

Dr. S. Prathap

Contact No : +91 9944373932

Mail Id: mic.prathap@gmail.com

Objective:

To obtain a responsible position as an Assistant professor where my teaching and research experience will be helpful to poor and marginalized people.



Date of Birth : 20 - 09 - 1985

Sex : Male

Father's Name : L. Selvaraj

Permanent Address : 45/39 H Udaiyar Street,
Tenkasi - 627811

Nationality : Indian

Marital status : Married

Academic Profile

Examination Passed	Name of Institution	Year of Passing	% of Marks
Ph.D., (Physics)	Loyola College, Chennai.	2013	By Thesis
M.Sc., (Physics)	Loyola College, Chennai.	2008	64
B.Sc., (Physics)	St. Xavier's College Palayamkottai	2006	60
PGDCA	LIBA	2008	72

Research Experience

- Experience in the synthesis and growth of organic materials.
- Preparation of nanoparticle by hydro Thermal method
- Growth of Non-Linear Optical single crystals by solution growth method.
- DFT Calculation.

Experience in Experimental Techniques:

I have hands on experience in the following techniques.

- ✓ Thermal Evaporation Technique
- ✓ Growing single crystal by melt and solution growth methods
- ✓ Powder X-Ray diffractometer
- ✓ Etching studies by optical microscope and SEM
- ✓ Hardness measurements by Vickers micro hardness method
- ✓ Obtaining optical properties from UV-VIS-NIR spectrum

Teaching Experience

Nov 2008 – Feb 2009	Physics Lecturer at Loyola College, (Autonomous), Chennai
June 2011 – Sept 2013	Tutor at Deepty institution Chennai
November 2013 to April 2014	Assistant Professor of Physics at St.Xavier's College (Autonomous), Palayamkottai.
June 2014 to May 2015	Assistant Professor of Physics at JP Arts and Science College, Aikudi , Tenkasi.
June 2015 to May 2016.	Assistant Professor of Physics at Arul Anandar College (Autonomous), Karumathur, Madurai.
June 2016 to May 2023.	Assistant Professor of Physics at Loyola College, (Autonomous), Chennai -34

June 2023 to till date

Assistant Professor of Physics at St. Joseph's
College (Autonomous), Trichy

List of the Projects

No.	Title of the Project Funding	Agency	Amount	Period
1	Growth and characterization of highly efficient Organic MNA single crystal.	Loyola Research Park	10,000/-	2018-2019
2	One Pot Hydrothermal Synthesis of CoFe ₂ O ₄ / (rGO) Nanocomposites for Superior Super Capacitor Electrode Material.	Loyola Research Park	15,000/-	2019-2020
3.	Vertical Axis Wind Turbine	Loyola Research Park	15,000/-	2022-2023

Research Guidance

No	Degree	Completed	On-going
1	Msc.,	12	1

Research Publications

International Journals:

1. A novel synthesis strategy for hybrid quaternary rGO/MnO₂/NiO/CuO nanocomposite as electrode for enduring symmetric supercapacitor fabrication Joselene Suzan Jennifer Patrick, S Muthupandi, SR Niranjana, M Joe Raja Ruban, J Madhavan, **S Prathap**, Synthetic Metals, 2023, pp 117282
2. Exploring ternary hybrid nanocomposite of NiO@ CuO embedded on reduced graphene oxide as supercapacitor electrode P Joselene Suzan Jennifer, S Muthupandi, SR Niranjana, M Joe Raja Ruban, Davis Varghese, J Madhavan, **S Prathap**, M Victor Antony Raj, Journal of Materials Science: Materials in Electronics 2023, pp 727
3. A quaternary nanocomposite as an efficient counter electrode for Pt-free Dye-sensitized solar cells (DSSC) P Joselene Suzan Jennifer, S Muthupandi, M Joe Raja Ruban, **S Prathap**, J Madhavan, M Victor Antony Raj, Materials Letters, 2023, pp 134151

4. Photocatalytic application of zinc oxide synthesized via sol gel route S Muthupandi, P Jennifer, M Ruban, **S Prathap**, J Madhavan, M Raj AIP Conference Proceedings 2023 , pp 2770
5. Synthesis and characterization and photocatalytic application of nickel oxide with pinecone morphology, S Muthupandi, P Jennifer, M Ruban, **S Prathap**, J Madhavan, M Raj AIP Conference Proceedings 2023, pp 2770
6. Temperature-Dependent supercapacitive behaviour of Cobalt oxide (Co_3O_4) nanospheres under electrolytes with different pH P Joselene Suzan Jennifer a,b , S Muthupandi , M. Joe Raja Ruban, C. Johxy, J. Madhavan, **S. Prathap**, Victor Antony Raj M. Journal of Inorganic Chemistry Communications, 2022 ,pp109884.
7. Deleterious Effect of Ultraviolet Radiation on *Glossogobius giuris*: A Short Experimental Study Azhagu Raj Ramakrishnan, Krishna Kumar, Palavesam Arunachalam, Muthupandi Sankar, **Prathap Selvaraj** and Sohan Jheeta Sci 2022, 4, pp 12
8. Analysis of optical and structural properties of Sm^{3+} doped TiO_2 : A potential composition for the fabrication of efficient DSSCs Bharathi Bernadsha, S., Anto Feradrick Samson, V., Madhavan, J., Victor Antony Raj, M., **Prathap, S.** AIP Conference Proceedings, 2020, 2265, pp 030623
9. Impact of calcination temperature on structural, optical, and magnetic properties of spinel CuFe_2O_4 for enhancing photocatalytic activity Samson, V.A.F., Bernadsha, S.B., Mahendiran, M., ...Raj, M.V.A., **Prathap, S.** Journal of Materials Science: Materials in Electronics, 2020, 31(9), pp. 6574–6585
10. Studies on growth and characterization of nonlinear optical single crystal L-Histidine di Picrate Subaranjani, R., Madhavan, J., **Prathap, S.**, Victor Antony Raj, M. Materials Today: Proceedings, 2019, 8, pp. 456–463

11. Hollow ZnSnO_3 crystallites: Structural, electrical and optical properties Prabakaran, P., Victor Antony Raj, M., Mathen, J.J., **Prathap, S.**, Madhavan, J. Springer Proceedings in Physics, 2017, 189, pp. 255–262
12. Growth, optical and thermal studies on N-benzyl-2-methyl-4-nitroaniline Prathap, S., Madhavan, J. IOP Conference Series: Materials Science and Engineering, 2015, 73(1), pp 012033
13. Synthesis, growth and computational studies on mNA single crystal **Prathap, S.**, Madhavan, J. Optics InfoBase Conference Papers, 2013, pp. 27–29
14. Synthesis, experimental and theoretical investigations of N-(3-nitrophenyl) acetamide (3NAA) **Prathap, S.**, Madhavan, J. AIP Conference Proceedings, 2012, 1447(1), pp. 1297–1298
15. Synthesis, experimental and theoretical investigations on nonlinear optical Urea L-malic acid single crystals **Prathap, S.**, Madhavan, J. Der Pharma Chemica, 2012, 4(5), pp. 1986–1990
16. Investigations of structural, optical and dielectric studies of copper oxide nanoparticles VAF Samson, KM Racik, **S Prathap**, J Madhavan, MVA Raj Materials Today: Proceedings 8, 386-392
17. Quantum chemical computational studies on 2, 4-difluoroaniline calculated by DFT method. LA Selvam, **S Prathap**, S Muthu, N Balamurugan, MVA Raj Materials Today: Proceedings

18. Density functional theory analysis of an organic compound 2-amino-5-chloro-3-nitropyridine LA Selvam, S Prathap, S Muthu, N Balamurugan, MVA Raj Materials Today: Proceedings 50, pp 2760-2763
19. Embellishing the bandgap of neodymium (Nd³⁺) doped TiO₂ for the fabrication of high efficiency DSSCs SB Bernadsha, VAF Samson, J Madhavan, MVA Raj, **S Prathap** Materials Today: Proceedings 50, pp 2703-2706
20. One pot hydrothermal synthesis and characterization of NiFe₂O₄ nanoparticles VAF Samson, SB Bernadsha, R Xavier, CST Rueshwin, **S Prathap**, ... Materials Today: Proceedings 50, pp 2665-2667
21. Studies on Growth and Characterization of Nonlinear Optical Single Crystal L-Histidine Di Picrate R Subaranjani, J Madhavan, **S Prathap**, MVA Raj Materials Today: Proceedings 8, pp 456-463
22. Studies on Growth and Characterization of Nonlinear Optical Single Crystal L-Histidine Di Picrate R Subaranjani, J Madhavan, **S Prathap**, MVA Raj Materials Today: Proceedings 8, pp 456-463
23. Crystallites: Hollow Electrical ZnSnO and Optical 3 Structural, Properties P Prabakaran, MVA Raj, JJ Mathen, **S Prathap**, J Madhavan Recent Trends in Materials Science and Applications: Nanomaterials, Crystal ...Proceedings ICRTMSA 2016), pp 255-262
24. Growth, optical and thermal studies on N-benzyl-2-methyl-4-nitroaniline **S Prathap**, J Madhavan IOP Conference Series: Materials Science and Engineering 73 (1), pp 012033

25. Synthesis, Growth and Computational Studies on mNA Single Crystal **S Prathap**, J Madhavan CIOMP-OSA Summer Session on Optical Engineering, Design and Manufacturing, Th5
26. Synthesis, experimental and theoretical investigations of N-(3-nitrophenyl) acetamide (3NAA) **S Prathap**, J Madhavan AIP Conference Proceedings 1447 (1), pp 1297-1298
27. Synthesis, Experimental and Theoretical Investigations on Nonlinear Optical Urea L-malic acid Single Crystals **S Prathap**, J Madhavan
28. Experimental and computational studies on Imidazole-Imidazolium Picrate Monohydrate R Subaranjani, MVA Raj, **S Prathap**.

Conferences/Seminars/Refresher Course attended in International Level

1. International Conference on Advanced Materials : Loyola College, Chennai(5-7 January), Studies on Growth, Optical, Vibrational properties and hyperpolarizability of *N*-benzyl-2-methyl-4-nitroaniline, **Prathap S.** and Madhavan J.
2. International conference on recent trends in advanced materials: VIT University 20-22 February 2012, Synthesis, Growth, Optical and DFT studies on ULMA crystal, **Prathap S** and Madhavan J.
3. International conference on Material Science and Technology (ICMST 2012) Kottayam (10-14 June 2012), Growth, optical and thermal studies on *N*-benzyl-2-methyl-4-nitroaniline, **Prathap S** and Madhavan J.
4. Joint CIOMP/OSA International Summer Session on Optical Engineering, Design and Manufacturing Changchun, China 4-9 August 2013. Synthesis ,Growth and Computational studies on mNA Single Crystal **Prathap S** and Madhavan J. (Won travel grant)

Conferences/Seminars/Refresher Course attended in National Levels

1. National Conference on Recent Trends in Materials Research; January 29-30, 2011 Birla College Arts, Science & Commerce; Kalyan “Spectral, thermal, dielectric and Photoconductivity investigations of pure and La^{3+} doped L- Arginine Maleate single crystals **S. Prathap**, M. Victor Antony Raj, J. Madhavan” and “Growth, Optical and thermal studies on non linear optical single crystal of N- (3-Nitrophenyl) Acetamide **Prathap S**, Victor Antony Raj M., Senthil S, Madhavan J.”
2. 56th DAE Solid state Physics Symposium Dec 19-23, 2011: SRM University, Chennai.“Synthesis, Experimental and Theoretical Investigations of N-(3-Nitrophenyl) Acetamide (3NAA)” **Prathap S** and Madhavan J.
3. XVI National Seminar on Crystal Growth; 19th to 21st January Aditanar college of arts and science, Tiruchendur, Crystal Structure, Vibrational Spectra and theoretical studies on N-benzyl-2-methyl-4-nitroaniline,**Prathap S.** and Madhavan J.
4. National seminar on advances in materials science 23rd and 24th January (MS University) Tirunelveli, Crystal Structure, Vibrational Spectra and theoretical studies on N-benzyl-2-methyl-4-nitroaniline, **Prathap S** and Madhavan J.
5. NSCGNM 2012(15-17 Mar 2012) National College, Tiruchirappalli, Growth Studies of Dielectric, Photoconductivity and HOMO, LUMO of Urea L Malic acid. **Prathap S** and Madhavan J.
6. Recent Advancements in Materials Research (RAMR-2012) July 19 – 20, 2012. Scott Christian College, Nagercoil theoretical and Experimental Studies on Nonlinear optical Urea L-Malic Acid. **Prathap S** and Madhavan J. and Molecular Structure first order hypopolarizability studies of N-(3-Nitrophenyl) Acetamide. Kirubakaran K., **Prathap S** and Madhavan J.
7. Two Week **Refresher Course on Experimental Physics** (March 5-20, 2013) at IASc, Bangalore.
8. National Level online Faculty Development Programme on **Effective Usage of ICT tools for E-Content preparation.** (April 4 – May 2, 2020) at Jeyaraj Annapackiam College for Women, Periyakulam , Theni.

Conferences Organized

1. 1st NATIONAL CONFERENCE ON MATERIAL SCIENCE – 2020, (**NCMS – 2020**)
Organized on 09th January 2020 (All the papers were published in Materials Today proceedings – **A Scopus indexed Journal**), Loyola College, (Autonomous), Chennai -34
2. 2nd NATIONAL CONFERENCE ON MATERIAL SCIENCE – 2021, (**NCMS – 2021**)
Organized on 19th March 2020. Loyola College, (Autonomous), Chennai -34
3. INTERNATIONAL CONFERENCE ON MATERIAL SCIENCE 17th March 2022. (**ICMS 2022**) Loyola College, (Autonomous), Chennai -34
4. International Conference On Materials For Energy Generation And Storage, (**ICME 2023**)
16TH March 2023 Loyola College, (Autonomous), Chennai -34

Personal Skills : Willingness to learn
Positive frame of mind
Motivation to grow
Belief in teamwork

Hobbies : Listening Music
Reading Books

Declaration

I hereby declare that all the information furnished is true to the best of my knowledge.

Place: Trichy

Date:

(S. Prathap)