

SRI SANKARA ARTS & SCIENCE COLLEGE

ENATHUR, KANCHIPURAM

STAFF PROFILE

DEPARTMENT OF PHYSICS

1.	Name of the Staff	Dr. CHITRAMBALAM S
2.	Designation	ASSISTANT PROFESSOR
3.	Date of Joining	10.06.2024
4.	Mobile Number	9789058903
5.	E-Mail ID	chitrambalam86@gmail.com
6.	Nationality	INDIAN
7.	Academic Qualification	M.Sc., B.Ed., M.Phil., Ph.D.
8.	Field of Specialization	Density Functional Theory, Crystal Growth and Nonlinear Optical applications
9.	Ph.D Thesis Title	Density Functional Theory Computations, Synthesis and Nonlinear Optical Studies of Zn(II) ion based Coordination Compounds for Optical Limiting Applications.
10.	Awarding University and Year of Award.	University of Kerala, Thiruvananthapuram, India and July-2021

11. Work Experience (in chronological order):

S.No.	Name of the Institution	Designation	Period
1	ES Arts & Science College (Co-Ed), Villupuram,	Assistant Professor	20-January 2023 to 04-May 2024
2	Sri Sankara Arts and Science College, Enathur, Kanchipuram	Assistant Professor	10-June 2024 till date

12. Other Academic and Administrative Responsibilities:

S.No.	Name of the Institution/Committee	Position	Period
1	ES Arts & Science College (Co-Ed), Villupuram	Certificate course Coordinator	01-February 2023 to 04-May 2024
2	ES Arts & Science College (Co-Ed), Villupuram/ Disciplinary Committee	Member	01-February 2023 to 04-May 2024
3	Naan Madhavan's Faculty Development Program "Advanced Data Analytics Using python" organized Tamil Nadu skill development corporation (TN) conducted by Annamalai University.	Assistant Professor / Coordinator	01-January 2024 to 04- May 2024

13. Publications:

S.No.	Title	Journal	Pages
1	Self-focusing behaviour of dichlorobis(sarcosinato)zinc(II) complex investigated by DFT computations, fluorescence, laser damaged threshold and Z-scan technique	Chemical Physics Letters,	754 (2020) 137648
2	Synthesis, Hirshfeld surface analysis, laser damage threshold, third-order nonlinear optical property and DFT computation studies of Dichlorobis(DL-valine)zinc(II): A spectroscopic approach	Optical Materials,	75 (2018) 285-296
3	Synthesis, vibrational spectral and optical absorption studies on the Dichlorobis (DL-alanine)zinc(II) complex	Asian Journal of Physics	27 (2018) 35-48.
4	NLOphoric imidazole-fused fluorescent anthraquinone dyes	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	246 (2020) 119017
5	Experimental and theoretical investigation of linear and nonlinear optical properties of ethyl-3-hydroxy-2-napthoate azo dyes by solvatochromic, computational aspects, and	Journal of Physical Organic Chemistry	33 (2020) e4050

	Z-scan technique		
6	Red Emitting Hydroxybenzazole (HBX) Based Azo Dyes: Linear and Non Linear Optical Properties, Optical Limiting, Z Scan Analysis with DFT Assessments	Journal of Fluorescence	30 (2020) 335–346
7	Z-scan and DFT approach for investigating the NLO properties of imidazole fused anthraquinone dyes	Journal of Photochemistry and Photobiology A: Chemistry	390 (2020) 112327
8	NLO characteristics of D- π -A coumarin-thiophene bridged azo dyes by Z-scan and DFT methods	Molecular Physics	118 (2020) e1662127
9	Spectroscopic, DFT and Z-scan approach to study linear and nonlinear optical properties of Disperse Red 277	Optical Materials	99 (2020) 109536
10	NLO Properties of 2-Naphthol Monoazo Disperse Dyes by DFT and Z-Scan Technique–A Detailed Study	ChemistrySelect	4 (2019) 13846-13855
11	Non-Linear Optical Properties of Disperse Blue 354 and Disperse Blue183 by DFT and Z-Scan Technique	Polycyclic Aromatic Compounds	41 (2019) 1-18
12	Pyrene Based NLOphoric D- π -A- π -D Coumarin-Chalcone and Their Red Emitting OBO Difluoride Complex: Synthesis, Solvatochromism, Z-scan, and Detailed TD-DFT Studies	Chemistry Select	4 (2019) 10385-10400
13	Spectroscopic investigation and non linear optical activity study on 7, 7, 8, 8-tetra cyano quino dimethane	Chemical Data Collections	21 (2019) 100220
14	NLO-Phoric Emissive Quinoxaline Analog of Quinoline Yellow 54 and Z-Scan Studies	ChemistrySelect	4 (2019) 3752-3761
15	Influence of acceptors in NLOphoric aacenaphthene and morpholine-thiourea hybrid dyes: Photophysical, viscosity, DFT and Z-Scan study	Optical Materials	89 (2019) 178-190
16	Non-linear optical response of meso substituted dipyrromethene boron difluoride dyes: Synthesis, photophysical, DFT and Z scan study	Optical Materials	89 (2019) 164-172
17	NLOphoric benzyl substituted BODIPY and BOPHY: A comprehensive linear and nonlinear optical study by spectroscopic, DFT and Z-scan measurement	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,	215 (2019) 122-129
18	Extensive Study of Rhodanine-Arylamine-Based Chromophores: Consolidated Optical, DFT/TD-DFT and Non-Linear Optical Properties	ChemistrySelect	4 (2019) 211-221
19	Non-linear optical response of meso hybrid BODIPY: Synthesis, photophysical, DFT and Z scan study	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	209 (2019) 126–140
20	Fluorescent meso-benzyl curcuminoid boron complex: Synthesis, photophysics, DFT and NLO study	Optical Materials	84 (2018) 786-794

21	Excitation energy transfer processes in BODIPY based donor-acceptor system-Synthesis, photophysics, NLO and DFT study	Optical Materials	84 (2018) 795-806
22	Enhancement of NLO Properties in OBO Fluorophores Derived From Carbazole-Coumarin Chalcones Containing Carboxylic Acid at the N-Alky Terminal End	The Journal of Physical Chemistry C	122 (2018) 14313-14325.
23	Large Stokes Shifted Far-Red to NIR-Emitting D- π -A Coumarins: Combined Synthesis, Experimental, and Computational Investigation of Spectroscopic and Non-Linear Optical Properties	ChemistrySelect	3 (2018) 4393 – 4405
24	Viscosity induced emission of red-emitting NLOphoric coumarin morpholine-thiazole hybrid styryl dyes as FMRs: Consolidated experimental and theoretical approach	Optical Materials	79 (2018) 90-107
25	Triphenylamine Derived 3-Acetyl and 3-Benzothiazolyl Bis and Tris Coumarins: Synthesis, Photophysical and DFT Assisted Hyperpolarizability Study	Journal of Electronic Materials	47 (2018) 1431-1446
26	Triphenylamine derived coumarin chalcones and their red emitting OBO difluoride complexes: Synthesis, photophysical and NLO property study	Dyes and Pigments	148 (2018) 474-491
27	Coherent source interaction, third-order nonlinear response of synthesized PEG coated magnetite nanoparticles in polyethylene glycol and its application	Optics and Laser Technology	98 (2018) 84–91
28	NLO phoric multichromophoric auxiliary methoxy aided triphenylamine D- π -A chromophores e Spectroscopic and computational studies	Optical Materials	73 (2017) 602-616
29	NLO properties of 1, 4-naphthoquinone, Juglone and Lawsone by DFT and Z-scan technique A detailed study	Optical Materials	72 (2017) 549-558
30	Spectroscopic, DFT and Z-scan supported investigation of dicyanoisophorone based push-pull NLO phoric styryl dyes	Optical Materials	66 (2017) 494-511
31	Non-linear optical study of BODIPY-benzimidazole conjugate by solvatochromic, Z-scan and theoretical methods	Optical Materials	64 (2017) 453-460
32	Synthesis, Vibrational spectral analysis and nonlinear optical property of Sarcosinium Succinate by DFT studies	Physical and Environmental Science Bulletin	3 (2015) 5-13

14. Awards / Distinction : NIL

15. Membership in Professional Bodies: NIL

16. Seminars Conferences organized /Participation:

S.No.	Program Attended	Place	Organized/ Participated	Period
1	Synthesis, vibrational spectra and nonlinear optical investigation of Dichlorobis(pyridine-3-carbaldehyde)zinc(II) complex”, International conference on 8 ICOPVS	JNCASR, Bengaluru, India	Presentation	24-28 February, 2020
2	Third-order nonlinear optical properties of Dichlorobis(dl-alanine) zinc(II) complex investigated using theoretical and experimental: a spectroscopy approach”, National conference on Advances in Materials and Methods of Chemistry	BIHER, Chennai, Tamilnadu, India	Presentation	21 December, 2019
3	Spectral investigation and nonlinear optical activity of (2E)-1-(4-bromophenyl)-3-(2-chloro-6-fluorophenyl)prop-2-en-1-one”, International conference on spectroscopy of biomolecules and advanced materials	Christian College, Chenganur, Kerala, India	Presentation	04-07 October, 2017
4	Z-scan measurements of third-order optical nonlinearity in Dichlorobis(DL-valine)zinc(II): a DFT approach”, National seminar on Technologically advanced Materials	Muslim Arts College, Thiruvithancode, Tamilnadu, India	Presentation	06 September, 2016
5	Third-order nonlinear optical property and DFT computation studies of Dichlorobis(DL-valine)zinc(II): a spectroscopic approach”, National Conference on Smart Materials	Sree Narayana College, Varkala, Kerala, India	Presentation	08-09 March, 2016

6	Spectroscopic characterization and density functional theory computation studies of (2E)-1-(4-bromophenyl)-3-(2-chloro-6-fluorophenyl)prop-2-en-1-one”, National Conference on Perspectives in Raman Spectroscopy	St. John’s College, Anchal, Kerala, India	Presentation	15-16 October, 2015
7	Investigation of self-focusing behavior of Dichlorobis(sarcosinato)zinc(II) by Z-scan technique”, National seminar on Nanomaterials and its applications	Mar Ivanios College, Thiruvananthapuram, Kerala, India	Presentation	01 October, 2015

17. Participated as Resource Person: NIL

18. Workshop & Training Programmes:

S.No.	Programme	Venue	Period
1	Webinar on Modeling Stationary and Non Stationary Time Series: An Inferential Perspective	School of CS & AI, SR University, Warangal, India.	27 March 2024
2	7 Days Professional Development Programme on "Design Thinking for Media Engagement"	SRM Institute Of Science And Technology, Ramapuram, Chennai, Tamilnadu, India	11-19 March 2024
3	Empowering educators: strategies for holistic teaching and professional growth	Sri Malolan College of Arts and Science, Madurantakam, Tamilnadu, India	18-22 December 2023
4	Faculty Development Programme on Teaching and Research Methodology	ES Arts and Science College, Villupuram, Tamilnadu, India	27-31 March 2023
5	Workshop on How to submit your research article in a journal” National workshop on Publishing research articles in Scopus indexed journals	Holy Cross College, Nagercoil, Tamilnadu, India	28 August 2019
6	Research Productivity Measure and Institutional Ranking	Mar Ivanios College, Thiruvananthapuram, Kerala, India	22 November 2018
7	Workshop on Academic writing skills and style manuals	Mar Ivanios College, Thiruvananthapuram, Kerala,	29 September 2016

		India	
8	DST-SERC sponsored workshop on "Single crystal of functional materials and their applications	SSN college of Engineering, Kalavakkam, Chennai, Tamilnadu, India	2-22 September 2015

19. Projects Completed: NIL

20. Any other Details: NIL