

FACULTY PROFILE

1. Name : Dr.P.NishaSanthakumari
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
 - 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
- 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: 10
14. No. of Books Published/Edited/Co-edited:
15. Membership in professional bodies (Descriptive):
 - Board of studies member, UG Physics, Thiruvalluvar university from 2011 to 2013
 - Board of studies member, Department of Physics, DKM College for Women from 2019 to till date

- External expert, Faculty interview panel, VIT University on 27th March 2015.
- Management nominee, Faculty interview committee, Department of Physics, D.K.M College for Women, Vellore on 14/3/2016.

16. Other bodies (Descriptive)

17. Honors & awards received (Descriptive):

- 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 (Descriptive):

- 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 in the Virtual Lecture series organised by Little Flower Degree college, Uppal, Hyderabad from 26-31/8/2020 for one day on 27/8/2020.

PUBLICATIONS :

Publications in Journals

- 1] Study of optimum growth condition and characterization of zinc mercury thiocyanate (ZMTC) single crystals in silica gel.
P. NishaSanthaKumari, S. Kalainathan and N. ArunaiNambi 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. NishaSanthaKumari, S. Kalainathan and N. ArunaiNambi 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. NishaSanthaKumari, 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. NishaSanthaKumari, S. Kalainathan and N. ArunaiNambi Raj
Materials Letters, ISSN 0167577X, 2008, Vol. 62, Pg. 305-308.
- 5] Characterization of lead (II) chloride single crystals grown in silica gel.

P. NishaSanthaKumari and S. Kalainathan
Cryst.Res. Technol. ISSN0232-1300, 2008, Vol. 43, Pg.413-416.

- 6] Comparative study of pure and Magnesium doped cadmium mercury thiocyanate single crystals – Gel technique.
P. NishaSanthaKumari and S. Kalainathan
Journal of minerals and materials characterization and engineering ISSN2327-4085, 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. NishaSanthaKumari
SpectrochimicaActa 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. NishaSanthaKumari, 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. NishaSanthaKumari 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. NishaSanthaKumari, S. Kalainathan, K. Shakila, T. Sivanandan
International Journal of Chem Tech Research ISSN, 2455-9555, 2014, Vol.6, Pg. 1663-1666.
- 11] Surface studies of cadmium mercury thiocyanate single crystals grown by gel technique.
P. NishaSanthaKumari, S. Kalainathan
Materials science and engineering ISSN 2412-5954, 2017, Vol 2,

Participation in Refresher/ Orientation/ FDP:

| S. No | Name of the Programme | Name of the Sponsoring Agency | Title | Duration |
|-------|-----------------------|---|--|-------------------------|
| 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 | Little Flower College, | Research trends in | 27/1/2021 to |

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| | (Online) | Hyderabad, AP. | Physics and Electronics | 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/Lectures presented in Seminars/ Conferences:

| S. No | Name of the seminar/ Conference | Place | Date | Title of papers presented |
|-------|--|---|---------------|---|
| 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 optical crystals and modeling in Crystal growth" | Anna university, Chennai, TN | 26/3/2007 | Growth and characterization of bimetallic thiocyanate 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 | Title | Category |
|-------|---------------|--|---|
| 1. | 15/10/2004 | Spectroscopic Applications and Instrumentation | National Seminar |
| 2. | 14/9/2012 | Recent Advancements in Spectroscopy | National Seminar |
| 3. | 15/9/2015 | Recent development in materials and methods” | National Conference |
| 4. | 14-15/10/2016 | Android Botix | Workshop in collaboration with e-cell, IIT Bombay |
| 5. | 7/9/2018 | National Conference on Advanced materials and applications | National Conference in collaboration with ISPA |
| 6 | 13/9/2019 | State level seminar on Material Science | State Level Seminar |
| 7. | 10/6/2020 | Novel materials, characterization and applications | National webinar |
| 8.. | 22-23/7/2021 | Sensors and applications | International webinar |
| 9. | 19/9/2022 | Higher Educational opportunities in India and Overseas | International Video conference |
| 10. | 13-14/10/2022 | Advanced materials and applications | Second National conference in collaboration with ISPA |

Seminars / Conferences Attended:

| S.No. | Title | Date | Place |
|-------|--|---------------|---|
| 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 |

Webinars attended:

| S.No. | Title | Date | Name of the organiser |
|-------|-------|------|-----------------------|
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| 1. | Good Teacher to Great Teacher | 14/05/2020 | ICT Academy, Chennai |
| 2. | 2-Days Webinar on Branding Design & Digital Marketing | 11-12/05/2020 | Department of Communication Media, Auxilium College, Vellore |
| 3. | Lecture Series on Corona Crisis | 14-15/05/2020 | PG & Research Department of English, Auxilium College, Vellore |
| 4. | 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 |
| 5. | National level online quiz contest on exercise NCC” - YOGDAN - COVID19 | 23-05-2020 | Thiagarajar College, Madurai. |
| 6. | Supercapacitors: New age energy storage devices. | 19-05-2020 | AyyanadarJanakiammal College |
| 7. | National webinar on Nutraceutical and functional foods, its applications and Health benegits | 29-05-2020 | PG and Research department of Zoology, Auxilium College, Vellore |
| 8. | International Webinar on Recent trends in Materials Science | 06-06-2020 | Muthurangam Government Arts College, Vellore |
| 9. | Workshop on Smart materials Sensor and Energy Devices | 25-30/05/2020 | SSN College of Engineering, Kalavakkam, Chennai |
| 10. | National Webinar on Computer aided Drug Discovery | 01-06-2020 | Department of Botany, Auxilium College, Vellore |
| 11. | Future of Examinations: Bloom's taxonomy and multiple assessment tools. | 08-06-2020 | GTN Arts College, Dindigul. |
| 12 | Leave a Green mark contest | 16-24/05/2020 | Auxilium Media Animation Resources - AMAR, Salesian sisters, Mumba |
| 13 | Photovoltaics and Materials science | 23-06-2020 | Crystal growth centre, Vellore institute of technology, Vellore. |