




Bharathiar University

State University | "A++" Grade by NAAC | 26th Rank in MoE-NIRF
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

Dr P DHANASEKARAN Assistant Professor School of Distance Education Bharathiar University Erode, 638116 Tamil Nadu E-mail: dhanasekaran@buc.edu.in Phone: 9789731090 Office Number:	
Research Area <ul style="list-style-type: none">• Crystal Growth• Biomaterials	Courses Teaching <ul style="list-style-type: none">• Classical Mechanics• Condensed Matter Physics• Atomic and Molecular Spectroscopy• Mathematical Physics• Nuclear and Particle Physics
Research Experience: 18	Teaching Experience: 10
Research Credentials (as on February 2024 – Source: Google scholar) H-index: 9 Citations: 9 i10-index: 231	
Publications International Journals: 26 Books/Chapters: 2 Conferences: 7	
Career Other Institutes 1. Designation : Assistant Professor Institution Name : Erode Sengunthar Engineering College, Erode Period : June 2014 - November 2016 2. Designation : Assistant Professor Institution Name : Sri Shakthi Institute of Engineering and Technology, Coimbatore Period : July 2013 - May 2014 At Bharathiar University 1. Designation : Assistant Professor & Head i/c Period : November 2016 - July 2022 2. Designation : Assistant Professor Period : July 2022 - March 2024	
Education Ph. D. Subject : Physics Institution : Bharathiar University Affiliated University : Bharathiar University Year of Award : March 2014 M. Phil. Subject : Physics Institution : Bharathiar University Affiliated University : Bharathiar University Year of Award : December 2006	



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Dr P DHANASEKARAN , Assistant Professor , School of Distance Education

M. Sc.

Subject : Physics

Institution : Sri Kandhan College of Arts and Science

Affiliated University : Periyar University

Year of Award : April 2005

B. Sc.

Subject : Physics

Institution : Sri Vasavi College

Affiliated University : Bharathiar University

Year of Award : April 2003

Projects

National Level

Ongoing - completed - 2

Research Guidance

Completed

Ph.D. - 3

On Going

Ph.D. - 1

Institutional Responsibilities

CCII In-charge

Period :Feb 2023 to Till date

Nature of Responsibility :Responsible for CCII, this is one of the major parts of SDE.

Teaching in B.Sc. Blended

Period :Jul 2023 to Till date

Nature of Responsibility :This is unique and oriented towards creativity in science.

Member

Period :Jan 2024 to Till date

Nature of Responsibility :To look into the matters related to the preparation of self-learning material (SLM) of ODL, offered by SDE.

Visits

1. International Conference on Materials for Advanced Technology (ICMAT2015) (2015-07-03 - 2015-06-28)

Publications

Books/Chapters - 2

2. 2. "Study of L-glutamic Acid's in situ Polymorphic Phase Transition through Solution Mediated"

Novel Aspects on Chemistry and Biochemistry Vol. 9, Chapter 11, Page 149-168. (January 2024)

P. Dhanasekaran

1. 1. "Effect Of L-Aspartic Acid Addition On The Crystal Growth, Structural, Optical And Biological

Applications Of L-Glutamic Acid Crystals"

Novel Aspects on Chemistry and Biochemistry Vol. 3, Chapter 6, Page 69-76. (June 2023)

J. Aarthi, P. Dhanasekaran

International Journals - 26

26. 26. "Characterization of Yttrium-doped γ -glycine crystal for nonlinear optical properties, antibacterial, anticancer activities"

Molecular Crystals and Liquid Crystals, 766, 78-89. (October 2023)

J. Aarthi, V. Vijayalakshmi*, P. Dhanasekaran, and N. S. Mohan



25. 25. "Investigations of Cadmium ion doped L-Histidine hydrochloride crystal growth, vibration, optical, thermal, SHG, and MTT assays for biological and optoelectronic applications"

Journal of Materials Science: Materials in Electronics 34, 522. (March 2023)
N. Poongodi; Dhanasekaran P; N. M. Ganesan; T. S. Senthil; Ravikumar Nattudurai

24. 24. "Effect of ammonium chloride addition on crystal growth, structural, optical and biological applications of L?glutamic acid crystals"

Applied Physics A 128, 416. (July 2022)
V. Vijayalakshmi, P. Dhanasekaran, J. Aarthi*

23. 23.

Journal of Materials Science: Materials in Electronics 32, 22984 - 22998. (March 2021)
B. ThilagaRajeswari, P. Sathya*, P. Dhanasekaran, G. Vinitha, S. Meyvel, V. Vijayalakshmi, and J. Aarthi

22. 21. "Growth and characterisation of thiosemicarbazide hydrochloride single crystals for optoelectronic and photonics device applications"

Optik 215, 164746. (March 2020)
B Thilagarajeswari, P Sathya, P Dhanasekaran*, S Meyvel, V Vijayalakshmi, J Arthi

21. 22. "Thiosemicarbazide zinc chloride single crystal: Promising (?)3 novel NLO material for optical and photonic device applications"

Optik 224, 165627. (March 2020)
ThilagaRajeswari. B, Sathya. P, Dhanasekaran. P*, Vinitha. G, Meyvel. S, V. Vijayalakshmi, J. Aarthi

20. 20. "Synthesis, Crystallization and Optical Properties of Potassium Nitrate Added L-alanine Single Crystals for Optoelectronic Device Applications"

Advanced Materials Proceedings 4, 162-164. (November 2019)
M. Shanmuga Sundaram*, V. Vijayalakshmi, P. Dhanasekaran, O.N. Balasundaram, S. Palaniswamy

19. 19. "Nonlinear optical investigations on novel gadolinium (III) ion doped L-histidine hydrochloride single crystal by solvent evaporation method"

Optoelectronics and Advanced Materials - Rapid Communications 13, 315-319. (August 2019)
N. Poongodi, P. Dhanasekaran, N. M. Ganesan and T. S. Senthil

18. 18. "Crystal growth and characterization of ?-glycine grown from AgSO4 for nonlinear optical applications"

Journal of Crystal Growth 509, 44-49. (June 2019)
V. Vijayalakshmi & P. Dhanasekaran

17. 17. "Growth and Characterization of L-Alanine Potassium Nitrate Single Crystals for Nonlinear Optical Applications"

Journal of Crystal Growth 506, 122-126. (May 2019)
M. Shanmuga Sundaram, V. Vijayalakshmi, P. Dhanasekaran, O.N. Balasundaram, S. Palaniswamy

16. 16. "Growth and Characterization of ?-glycine single crystals for Photonics and Optoelectronic device applications"

Journal of Crystal Growth, 506, 117-121. (March 2019)
V. Vijayalakshmi, P. Dhanasekaran

15. 15. "Growth, structural, optical, thermal and dielectric properties of L-glutamic acid hydrochloride crystal for optoelectronic device applications"

Journal of Crystal Growth, 506, 79-82. (February 2019)
J. Aarthi, P. Dhanasekaran

14. 14. "Growth and characterization study of ? and ? polymorphs of L-glutamic acid single crystals in the presence of ammonium sulphate"

Journal of Crystal Growth 502, 64-70. (September 2018)
J. Aarthi, P. Dhanasekaran, T.S. Senthil and N.M. Ganesan



13. 13. "Growth and characterization of α & β polymorphs of L-glutamic acid and its Anticancer & Antibacterial application

Crystal research and technology, volume 53, 6, 1700190 (1-10). (August 2018)

J. Aarthi, P. Dhanasekaran, T.S.Senthil and N.M.Ganesan

12. 12. "Optical, photoconductivity and dielectric studies of zinc sulphate added glycine crystal for photonics applications"

Optik, 173, 65-70. (July 2018)

V.Vijayalakshmi, P. Dhanasekaran,

11. 11. "Growth and characterization study of α -glycine crystal grown using a different mole concentration of zinc sulphate"

Journal of Crystal Growth, 498, 372-376. (May 2018)

V. Vijayalakshmi, P. Dhanasekaran

10. 10. "Effect of nickel sulphate hexahydrate addition on crystal growth, structural, optical and biological applications of glycine single crystals"

Molecular Crystals and Liquid Crystals, 664, 241-250. (April 2018)

V. Vijayalakshmi, P. Dhanasekaran and N. M. Ganesan

9. 9. "Influence of rare earth gadolinium nitrate addition on structural, dielectric, linear and nonlinear optical properties of glycine single crystals"

Journal of Crystal Growth, 493, 30-33. (February 2018)

V.Vijayalakshmi, P. Dhanasekaran and N. M. Ganesan

8. 8. "Nucleation control and growth of metastable β -L-glutamic acid single crystals in the presence of L-phenylalanine"

Procedia Engineering 141, 70-77. (April 2016)

DhanasekaranPalanisamy, Srinivasan Karuppannan*

7. 7. "Studies on the growth, structural, optical, thermal and mechanical properties of the semiorganic nonlinear optical crystal L-glutamic acid hydrobromide"

Phys. Chem. Solids 74, 934-942. (June 2013)

P. Dhanasekaran, K. Srinivasan

6. 6. "Nucleation control, separation and bulk growth of metastable β -L-glutamic acid single crystals in the presence of L-tyrosine"

J. Cryst. Growth 364, 23-29. (March 2013)

P. Dhanasekaran, K. Srinivasan

5. 5. "Synthesis, growth, morphology of the semiorganic nonlinear optical crystal L-glutamic acid hydrochloride and its structural, thermal and SHG characterizations"

Cryst. Res. Technol. 47, 1217-1230. (March 2012)

P. Dhanasekaran, K. Srinivasan

4. 4. "Nucleation control and crystallization of L-glutamic acid polymorphs by swift cooling process and their characterization"

J. Cryst. Growth 318, 1080-1084. (September 2011)

K. Srinivasan, P. Dhanasekaran

3. 3. "Separation and nucleation control of α and β polymorphs of L-glutamic acid by swift cooling crystallization process"

Amino Acids 40, 1257-1260. (July 2011)

K. Srinivasan and P. Dhanasekaran

2. 2. "Synthesis and Characterization of Silver-Polyvinyl Alcohol Nanocomposites and Plasma Effect"

Journal of Ovonic research 6, 187-191. (May 2010)

B. Raneesh*, A. Pragatheeswaran, P. Dhanasekaran, P. Chandrasekaran, Nandakumar Kalarikkal



1. 1. "Transferred arc plasma processing of mullite–zirconia composite from natural bauxite and zircon sand"

Vacuum 83, 353–359. (March 2009)

S. Yugeswaran, V. Selvarajan, P. Dhanasekaran, L. Lusvarghi

Conferences - 7

7. 7. "Growth and characterization study of L-glutamic acid γ -polymorphs in the presence of L-aspartic acid"

AIP Conference Proceedings, 2220, 060004. (July 2020)

J. Aarthi, and P. Dhanasekaran

6. 6. "Synthesis, Crystallization, Non Linear Optical and Anti-bacterial Activity of L-Alanine Sodium Nitrate

Single Crystals"

Journal of Physics 1172, 012072. (June 2019)

M. ShanmugaSundaram*, V. Vijayalakshmi, P. Dhanasekaran, O.N.Balasundaram and S.Palaniswamy

5. 5. "Growth and antimicrobial studies of γ -glycine crystal grown using CuSO₄"

AIP Conference Proceedings, 1953, 070004. (August 2018)

V. Vijayalakshmi & P. Dhanasekaran

4. 4. "Nucleation control and growth of metastable γ - L-glutamic acid single crystals in the presence of L-phenylalanine"

Procedia Engineering, 141, 70-77. (May 2016)

P. Dhanasekaran, K. Srinivasan

3. 3. "Growth and characterization of stable γ -polymorphs of L-glutamic acid by slow evaporation method"

International Journal of Science and Research (IJSR), AIP Conference Proceedings, ISSN 2319-7064, 5-8. (June 2014)

P. Dhanasekaran & C.R.Kalaiselvi

2. 2. "Nucleation and growth of L-glutamic acid polymorphs and its nonlinear optical properties"

AIP Conference Proceedings, 1536, 719-720. (July 2013)

P. Dhanasekaran & K. Srinivasan

1. 1. "Nucleation control and growth of metastable γ - L-glutamic acid single crystals in the presence of L-tyrosine"

AIP Conference Proceedings, 1512, 896-897. (March 2013)

P. Dhanasekaran & K. Srinivasan

Projects

Completed - 2

1. Nucleation Control, Separation and Crystallization of L-Glutamic acid Polymorphs by Solution Growth Technique and Growth & Characterization of Single Crystals of L-Glutamic Acid Derivatives DAE-BRNS 28.12 Lakhs (September 2015 - August 2018)
2. Non-linear optical and anti-bacterial applications of glycine and its derivatives DST – SERB 24.42 (October 2016 - October 2019)