



Lekshmipuram College of Arts & Science

Neyyoor- 629802

TEACHER PROFILE Department: PHYSICS



1	Name	:	S. Abraham Thambiraja
2	Date of Birth	:	04 – 01 - 1959
3	Educational Qualification	:	M.Sc., M.Phil., Ph.D, B. Ed.
4	Date of Appointment	:	26-06-1987
5	Designation	:	Associate Professor
6	Experience (01-06-2015)	:	UG 27 yrs PG 5 yrs
7	Communication Address with e-mail ID and contact number	:	Dr. S. Abraham Thambiraja Associate Professor Department of Physics Lekshmipuram College of Arts & Science Neyyoor-629802, Tamilnadu atrunit@yahoo.co.in , 9442439857.
8	Permanent Address	:	T. C 24/553, 29,WCG, YMR Jn., Nanthencode, Thiruvananthapuram. Pin: 695003. Thiruvananthapuram District, Kerala. 09442439857
9	Area of specialization (Research)	:	Boundary Layer Climates, Space Physics
10	Participation in Academic Bodies	:	Member BoS, M.S University Member BoE, M.S University, Kerala University, Bharatiyar University, Coimbatore, Karpagam University, Coimbatore.
11	Number/List of Conferences /seminar/workshop attended	:	Number : 7, List in Annexure -1
12	Number/List of paper published in proceedings	:	Number : 45, List in Annexure - 1
13	Number /List of paper published in Journals (National/International)	:	Number : 13 List in Annexure - 2
14	Number /List of Books Published	:	Number : 3 List in Annexure - 4
15	Number/ List of chapters in Books	:	Number : 2
16	List of invited Talks	:	6
17	Contributions as Resource Person	:	Annexure -5
18	List of M.Phil guided/awarded	:	M.Phil : 3 Annexure - 7
19	List of Ph.D guided /awarded	:	See Annexure – 7
20	UGC -Minor/Major, CICT, other Funding Agencies project completed /ongoing	:	Completed: 1 Ongoing : nil, Details in annexure -8
21	Participation in Orientation/Refresher course	:	Details in Annexure - 4
22	Any other relevant information (Co-curricular Activities)	:	<ul style="list-style-type: none"> Versatile in Computer Languages COBOL & Basic, as 4years working

			<p>experience in the HT Multinational Apparel Industry MADURA COATS at Ambasamudrum (1983-1987).</p> <ul style="list-style-type: none"> • Nominated by IMD, DST, Govt. of India by Hon’y Supt. For the Automatic Weather Station. • Nominated as Administrative Officer, Self Finance Courses 3yrs since 2006. • Appointment as Vice Principal for 3yrs since 2006. • Appointment as Principal (i/c) for about 3 months since May 2005 & 6 months since July 2009. • Organised Exhibition – 2007 @ Lekshmipuram College for school students. Participation by nearly 25 schools and all the science depts. Of the college. • Organised 3 National Seminars (as CONVENOR) <ul style="list-style-type: none"> i) UGC sponsored – POTCOM – 2006. ii) DBT sponsored – GLOWINO-2008 iii) UGC sponsored – NCETAP-2015
23	Membership in professional bodies	:	<p>Life member in India Meteorology Society, Chennai.</p> <p>Life member in Indian Science Congress, Culcatta.</p> <p>Life member in KAAS, K. K. Dist.</p> <p>Life member in University Library in Thiruvananthapuram.</p>
24	Editorial positions	:	Details in Annexure -4
25	Any other	:	<p>Donated Blood thrice.</p> <p>Football player during school going.</p>

Annexure – 1

Participation in Seminars/Conferences/Workshop

1. Participated and Presented a paper at the Eighth **National Space Science Symposium**, Thiruvananthapuram, Kerala, on Dec. 20-24, 1994, Paper entitled **“Soil Heat Flux at Different seasons and Locations, A Comparative Study”**.
2. Presented a paper at the Seventh **Kerala Science Congress**, Palakkad on Jan 27-29, 1995, Paper entitled **“Fluctuations of Thermal Wave within the Soil – Atmosphere Interface”**.
3. Participated and Presented a paper at Nineth **Kerala Science Congress**, Thiruvananthapuram, Kerala, on Jan. 27-29, 1997, on Paper entitled **“Time Lag and Temperature Range of Thermal Wave at Neyyatinkara and Kariavattom”**.

4. Participated and Presented a paper at Ninth Kerala Science Congress, Thiruvananthapuram, Kerala, on Jan. 27-29, 1997, on Paper entitled **“Thermal Wave at Trivandrum during NE-monsoon and Summer”**.
5. Presented a paper at the **National Symposium on Tropical Meteorology**, Cochin. On 1-4 Feb 2000, Paper entitled **“ Soil Heat Flux on Ramdas Layer at Nalanda, Trivandrum.”** In Abstract.
6. Presented a paper at the Eighth **National Space Science Symposium**, Puri, on March 1-4, 2000, Paper entitled **“Estimation of Sencible Heat Flux”**.
7. Undergone Yoga Training course at **Bethany Nature Club and Yoga Centre**, Thiruvananthapuram since 16th to 26th Aug 2001.
8. Presented a paper at the XIIth **National Space Science Symposium**, Bhopal on Feb. 25th to 28th 2002. Paper entitled **“Ramdas Layer and Thermal wave”**.
9. Presented a paper at the 15th **Kerala Science Congress**, Thiruvananthapuram on Jan 29-31, 2003, Paper entitled **“Daily sensible heat flux and water resource in soil in Thiruvananthapuram”**.
10. Presented a paper at the **National Space Science Symposium**, Kottayam, on Feb 17-20, 2004, Paper entitled **“Annual Variation of Soil Temperatures and Rainfall in Kerala”**.
11. Presented a paper at the XIVth **National Space Science Symposium**, Visakhapatnam, on Feb 9-12, 2006, Paper entitled **“Diurnal Variation of Soil Temperatures during Different Seasons at Thiruvananthapuram”**.
12. Participated in the National Seminar on **Spectroscopy, Optoelectronics and Non-destructive Evaluation**. May 23-25,2001, Dept. of optoelectronics, University of Kerala, Thiruvananthapuram.
13. Participated in the National Seminar on **“Physics of Low dimensional systems”** July 2&3, 2004, Dept. of Physics, Holy Cross College, Nagercoil.
14. Published in the UGC sponsored National seminar POTCOM 2006 (**Post tsunami changes on marine system environment and Socio- Economic status of coastal people**) during 17-18 March, 2006 at Neyyoor, Paper entitled **“Influence of Tsunami on soil properties along the Costal Line between Colachel and Muttom”**.
15. Published in the UGC sponsored National Seminar POTCOM 2006, paper entitled **“Study of Pollution Parameters Carbon-monoxide and Respiratory Suspended Particles in Rural Kitchens”** 17-18 March, 2006, Neyyoor.
16. Published in the UGC sponsored National Seminar POTCOM 2006, paper entitled **“Pre and Post Tsunami Rainfall analysis of Kanyakumari District”** 17-18 March, 2006, Neyyoor.
17. Published in the UGC sponsored National Seminar POTCOM 2006, paper entitled **“Kanyakumari District and its Climate”** 17-18 March, 2006, Neyyoor.
18. Published in the UGC sponsored National Seminar POTCOM 2006, paper entitled **“Kerala State and its Climate”** 17-18 March, 2006, Neyyoor.
19. Published in the UGC sponsored National Seminar POTCOM 2006, paper entitled **“Solar Drying of Beans using Step Type Solar Dryer”** 17-18 March, 2006, Neyyoor.
20. Published in the National Seminar POTCOM 2006, paper entitled **“Tsunami- Impact on Sea Life and Earth’s Rotation”** 17-18 March, 2006, Neyyoor.
21. Presented a paper at the **Fourth All India conference of KAAS**, November 2007, Nagercoil, Paper entitled **“Status of global warming from seasonal variation of soil temperature at Thiruvananthapuram”**.
22. Presented a paper at the **National Space Science Symposium**, Ooty, on Feb 26-29, 2008, Paper entitled **“Analysis of Soil heat flux at Central Kerala during 1998 ”**.
23. Published in the Proceedings of the **First International Conference of SRF**, Scott Christian College, April 2008, Nagercoil, a paper entitled **“Crop based Rainfall study during 2004-05 at Thiruvananthapuram”**

24. Participated in the Seminar on **"Nano Materials"** Nano-2008 March 3, 2008, Dept. of Physics, S. T. Hindu College, Nagercoil.
25. Participated in the State Level Conference on **"Higher Education and Students' Participation in Quality Assurance"** on Jan 25, 2008, M.D.T Hindu College, Tirunelveli.
26. Participated in the State Level Seminar on **"Recent Advances in Physics"** Feb 22, 2008, Scott Christian College (Autonomous) College, Nagercoil.
27. Published in the DBT sponsored National Seminar GLOWINO-2008(**Global Warming and its Environmental impact along Indian Ocean**), paper entitled **"Mitigation Techniques of Global warming with reference to UK"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
28. Published in the DBT sponsored National Seminar GLOWINO-2008, paper entitled **"Bio energy from Sugarcane for Reducing Global Warming"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
29. Published in the DBT sponsored National Seminar GLOWINO-2008, paper entitled **"Present Scenario of Synthesis Gas conditioning from Bio-mass for Large-scale Gasification System"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
30. Published in the DBT sponsored National Seminar GLOWINO-2008, paper entitled **"Importance of Crop Rainy Days in Irrigation Schedule"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
31. Published in the DBT sponsored National Seminar GLOWINO-2008, paper entitled **"Zero Emission Alkaline Fuel Cell for Environmental Friendly Electricity Production"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
32. Published in the DBT sponsored National Seminar GLOWINO-2008, paper entitled **"Bio-diesel Production from Oils"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
33. Published in the DBT sponsored National Seminar GLOWINO-2008, paper entitled **"Nano Materials and its Application in Fuel Cell"** held during 22nd & 23rd Aug. 2008 at Lekshmipuram College, Neyyoor.
34. Participated in the National Seminar on **"Nano Technology and Environmental Applications"** NTEEA-2009, April 9, 2009, Dept. of Chemistry, Centre for Nano Technology, Kalasilingam University, Srivilliputhoor.
35. Presented in the Tamil National Seminar on **"Sustaining Global Warming by deriving bio energy from Sugercane."** At M. S. University, Tirunelveli on 21 -23 May 2010.
36. Presented in the National Seminar on Recent Trends in Space Physics, paper entitled **"Artificial Neural Network (ANN) based prediction of Annual Soil Temperature variation during HWP"** 30 May 2011, Dept. of Physics, University of Kerala , Kariavattam.
37. Presented in the National Seminar on Recent Trends in Space Physics, paper entitled **"Prediction of Annual Soil Temperature variations using Artificial Neural Network for cold weather period"** 30 May 2011, Dept. of Physics, University of Kerala , Kariavattam.
38. Presented in the National Conference on Emerging Trends in Arts and Science, paper entitled **"Prediction of Soil Temperature using ANN"** 7&8 October 2011, Nesamony Research Forum, NMCC Marthandam.
39. Presented in the National Conference on Recent Trends in Arts, Science and Management, paper entitled **"Prediction and comparative Analysis of Annual Soil Temperature and Rainfall using Artificial Neural Network"** 17 February 2012, Research Forum, W.C.C Nagercoil.
40. Presented in the National Conference on Recent Trends in Arts, Science and Management, paper entitled **"Long term and Short term based Prediction Of Annual and Seasonal Soil temperature using Artificial Neural Network"** 17 February 2012, Research Forum, W.C.C Nagercoil.
41. Presented in the National Conference on Multi Disciplinary Research –An Indian Scenario, paper entitled **"Statistical Analysis of Weibull Parameter For Wind Energy Generation In the Southern Region of Tirunelveli."** 11 March 2013, Research Forum W.C.C Nagercoil.

42. Presented in the National Conference on Multi Disciplinary Research –An Indian Scenario, paper entitled **“Impact Of Soil Temperature And Rainfall On Environment At Killikulam, Tuticorin District.”** 11 March 2013, Research Forum W.C.C Nagercoil.
43. Presented in the National Conference on Future Prospects In Multi Disiplinary Research, paper entitled **“Environmental Impact Assessment (EIA) of Meteorological Parameters at Pechiparai, Kanyakumari District”** 14 February 2014, Research Forum W.C.C Nagercoil.
44. Presented in the International Conference on *Recent Trends in Engineering and Technology*, paper entitled **“Thermal Wave Characteristics and Prediction of Soil Temperature using Artificial Neural Network”** organised by C.S.I. Institute of Technology, Thovalai in association with IEEE Student Chapter, Madras Section on 13, 14-03-2014.
45. Presented in the National Conference on Emerging trends in Applied Physics, paper entitled **“Crop Rainy Day (CRD) Analysis at two locations with differing configurations”** 19&20 February 2015, Lekshmipuram college of Arts& Science, Neyyoor.
46. Presented in the National Conference on Emerging trends in Applied Physics, paper entitled **“A Study of Earth’s Skin Temperature with other Meteorological Parameters”** 19&20 February 2015, Lekshmipuram college of Arts& Science, Neyyoor.
47. Presented in the National Conference on Emerging trends in Applied Physics, paper entitled **“Annual Thermal Wave and its Prediction using Artificial Nural Network”** 19&20 February 2015, Lekshmipuram college of Arts& Science, Neyyoor.
48. Presented in the National Conference on Emerging trends in Applied Physics, paper entitled **“Application of Nano Materials in Fuel Cell”** 19&20 February 2015, Lekshmipuram college of Arts& Science, Neyyoor.
49. Presented in the National Conference on Emerging trends in Applied Physics, paper entitled **“Electro-chemical Performance study of Platinum – Palladium Catalyst in The anode electrode of Alkaline Fuel Cell.”** 19&20 February 2015, Lekshmipuram college of Arts& Science, Neyyoor.
50. Presented in the National Conference on Emerging trends in Applied Physics, paper entitled **“An Investigation of Temperature at various soil depths at Lekshmipuram K. K. Dist.”** 19&20 February 2015, Lekshmipuram college of Arts& Science, Neyyoor.
51. Presented in the International Conference on Digital World, paper entitled **“Monsoon Variability Over Western Ghats of Kanyakumari District”** 13 March 2015, Research Forum W.C.C Nagercoil.
52. Published a paper entitled “Seasonal Variation of Aerosol Optical Depth over Two Astronomical Sites in India:Hanle and Nainital”, in the **Proceedings of Indian Aerosol Science and Technology Association**, ISSN 09714510 of the International Conference, IASTA Bulletin Vol.21 Issue1&2, pp. 393-395.

Annexure – 2

Publications

1. **Abraham Thambiraja. S.** and Renuga. G, (1996). Estimation of Soil Heat Flux at Thiruvananthapuram during NE-monsoon and Winter Period, *Mausam*, 47(1), 103-104.
2. **Abraham Thambi Raja S** Renuka G and Retnakumari, (2001). Ramdas Layer and Thermal Wave during Winter Period, *Mausam*, 52(4), 697-702.
3. **Abraham Thambiraja. S.** and Renuga. G, (2005). Heat Storage at Sub-surface soil and microclimate at Thiruvananthapuram, *Indian Journal of Radio & Space Physics*, 34(4), 274-280.
4. **Abraham Thambiraja. S.** and Renuga. G, (2009).Subsurface thermal mapping during contrast seasons over Central Kerala, *Indian Journal of Radio & Space Physics*, 38, 215-219.

5. **Abraham Thambiraja. S.** and Jebamalar, (2012). Prediction of Annual and Seasonal Soil Temperature variation using Artificial Neural Network, *Indian Journal of Radio & Space Physics*, 41, 48-57.
6. **Abraham Thambi Raja S** and Renuka G *Proc Indian Acad Sci (Earth Planet Sci)* **2002**.
7. G. Pious Michael, **S. Abraham Thambi Raja**, (2015.) Trend based Analysis of Climate in Environmental Deterioration, **LPC Bulletin on Research** Volume 5, Issue 2, pp 159-164.
8. Anie. S. S, **Abraham Thambi Raja. S**, (2015.), Geographical Classifications of Rainfall in Kerala during South West Monsoon **LPC Bulletin on Research** Volume 6, Issue 1, pp 62-65.
9. **Jeslin Sunitha, Abraham Thambi Raja. S** (2012.), Prediction of Soil Temperature using ANN **Journal of Research in Science** ISSN:2278-9073, Volume 1, pp 19-27.
10. Jeslin Sunitha, **Abraham Thambi Raja. S**, (2011). Prediction of surface temperature using soil temperature at different depths using Artificial Neural Network. **LPC Bulletin on Research** Volume 2, Issue 1, pp. 47-57.
11. Jeslin Sunitha, **Abraham Thambi Raja. S**, (2011) Prediction of surface temperature using soil temperature at different depths using Artificial Neural Network. **LPC Bulletin on Research** Volume 1, Issue 1, pp. 47-57
12. Jeslin Sunitha, **Abraham Thambi Raja. S**, (2014.), Prediction of Seasonal soil temperature during SWM of 2004 at Killikulam using ANN **LPC Bulletin on Research** Volume 4, Issue 1, pp 202-210.
13. K.Janaki., **S.Abraham Thambi Raja,C.K..Mahadevan**, (2015), Seasonal Variation of Aerosol Optical Depth over two Astronomical Sites in India: Mt.Abu and Devasthal **LPC Bulletin on Research**,ISSN 2249-3417,Vol:5,Issue:2, pp. 165-168.

Annexure – 3

List of Books Published

- The Proceedings of the UGC sponsored National Seminar **POTCOM-2006** held at Lekshmipuram College during 17th & 18th March 2006.
- The Proceedings of the DBT sponsored National Seminar **GLOWINO-2008** held at Lekshmipuram College during 22nd & 23rd August 2008.
- The Proceedings of the UGC sponsored National Seminar **NCETAP-2015** held at Lekshmipuram College during 19th & 20th Feb. 2015.

Annexure – 4

List Chapters in Edited Books

- Editor of two chapters of Tamil Nadu Consultancy Report “**Microlevel Environmental Status Report for Kothaiyar (including Valliyar and Pazhayar) River Basin**” Published on March 2004

Annexure – 5

Contributions as a Resource Person

1. **Convened a Session by being a Chair Person in the National Seminar on “Physics of Low dimensional systems”** July 2&3, 2004, Dept. of Physics, Holy Cross College, Nagercoil.
2. **Served as a Resource Person at the Seminar SAPP-2010** on “Radiation and Environmental Physics” about “Global Warming & Climate Change” held on 18th Feb 2010 at PG Department of Physics, WCC, Nagercoil.
3. **Served as a Resource Person at the National Seminar POTCOM-2006** on “Earthquake & Tsunami” held on 17th&18th Feb 2008 at Lekshmipuram College of Arts & Science, Neyyoor.
4. **Delivered a Lecture** on Tsunami & Earthquake at the Physics Association meeting in Sree Ayyappa College for Women, Nagercoil, on 7th Feb. 2006.
5. **Served as a Resource Person at the National Seminar GLOWINO-2008** on “Mitigation Techniques of Global Warming w. r. t. United Kingdom” held during 22nd & 23rd August 2008 at Lekshmipuram College of Arts & Science, Neyyoor.
6. **Contributed SECOND PROF. J. M. ARTHUR CENTANARY ENDOWMENT LECTURE on Global Warming** organised by Scott Alumini Association, at Scott Christian College, Nagercoil on 14-10-2011.
7. **Delivered Combined Lecture on “Innovative Reserch in Science”** alongwith Mr. T. P. Sreenivasan, IFS, Vice Chairman of Kerala State Higher Education Council and Former Indian Ambassador to Austria, Slovenia and other countries and Former Permanent Representative to United States at WCC, Nagercoil on 20-01-2015.

Annexure – 6

M.Phil Dissertations Guidance(Completed)

1. Prof. Regin Das, Assistant Professor, Dept. of Physics (PG) Lekshmipuram College, Neyyoor.
2. Dr. G. Pious Michel, PG Assistant, Government School.
3. Prof. Stephen (Late), Vice principal, James College of Engineering, Nagercoil.

Annexure – 7

List of Students for Ph.D - 8

1. Dr. G. Pious Michel, PG Assistant, Government School.(**completed**)
2. Dr. Jebamallar, Assistant Professor in Physics, Dept. of Physics, Nesamony Memorial Christian College Marthandam. (**Completed**)
3. Dr. Jeslin Sunitha, Assistant Professor & Head, Dept. of Physics (PG), WCC, Nagercoil. (**Completed**).
4. Prof. Esra Sargunam. (**Enrolled**)
5. Mrs. Janahi. (**Enrolled**)
6. Prof. S. S. Annie, Assistant Professor, Dept. of Physics, Kattakada Christian College, Kattakada, Thiruvananthapuram. (**Enrolled**)
7. Prof. Abirami Priya, Assistant Professor, Dept. of Physics (PG), Sivanthi Adithanar College, Pillaiarpuram, Nagercoil. (**Enrolled**)
8. Mrs. V. T.Srisuvetha (**Enrolled**)
9. Ms. S Rathi (**Enrolled - coguide**)

Annexure – 8

Project Completed/Ongoing Project

- **Government of Tamil Nadu Consultancy PROJECT “ Micro Level Environmental Status Report for Kodayar River Basin”** served as expert in the team for climate and ground truth verification. (seven lakhs project) during 2004.

Annexure – 9

Participation in Short Term/Refresher Courses

- Orientation Course in at Academic Staff College, M. K.University, Madurai from 02-03-1989 to 31-03-89.
- Refresher Course on Quantum Mechanics organised by the dept. Of Physics, Cochin university of Science & technology, from Feb. 2-24, 1998.
- Refresher Course in physics organised by the dept. Of Physics, Cochin university of Science & technology, from Feb. 1-26, 1999.
- Refresher Course on Micro Processors and Computers in Physics, organised by the Dept. Of physics, NMC College, Marthandam, from 04-05-1999 to 24-05-1999.

Annexure - 10

Editorial Positions

- Editor of two chapters of Tamil Nadu Consultancy Report “**Microlevel Environmental Status Report for Kothaiyar (including Valliyar and Pazhayar) River Basin**” Published on March 2004.
- **Chief Editor** of the Proceedings of the UGC sponsored National Seminar **POTCOM-2006** held at Lekshmipuram College during 17th &18th March 2006.
- **Chief Editor** of the Proceedings of the DBT sponsored National Seminar **GLOWINO-2008** held at Lekshmipuram College during 22nd & 23rd August 2008.
- **Chief Editor** of the Proceedings of the UGC sponsored National Seminar **NCETAP-2015** held at Lekshmipuram College during 19th &20th Feb. 2015.
- Served as **Judge** for the two days science Exhibition under **Post Tsunami Sustainable Livelihood Programme (PTSLP)** on 20-01-2011 at St. Mary’s HSS, Colachel.