



St Thomas College, Kozhencherry

Established in 1953 | Reaccredited by NAAC with Grade A | ISO 9001:2015 Certified | ISO 21001:2018 Certified

Affiliated to Mahatma Gandhi University, Kottayam

www.stthomascollege.info

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Faculty Profile

Dr. Leena Abraham

Head I/c and Research Guide

Postgraduate and Research Department of Botany

Mobile No. +91 7559062061

✉ leenaabraham@stthomascollege.info



Personal Details

Date of Birth	01.04.1978
Nationality	Indian
Marital Status	Married
Permanent Address	Parackathottathil House, Thadiyoor P. O., Pathanamthitta Dist-689 545, Kerala State, INDIA

Higher Education

2007	Ph. D. Botany , Maharaja Sayajirao University of Baroda, Gujarat.
1999 – 2001	M.Sc Botany (Gold Medallist) , Maharaja Sayajirao University of Baroda, Gujarat.
1996 – 1999	B.Sc Botany (Gold Medallist) , Maharaja Sayajirao University of Baroda, Gujarat.

Professional Position

20 February 2014 to present	Assistant Professor, Department of Botany, St Thomas College, Kozhencherry
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Teaching Experience

February '2014 to till date	Assistant Professor St. Thomas College, Kozhencherry
February '2013 to February '2014	Senior Associate Professor Aakash Institute, Mumbai
June '2007 to December '2012	Assistant Professor N. V. Patel College of Pure and Applied Sciences, Vallabh Vidhyanagar, Anand, Gujarat
August '2005 to May '2007	University Teaching Assistant Department of Botany, Faculty of Science, The Maharaja Sayajirao University of Baroda
August '2001 to March '2002	Post Graduate Teacher (PGT)-Biology Kendriya Vidhyalaya (Gujarat).

Courses Taught

M.Sc	■ Proteomics
	■ Genetic Engineering
	■ Environmental Science
	■ Research Methodology
	■ Genetics
B.Sc	■ Phycology
	■ Methodology of Science
	■ Applied Botany
	■ Environmental Science
	■ Genetics

Professional Service Rendered

01 June 2020 till date	■ HoD in Charge, Department of Botany
	■ Member, Staff Council
AY 2019-'20 till date	■ Convenor, IQAC Criterion 3 - Research, Innovation, Extension
AY 2021-'22 till date	■ Convenor, Research Forum
AY 2021-2022	■ Member, Research Advisory Committee

Other Important Responsibilities/Positions Held

External Expert	■ External Expert for project associate-1 selection committee, CSIR-NIIST.
Question Bank Upgradation	■ Participated in the Question Bank Upgradation Initiative of Mahatma Gandhi University, Kottayam and Contributed to the Question Bank of IV Semester PG CSS Examination. (During 2021-2022)
	■ Participated in the Question Bank Upgradation Initiative of Mahatma Gandhi University, Kottayam and Contributed to the Question Bank of I Semester PG CSS Examination. (During 2020-2021)
Subject Expert	■ Half yearly presentation of research scholars of Botany, CMS college, Kottayam.

Social Responsibilities Held

- Presiding Officer, Lok Sabha Election, May 2016
- Presiding Officer, Panchayath Election, November 2015








International Assignments and Experiences







Professional Membership and Activities

- Member, PG, Board of Studies. Mahatma Gandhi University, Kottayam
- Life Member of Indian Society of Remote Sensing ISRS campus, Dehra Dun, India.
- Life Member of Indian Society of Geomatics ISRO, Ahmedabad, India.

Awards and Achievements

- 2019  Member, PG Board of Studies, M. G. University.
-  Approved Research Guide of M. G. University.
- 2013  'Aakash Guru' award for outstanding performance in teaching.
- 2001  I Rank in M.Sc. Botany, The Maharaja Sayajirao University of Baroda
-  Vaidya Narayanrao Hardikar Gold Medal for M.Sc.Botany
- 1999  I Rank in B. Sc. Botany, The Maharaja Sayajirao University of Baroda
-  Dr. V.G. Phatak Gold Medal for B.Sc.

Research Experience

-  **APPROVED RESEARCH GUIDE**, Mahatma Gandhi University
-  Students:
-  1. Princy Bose-Topic: Plant Functional Classification: A Pragmatic Approach towards understanding Ecological Dynamics of Selected Wetlands of Pathanamthitta district
-  2. Hima K.S.-Topic: Phytosociology and Diversity of Terrestrial Ferns of Pathanamthitta district and Bioefficacy of selected Ferns against Stored Grain Pest

Areas of Specialization and Interest

-  **Botany**
-  **Applied Ecology**
-  **Remote Sensing**

Research Publications

-  **Remote sensing and GIS in Forestry**
Leena Abraham (2022) Book of Abstracts Proceeding of National Seminar on, "Biotechnology, Environment and Conservation" (ISBN:978-81-955053-2-6)
-  **Tree Diversity, Distribution and Carbon Sequestration Potential of Selected Artificial Ecosystems of Pathanamthitta district: A Comparative Study.**
Leena Abraham and Deepamol P.K., (2019) Conceptualization of Nature (ISBN:978-93-540887-1-1)
-  **A Comparative Study of Air Pollution Induced Stress Tolerance of Selected Tree Species in a Disturbed and Undisturbed Plant Community.** Leena Abraham (2019), International Journal of Current Research, Vol. 11 (1), 411-416, ISSN:0975-833X.
-  **Evaluation of Air Pollution Tolerance Index of selected Tree Species along roadsides in Vidyanagar, Gujarat (India).** Leena Abraham, International Journal of Science and Research, Vol. 8 (1), 886 – 890, ISSN:2319-7064.
-  **Physiochemical Analysis and Conservation Strategies for a Pond Emerged by Pamba Irrigation Project in Vazhakunnam, Pathanamthitta District.** Sam Alex and Leena Abraham (2018) Trends in Biosciences 11(7), pp.1589-1591, ISSN 0974-8431.
-  **Study Of Air Pollution Tolerance Index (APTI) and Distribution Pattern by Using Importance Value Index (IVI) of Plants in Disturbed and Undisturbed Locality Around Anand City (India).** Mitul Kotecha, Kasturi Naik and Leena Abraham (2014) Carpathian Journal of Earth and Environmental Sciences, Vol. 99(1), pp.163 – 169 (ISSN Printed: 1842 - 4090)
-  **Pollution Tolerance and Distribution Pattern of Plants of Disturbed and Undisturbed Community in Anand** Leena Abraham, K. Naik, M. Kotecha, P. Gor and R. M. Thakkar (2011) International Journal of Pharma and Bio Sciences (ISSN 0975-6299).

Research Publications (continued)

- **Role of planning strategies in success/failure of JFM plantation** Leena Abraham and G. Sandhya Kiran (2005), Current Science, vol.88 (2) pp 288-291 (ISSN 0011-3891).
- **Sustainability of Joint Forest Management(JFM) Plantations Using Satellite Data** Leena Abraham and G. Sandhya Kiran, (2005), 25th ISRS Annual Convention and National Symposium Birla Institute of Technology, Ranchi, India.
- **Study of Grasslands in Amreli District** G. Sandhya Kiran, Leena Abraham, Kavita Sharma and Jessica Karia (2004), Range Management and Agroforestry, Indian Grassland and Fodder Research Institute, 25(2) pp161-163.
- **Remote Sensing in Salinity Studies** Leena Abraham and G. Sandhya Kiran (2003), Geobios, vol. 30(4) pp 233-236.
- **Effect of NaCl stress on growth of Sorghum bicolor (L.) Monech.** Leena Abraham and G. Sandhya Kiran (2003), Journal of Eco-physiology, vol.6(3-4), 137-140.
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Book Chapters

- **Proceedings of National Workshop on, “Genomics, Proteomics and Bioinformatics: Fundamentals to Advanced** Leena Abraham and Elizabeth Thomas (2015)- Editors.
- **A Practical Book of Biology** Rita N. Kumar, Leena Abraham (2009), Atul Prakashshan, Ahmedabad, India.
- **A Text Book of Botany** Rita N. Kumar, Leena Abraham (2009), Atul Prakashshan, Ahmedabad, India.
- **Joint Forest Management: Issues and Experiences, Role of planning strategies in success/failure of JFM plantation** Leena Abraham and G. Sandhya Kiran. (2008), pp. 109-116, The ICFAI University Press, Hyderabad, India.
- **Air Pollution Development at What Cost? Green belt, Plant Scavengers for Combating Air Pollution** Leena A., Jasrai Y.T. and Garge S.K.(2003), Daya Publishing House, New Delhi, India.
- **Air Pollution Development at What Cost? Green belt, Plant Scavengers for Combating Air Pollution** Leena A., Jasrai Y.T. and Garge S.K.(2003), Daya Publishing House, New Delhi, India.

Popular Articles



Paper Presentations

- **Tree diversity, distribution and carbon sequestration potential of selected artificial ecosystems of Pathanamthitta district: A comparative study.** National seminar on New Horizons for Biodiversity-Climate Change and Human Society, Department of Botany, Government College, Kottayam
- **Sustainability of Joint Forest Management Plantations in Rajpipla Taluka.** INational Seminar on “New Horizons in Biological Sciences” organized on 23rd Sep’07 by N. V. Patel College of Pure and Applied Sciences, Vallabh Vidhyanagar, Gujarat.

Minor Research Project

- SPYTiS-II Project entitled, "Diversity, spatial distribution and productivity of trees in St. Thomas College, Kozhencherry" sponsored by Kerala State Council for Science, Technology and Environment (KSCSTE)
- Project entitled, "To evaluate Air Pollution Tolerance Index of Selected Plant Species Along the road-sides in Vallabh Vidyanagar, Anand" sponsored by GUJCOST (Gujarat Council on Science and Technology) Gandhinagar.

Project Guidance

- M.Sc
- **Vijitha B.**, *Comparative study of selected ponds of Elanthoor panchayat* (2020-2022 Batch)
 - **Arunkumar K. S.**, *QR Coding of trees in St. Thomas College, Kozhencherry* (2019-2021 Batch)
 - **Sonu C. Regikumar**, *Comparative Morphological Analysis of some Fruit Crops* (2017-2019 Batch)
 - **Shilpa Sathyan**, *Morphological Characterization of Some Ornamental Plants* (2017-2019 Batch)
 - **Ayana V.M.**, *Comparative Study Of Physical, Chemical And Biological Parameters Of Selected Pond Ecosystems In Kozhencherry Taluk* (2016-2018 Batch)
 - **Nisha T. G.**, *Effect of salt stress on growth of some vegetable crops* (2015-2017 Batch)
 - **Renjusha R.**, *Air Pollution Tolerance Index* (2015-2017 Batch)
 - **Deepamol P. K.**, *Floristic Diversity, Distribution and Carbon Sequestration Potential of Selected Artificial Ecosystems of Pathanamthitta district-A Comparative Study* (2014-2016 Batch)
 - **Sachu Elza Mathew**, *Flora of St. Thomas College, Kozhencherry* (2013-2015 Batch)
 - **Vithin Kumar P. T.**, *Effect of NaCl Stress on Growth of Some Selected Crops Plants* (2013-2015 Batch)
- B.Sc
- **Abhirag R. R., Ajeesh Suseelan, Rahul R., Shaheera Shaji, Sneha Saji**, *Seed germination studies* (2022)
 - **Anto M.V., Anu Prasad, Revathi M. Nair, Sneha Anu Sam**, *Microscopic Characteristics of Starch Grains* (2019)
 - **Sruthi mol S. R., Asha Mohanan and Arunthathi S.**, *Digital Mapping of Trees in St. Thomas College, Kozhencherry* (2018)
 - **Merin Sam George**, *Diversity and Productivity of Trees* (2017)
 - **Nandana Krishnan, Princy Bose, Radhika R.**, *Morphoanatomical Adaptations of Hydrophytes* (2013-16 Batch)

Faculty Development Programmes Attended

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|-------------------------------|---|
| 06 to 19 December 2022 | ■ Refresher Course in ICT and Online Teaching(Interdisciplinary), UGC-HRDC, University of Calicut |
| 27 October to 3 November 2021 | ■ One Week Inter-Disciplinary Faculty Development Programme "Youth and Climate Change", Teaching Learning Centre, Ramanujan College, University of Delhi. |
| 15-29 July 2021 | ■ Two Week Inter-Disciplinary Refresher Course in Environmental Studies "21st Century Environmental Issues, Challenges and Solutions", Teaching Learning Centre, Ramanujan College, University of Delhi |
| 08 to 26 September 2018 | ■ Refresher Course in Life Sciences(Interdisciplinary), UGC-HRDC, University of Kerala. |

Faculty Development Programmes Attended (continued)

21.08.2017 to 17.09.2017

Orientation Programme, UGC-HRDC, Sardar Patel University, Gujarat

Seminar Attended

- 20-21 January 2021 Accreditation Framework: A comprehensive Approach, organized by organized by KE College, Kottayam.
- 31.07.2021 "Higher Education and Cyberspace: Re configuring Institutional Strategies" organized by the Mar Thoma Higher Education Commission, Thiruvalla.
- 16.02.2022 National Level Round Table Discussion on Biological Diversity (Amendment Bill) 2021 organized by Mahatma Gandhi University, Kottayam

Recent Seminar/Conferences/Workshops Organized

- Co-convenor National Workshop on, "Genomics, Proteomics and Bioinformatics: Fundamentals to Advanced" organized during 18th- 20th November 2015 by Department of Botany, St. Thomas College, Kozhencherry, Kerala.
- Convenor "Understanding Research: A way of Life" organized by Research Forum, 17th March 2021.
- "Research and Innovation" organized by Research Forum, 23rd March, 2022
- "National Life Science Entrepreneurship Awareness Programme" in association with C-CAMP (Centre for Cellular and Molecular Platforms), Bangalore, an initiative of Department of Biotechnology, Govt. of India, 11th May, 2021.

Invited Talks

- Resource Person for Application of Geospatial Technologies in Plant Conservation and Plant Science organized by Mar Thoma College, Tiruvalla, 18th October 2022.
- Resource Person for National Seminar on, "Biotechnology, Environment and Conservation" organized by St. Dominic's College, Kanjirapally in association with Kerala State Higher Education Council, Government of Kerala on 25-26th Aug 2022. Delivered a talk on, "Remote Sensing and GIS in Forestry".
- Delivered invited talk on the topic, "Importance of Science and Technology" in SNDP HSS Karamveli, on 21.07.2022.
- Delivered keynote address on, "Applications of Remote Sensing and GIS in Botany" in BAM College, Thuruthicad on 20.12.2021
- Delivered keynote address on, "Biodiversity conservation with Remote Sensing and GIS" in Sree Narayana College, Kollam on 22.05.2021
- Delivered invited talk on, "Remote Sensing and Digital Image Processing of Satellite Data" in Prof. P. N. Rajamma Memorial Lecture Series organized by Maharaja's College, Ernakulum in association with Kerala Academy of Sciences on 29.12.2020
- Delivered key note address on the topic, "Adaptations, Interactions and Ecology of Plants" at Assumption College (Autonomous), Changanaseery, Kottayam, Kerala on 5th July'2017.
- Delivered invited talk on, "Remote Sensing and GIS" in Botany Association Seminar of St. Thomas College, Kozhenchery on 11th Mar'2016.

Invited Talks (continued)

- Keynote address on “Application of Remote Sensing and GIS in Plant Resource Mapping” in National Seminar organized by Department of Botany, KKTU Govt College, Kodungallur, on 21st Jan’2016. Delivered key note address during the inauguration of Science Club of St. Thomas Higher Secondary School, Kozhencherry on 15th Oct’2015.

Media Discussions



Community Service



Skills

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| Languages known | English, Malayalam, Gujarati, Hindi. |
| Sports | State Level Basketball player |