

CURRICULUM VITAE

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Kerala, India

Date of Birth: 14/10/1969

Educational Qualifications

- Ph.D in Marine Biology, Department of Marine Biology, Cochin University of Science and Technology, Kochi- 682022, Kerala, 2002.
- The title of the thesis - "Seaweed exudates and settlement behaviour of sedentary organisms" under the guidance of Dr.N.RMenon
- B.Ed Natural Science, Mahatma Gandhi University, Kottayam, Kerala, 1993
- CSIR JRF -NET, 1992
- M.Sc Zoology, Mahatma Gandhi University, Kottayam, Kerala, 1992
- B.Sc Zoology, Mahatma Gandhi University, Kottayam, Kerala, 1990.

Teaching Experience

- **18 years** of teaching experience in Department of Zoology, St. Teresa's College, Ernakulam.

Topics taught:

Animal Diversity, Environmental Biology, Physiology, Biodiversity and systematics, Instrumentation, Developmental Biology, Cell Biology, Molecular Biology, Immunology, Evolution and Applied Zoology.

Period: 20 August 2001 - Till date

- **5 years** of teaching in Department of Zoology, Bharata Mata College, Thrikkakara.

Topics taught:

Evolution, Applied Zoology, Animal Diversity Chordata and Non Chordata.

Period: 20 August 1996 - 19 August 2001

Positions held

- Faculty in charge of Bhoomithra Sena club in St. Teresa's College-2012-2019
- Nodal Officer of Swachh Bharat Summer Internship programme -2018
- Camp Officer -2018-19
- Board of studies member -2014-2019
- Syllabus restructuring committee member -2017-18
- Head of the Department -2019

LIST OF PUBLICATIONS

List of papers published

National Journals

1. **Meera Jan Abraham** and N.R Menon.2014.Inhibition of larval attachment and metamorphosis in the Serpulid Polychaete, *Hydroides elegans* Haswell by Seaweed secondary metabolites. *Bharata Mata Journal of Multidisciplinary studies*.1(2):1-10. ISSN 2348-3571.
2. M Paul, **Meera Jan Abraham**& N R Menon, 1998, Settlement pattern of the larvae of *Hydroides elegans* (Polychaeta) in the presence of petroleum hydrocarbon compounds. *Indian Journal of Marine Sciences*.27:489-491.ISSN 0379-5136.

International Seminars

3. Revathy, T.V., **Meera Jan Abraham** & Simi Joseph P, 2012, Study on Antibacterial Activity of Natural Products. *Proceedings of the International Conference on Nutritional Medicine, Health and Wellness*, Gladys Francis, Meera Jan Abraham and Soja Louis(Eds.), Department of Zoology, St. Teresa's College, pp.330 ISBN 978-81-924940-0-5.
4. Nimitha, R. C and **Meera Jan Abraham**, 2012, Effect of cleaning agents on different bacterial Strains. *Proceedings of the International Conference on Nutritional Medicine, Health and Wellness*, Gladys Francis, Meera Jan Abraham and Soja Louis(Eds.), Department of Zoology, St. Teresa's College, pp.310 ISBN 978-81-924940-0-5.

National Seminars

5. **Meera Jan Abraham** and N.R Menon.2014.Effect of seaweed secondary metabolites on the settlement pattern of the larvae of *Balanus amphitrite* .In:Proceedings of the National Seminar on Trends in Biodiversity Studies,4-5th December 2014 . (Eds.) Gladys Francis, Meera Jan Abraham, Reema Kuriakose. Dept. of Zoology, St. Teresa's College. Ernakulam. pp 208-216.ISBN 978-81-924940-1-2

6. **Meera Jan Abraham** & N R Menon, 2009, Settlement pattern of the larvae of *Hydroides elegans* (Polychaeta) in the presence of secondary metabolites of seaweeds. Proceedings of the *National seminar on Bioactive compounds from marine organisms*, (Eds) N N Menon *et al.*, Department of Marine Biology, Microbiology and Biochemistry, CUSAT, pp.39.

State level Seminar

7. **Meera Jan Abraham** & N. R Menon. 2011. Antifouling activity of seaweed secondary metabolites on the larval settlement of *Hydroides elegans* (Polychaeta). In: Proceedings of the State Level Seminar –Biodiversity at risk- An Indian Perspective, pp. 56-74

Paper presented in the National Seminar

8. M J Abraham & N R Menon , 2010 Inhibitory effects of seaweed secondary metabolites on the larval settlement of *Balanus amphitrite communis* (Cirripede) and *Hydroides elegans* (Polychaeta) — Ist Kerala Women Science Congress

Books Published

Chapters in books

1. Chordate Diversity of Kerala, 2018. Published by the Zoological Society of Kerala. ISBN 978-81-936818-1-7.
2. Cell Biology and Molecular Biology, Published by the Zoological Society of Kerala.

Books edited

1. Chordate Diversity of Kerala, 2018. Published by the Zoological Society of Kerala. ISBN 978-81-936818-1-7.
2. Proceedings of the International Conference on Nutritional Medicine, Health and Wellness. 2012. Department of Zoology, St. Teresa's College, Ernakulam. ISBN 978-81-924940-0-5.
3. Proceedings of the National Seminar on Trends in Biodiversity Studies, 2014. Department of Zoology, St. Teresa's College, Ernakulam. ISBN 978- 81-924940- 1-2.

Projects Undertaken

Title : Bioactive compounds and settlement behaviour of Biofoulers
Status : Completed
Funding Agency : University Grants Commission
Scheme : Minor Projects
Amount Received : Rs. 76000/-

Title : Antifouling Role of Natural Products
Status : Completed
Funding Agency : University Grants Commission
Scheme : Minor Projects
Amount Received : Rs. 170250/-

Title : Study on Bioactive compounds and settlement behavior of *Perna viridis*
Status : Completed
Funding Agency : Kerala State Council for Science, Technology and Environment
Scheme : Student Projects
Amount Received : Rs. 8000/-

Title : Plastic free Cheranalloor and popularizing BhoomithramSanchi
Status : Completed
Funding Agency : Directorate of Environment and Climate change, Govt. of Kerala
Scheme : Paristhithikam Projects
Amount Received : Rs. 110000/-

Seminars/ Conferences/Symposium/Projects organized

1. Organizing committee member, Life guidance and Women empowerment programme for final year UG and PG students on 5th February 2019.
2. Organizing committee member of Social action project PK3(Plastic Kurakkaam, Kurakkanam, KurachePattuu) Nava Keralam, HarithaKeralathinayi in Ernakulam District in Kerala State jointly implemented by Bhoomithra Sena Club, St. Teresa's College, Suchitwa Mission Ernakulam District Govt of Kerala and Mathrubhumi Seed project Under the leadership of Ernakulam District Collector 2018-19
3. Co-ordinator of Swacch Bharath Summer Internship project 2018 'Cheraam Cheranalloorinoppam' initiated by St. Teresa' College in association with Cheranallur Panchayat in Ernakulam District in Kerala for promoting green protocol for sustainable solid waste management in Cheranallur Panchayat.
4. Convenor, Bhoomithram day award distribution ceremony, Launch of Cloth Diapers and sanitary napkins and BhoomithramSanci exhibition as part of Paristhithikam Project at Little Flower U. P School,Cheranalloor, Ernakulam.

5. Co-ordinator , Faculty Enrichment programme on Teresian Ecofriendly Recycling and Reusing Activities (TERRA), organized by Bhoomithra Sena Club and Department of Chemistry, St. Teresa's College (Autonomous), Ernakulam on 7th November 2018.
6. Co-ordinator, World Ozone day Celebrations 2018- 'Keep Cool and Carry on' organized by Bhoomithra Sena Club and Department of Chemistry, St. Teresa's College (Autonomous), Ernakulam on 17th September 2018.
7. Co-ordinator, International Seminar on Emerging Trends in Biophysical Research and Current Challenges in Arctic Sea Ice Monitoring organised by the Department of Zoology and Bhoomithra Sena Club, St. Teresa's College, Ernakulam on 13th July 2018.
8. Co-ordinator, Malayattoor Green Protocol implementation programme 2018- a joint initiative of Ernakulam District Administration, District Suchitwa Mission and St. Teresa's College.
9. Co-ordinator KSCSTE sponsored one day seminar on 'Ente Haritha Bhavanam' – Connecting People and Nature, organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 16th June 2017.
10. Co-ordinator Malayattoor Green Protocol implementation programme 2017- a joint initiative of Ernakulam District Administration, District Suchitwa Mission and St. Teresa's College .
11. Organizing committee member, UGC Sponsored National Seminar on Trends in Biodiversity Studies organised by the Department of Zoology, St. Teresa's College, Ernakulam on 4th & 5th December 2014.
12. Organizing committee member of the International conference on Nutritional Medicine Health and Wellness, June 7 & 8th 2012.
13. Organizing committee member, UGC sponsored National Seminar on "Animal Welfare and Humane Education" conducted by the Department of Zoology, St. Teresa's College, Ernakulam and the Mahatma Gandhi Doerenkamp Center MGDC, Bharathidasan University, Thiruchirapalli, Tamil Nadu. On 15th March 2011.
14. Organizing committee member International Seminar on 'Nutritional Medicine A natural science based approach to health and the control of chronic and infectious diseases' on 8th December 2010.
15. Co-ordinator Symposium on Mosquito – The Menace organized by Dept. of Zoology, St. Teresa's College, Ernakulam conducted on 8-11-2005.

Nature Camps Organized

1. 3 day Nature Study camp at Neyyar-2012
2. 3 day Nature Study camp at Thenmala - 2/2/2014 - 4/2/2014
3. 3 day Nature Study camp at Thattekkad Bird Sanctuary - 3/11/2016 -5/11/2016
4. 3 day Nature Study camp at Mathikettan Shola -17/11/2017 - 19/11/2017

Recognitions

1. Certificate of appreciation in recognition of the commendable service rendered to Bhoomithra Sena Club during the academic year 2015 – 16 which helped BMC of St. Teresa’s College, Ernakulam to win the best BMC Club Award in Central Kerala in 2017.
2. Certificate of appreciation in recognition of the commendable service rendered to Bhoomithra Sena Club during the academic year 2015 – 16 which helped BMC of St. Teresa’s College, Ernakulam to win Suchithwa Haritha Puraskar 2016 organized by Mithradam and Rajagiri College of Social Science, Ernakulam.
3. Certificate of appreciation in recognition of the commendable service rendered to the Department of Zoology as staff advisor of Zoology association during the academic year 2016 – 17.
4. Certificate of appreciation from Shri. K. Mohammed Y Safirulla I.A.S, District Collector Ernakulam for the role as Staff Advisor in the Malayattoor Green Protocol implementation programme 2017- a joint initiative of Ernakulam District Administration, District Suchitwa Mission and St. Teresa’s College and for supporting various green protocol activities during supporting various green protocol activities in 2016 -2017.
5. Certificate of appreciation from Shri. K. Mohammed Y Safirulla I.A.S, District Collector Ernakulam for the role as Staff Advisor in the Malayattoor Green Protocol implementation programme 2018- a joint initiative of Ernakulam District Administration, District Suchitwa Mission and St. Teresa’s College and for supporting various green protocol activities during 2017-18.
6. Certificate of appreciation in recognition of the commendable service rendered to Bhoomithra Sena Club during the academic year 2017– 18 which helped BMC of St. Teresa’s College, Ernakulam to win first prize for environment protection at institutional level instituted by world malayalee council on 13/01/2019.

Fellowships/ Memberships

1. **Fellow**, Zoological Society of Kerala, ZSK, India

Orientation and Refresher courses attended

1. UGC sponsored Refresher course on “Life Science” organized by Dept. of Marine Biology, CUST, Cochin conducted on 2/3/2009 to 23/3/2009
2. UGC sponsored Refresher course on “Life Science” organized by Dept. of Marine Biology, CUST, Cochin conducted on 19/02/2007 – 10/03/2007
3. UGC sponsored Orientation on “IT Oriented” organized by Academic Staff College, Trivandrum, conducted on 18/4/2006-15/5/2006

Conference/ Seminars/ Workshops attended

A. International level - 6

B. National /State/ Regional level - 55

C. Workshops & Training - 8.

Seminars/ Workshops Attended

International

1. International Seminar on **Emerging Trends in Biophysical Research and Current Challenges in Arctic Sea Ice Monitoring** organised by the Department of Zoology, St. Teresa's College, Ernakulam on 13th July 2018.
2. International Seminar on **Recent Trends in Molecular Diagnostics** (RTMD-2017) organized by the Post Graduate Department of Fisheries and Aquaculture, St. Albert's College (Autonomous), Ernakulam on 10th August 2017.
3. International Seminar on **Recent advances in solar energy applications, RASE -2016** organized by the Post Graduate Department of Chemistry, St. Teresa's College, Ernakulam on 15th December 2016.
4. International Seminar on **Stem Cell Technology and Tissue Engineering** organized by the Department of Botany, St. Teresa's College, Ernakulam on 15th January 2013.
5. UGC sponsored International conference on **Nutritional Medicine, Health and Wellness** organised by the Department of Zoology, St. Teresa's College, Ernakulam and Dr. Rath Research Institute, USA on 7th and 8th JUNE 2012.
6. International Seminar on **Nutritional Medicine- A natural science based approach to health and the control of chronic and infectious diseases** organized by the Department of Zoology, St. Teresa's College, Ernakulam on 8th December 2010.

National /State/Regional

1. Faculty Enrichment programme on **Teresian Eco friendly Recycling and Reusing Activities (TERRA)**, organized by Bhoomithra Sena Club and Department of Chemistry, St. Teresa's College (Autonomous), Ernakulam on 7th November 2018.
2. World Ozone day Celebrations 2018- **Keep Cool and Carry on** organized by Bhoomithra Sena Club and Department of Chemistry, St. Teresa's College (Autonomous), Ernakulam on 17th September 2018.
3. Total **Quality Management –Enrichment Programme for administrators and senior faculty**, organized by the Postgraduate Department of Chemistry and Internal Quality Assurance Cell, St. Teresa's College (Autonomous), Ernakulam on 8th November 2018.

4. Two day **Academic Orientation Programme** organized by the Internal Quality Assurance Cell, St. Teresa's College (Autonomous), Ernakulam on 31st May and 1st June 2018.
5. One day Workshop on **Human Rights** organized by the Zoological Society of Kerala on 3rd April 2018.
6. UGC (CPE) sponsored National Conference on **Modern Trends in Research-2017**, organized by Teresian Research and Consultancy Cell (TRACC), St. Teresa's College (Autonomous), Ernakulam on 19th October 2017.
7. KSCSTE sponsored one day seminar on **EnteHarithaBhavanam' –Connecting People and Nature**, organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 16th June 2017.
8. UGC sponsored National workshop on **Capacity building in academic writing and publishing** organized by the Golden Jubilee Memorial Library , St. Teresa's College (Autonomous), Ernakulam on 15th March 2017.
9. UGC sponsored National Seminar on **Green Efforts for Water Conservation – A move towards sustainable environment** organized by the Department of Zoology, Bharata Mata College, Thrikkakara and Centre for Water Resources Development and Management (CWRDM) on 28th February 2017.
10. UGC sponsored Workshop on **Education Leadership and Teacher Wellness** organised by the Community College and the Internal Quality Assurance Cell, St. Teresa's College (Autonomous), Ernakulam on 27th February 2017.
11. KSCSTE Sponsored seminar on **Ozone Depletion: Impacts and Remedies** in connection with the International day for Preservation of Ozone Layer -2016: Ozone and Climate: Restored by a World United, organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 22nd September 2016.
12. UGC sponsored Seminar on **Biodiversity Conservation & issues** organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 29th June, 2016.
13. Seminar on **Biodiversity Conservation Envisaging Ecosystem changes** by Department of Botany, St. Teresa's College, Ernakulam on 28th June ,2016.
14. UGC sponsored Workshop on **4th Cycle Accreditation in Autonomous Colleges** organized by the Internal Quality Assurance Cell and the Audit Cell, St. Teresa's College (Autonomous), Ernakulam on 22nd June 2016.
15. UGC sponsored National Workshop on **Accreditation & Academic Audit** organized by Internal Quality Assurance Cell, St. Teresa's College (Autonomous), Ernakulam on 11th June 2016.
16. **World Fish Migration Day panel discussion and seminar on Linking rivers, barrages and fish migration** organised by Community Environmental resource Centre (CERC) of Ashoka Trust for Research in Ecology and the Environment (ATREE) and KUFOS, Kerala.on 21st May 2016.

17. UGC sponsored National Conference on **Modern Trends in Research -2015** organised by Teresian Research and Consultancy Cell (TRACC), St. Teresa's College (Autonomous), Ernakulam on 14th October 2015.
18. Regional Seminar on **Biology and Society** organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 9th September 2015.
19. UGC sponsored National seminar on **Human Rights and Gender issues –Towards Pragmatic Solutions** organised by Dept. of Sociology), St. Teresa's College (Autonomous), Ernakulam on 11-12th February 2015.
20. National Workshop on **Curriculum and Syllabus Restructuring** organized by the Internal Quality Assurance Cell, St. Teresa's College (Autonomous), Ernakulam on 9th-10th December, 2014.
21. UGC sponsored National seminar on **Trends in Biodiversity Studies** organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 4th-5th December, 2014.
22. National workshop on **Functioning as an autonomous College** by IQAC, St. Teresa's College, Ernakulam on February 11th, 2014.
23. National workshop on **Dimensions of media and impact on youth** by Department of Sociology, St. Teresa's College, Ernakulam on November 13, 2013.
24. UGC sponsored National seminar on **Microbiology and microbial technology** by Department of Botany, St. Teresa's College, Ernakulam on October 7-8, 2013.
25. UGC sponsored National Seminar on **Towards Green Consumerism- Innovative Approaches and Practices** organized by Dept. of Home Science, St. Teresa's College, Ernakulam conducted on 9/8/2012 to 10/8/2012.
26. KSCSTE sponsored State level Seminar on **Intellectual Property Rights- Concepts, Policies and Guidelines** organized by Patent Information Centre, Kerala and St. Teresa's College , Ernakulam conducted on 11/07/2012.
27. National Seminar on **Best practices in Research and Consultancy: Opportunities and challenges**, Organized by Internal Quality assurance Cell, St. Teresa's College, Ernakulam on October 20th 2011.
28. UGC sponsored State level Seminar on **Biodiversity at risk – An Indian Perspective**, Organised by the Department of Zoology, Bharata Mata College, Thrikkakara on September 28th and 29th 2011.
29. UGC sponsored National Seminar on **Challenges in Nano Science and Technology, CNT-2011** Organised by the Department of Chemistry, St. Teresa's College, Ernakulam in collaboration with Inter University Center for Nanomaterials and Devices, CUSAT on 28th & 29th July 2011.
30. UGC sponsored National Seminar and Workshop on **Animal Welfare and Humane Education** organized by Dept. of Zoology, St. Teresa's College, Ernakulam in collaboration with Mahatma Gandhi –Doerenkamp Center (MGDC) ,Bharathidasan University conducted on 15/03/2011.

31. Dr. Rath Research Institute U.S.A Sponsored International level Seminar on **Nutritional Medicine** organized by Dept. of Zoology, St. Teresa's College, Ernakulam conducted on 08/12/2010.
32. Symposium on **Urban Biodiversity** organized by Dept. of Zoology, St. Albert's College, Ernakulam conducted on 2-3/12/2010.
33. **Regional Meet of Xavier Board of Higher Education In India** held at St. Teresa's College, Ernakulam on 16/10/2010.
34. SHAKTI sponsored 1st **Kerala Women's Science Congress** held at St. Teresa's College, Ernakulam on 10-12/08/2010.
35. UGC, CAREKeralam&Arjuna Natural sponsored State level Seminar on **Modern Methods In Herbal Drug Development** organized by Bharata Mata College, Thrikkakara conducted on 28-29/07/2010.
36. NAAC and Quality Assurance Cell, Govt. of Kerala sponsored, State level Seminar –Cum Workshop on **New Methodology of Assessment in Accreditation** by NAAC organized by St. Teresa's College, Ernakulam on conducted 25/2/2010.
37. Zoological Society of Kerala sponsored, State level Conference on **Global Warming** organized by St. Teresa's College, Ernakulam conducted on 5/2/2010.
38. Talk on **Logistics** organized by Dept. of Zoology, St. Teresa's College, Ernakulam on conducted 8/1/2010.
39. Talk on **Memory enhancement** organized by Dept. of Zoology, St. Teresa's College Ernakulam conducted on 13/10/2009.
40. UGC sponsored National level seminar on **Resolving stress to optimize academic achievements – the innovative role of teachers** organized by Dept. of Family and Community Science , St. Teresa's College, Ernakulam conducted on 14-11-2008.
41. M.G University sponsored State level, silver jubilee seminar on **Maximising student potential in the changing Scenario** organized by Department of Family and Community Science, St.Teresa's College, Ernakulam. Conducted from 28-09-2008 to 29-09-2008.
42. Kerala State Higher Education Council sponsored State level Seminar on, **Restructuring Undergraduate Education** organized by St. Paul's College, Kalamassery conducted on 19-07-2008.
43. National Seminar, on **Bioactive Compounds from Marine Organisms** organized by Department of Marine Biology, CUSAT,Kochi conducted on 14-15 March 2008.
44. Seminar on **Diabetes –A better understanding** organized by Dept. of Zoology, St. Teresa's College conducted on 21-11-2007.
45. One day seminar on **Environment Management: Issues and Strategies** organized Dept. of Botany, St.Teresa's College conducted on 10-08-2007.

46. State Level seminar on **Environmental Biotechnology** organized by Dept. of Chemistry, St. Teresa's College conducted on 23-01-2007.
47. Rajiv Gandhi Centre for Contemporary Studies, CUSAT, Kochi sponsored Seminar on **Contemporary Studies** organized by School of Environmental Studies , CUSAT, Kochi conducted on 19/01/2007.
48. UGC sponsored National level Seminar on **Marine Biology – Advances & Prospects** organized by Dept. of Marine Biology, Microbiology and Biochemistry, School of Marine Sciences,CUSAT, Cochin conducted on 10/11/2006.
49. KSCST&E and Kerala Academy of Sciences sponsored state level Workshop on **Formulation of Project proposal for funding by External agencies** organized by Sacred Heart College, Thevara conducted on 25/09/2006.
50. UGC sponsored state level Seminar on **Emerging Viral Diseases** organized by St.Alberts College, Ernakulam conducted on 19/12/2005.
51. Xavier Board of Higher Education sponsored Seminar on **The Media dominated culture and the new values- A Christian response** organized by St. Teresa's College, Ernakulam conducted on 17-12-2005.
52. Symposium on **Mosquito – The Menace and its control** organized by Dept. of Zoology, St. Teresa's College, Ernakulam conducted on 8-11-2005.
53. UGC sponsored State level Seminar on **Recent Trends in Applied Biosciences** organized by Sree Narayana College, Cherthala conducted on 17 and 18 August 2005.
54. UGC sponsored State level Seminar on **Recent Trends in Mariculture** organized by St.Peter's College, Kolenchery conducted on 20/07/2005.
55. National seminar on **Higher education in India in the new millennium- challenges and prospects** organized by Zoological Society of Kerala and Sacred Heart College , Thevara on 20-21 October ,2001.

Training undergone

1. One day **Training Programme of Bhoomithra Sena Clubs** of middle zone organized by Directorate of environment and climate change, Govt. of Kerala , held at St. Xavier's College ,Aluva, Ernakulam on 25th November 2017.
2. Hands on training on **SDS Page, Cell Line and Viral Cultivation** organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam and Department of Marine Biology, Microbiology and Biochemistry, School of Marine Sciences, Cochin University of Science and Technology, on 7th March 2017.
3. Hands on training on **Tools and Techniques in Microbiology and Biotechnology** organized by Department of Zoology, St. Teresa's College (Autonomous), Ernakulam on 11th November, 2015.

4. Training on **Molecular markers in fisheries research** organized by National Bureau of Fish Genetic Resources (NBFGR), ICAR at CMFRI during 12-19 September 2012. Course consisted of lectures, demonstrations, discussions and practical exercises based on latest advancements in DNA Barcoding, DNA isolation and amplification, advance training in handling Instruments such as DNA sequencer, Thermal Cycler, various types of electrophoresis, genotyping, softwares for analysis of molecular genetic data and biological databases.

5. 10 day International Training program on **Cellular Nutrition and Health**, as part of the World Health Alphabetization Program of Dr. Rath Health Foundation, Santa Clara USA, from 12th July to 22nd July 2011.

6. HORTICORP sponsored State level seminar on **Training Program in Beekeeping** organized by S.S College, Kalady conducted on 29/07/2009.

7. UGC sponsored Training Programme on **Extraction, separation and isolation of natural compounds and rearing of larvae of cirripede crustacean *Balanus amphitrite***. Organized by National Institute of Oceanography conducted from 27.03.1995 to 31.03.1995.

8. UGC sponsored Training Programme on **Screening bioactive compounds from Marine Organisms** organized by Dept. of Aquatic Biology and Fisheries conducted from 3.05.1994 to 6.05.1994

Nature Camps Organized

1. 3 day Nature Study camp at Neyyar-2012
2. 3 day Nature Study camp at Thenmala - 2/2/2014 - 4/2/2014
3. 3 day Nature Study camp at Thattekkad Bird Sanctuary - 3/11/2016 -5/11/2016
4. 3 day Nature Study camp at Mathikettan Shola -17/11/2017 - 19/11/2017