
DR. ELSAM JOSEPH

Designation: Associate Professor

Qualification: M. Sc., M. Phil., Ph. D.

Area of Specialization: Plant Biochemistry

Email (official): elsamjoseph@teresas.ac.in



Profile in Detail

Academic records

- Ph.D. : Biochemical characterization and pharmacognostic analysis of selected members of South Indian Phytolaccaceae (Mahatma Gandhi University, 2010)
- M.Phil.: Preliminary investigations on protocorm development of *Spathoglottis plicata in vitro* (University of Kerala, 1993)
- M.Sc. : Botany, Mahatma Gandhi University, Kottayam, 1990
- B.Sc. : Botany, Mahatma Gandhi University, Kottayam, 1987



Professional/Teaching Experience

Years (in total) – 26 years

- Name of Institution- St. Teresa's College, Ernakulam
- Position held- Associate Professor
- Period (from-to)- 1994 –to present
- Subject handled & Nature of duties – Teaching the subjects of UG and PG Botany



Research Experience & Expertise

Recognised research Guide of Mahatma Gandhi University, Kottayam from 2014 onwards.





Research Guidance

- Details of Ph.D. awarded- Student name, title, year: Nil
- Thesis submitted: Nil
- On-going : 6 Ph. D. Programmes

Awards & Recognitions

1. Third Rank for M.Sc. Botany of M.G. University, Kottayam.
2. Sr. Margret Mary Endowment Prize for the Best Publication, 2012.
3. Sr. Margret Mary Endowment Prize for the Best Publication, 2013.



Administrative responsibilities and Positions held in College



Positions held in College:

1. Head of the Department
2. Controller of Examination of the College

Administrative responsibilities held in College:

- Coordinator of Nature Club – 1997, 2000- 2003.
- Teacher in charge of Arts Club – 2001-2005.
- Staff in charge of PTA – 2010-2012
- Director of Certificate course in Botany from 2004 - 2014.
- Coordinator of Add-On Course 2009 -2014
- Coordinator of UGC/CSIR NET examination coaching programme - 2010- 2014
- College council member – 2004 – 2017
- Discipline committee member – 2013 -2015
- IQAC member of college – 2009-2011 & 2016 – 2018
- NAAC Core committee member – 2017-18
- Teacher in charge of SC/ST/Minority monitoring cell - 2018 onwards
- Member, TRACC of college – 2019 onwards
- Teacher in charge of Career Guidance Cell – 2019 onwards

Research Projects Undertaken



Title of the project	Funding agency	Duration	Approved fund
Heavy Metal Phytoremediation of Industrially Polluted Aquatic Ecosystems of Kochi City Using Wetland Plants: an Eco sustainable Approach	UGC	18 months (2011-2013)	Rs. 140000/-

Publications in peer reviewed national/international journals



1. 'Biogenesis of chloroplasts in germinating seeds of *Spathoglottis plicata in vitro*' (with Sasidharan A.), Proceedings of Sixth Kerala Science Congress, Govt. of Kerala, 1994, pp 331-333.
2. 'Impact of sodium chloride stress on the seed germination and vegetative growth of *Phaseolus aureus* Roxb' (with Elizabeth Cheriyan), *Star Research Reach*, 2010, Vol. 2(3), pp 1-9.
3. 'Temporal biochemical sequences of protocorm development of *Spathoglottis plicata* Bl. *in vitro*', *Geobios*, 2011, Vol. 38(4), pp 265-270.
4. 'Bioaccumulation of heavy metals in *Eichhornia Crassipes* (Mart) Solms. growing in selected aquatic ecosystems of Kochi' (with Lini M.), *Science and Society*, 2012, Vol. 10(1), pp 33-36.
5. 'Quantification of Gallic acid in *Petiveria alliacea* L. by high performance thin layer chromatography' (with Sr. Avita), *Indian Journal of Botanical Society*, 2012, Vol. 91(1-3), pp 194-197.
6. 'Phytochemical screening and bioactivity assay of selected South Indian phytolaccaceae' (with Sr. Avita), *Journal of Nature and Life Science*, 2013, Vol. 1(1), pp 26-30.
7. Phenotypic variation and genetic diversity analysis of accessions of peninsular Indian phytolaccaceae, (with Sr. Avita), *Phytomorphology*, 2013, Vol. 63 (3&4), pp85-93.

Paper presentations in Seminars/Conferences/Symposium attended



1. “Inhibitory effect of Travancore Titanium Products factory effluent on the chlorophyll-protein complexes of marine Macrophyte” (with A. Jayakumaran Nair, Sasidharan A.), All India Symposium on Algal Resources, Their Management, Biology, Chemistry and Utilization, organized by Department of Aquatic Biology & Fisheries, University of Kerala, Trivandrum, 25-27 November, 1991.
2. “Biogenesis of chloroplasts in germinating seeds of *Spathoglottis plicata in vitro*” (with Sasidharan A.), Sixth Kerala Science Congress, Organized by State Committee on Science, Technology and Environment, Government of Kerala, Thiruvananthapuram, 27-29 January, 1994.
3. “Analysis of variation among accessions of South Indian members of Phytolaccaceae”, 1st Kerala Women’s Science Congress, Organized by Shakti and St. Teresa’s College, Ernakulam, 10-12 August, 2010.
4. “Phytochemical characterization and pharmacognostic analysis *Phytolacca octandra* L.” (with Sr. Avita), UGC Sponsored National Seminar on Conservation and Sustainable Utilization of Red-listed Medicinal Plants of Western Ghats of India, organised by Department of Botany, Newman College, Thodupuzha, 2-3 September, 2010.
5. “Evaluation of antimicrobial activity and phytochemical screening of South Indian phytolaccaceae, in the International seminar on cell and molecular biology”, Organised by Nirmala College Muvattupuzha and KSCSTE, 16-17 December, 2011

Seminars/Conferences/Symposium attended



1. All India symposium on Algal Resources, Their Management, Biology, Chemistry and Utilization, organized by Department of Aquatic Biology & Fisheries, University of Kerala, Trivandrum, 25-27 November, 1991.
2. National Seminar on Frontiers of Sciences, organised by Department of Botany, University College, Thiruvananthapuram, 15-17 January, 1992.
3. Contested for young scientist award in the sixth Kerala Science Congress, Organized by State committee on science, technology and environment, Government of Kerala, Thiruvananthapuram, 27-29 January, 1994.

4. State level seminar on Effective Handling of C. B. S. E. Syllabus in Colleges, held at S. H. College, Thevara, Organized by Kerala Botanical Society, 19th November, 1994.
5. One-day workshop on Plant Physiology, organized by Mahatma Gandhi University and S. H. College Thevara, 5th November, 1994.
6. UGC Sponsored state level conference on Genetic Engineering as an Effective Tool in Biological Studies, organized by Department of Botany, St. Teresa's College Ernakulam, 6-8 January, 1999.
7. Group Discussion on PG Botany Internal Assessment, held at S. B. College Changanacherry, organized by Kerala Botanical Society, 11th August, 2001.
8. National Seminar on Higher Education In India In The New Millennium - Challenges And Prospects, organized by Zoological Society of Kerala, 20-21 October, 2001.
9. State level Conference on Immunology and Allergy, organized by Kerala Botanical Society, at M. A. College Kothamangalam, 19th January, 2002.
10. One-day Symposium on Human Resource Development in Microbiology, organised by Association of Microbiologists of India, Cochin Unit, 8th February, 2003.
11. UGC Sponsored Regional Seminar on Ecology and Economy of Plant Diversity, organized by Department of Botany, S. H. College Thevara, 3-4 February, 2005.
12. State level Conference on Biodiversity and Bio-conservation in the Context of Kerala: Role of Plant Taxonomy, held at St. Teresa's College Ernakulam, organized by Kerala Botanical Society, 26th November, 2005.
13. One-day Seminar on Environment Management: Issues and Strategies, organized by Department of Botany, St. Teresa's College, Ernakulam, 10th August, 2007.
14. One-day Seminar on Research Methodology, organized by Department of Botany and Kerala Botanical Society, at St. Teresa's College, Ernakulam, 15th September, 2007.
15. One-day Seminar on Diabetes – A Better Understanding, organized by Department of Zoology, St. Teresa's College, Ernakulam, 21st November, 2007.
16. One-day National Seminar on Analysis and on contributions of Women Mathematicians, organized by Department of Mathematics, St. Teresa's College, Ernakulam, 31st October, 2008.
17. Five-day Workshop on Restructuring Curriculum of Degree Courses – Botany, organised by Mahatma Gandhi University, 14-22 May, 2009.

18. UGC Sponsored State level Seminar on Ethnobotany: The plant friendly practices on medicinal Plants, organized by The Dept. of Botany, St. Teresa's College, Ernakulam, 6-7 October, 2009.
19. First Kerala Women's Science Congress, organized by Shakti and St. Teresa's College, Ernakulam, 10-12 August, 2010.
20. UGC Sponsored National Seminar on Conservation and Sustainable Utilization of Red-listed Medicinal Plants of Western Ghats of India, organised by Department of Botany, Newman College, Thodupuzha, 2-3 September, 2010.
21. UGC Sponsored State level Workshop on Mushroom Cultivation, organized by Nirmala College, Muvattupuzha, 8-9 October, 2010.
22. Regional Meet of Xavier Board Of Higher Education In India, Kerala North Region, held at St. Teresa's College, Ernakulam, 16th October, 2010.
23. Three-day Training Programme for College Teachers on General Informatics, organized by St. Teresa's College, Ernakulam and Kerala Higher Education Council, 20-22 December, 2010.
24. UGC Sponsored International Conference on Multimodality, Multilingualism, Multiliteracies: New Pedagogies for New Times?, organized by Department of English and London Metropolitan University, UK, held at St. Teresa's College, Ernakulam, 24-25 January, 2011.
25. UGC Sponsored National Seminar on Role of Women In The Protection And Promotion Of Environment, organized by Women Studies Centre, Cochin University of Science and Technology, 8th March, 2011.
26. National Seminar on Best Practices in Research and Consultancy: Opportunities and Challenges, organised by St. Teresa's College Ernakulam, 20th October, 2011.
27. International Seminar on Cell and Molecular Biology, organised by Nirmala College Muvattupuzha and KSCSTE, 16-17 December, 2011.
28. Workshop on Restructuring Curriculum and Syllabus of PG programme in Botany, Organised by M.G. University Kottayam, 20th to 22nd December, 2011.
29. National Workshop on Fast Food Trap: Issues, Problems and Solutions – Train the Trainer Programme, organised by St. Teresa's College Ernakulam, 12th January, 2012.
30. National seminar on Environment and Society- The India Challenge, ESTIC 2013, 5th June 2013
31. National seminar on Science Sans Borders organised by Maharaja's College, 7th & 8th November 2013

32. National workshop on Functioning as an autonomous college, organised by IQAC St. Teresa's College Ernakulam, 11th February 2014
33. Triennial Conference and 18th general body meeting of AIACHE, organised by Christ University Bangalore , 29-30 January 2018
34. National seminar on e-learning and MOOCs in higher education organised by University of Delhi on 1st March 2019
35. Workshop on advanced statistical methods for communicating science organised by Dept. Of Botany, St. Teresa's College Ernakulam, 24th January 2020.
36. National Webinar on Phytochrome Controlled Plant Physiological Functions organised by the Albertian Centre for Human Resource Development and Research, St. Albert's College (Autonomous) on Wednesday 29th April 2020
37. Webinar series on "Genomics of COVID- 19 - hurdles in developing Vaccines and Drugs" organized by the Inter University Centre for Genomics and Gene Technology, University of Kerala, Kariavattom from June 23 to July 29, 2020

Faculty development programs attended



(Orientation/Refresher Course/Workshop/Short term)

- UGC Sponsored Refresher Course in Life Sciences (Marine Biology, Microbiology and Biochemistry) at Cochin University of Science and Technology, Kochi, 15th October to 6th November, 2001.
- Orientation Course for College/ University Teachers at Sree Sankaracharya University of Sanscrit, Kalady, 15th November to 12th December, 2001.
- UGC Sponsored Refresher Course in Life Sciences (Marine Biology, Microbiology and Biochemistry) at Cochin University of Science and Technology, Kochi, 1-20 December, 2003.
- UGC Sponsored Refresher Course in Life Sciences (Marine Biology, Microbiology and Biochemistry) at Cochin University of Science and Technology, Kochi, 1-21 December, 2004.

Seminars/Conference/Symposium organised



1. Co-ordinator of the one-day Seminar on Environment Management: Issues and Strategies, organized by Department of Botany, St. Teresa's College, Ernakulam, 10th August, 2007.
2. Co-ordinator of the one-day Seminar on Research Methodology, organized by Department of Botany and Kerala Botanical Society, at St. Teresa's College, Ernakulam, 15th September, 2007.
3. Convener of One-day Workshop on Road Safety Measures – “*Be safe Drive safe*” organized by Department of Botany, St. Teresa's College, Ernakulam in association with FAST a Women Drivers' Association, 15th November, 2007.
4. Organizing Secretary of Outreach programmes for Home makers on Vegetables and Fruits Cultivation Practices, Organic Farming, Mushroom Cultivation and Vegetable Processing Techniques, organized by Department of Botany, St. Teresa's College, Ernakulam, 19-21 November, 2007.
5. Organizing Secretary of One-day Seminar on “*Ayurdarsan – Ayurveda a way of life*” and Inter Collegiate Quiz Competition “*Sasyajam Mruthyunjayam*”, organized by Department of Botany, St. Teresa's College, Ernakulam in association with Panchajanyam Nagarjuna Ayurvedic Centre, 22nd November, 2007.
6. Coordinator One-day Symposium on Environment and Pollution Laws- an Institutional Approach, organized by Department of Botany, St. Teresa's College, Ernakulam, 23rd November, 2007.
7. Convener of Environment Management Campaign – One-day Seminar on Biodiversity and Sustainable Development, Organized by Department of Botany, St. Teresa's College, Ernakulam, 24th January, 2008.
8. Organizing Secretary of the One-day exhibition on Plants for pollution abatement and medicine, organized by Department of Botany and Centre for Environment Management, 25th January, 2008.
9. Core Committee Member of the Advisory Board for Green Belt Construction at the Solid Waste Treatment Plant of Kochi Corporation at Brahmapuram, 2008.
10. Co-ordinator One-day Regional Seminar on Bioinformatics and Data Analysis, organized by Department of Botany, St. Teresa's College, Ernakulam, 7th October, 2009.
11. Organizing Secretary of the 1st Kerala Women's Science Congress, Organized by Shakti and St. Teresa's College, Ernakulam, 10-12 August, 2010.

12. Organizing Secretary of the three day Training Programme for College Teachers on General Informatics, organized by St. Teresa's College, Ernakulam and Kerala Higher Education Council, 20-22 December, 2010.

Membership/Professional affiliations in academic societies

1. Member, Kerala Botanical Society
2. Member, Microbiological Society of India
3. Life Member, International Society of Plant Morphologists
4. Indian Society of Ecological Economics



Dr. Elsam Joseph

02-11-2020