




# SRIRAM ENGINEERING COLLEGE

Perumalpattu, Veppampattu (RS), Chennai 602024 Tamil Nadu  
(A Unit of Sriram Educational Trust)  
(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

## DEPARTMENT - PHYSICS

### GENERAL INFORMATION

Name of the Faculty Member	Dr. R. Durgadevi	
Present Designation	Assistant Professor	
Educational Qualification	M.Sc, Ph.D	
Anna University ID Number	6225563	
AICTE ID Number	275764	
Total Experience	6 years	
Date of Birth	10.01.1991	
Date of Joining	01.08.2024	
Area of Specialization	Material science & Crystal Growth	

### PARTICULARS OF EDUCATIONAL QUALIFICATION

Degree / Diploma	Subject	University / Board	Year of Passing
Ph.D.,	Physics	University of Madras	2024
PG-M.Sc	Physics	University of Madras	2013
UG-B.Sc	Physics	University of Madras	2011

### RESEARCH TITLES

Ph.D.,	An extensive investigation on physico-chemical properties of p-nitrophenol derivative single crystal
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### ACADEMIC & INSTITUTIONAL RESPONSIBILITIES

Newsletter Co-ordinator, UPC Co-ordinator, IIC convener
Class-In charge

## JOURNAL PUBLICATIONS

1. Growth, optical, electrical properties and DFT studies on piperidinium 4-nitrophenolate NLO single crystal in acetone, R Durgadevi, A Suvitha, T Arumanayagam, Journal of Crystal Growth 582, 126512, IF-1.7

2. Growth, thermal, linear and nonlinear optical properties of a novel second-order nonlinear optical crystal: urotropine p-nitrophenol, R Durgadevi, A Steephen, T Arumanayagam, Journal of Materials Science: Materials in Electronics 31 (21), 18683-18691, IF-2.8

3. An organic hexamine p-nitrophenol crystal: growth, optical, electrical, mechanical and density functional theoretical studies for nonlinear optical applications, R Durgadevi, A Suvitha, A Steephen, T Arumanayagam, Optical Materials 127, 112280, IF-3.8

4. Computational, experimental investigations on effect of phosphoric acid to enhance the linear and nonlinear optical properties of hexamine p-nitrophenol crystal. R Durgadevi, A Suvitha, A Steephen, T Arumanayagam, Optical and Quantum Electronics 56 (1), 120, IF-3.3

## PAPERS PRESENTED IN CONFERENCES/SYMPOSIUMS

1. Growth, spectral, linear and nonlinear optical studies of a new nitrophenol complex crystal, R. Durgadevi, T. Arumanayagam, International symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-2019) during 26-28, February-2019, Organized by the SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India.

2. Investigation of new organic L-ascorbic 4-nitrophenolate single crystal, R. Durgadevi, T. Arumanayagam, International conference on Recent Trends in Applied Science and Technology (ICRTAST-2019) during 19-21, September-2019, Organized by the SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India.

3. Synthesis, growth and spectral analysis of new organic nonlinear optical single crystal Hexamine l-alanine (HMLA), R. Durgadevi, T. Arumanayagam, International Conference On Recent Advancements in Material Science (New Phy 2020) organized by P.G & Research Department of Physics, The new college (Autonomous), Chennai on 21<sup>st</sup> January 2020.

4. Growth and spectral analysis of new organic nonlinear optical single crystal: L-glutamin p-nitrophenol single crystal, R. Durgadevi, T. Arumanayagam, International Conference on Physics of Advanced Materials and Molecules (ICPAMM-2020) during 30&31, January-2020, organized by Dr. Ambedkar Government Arts College, Vyasarpadi, Chennai-600 039.

5. Optical and electrical properties of a nitrophenol based organic crystal (P4NP) for nonlinear optical application, R. Durgadevi, T. Arumanayagam, International E-conference On Advanced material science (ICAMS-2021) during March 03 & 04, 2021 organized by the Manonmaniam Sundaranar university, Tirunelveli-627 012, Tamilnadu, India.

6. Growth, linear and nonlinear optical studies of p-nitrophenol L-tartrate (PNLT) single crystal, R. Durgadevi, T. Arumanayagam, International conference on Sustainable Materials and Technologies for Bio and Energy Application, (SMTBEA-2021) during 19-21, May-2021, organized by the SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India.

7. Growth, spectral, linear and nonlinear optical properties of a single crystal: Hexamine p-nitrophenol phosphoric acid (HMPN), R. Durgadevi, T. Arumanayagam, The 2<sup>nd</sup> International symposium on Modeling of Crystal Growth Processes and Devices during 5-8 July-2021, organized by the SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India.

8. Growth and spectral analysis of organic nonlinear optical single crystal: Urotropine p-nitrophenol (UTPN), R. Durgadevi, T. Arumanayagam, International Conference on Growth of Crystal and their Technological Applications (GCTA-2022) during 10-12 January, 2022, organized by the SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India.

9. Growth, mechanical, spectral, optical & electrical studies of an organic nitrophenolate single crystal, R. Durgadevi, T. Arumanayagam, The 7<sup>th</sup> National Conference On Hierarchically Structured Materials (NCHSM

2019), during 22-23, February-2019, Organized by the SRM Institute Of Science and Technology, Ramapuram Campus, Chennai- 600 089.

### **CONFERENCES, SEMINARS AND WORKSHOPS ATTENDED**

1. National webinar on “Prospectives of Thermoelectric Materials”, R. Durgadevi, organized by the Department of Physics, C. Kandaswami Naidu College for Men, Anna Nagar East, Chennai-600 102, on 11<sup>th</sup> October 2021.

2. University distinguished lecture series on “Semiconductor Nanostructures for optoelectronic applications”, R. Durgadevi, by the Australian national university, Australian organized by SRM university-AP, held on 22<sup>nd</sup> January 2022.

### **NPTL, SWAYAM AND OTHER CERTIFICATIONS:**

1. NPTEL – 1 Human Movement Science –Attended- Feb-April 2025

2. FDP- AI&DIGITAL SKILL (NAAN MUDHALVAN) (Dated from 5/1/26 to 10/1/26), conducted by Anna University.

3. FDP-Modern pedagogical approaches for multidisciplinary engineering subjects (Dated from 15 to 20<sup>th</sup> December 2025), conducted by AMS college, Chennai.

4. FDP-Research foundations and practices for quality academics research from 21/1/26 to 23/1/26, conducted by Thiruthangal Nadar College, Selavayal, Chennai.

### **SUPERVISERSHIP (IN NUMBERS)**

Ph.D.,	
PG.	
UG.	