
DR. LIZA JACOB

Designation: Assistant Professor

Qualification: M.Sc., Ph.D.

Area of Specialization: Environmental Science

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Profile in Detail

Academic records



- Ph.D. : Impact of heavy metal pollutants on the germination, histomorphology, productivity and histochemistry of certain plants of *Solanaceae*, St. Teresa's College, Ernakulam, 1997
- M.Sc.: Botany, St. Teresa's College, Ernakulam, 1990
- B.Sc. Botany, St. Teresa's College, Ernakulam, 1998

Professional/Teaching Experience



Years (in total) - 21 yrs

- Name of Institution- St. Teresa's College, Ernakulam.
- Position held- Guest Lecturer-1999-2005. Assistant Professor- 2005-2020

Research Experience & Expertise

Research field is Environmental Science. A total of 13 yrs of experience.



Administrative responsibilities and Positions held in College



Teacher in charge of the following:

- Career Guidance cell
- ED club, Tourism club
- NAAC report writing
- Life guidance cell
- Value education committee
- Counselling cell
- IQAC
- AQR
- WWS coordinator
- UGC purchase committee member of the Dept.
- First Friday Mass
- UGC sponsored Career Oriented Programme in Applied Botany
- ISA committee
- Certificate course in Applied Botany
- STAR programme coordinator of the Dept. of Botany
- Central Instrumentation Facility

Extension activities



Coordinated the activities of TROP at St.Mary's school, Maradu, SreeSukrutha samrakshini Sabha School, Ochanthuruthu , St.Mary's School, Vallarapadam and St.Teresa's Girls' Home, Ernakulam

Research Projects Undertaken



Title	Funding Agency & Fund allotted	Duration	Approved fund	Remarks
An Investigation on Diversity of flowering plants in <i>Ambalamedu</i> : An	UGC	2 years	Rs. 70000/-	Co - investigator

Industrial belt of Kerala. (Minor Project)				
Heavy metal phytoremediation of industrially polluted aquatic ecosystems of Kochi city using selected wet land plants: An ecosustainable approach	UGC	2 years	Completed Rs.1,40,000/-	Co - investigator
Study On The Agroecological And Phytosociological Aspects Of Eloor- An Industrial Belt In Kerala	UGC	2 years	Rs.80,000/-	Principal investigator

Publications in peer reviewed national/international journals



1. Merlee Teresa M.V, Liza Jacob and Beena .B. Nair, 1998. Growth kinetics of *Eremosphaera* a fresh water alga, *Geobios*, 25: 166-169.
2. Merlee Teresa M.V, Beena. B. Nair and Liza Jacob, 1998. Observations on the growth and physiology of *Chlorella* of fresh water ponds. *Geobios*, 25:232-234
3. Merlee Teresa M.V and Liza Jacob, 1999. Seed coat and strophilar structure in *Polygala* L. in relation to taxonomy; *Geobios*, 18:43-47.
4. Merlee Teresa M.V, Beena.B.Nair and Liza Jacob, 2000. Impact of IR and UV radiations on the productivity of *Pandorina*. *Geobios* 27: 39-41.
5. Effectiveness of Mangrove soil microflora in degradation of plastics: A case study, 2010. *Proceedings of 1st Kerala Women's Science Congress*.
6. Liza Jacob, Bhavana K.B., Merlee Teresa M.V. and Sr. Avita, 2013. A study on *Jatropha curcas*, L.- The bio-diesel plant. *Journal of Nature and Life Science*, 1(1): 31-36.

7. Kirthana B. Raj and Liza Jacob, 2014. Comparative study on the effect of Caffeine and Coffee powder on the growth parameters of *Phaseolus aureus* Linn. *Proceedings of the National Seminar- Sustainable Resource Management- Tools and Techniques*.
8. Alka Nassar, Liza Jacob and Romilly Margaret Mendez, 2015. Study on the physicochemical properties of soil and phytosociological aspects of plants in an industrial hub of Kerala. *International Journal of Current Research*, 7 (11) :22271-22277.
9. Liza Jacob and Sruthy S. Dev, 2015. Allelopathic impact of certain weeds on *Oryza sativa* L. *International Journal of Informative & Futuristic Research*, 3: 1055-1062.
10. Liza Jacob, Romilly Margaret Mendez and Bindu Antony, 2015. Analysis of the soil properties of an industrial area in Kerala. *International Journal of Scientific & Technology Research*, 4 (12): 139-140,
11. Anu Rose Varghese and Liza Jacob, 2016. Phytoremediation of water bodies using selected aquatic macrophytes- *Eicchornia crassipes* (MART.) Solms and *Pistia stratiotes*, L. *Asian Journal of Science and Technology*, 07(04): 2774-2776.
12. Liza Jacob, Greeshma Selin, Bibina K.B., and Rose Xavier K.X., 2016. Impact of distillery effluent on the growth and development of *Oryza sativa* L. *International Journal of Development Research*, 6(04): 7326-7329.
13. Liza Jacob 2016. Allelopathic impact of selected weeds on the growth and development of *Oryza sativa* Linn. *International Research Journal of Natural and Applied Sciences* 3 (6): 10-24.
14. Mariya Francis., Geethu C.T. and Liza Jacob, 2016. Comparative study on the quality of water from two villages in Ernakulam District of Kerala. *Elixir Pollution*, 96:41524 - 41527.
15. Mary Nisha M.X. and Liza Jacob, 2016. Allelopathic impact of selected weeds on the growth and development of *Oryza sativa* L. *International Research Journal of Natural and Applied Sciences*, 3(6): 10-24.

Books authored/Chapters/edited

1. Manual of Practical Botany for B.Sc. Botany Programme - Semesters I &II .

Seminars/Conferences/Symposium attended



- 1) UGC sponsored state level seminar on genetic engineering from 6th to 8th January, 1999
- 2) Workshop for teachers on professional excellence conducted by AIACHE KCCHE on 7th and 8th July 1999.
- 3) Workshop on environmental commitment, organized by St Teresa's College on 06-08-1999
- 4) State level conference on Genetic engineering as an effective tool in Biological studies-1999
- 5) Group discussion of PG Botany internal assessment at SB College conducted by Kerala Botanical Society, 11-08-2001
- 6) Orientation programme for teacher co-ordinators of Tourism Club held at KITTS, Malayattoor on 8th and 9th December 2002.
- 7) Two day district level camp of Tourism Clubs conducted by DTPC Cochin at KITTS, Malayattoor from 25th-26th January, 2003.
- 8) Seminar on Education for integral growth conducted by Christ College, Irinjalakuda on 15-03-2003.
- 9) NAAC Sponsored seminar on Quality Assurance in Higher Education : Challenges, Trends and Priorities in Sacred Heart College, Chalakudy on Feb 5th 2005.
- 10) National Seminar on effective class room communication skills by Centre for Education Beyond Curriculum, Christ College, Bangalore – March 12th – 13th , 2005
- 11) U.G.C.Workshop on 'Cluster of Colleges' – St. Teresa's College on 10.05. 2006
- 12) Seminar on Women counseling organized by Dept. of Student Services, Mahatma Gandhi University on 06.07.05
- 13) State Level Conference on "Rejuvenating Plant taxonomy – Potentialities in Kerala Scenario on 19th Nov. 2005 at Mar Athanasius College, Kothamangalam organized by Dept. of Botany & Kerala Botanical Society.
- 14) State Level Conference on Biodiversity and Bioconservation in the context of Kerala: 'Role of Plant Taxonomy' on 26th November 2005 at St.Teresa's College,Ernakulam
- 15) Kerala Botanical Society – M.Sc. Semester Syllabus modification at St. Albert's College,Ernakulam on 17th Dec. 2005

- 16) Seminar on “Mass Media and Modern Youth – the Symbiotic connection” – Organised by the Counselling Centre, St.Teresa’s College Ernakulam on 17.01.06
- 17) International Education Meet ‘06, 4 – 7 Feb., 2006, at Le Meridian, Cochin, organized by the Government of Kerala and Cochin University of Science and Technology
- 18) U.G.C.Workshop on ‘Cluster of Colleges’ – St. Teresa’s College on 10.05. 2006
- 19) Women Scientists/ Technocrats Opportunities and Challenges, 23- 25 June, 2006, at St. Teresa’s College, Ernakulam, organized by Shakthi :A National Movement for Women (Womens wing of Vijnana Bharati)
- 20) State level seminar on Environmental Biotechnology, at St. Teresa’s college, Ernakulam, conducted by The Dept. of Chemistry, St. Teresa’s college, Ernakulam, on 23-01-2007
- 21) State level seminar on Environment Management; Issues and Strategies at St. Teresa’s college, Ernakulam conducted by The Dept. of Botany, St. Teresa’s College, Ernakulam on 10- 08-2007
- 22) State level seminar and MSc Botany Project presentation competition organized jointly by the Kerala Botanical Society and Dept. of Botany, St. Teresa’s college, Ernakulam,on 15-09-2007
- 23) Regional Iseminar on Diabetes- A better understanding, at St. Teresa’s College, Ernakulam, conducted by The Dept. of Zoology,on 21-11-2007
- 24) District Level camp of Tourism clubs in Ernakulam District, at Yathri Nivas, Kalady, conducted by The District Tourism Promotion Council, Ernakulam from 19-01-2008 to 20-01-2008,
- 25) UGC sponsored orientation programme, at Academic Staff College, University of Kerala, from 3.05.08 to 30.05.08
- 26) National seminar on Analysis and on Contributions of Women Mathematicians, at St. Teresa’s College, Ernakulam, conducted by The Dept. of Mathematics and Kerala Mathematical Society, on 31-10-2008
- 27) UGC sponsored State level seminar on Ethno Botany: The plant friendly practices on medicinal Plants, at St. Teresa’s College, Ernakulam, conducted by The Dept. of Botany, St. Teresa’s College, Ernakulam, from 06-10-2009 to 07-10-2009
- 28) First Kerala Women Science Congress organized by *Shakti*- The Womens’ Wing of Vignana Bharati from 10.08.10 to 12.08. 10
- 29) Regional Seminar on Bionanotechnology organised by The dept. of Botany, Cochin College, Cochin sponsored by The cluster of colleges, Ernakulam region on 06-10-10

- 30) Xavier board of Higher Education in India- Regional meet- 2010, sponsored by Xavier Board on 16-10-10.
- 31) Orientation programme for college teachers on student welfare activities, organized by Mahatma Gandhi University, Dept. of Student services, at St. Teresa's College, Ernakulam, on 10-11-2010.
- 32) Training Programme For College Teachers on General Informatics, organized by St. Teresa's College, Ernakulam, in association with Kerala Higher Education Council, from 20-12-2010 to 22-12-2010 at St. Teresa's College, Ernakulam.
- 33) National seminar on Best Practices in Research and Consultancy: Opportunities and Challenges organised by IQAC, St. Teresa's College, Ernakulam on 20.10.2011.
- 34) Orientation programme on Women Empowerment by M. G. University on 30-07-2012.
- 35) National workshop on Functioning as an Autonomous College by IQAC, St.Teresa's College, Ernakulam on 11-2.2014.
- 36) Webinar on Plant Molecular changes in Space organized by G.T.N.Arts College(Autonomous), Dindigul on 16-05-2020.
- 37) Short Term Course on Basics of Organic Farming by Athalye- Sapre-Pitre College (Autonomous), Devrukh, Maharashtra from 31-05-2020 to 06-06-2020.

Faculty development programs attended



(Orientation/Refresher Course/Workshop/Short term)

Name of the Course	Name of the Institution	Duration	Sponsoring Agency
Orientation Course on IT	Academic Staff College, Thiruvananthapuram	3/5/08 to 30/5/08.	UGC
Refresher Course in Environmental Science.	Academic Staff College, Bharathiar University, Coimbatore, Tamil Nadu,	19/11/2013 to 9/12/2013.	UGC

Short Term Course in Women Empowerment	Academic Staff College, Thiruvananthapuram	6-11-2017 to 11-11-2017	UGC
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Seminars/Conference/Symposium organised



1. Seminars *Job avenues in Tourism Industry* on 27.8.06
2. Workshop on *Mentoring and Counselling* on 3.7.'07
3. Seminar on *Ecotourism* on 26.9.08.
4. Seminar on the Tourism Theme of 2013- "*Tourism and Water-Protecting our Common Future*".
5. Seminar Cum Exhibition on *Pulses- Nutritional Seeds for a Sustainable Future* on 07-12-2016, as a part of the celebrations of the International Year of Pulses.
6. Training Programme on *Herbarium Techniques* on 26-3-2018.
7. Training & Workshop on *Photography Theory and Practice* on 09-11-2018,12-11-2018 and 16-11-2018.
8. *Teresian Science Exhibition* from October 18th to 19th, 2019

Liza Jacob, Ph.D.

03-11-2020