JGI JAIN DEEMED-TO-BE UNIVERSITY | SCHOOL OF SCIENCES

DEPARTMENT OF PHYSICS AND ELECTRONICS

Faculty Name: Dr. S. THIYAGARAJ

Specialization: Crystal growth and Nano materials

Education

- Ph.D.in Physics, Karpagam University, Coimbatore, INDIA. (July 2014)
- M.Phil. in Physics, Annamalai University Chidambaram, INDIA. (2007)
- B.Ed. in Science, Indira Gandhi National Open University, Madras, INDIA. (2010)
- M.Sc. in Physics, Sacred Heart College (University of Madras), Thirupatture, INDIA. (2003)
- B.Sc. Physics, Thiru A.G.Govt. Arts College, University of Madras, Tindivanam, INDIA. (2001).
- Diploma. In Photography, Government ITI, Guindy, Madras, INDIA. (1999)

Work Experience

- Associate Professor of physics, Centre for post graduate studies, Jain University, Bangalore, INDIA (**April 01, 2019 to till date**)
- Resource person, Department of Bio Physics**,** Community College, Pondicherry, (**06th Sep 2018 to March 31st 201**9)
- Professor of Physics, Science and Humanities, Christ College of Engineering and Technology, Pondicherry (**2017- August 2018**)
- Associate Professor of Physics , Science and Humanities, Christ College of Engineering and Technology, Pondicherry (**2014-2017**)
- Senior Assistant Professor of Physics , Science and Humanities, Christ College of Engineering and Technology, Pondicherry (**August 2011-2014**)
- Assistant Professor of Physics, Department of Physics, St.Joseph College of Arts and Science, Cuddalore. (**2009-2011**)
- Post Graduate Teacher, Department of Physics, St.Michael's Hr.Sec School, Gingee. India. (**2006-2009**)
- Guest Lecturer in Physics, Department of Physics, Thiru.A.G.Govt Arts College, Tindivanam. India.(**2004-2006**)

Key Areas of Research interest

- Nanoparticles and Nano structured materials synthesis.
- Synthesis of Organic, semi organic, Metallic, Non-Metallic, Non Linear Optical Crystals, and Piezo Electric Crystals, Semiconducting and insulating Crystals
- Powder X-Ray Diffraction (Phase Analytical and Structure Analytical)
- Spectroscopic Studies of Organic and Semi Organic NLO Crystals
- Crystal structure refinements both organic and inorganic crystals

Publications

1. S. Thiyagaraj, Vishal Vrashabhanath Samaje, Nagaiah Kambhala, A. Christy Ferdinand, K. Munirathnam. A study on structural analysis and magnetic behaviour of barium hexaferrite nanomaterial. Applied Physics A **(2022)** 128:74 https://doi.org/10.1007/s00339-021-05179-0
2. K. Munirathnam, Ramaraghavulu Rajavaram, P.C. Nagajyothi, **S. Thiyagaraj**, M. Srinivas,Synthesis and optimization of Dy-doped SrZr4(PO4)6 nanophosphors for plant growth light-emitting diodes, Solid State Sciences, Volume 109, **2020**, 106455, ISSN 1293-2558, https://doi.org/10.1016/j.solidstatesciences.2020.106455.
3. **S Thiyagaraj1*, Nagaiah Kambhala2, N Shanthi3,** Modern learning of materials science and fundamental physics through the implementation of new communication skill-based (CSB) teaching and learning process during Covid-19 lockdown – A booster of research-based teaching and learning education, International Journal of Advanced Education and Research,**2020**,Vol.,5,Issue 3,PP 82-87
4. H. JudeLeonard Hilary, P.C.Jobe Prabakar, A. ChristyFerdinand, D.Manikandand**, S.Thiyagaraj** structural and optical mechanical and dielectric property study of adduct single cryatal 2,4,6 trinitrobenzene-1,3-diol-2-mehylimidaxole: A spectroscopic and theoretical approach, Physica B: Physics of Condenced Matter**, 2019**, 0921-4526
5. H. JudeLeonard Hilary, P.C.Jobe Prabakar, A. ChristyFerdinand, D.Manikandand, **S.Thiyagaraj,** New insights of structural, thermal, dielectric and nonlinear optical

properties of L-asparaginium orthophosphite crystal: A spectroscopic view, Journal of Molecular Structure, Vol. 1179, **2019**, 216-223 **(IF: 2.011-Q-1)**

6. M Indhumathi , G Meenakshi , VJ Priyadharshini , R Kayalvizhi and **S Thiyagaraj,** Theoretical evaluation of ultrasonic Velocity and Excess Parameters in Binary Liquid Mixtures of Bromobenzene with alkanols, Research Journal of Pharmaceutical, Biological and Chemical Sciences, RJPBCS, 2013, Vol 4, I 2, 1382 **(IF : 0.35-Q3)**
7. **Thiyagaraj** S. Meenakshi G. Synthesis, growth of semiorganic TGDCC (Tetra Glycine Dihydrated Calcium Chloride) single crystal and a study of effect by Urea on the structural and optical properties, e-ISSN: 2278-4861.Volume 4, Issue 2 (Jul. - Aug. 2013), PP 25-30**(IF: 3.15)**
8. M. Indhumathi , G. Meenakshi , V. J. Priyadharshini , R. Kayalvizhi and **S. Thiyagaraj**, Theoretical evaluation of ultrasonic velocity and excess parameters in binary liquid mixture at 303k, Journal of Chemical and Pharmaceutical Research, 2012, 4(9):4245-4250 **(IF: 1.20- Q4)**
9. **S. Thiyagaraj,** G. Meenakshi Ocular suitability of Fertilizer (Urea) doped Semiorganic NLO single Crystal: Tri-Glycine potassium chloride International Journal of Computer Applications, Volume 51– No.13, August 2012. **(RG IF :0.26)**
10. R. Kayalvizhi, G. Meenakshi, **S. Thiyagaraj,** V. J. Priyadharshini, M. Indhumathi, Growth and characterisation of pure and methyl orange doped potassium dihydrogen phosphate (KDP) Crystal, International journal of Advanced Science, Engineering and Technology. Vol 1, 2012, 39-42 **(IC IF:69.25)**
11. **Thiyagaraj** S. Meenakshi G., Synthesis, Growth and UV studies on semi-organic NLO material by an impact of fertilizer (Tri-Glycine Potassium Chloride (TGPC) and UREA), Indian Streams Research Journal, 2012, 2 (2):68-75. (**IF : 0.62**)
12. **Thiyagaraj S,** Meenakshi G, Growth and character revolution of Non-Linear Optical crystal by the impact of fertilizer on primary synthesis of γ- C2H5NO2 from (NH4)2SO4, and dihydrated CaCl2 as solvents, Archives of Physics Research, 2012, 3 (4):264-268. (**IF : 1.026**)

13. **Thiyagaraj S,** Jerome and Jerry**,** Magnetocaloric, Superconducting Trace of LaBiCuO3 and Cobalt-doped LaBiCuO3 Compounds, Published in an international conference at Bangalore.2016.

BOOK chapters: Nil

PhD Guidance:

Completed:0
Ongoing:2

Projects (External funded/Internal): Nil

Patents: Nil