSET)	Life Sciences	Tamilnadu State Government	June,2018

Educational Qualification:

Specialisation in Teaching:

- Environmental biology
- Plant Systematics
- Ethnobotany
- Microbiology

Specialisation in Research:

UG Botany-Biochemical anlysis of greens and vegetables under various temperature conditions.

M.Phil Botany– Project title: "Biochemical analysis of some plant galls of Alagar Hills", Alagarkoil, Madurai.

I.Journal Publications:

1. Social sciences International research journal : Volume 1 Issue 1(2015), ISSN 2395-0544

2.Journal of Pure and Applied Microbiology 2024 P-ISSN:0973-7510;E-ISSN:2581-690X

II. Publications in Book/book chapters and proceedings:

1.Proceedings- International conference on "Women Empowerment & Social Sciences - 2015.

2.Proceedings-**International conference** on Advanced Functional Materials for Energy, Environment and Biomedical Applications (AFMEEB-2017)

3.Proceedings- **International conference** on "Innovative and Emerging Trends in Botany (ICIETB-2019)"

4. Proceedings of **National conference** "Sustainable Wellness through Noni,Medicinal Plants,Microbes and Bio-molecules "SWNMPMB-2023",November2023

5. Proceedings of **International Conference on** Agricultural Sciences, Technologies, Innovations and Entrepreneurship-2023" "*Pseudomonas sp* VSMKU 3090 Isolated from Tomato Rhizosphere Against Fungal wilt disease of Tomato.

III. Research Projects:

Pursuing Ph.D on "Optimization and Characterization of an antifungal compound from Tomato Rhizobacterium *Pseudomonas otitidis*VSMKU3098 against Wilt Pathogen *Fusarium oxysporum*" under the guidance of Dr.V.Shanmugaiah,Assistant Professor,Department of Microbial Gene Technology,Scool of Biological Sciences,Madurai Kamaraj University.

PG project-2019-2020

Study on culture and ethnomedicinal practices of Paliyar tribal community at Kurinji

nagar, Usilampatti.

PG project :2022-2023

Impact of chemical fertilizer and organic fertilizer on the growth and yield of CO-GG-912

Green gram variety Vigna radiata.L

2.Undergraduate student projects from the academic year 2014-2024

1. Campus mushroom audit and cultivation of *Pleurotus*. (2016-2017)

2.Study of Folklore medicines and medicinal practices of Selective villages.(2019-2020)

3.A Case study of farmers in selective villages in and around Madurai district.(2020-2021)

4. Study of Sacred Trees and Sthalavirukshas in Madurai(2021-2022)

5. Ethnobotanical study of Paliyar tribes of Mokkathanparai hills & Phytochemical screening of selective medicinal plants. (2022-2023)

6."A survey on traditional medicinal practices and ethnobotanical studies of people in Malaiyur and Panrimalai villages."(2023-2024)

IV. Seminars / Conferences attended:

International Conferences:

1.Participated in the **International conference** on **"Women Empowerment & Social Sciences** – **2015**". Presented a paper on "Impact of NGO on the empowerment of rural poor women in Tamilnadu. A case study of Usilampatti block, Madurai district. 5th to 7th March 2015.

2.Participated in International conference on "New horizons, Emerging Challenges and Recent paradigms in food mediated immunity and their role in human health and longevity" by PG & Research Dept of Zoology & Dept of Immunology & Microbiology, The American College (31st August to 1st September 2016).

3.Presented a paper entitled **"Hydrogen Cyanide (HCN) gene detection from** *Ralstonia solanacearum*" in the **International Conference** on Advance Functional materials for Energy,Environment and Biomedical Applications (AFMEEB-2017)" on 11th and 12th December,2017 at Madurai Kamaraj University, Madurai.

4. Presented a paper "Pyrrolnitrin and its bio control potential for the control of wilt pathogen *Fusarium oxysporum*" in the International conference on "Innovative and

Emerging Trends in Botany (ICIETB-2019)" organized by the Department of Botany, Alagappa University, Karaikudi on 6th and & 7th November, 2019.

5.Oral Presentation-"Biocontrol properties of Pseudomonas sp. VSMKU 3037 against *Fusarium oxysporum*".

Unifying Biology Through Diversity (ICUBD-14 & 15 October 2022) organized by the Department of Botany, The American College, Madurai.

6.Oral Presentation-"*Pseudomonas sp.* VSMKU 3090 isolated from tomato rhizosphere against fungal wilt disease of tomato"

Agricultural Sciences, Technologies, Innovations and Entrepreneurship-2023 organized by AGRI AMIGOS Pvt Ltd, Theni & Coimbatore, TN.(17^{th &} 18th February, 2023)

National Conferences:

1.Participated in the National Conference on "Community Microbial Consortia and the human holobiont - Implications of Yet-unculturable microorganism in systematic health, disease & Personalized medicine" by Department of Immunology & Microbiology, The American College. (7th & 8th December 2015).

2. Participated in the National Conference on "Impact of Pollution on Health and Restoration of Quality Environment Through Biotechnology Applications" PG & Research Dept of Zoology & PG Dept of Immunology & Microbiology, The American College. (2 & 3rd February 2018).

3. Participated in the National Conference on "Coral reefs: Threats and Conservation CRTC – 2019". by PG & Research Dept of Zoology, The American College on 12th February 2019.

4.Participated in the **National Conference** on "**Recent trends in Modern Immunology**" by Dept of Immunology & Microbiology, The American College, 23rd January 2019.

5.Participated "Emerging Trends in Microbiology" by the PG Dept of Immunology & Microbiology, The American College, 12th March 2019.

6.Attended in the NAAC sponsored National Conference on Quality Enhancement and sustenance in Higher Education Organized by Internal Quality Assurance Cell(IQAC), The American College, Madurai on 6th March, 2020.

8. Oral Presentation in the National conference & Awarded for Best Oral Presentation-From Bharadhidasan University

"Biocontrol properties of *Pseudomonas sp* **VSMKU 3090 against** *Fusarium oxysporum* "Organized by School of Biological Sciences,Bharathidasan University,Tiruchirapalli (30th March 2022)

Workshops

1. Tamilnadu Council for Enterprise Devt. (TACED) Madurai, "First milestone workshop

on Bonsai," conducted by Mr. K.Sivaji, Bonsai Master & Artist, on 5th September 2015 at Madurai.

2.Two days workshop on **"Food Technology"** by Dept of Biochemistry, The American College, Madurai on 15th & 16th September 2015.

3.One day workshop on **"Food Technology"** by Dept of Biochemistry, The American College, Madurai on 12th September 2017.

4.Participated in the one day workshop on" **Entrepreneurial oppurtunities in Bamboo**" organized by the Department of Botany, The American College, 23rd January, 2023.

5.Participated in the One day Workshop on **"Art and Science of Methodical Scientific Writing & Publishing in a High Impact Journal"** conducted by IQAC and Office of the Dean Research, The American College, on 6th March, 2023.

6.Participated in the National level Workshop on **"Skills in Ferns Identification and aconservation"**,14th September 2023

7.Participated -Interactive workshop on "**Outcome Based Education-2023**" Organized by IQAC, The American College, on 24th February 2024

VI.Orientation (Faculty Induction Programme)

*Attended **Faculty Induction Programme(FIP)** Organized by HRDC, Bharathidasan University from(20.01.2021 to18.02.2021)

*Refresher Course:

Attended **Refresher course on Biological Sciences** Organized by HRDC, Bharathidasan University from (05.7.2022 to 18.07.2022)

*Faculty Development Programme

UBCHEA sponsored four day faculty development Program (FDP 2020) on "Emerging

Leaders of Service Learning Programme "(13th - 16th February 2020).

*In-Service Training Programme:

Attended Two days "In-Service Training Programme" in Life Sciences Organized by Mother Teresa University,Kodaikanal (12.05.2022 -13.05.2022) organized by Tamilnadu Council for Higher Education,Chennai.

VII. Membership in Professional Bodies: -NIL-

VII. Resource Person:

1.Guest Lecture-Service Learning programme(Vaigai Ecology) On Restoration of Vaigai ecosystem.

2. International Mental Health Webinar series organized by the Department of Psychology, The American College -Guest lecture on **"Indoor Gardening and Mental Health" on 7th August 2023.**

VIII. Webinars Participated:

1. Attended webinar on **"Trends in Plant Biology"** organized by the department of Botany on June 1,2020.

2. Attended webinar on **"Mangrove Environment**" organized by the department of Botany on 5th June 2020.

3.Participated in the Webinar organized by the Ladies Club ,The American College on 27th May,2020.

4. Attended webinar on **"Women at Risk Blossom !"**, organized by the Ladies club of The American College on 9th June, 2020.

5. Attended webinar on **"Biodiversity-Urgent and Existential concerns"** organized by the PG And Research department of Botany, St.Mary's College (Autonomous, Thoothukudi on 10th June 2020.

6. Attended webinar on **"Issues and Challenges of Climate change on Biodiversity"** organized by PG & Research Department of Botany Kandaswami Kandar's College, Velur, Namakkal on 11th, 2020.

7.Participated in the Webinar organized by the Ladies club of The American college,Madurai on 7th May,2020

8.Participated in One day webinar on "**Biodiversity-Urgent and Existential Concerns**" Organized by the Department of Botany,St.Mary's College,Thoothukudi,on 10.6.2020.

9.Participated in the webinar on **"Recent Advances in Plant Science Research** "organized by PG and Research department of Botany, Arulmigu Palaniandavar College of Arts and Culture ,Palani on 18th and 19th June, 2020.

10.Participated in the webinar on **"Mangrove Environment"** organized by the Department of Botany, A.V.V.M.Pushpam college ,Poondi,Thanjavur,5th June 2020.

11.Participated in National webinar on "Issues and Challenges of Climate change on biodiversity" Organized by Department of Botany,Kandaswami Kandar's College,Namakkalon 11th June 2020.

12.Attended webinar on "Additive Manufacturing For Bioimplant Manufacturing and its Challenges" Organized by Department of Mechanical Engineering & Research Committee, Arasu Engineering College, Kumbakonam on 13th June, 2020.

13.Participated in the webinar on **"Plant Based Biopolymers for Human Utilization"** organized by PG & Research Department of Botany, Adhiyaman Arts & Science College for Women, Uthangiri, 17th June ,2020.

14."**Medicinal plants used in Siddha Formulation currently recommended for COVID 19**"Organized by the PG department of Chemistry,Sri Meenakshi Government Arts College for women (Autonomous),Madurai,on 6th July,2020

15."**Plant Quarantine-Current Status & Challenges**" organized by the Department of Botany,PSG College of Arts and Science,Coimbatore on 9th July,2020.

16."Sacred Groves-A Community Approach to Conservation" organized by the PG & Research Department of Botany, M.R.Government Arts College, Mannargudi on 11th, July, 2020.

17.Participated in **International webinar** on "**The Power to Change the World**" Organized by Women's forum ,The American College,8th March,2021.

18.Participated in the **National webinar** on **"A Pandemic year for Women:What are we Learning?"** organized by the Ladies Club of The American College,Madurai on 30th June ,2021.

19.Participated in the **International Webinar** on "**Promoting IKIGAI to Arise & Shine**" Organized by The Ladies Club of The American college,on 29th July 2021.

20.Participated in **National webinar** on "Genetic Engineering pf plants with photoreceptor genes to enhance the biomass and yield" organized by the Post Graduate & Research Department of Botany,Pachayappa's college ,Chennai, 4th August,2021.

21.Participated in **International webinar** on **"Recent Developments in genetic/genomic medicine"** organized by the Post Graduate & Research Department of Botany,Pachayappa's college ,Chennai,7th August,2021.

22.Participated in the **National Webinar** on **"Systems Biology"** Organized by Post Graduate and Research Department of Botany, The American College, on 12th August 2022.

IX.Membership:

1. **Coordinator**, Department of Horticulture, B.Voc/M.Voc Programme, The American College.

2. Convenor-Mushroom cultivation unit, The American College, Madurai from 2019-till date

3.Member of the **Board of Studies**, The Department of Botany, The American college.

4.Member of the **Board of studies**,Department of Horticulture ,B.Voc/M.Voc programme,The American College.

5. Member of the Senatus, The American College.

6.Member in NAAC Committee, Criteria-I Curricular Aspects.

7.Member of the Academic Council, The American College.

8. Member-Medicinal Plant Conservation Centre, The American College.

9. Member in Green club, The American college

10. Project Associate-SLP Vaigai Ecology from 2015-2023

11.Member in NAAC Committee (Criteria-I)

12.Member in Audio Visual Committee of the college

13.Organizing member "FEM FIESTA-2023", The American College

14.**UG Association President-PLASCIA(2022-2023)**Department of Botany, The American College

15.PG Association President(2023-2024) Department of Botany, The American College

X.Others:

- 1. Talk on eradication of *Prosopis juliflora*,(Seema karuvelai) in rural areas of Usilampatti block,Madurai district..(Pudhiya Thalaimurai TV)
- 2. Awareness campaign onConservation of Natural Resources among Paliyar tribal community in Madurai District.
- 3. Oyster Mushroom cultivation training to Rural SHG Federation.
- 4. Interview to **RAJ TV** for implementing eradication of "*Parthenium*" plants in farm lands.