

## FACULTY PROFILE

1. Name : Dr.P.Nisha Santhakumari
2. Designation Associate Professor & Head
3. Qualification : M.Sc. M.Phil. Ph.d
4. Mobile number : 94438 64950
5. E-mail id : nishas@auxiliumcollege.edu.in
6. Teaching Experience : 38 years
7. Area of specialization : Crystal Growth
8. Positions held in Auxilium:
- Head of the department from 2000 to till date :
  - NSS Program officer for 2 years from 1987-1989
  - Member of Educating Community for 2 years from 2007 to 2009.
  - Academic council member, Auxilium College from 2008 to till date
  - Additional controller of examinations, Auxilium College from 2009 to 2011.
  - Dean of Sciences, Auxilium College from 2011 to 2013.
  - Governing body member, Auxilium College from 2021 to till date
  - Staff secretary for 2 years from 2012 to 2014
9. Research Experience and Guidance : .....
10. Projects Completed / Ongoing : .....
11. No. of Papers Published : 11
12. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences : 6
13. No. of Seminars/Workshops/Conferences/Webinars organized: 18
14. No. of Books Published/Edited/Co-edited: .....
15. Membership in professional bodies:
- Board of studies member, UG Physics, Thiruvalluvar university from 2011 to 2013 & 2019 to 2021.

- Member of selection committee for the post of Guest lecturer in Physics at Thiruvalluvar University held on 11/11/2022
- Member of Inspection commission of Physics, Thiruvalluvar University to grant fresh affiliation for additional courses
- University nominee as Member of Board of studies in Physics,, D.K.M College for Women, Vellore from 2018 to 2020.
- Member as Subject expert, Board of studies, Department of Physics, DKM College for Women from 2021 to till date
- Management nominee, Faculty interview committee, Department of Physics, D.K.M College for Women, Vellore on 14/3/2016.
- Member of Screening and Evaluation committee of Physics for CAS proposals at D.K.M College for Women, Vellore.
- External expert, Faculty interview panel, VIT University on 30<sup>th</sup> March 2015.

16. Other bodies (Descriptive)

17. Honours & awards received: 1

- Appreciation award by Indian SpectroPhysics Association (ISPA), Chennai for organizing conferences periodically with publication of proceedings

18. No. of Online Courses completed (Minimum of 4 Weeks) -.....

19. Any Other: **Chair person & Invited talks**

- Delivered a talk in the International conference on ‘Materials processing and applications’ held at VIT University during Dec 14-16, 2016.
- Chaired the Poster session in the State level Technical seminar on ‘Advanced Materials and Applications’ organized by PG and Research department of Physics, Voorhees College on 6/3/2017
- Served as a resource person and gave a lecture on 27/8/2020 in the Virtual Lecture series organised by Little Flower Degree College, Uppal, Hyderabad from 26-31/8/2020.

## **PUBLICATION IN INTERNATIONAL JOURNALS:**

- 1] Study of optimum growth condition and characterization of zinc mercury thiocyanate (ZMTC) single crystals in silica gel.  
*P. Nisha Santha Kumari, S. Kalainathan and N. Arunai Nambi Raj*  
*Materials Research Bulletin, ISSN 0025-5408, 2007, Vol. 42, Pg. 2099-2106.*

- 2] Study of optimum growth conditions of Zinc cadmium thiocyanate (ZCTC) single crystals in silica gel.  
*P. Nisha Santha Kumari, S. Kalainathan and N. Arunai Nambi Raj*  
*Materials letters, ISSN 0167577X, 2007, Vol 61, Pg. 4423-4425.*
- 3] Study of crystalline perfection and thermal analysis of Zinc cadmium thiocyanate single crystals grown in silica gel  
*P. Nisha Santha Kumari, S. Kalainathan and N. Bhagavannarayana*  
*Cryst. Res. Technol. ISSN 0232-1300, 2008, Vol. 43, Pg. 276-281.*
- 4] Vickers microhardness studies on cadmium mercury thiocyanate single crystals grown in silica gel.  
*P. Nisha Santha Kumari, S. Kalainathan and N. Arunai Nambi Raj*  
*Materials Letters, ISSN 0167577X, 2008, Vol. 62, Pg. 305-308.*
- 5] Characterization of lead (II) chloride single crystals grown in silica gel.  
*P. Nisha Santha Kumari and S. Kalainathan*  
*Cryst. Res. Technol. ISSN 0232-1300, 2008, Vol. 43, Pg. 413-416.*
- 6] Comparative study of pure and Magnesium doped cadmium mercury thiocyanate single crystals – Gel technique.  
*P. Nisha Santha Kumari and S. Kalainathan*  
*Journal of minerals and materials characterization and engineering ISSN 2327-4085, 2008, Vol.7, Pg. 317-330.*
- 7] Comparative study of pure and alkaline earth metallic doped cadmium mercury thiocyanate single crystals- Gel technique.  
*S. Kalainathan and P. Nisha Santha Kumari*  
*Spectrochimica Acta Part A ISSN 1386-1425, 2009. Vol. 73, Pg. 127-132.*
- 8] A comparative study of pure and potassium doped cadmium mercury thiocyanate single crystals grown in silica gel.  
*P. Nisha Santha Kumari, M. Beatrice Margaret and S. Kalainathan*  
*Crystal Research and Technology ISSN 0232-1300, 2009, Vol. 44, Pg. 177-183.*
- 9] Growth of manganese doped cadmium mercury thiocyanate single crystals – Gel technique.  
*P. Nisha Santha Kumari and S. Kalainathan*  
*Materials letters, ISSN 0167577X, 2009, Vol. 63, Pg. 1643-1646.*
- 10] Crystal growth, optical and dielectric properties of CMTC – Grown by gel technique.  
*P. Nisha Santha Kumari, S. Kalainathan, K. Shakila, T. Sivanandan*  
*International Journal of Chem Tech Research ISSN, 2455-9555, 2014, Vol.6, Pg. 1663 -1666.*
- 11] Growth and Etching studies of cadmium mercury thiocyanate single crystals grown by gel technique.  
*P. Nisha Santha Kumari, S. Kalainathan*

**Participation in Refresher/ Orientation/ FDP:**

<b>S. No</b>	<b>Name of the Programme</b>	<b>Name of the Sponsoring Agency</b>	<b>Title</b>	<b>Duration</b>
1.	Refresher Course	Academic staff College, Univ. of Madras, Chennai.	Physics of Condensed matter and Materials	18-1-1999 to 8-2-1999
2	Refresher Course	Academic staff College, Univ. of Madras, Chennai.	Theoretical Physics	1-2-2001 to 21-2-2001
3.	Orientation Programme	Academic staff College, Univ. of Madras, Chennai	General – Batch-92	3-11-2009 to 30-11-2009
4.	FDP (Online)	Auxilium College, Vellore	Evolving best teaching and learning practices in the Pandemic era 2020	15-6-2020 To 21-6-2020
5.	FDP (Online)	Little Flower College, Hyderabad, AP.	Research trends in Physics and Electronics	27/1/2021 to 1/2/2022
6.	FDP (Online)	Libre office Suite writer, Calc and Impress	Auxilium College in association with Spoken tutorial, IIT, Bombay	26/5/2022 to 10/6/2022

**Papers presented in Seminars/ Conferences:**

<b>S. No</b>	<b>Name of the seminar/ Conference</b>	<b>Place</b>	<b>Date</b>	<b>Title of papers presented</b>
1.	Second National symposium on ‘Crystal growth of Laser related materials’	SSN College of Engineering, Kalavakkam, Chennai, TN	19-20/12/2005	Growth and characterization of nonlinear optical material Zinc mercury thiocyanate in Silica gel
2.	National conference on “Preparation and Characterization of crystalline materials”	S.T.Hindu College, Nagercoil, TN	19-21/1/2006	Growth and characterization of acousto optical material lead bromide in Silica gel
3.	Third National symposium on “Crystal growth of Laser related materials”	SSN College of Engineering, Kalavakkam, Chennai, TN	18-20/12/2006	Growth and characterization of nonlinear optical crystal Cadmium mercury thiocyanate CMTC in Silica gel
4.	Second National symposium on “Nonlinear	Anna university,	26/3/2007	Growth and characterization of bimetallic thiocyanate

	optical crystals and modeling in Crystal growth”	Chennai, TN		complexes in silica gel
5.	State level seminar on” Recent advancements in Physics”	Sacred Heart College, Tirupattur, TN.	14/9/2007	Growth and characterization of nonlinear optical materials by gel growth
6.	National seminar on “Recent advancements in Materials and Energy”	Voorhees College, Vellore.	5-7/3/2009	Growth and characterization of ZCTC and CMTC single crystals in silica gel

### Conferences/Seminars/Workshops/Webinars - Organised:

S. No.	Date	Category & Title	Speakers
1.	15/10/2004	National Seminar on “Spectroscopic Applications and Instrumentation” with Proceedings	1.Mr.M.NihalAhmed,Principal, C.AbdulHakeemCollege, Melvisharam. 2.Dr.S.Gunasekaran,Reader,,Dept.of Physics,Pachaiyappa’sCollege, Chennai
2.	24/10/2007	Intercollegiate seminar on Fiber optics	Dr.Seenuvasakumaran,Asst.Prof. Muthurangam Govt. Arts College, Vellore.
3.	13/8/2008	Spectra-2008 – Exhibition cum Intercollegiate competitions	Dr.Seenuvasakumaran,Asst.Prof. Muthurangam Govt. Arts College, Vellore.
4.	3/2/2010	ECHO-2010 – Intercollegiate – Invited talk & Paper presentation	Dr.S.Kalainathan,Professor,VIT University, Vellore
5.	13/9/2011	PHYSIKOS-2011 Intercollegiate meet	1.Dr.S.Kalainathan,Professor,VIT University, Vellore. 2.Dr.Beatrice Margaret, Asso. Prof. & HOD, Arignar Anna Govt. Arts college, Walajapet
6.	14/9/2012	National seminar on “Recent Advancements in Spectroscopy” with Proceedings.	1.Dr.S.Gunasekaran,HOD,Dept.of Physics,Pachaiyappa’sCollege, Chennai 2.Dr.T.Renuga Devi, WCC, Chennai. 3.Dr.Jayasankar,SriVenkateswara University, Tirupathi.
7.	30-31/8/2013	Awareness programme on “Energy conservation and Electrical safety” RALLY	Tamilnadu Generation and Distribution Corporation-TANGEDCO, Vellore.
8.	15/9/2015	National Conference on “Recent development in materials and methods” with Proceedings	1.Dr.P.Ramasamy,Research Director, SSN College of Engineering, Chennai. 2.Dr.R.S.Dubey,HOD, Nanotechnology, Swarnndhara college of Engg., AP.

			<b>3.Dr.S.Kalainathan,SeniorProfessor,VIT, Vellore</b> <b>4.Dr.K.PremNazeer,Principal, Islamiah College for Men,, Vaniyambadi.</b>
9.	14-15/10/2016	Workshop in collaboration with e-cell, IIT Bombay - Android Botix	Mr.Yogesh Bhole, Head, R&D, Robokart, Mumbai.
10.	14/9/2017	Intercollegiate seminar on "Nano technology and Applications"	1.Dr.DayalRaj, Asst.Prof., Sacred Heart College, Tirupattur. 2.Dr.A.Nirmala,Grace, Director of Nanotechnology, VIT, Vellore.
11.	<b>7/9/2018</b>	<b>National Conference in collaboration with ISPA on "Advanced materials and applications" with Proceedings</b>	<b>1.Dr.S.Gunasekaran, Director, ISPA, Chennai.</b> <b>2.Dr.S.Uthanna,Prof.,SriVenkateswara University, Tirupathi.</b> <b>3.Dr.I.Hubert Joe, Mar Ivanios College,Thiruvananthapuram, Kerala.</b> <b>4.Dr.S.Kalainathan,Senior Professor,VIT, Vellore</b>
12.	13/9/2019	State level seminar on "Material Science"	1.Dr.A.Mary Saral, VIT, Vellore. 2.Dr.A.Ruban Kumar, VIT, Vellore. 3.Dr.R.Arivuselvi,Asso. Prof. & Head, Sri Vidhya Mandir College,Uthangarai.
13..	9-10/6/2020	National webinar on "Novel materials, characterization and applications"	1.Dr.S.Gunasekaran,ISPA,Chennai. 2.Dr.S.A.Martin Britto Dhas,Asst. Prof. of Physics,Sacred Heart college, Tirupattur. 3..Dr.SeenuvasaKumaran, Asso.Prof. Muthurangam Govt. Arts College, Vellore.
14.	22-23/7/2021	International webinar "Sensors and applications"	1.Dr.Sivaranjini Arumugam,Senior Scientist, Leipzig University, Germany 2. Dr.DayalRaj, Asst.Prof., Sacred Heart College, Tirupattur.
15.	13/10/2021	Dr.A.P.J.Abdulkalam Memorial virtual Lecture	Dr.Seenuvasa kumaran, Asso.Prof. Muthurangam Govt. Arts College, Vellore
16.	19/9/2022	International Video conference on "Higher Educational opportunities in India and Overseas"	1.Chairperson:Dr.S.Kalainathan, Senior Professor,VIT, Vellore. 2.Speaker:Dr.Logu Thirumalaisamy,Swansea University, UK.
17.	<b>13-14/10/2022</b>	<b>SecondNational conference in collaboration with ISPA on "Advanced materials and applications" with Proceedings</b>	<b>1.Dr.S.Gunasekaran,ISPA,Chennai.</b> <b>2.Dr.S.Kalainathan,SeniorProf., VIT, Vellore.</b> <b>3.Dr.M.SelvaPandiyan,Peryar University PG Extension Centre, Dharmapuri.</b>
18.	22/8/2023	National webinar on "Applications of Physics in medicine"	Dr.N.Arunai Nambi Raj, Dean, School of Advanced Sciences, VIT, Vellore.

**Seminars / Conferences/Webinars attended:**

<b>S.No.</b>	<b>Title</b>	<b>Date</b>	<b>Place</b>
1.	National conference on Recent trends in Materials Science and Technology	2005	Vellore Institute of Technology , Vellore
2.	National seminar on Innovative strategies for Internal Quality Assessment	24-25/11/2006	Auxilium College Vellore
3.	State Level Seminar on Effective Evaluation – Practices and Perspectives	17/9/2011	Auxilium College Vellore
4.	National Seminar on Enhancement of quality in Research publications and recent research in water,alternative Energy resources, Materials and Health	15-16/12/2011	Auxilium College Vellore
5.	National conference on “ Journey of Excellence”	9-11/2/2017	IQAC, Auxilium college, Vellore, TN
6.	State level technical seminar on “Advanced materials and its applications”	6/3/2017	Voorhees college, Vellore, TN
7.	Good Teacher to Great Teacher	14/05/2020	ICT Academy, Chennai
8.	2-Days Webinar on Branding Design & Digital Marketing	11-12/05/2020	Department of Communication Media, Auxilium College, Vellore
9.	Lecture Series on Corona Crisis	14-15/05/2020	PG & Research Department of English, Auxilium College, Vellore
10.	2 Day National Online Workshop on "Nanomaterials for Human Safety and Environment"	15/-16/05/2020	K.M.E Society's G.M. Momins Women's College, Thane, Maharashtra
11.	National level online quiz contest on exercise NCC” - YOGDAN - COVID19	23-05-2020	Thiagarajar College, Madurai.
12.	Supercapacitors: New age energy storage devices.	19-05-2020	Ayya nadar Janaki ammal College

13.	National webinar on Nutraceutical and functional foods, its applications and Health benefits	29-05-2020	PG and Research department of Zoology, Auxilium College, Vellore
14.	International Webinar on Recent trends in Materials Science	06-06-2020	Muthurangam Government Arts College, Vellore
15.	Workshop on Smart materials Sensor and Energy Devices	25-30/05/2020	SSN College of Engineering, Kalavakkam, Chennai
16.	National Webinar on Computer aided Drug Discovery	01-06-2020	Department of Botany, Auxilium College, Vellore
17.	Future of Examinations: Bloom's taxonomy and multiple assessment tools.	08-06-2020	GTN Arts College, Dindigul.
18	Leave a Green mark contest	16-24/05/2020	Auxilium Media Animation Resources - AMAR, Salesian sisters, Mumbai
19	Photovoltaics and Materials science	23-06-2020	Crystal growth centre, Vellore institute of technology, Vellore.