Dr. S. SUDHAHAR
ASSISTANT PROFESSOR

Contact

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Date of Birth	:	11/04/1985
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Skype id	:	Sudhahar

Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph.D.	University of Madras	2014	Physics	Highly Commended
M.Ed.,	University of Madras	2010	Education	I-Class
B.Ed.,	Tamilnadu Teacher's Education University	2009	Physical Science	I-Class
M.Sc.,	Bharathidasan University	2008	Physics	I-Class
B.Sc.,	Bharathidasan University	2006	Physics	I-Class

Teaching & Research Experiences

Total Teaching Experience : 9 Years

Position	Institution	Duration
Assistant Professor	Alagappa University	2015-Till Date

Total Research Experience : 13 Years

Position	Institution / University	Duration
Assistant Professor	Alagappa University	2015 - Till Date
Research Scholar	Presidency College, Chennai-05	2010 - 2014

Distinctive Achievements / Awards

- **Young Scientist Awards-2024**, Issued by The Academia of Sciences, University of Madras, Chennai
- **Academic and Research Excellence Award-2024,** Issued by Alagappa University, Karaikudi
- **The Excellent Work Award-2024** (Entitled: Exploration of CeO_2-MoO_3 based nanocomposites as an efficient electrode material for supercapacitor applications) by 2023 International Forum in Plasma and Thin Film Technologies for Sustainable Development Goals at **Taiwan**
- A Ph.D thesis entitled "Investigations on the synthesis, growth, physicochemical and quantum chemical calculations of 2-amino-6-methylpyridine derivative single crystals for nonlinear optical applications", was awarded with "**National Award for Best Thesis in Crystal Growth-2023**" Issued by Indian Association of Crystal Growth (Research Scholar: **Mrs. R. Kaliammal,** Research Supervisor: **Dr. S. Sudhahar,** Assistant Professor of Physics, Alagappa University, Karaikudi-03).
- **Promising Researcher Award – 2022** Issued by Alagappa University, Karaikudi-03.
- **Vallal Alagappar Research Recognition Award – 2020** Issued by Alagappa University, Karaikudi-03.

Academic and Additional Responsibilities

S.No.	Position	University Bodies	Period	
			From	To
1	Deputy Director	Science Campus	23rd Aug 2024	Till Date
2	Co-ordinator	Rotary Club	2019	Till Date
3	Deputy Co-ordinator	Swachh Bharath	2018	Till Date
4	Co-ordinator	Dept. NSS	2016	Till Date
5	Co-ordinator	Dept. Student Welfare	2016	Till Date
6	Co-ordinator	Dept. Cultural Club	2022	Till Date

7	VPP coordinator	Kanadukathan Village, 2019	2019	2019
8	Co-ordinator	Dept. Vivekananda Cadet Corps	2016	Till Date
9	Question paper setter	In various Colleges and Universities for UG/PG programme	2016	Till Date

Areas of Research

- **Crystal Growth (Nonlinear and Ferroelectric Materials)**
- **Thin Films and**
- **Nanomaterials (Supercapacitor and Biomedical applications)**

Patents Filed

- **NIL**

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	PDF	---	---
	Ph.D	04	04
	M.Phil	11	--
Project	PG	42	07
	UG / Others	02 (Internship)	

Ph.D Completed: 04

Department of Physics, Alagappa University, Karaikudi-630003			Awarded
S. No.	**Students Name**	**Title of the Thesis**	
04	G. MAHESHWARAN (R2016**2343**)	Investigation on two dimensional layered bismuthene nanosheets and its composites for supercapacitor applications.	20th January 2023
03	K. VELSANKAR (R2016**2024**)	A comprehensive exploration on green synthesized metal oxide nanoparticles using panicoideae (edible grass-millet crops) subfamily grains extract for emerging biological applications.	15th September 2022
02	R. KALIAMMAL (R2016**1943**)	Investigations on the synthesis, growth, physicochemical and quantum chemical calculations of 2-amino-6-methylpyridine derivative single crystals for nonlinear optical applications.	17th June 2022
01	G. PARVATHY (R2016**1810**)	Investigations on the synthesis, growth, physicochemical and quantum chemical calculations of 5-chloro-2-hydroxybenzoic acid derivative single crystals for nonlinear optical applications.	13th April 2022

Ph.D Ongoing: 04

Department of Physics, Alagappa University, Karaikudi-630003			Ongoing
S. No.	**Students Name**	**Title of the Thesis**	
04	F. KOUSI (R2016**2977**)	Investigations on the synthesis, growth, physicochemical and quantum chemical calculations on p-toulenesulphonic acid based single crystals for non linear optical applications.	Ongoing
03	S. SUGANYA (R2016**2827**)	Development of ternary metal oxide nanostructured electrode materials for the fabrication of high performance hybrid supercapacitors.	Ongoing
02	V. KOUSALYA DEVI (R2016**2771**)	Investigations on the synthesis, growth, physicochemical and quantum chemical calculations on creatinine derivative single crystals for nonlinear optical applications.	Ongoing
01	A. NIVEDHITHA BHARATHI (R2016**2678**)	Functional and fabrication of layered two dimensional transition metal based electrode materials for high performance supercapacitor applications.	Ongoing

M.Phil Completed: 11

Department of Physics, Alagappa University, Karaikudi-630003			Awarded
S. No.	**Students Name**	**Title of the Thesis**	
11	V. VINOTHINI (R2019581009)	Green synthesis of silver nanoparticles using zephyranthes candida flower extract for biomedical application	June 2020
10	G. MAHESHWARAN (R2018581002)	Mechanical, thermal and optical properties of piperazinium orthophthalate non-centrosymmetric single crystal	August 2019
09	S. SUMATHY (R2017582018)	Synthesis, growth and characterization of l-alaninium p-hydroxybenzoate non-linear optical single crystal	April 2019
08	R. MUTHU KARUPPASAMY (R2017582013)	Growth and structural, spectral, optical, thermal properties of l-alaninium 3,5-dinitrobenzoate NLO single crystal	April 2019
07	B. BHUVANA MARIDHASAN (R2017582003)	Synthesis, growth and non-linear optical properties of 2-amino 6-methylpyridinium 3,4-dimethoxybenzoate single crystal	April 2019
06	J. SAHAYA MELBA (R2017581009)	Synthesis, growth and characterization of 2-amino- 6-methylpyridinium 5-chlorosalicylate and l-alaninium 5-chlorosalicylate organic nonlinear optical single crystals	July 2018
05	R. ARCHANA (R2017581002)	Growth and characterization of 8-hydroxyquinolinium 3,4-dimethoxybenzoate and p-toluidinium picrate organic single crystals for nonlinear optical applications	July 2018
04	S. SHARAVANAN (R2016582017)	Synthesis, growth and characterization of 8-hydroxy quinolinium salicylate organic nonlinear optical single crystal	October 2017
03	U. KARUPPASAMY (R2016582008)	Synthesis, growth and characterization of 8-hydroxy quinolinium 6-aminocaproate organic nonlinear	October 2017

		optical single crystal	
02	A. SAVARI RAJEEV (R2016581014)	Synthesis, growth and characterization of 2-amino 6-methylpyridinium 6-aminocaporate nonlinear optical single crystal	July 2017
01	R. ERNEST AMALA (R2016581005)	Crystal growth and characterization of 2-amino pyridinium salicylate organic nonlinear optical single crystal	July 2017

M.Sc Completed: 42

Department of Physics, Alagappa University, Karaikudi-630003			Awarded
S. No.	**Students Name**	**Title of the Thesis**	
42	N. ANUDHARSHINI (R2022521005)	Fabricating efficient electrode materials for supercapacitor application	April 2024
41	M. APARNA (R2022521007)	Fabrication of 2D-Metal sulfide based nanocomposites for supercapacitor applications	April 2024
40	G. JANANI (R2022521015)	Investigation of Graphitic-carbon nitride based electrode materials for hybrid supercapacitor device	April 2024
39	V. MADHUMITHA (R2022521021)	Investigating Binary metal oxides as supercapacitor electrodes	April 2024
38	M. SHARMILA (R2022521029)	Exploring Binary metal oxide composites as efficient supercapacitor electrodes	April 2024
37	S. SRIPRIYA (R2022521034)	Two dimentional transition metal nanoparticles in enhancing hybrid capacitor performance	April 2024
36	S. ABITHA BHANU (R2021521003)	Investigation of MoO_3-Fe_2O_3 nanocopmposite based electrode for supercapacitor applications.	April 2023
35	C. ASHWIN (R2021521009)	Exploration of two dimensional layered hexagonal boran nitride for the fabrication of high performance hybrid supercapacitor	April 2023
34	P. DIVYARANI (R2021521018)	Fabrication of Y_2O_3-CoO_3 nanocomposites and analysing their electrochemical properties for supercapacitor applications.	April 2023
33	J. JEYAPRATHA (R2021521024)	Exploration of electrochemical properties of SrO-NiO as an effective electrode for supercapacitor	April 2023
32	S. RAMYA (R2021521034)	Preparation of $MnFe_2O_4$-gC_3N_4 nanocomposites for high performance supercapacitor applications.	April 2023
31	V. YOGA THARSHINI (R2021521045)	Synthesis, crystal growth and optical properties of 8-Hydroxyquinolinium 3,5-Dinitrobenzoate for NLO applications.	April 2023
30	S. ABDULKAJINA (R2020521001)	Synergistic effect of two dimensional MoS_2-Cr_2O_3 nanocomposite based electrode material for high performance supercapacitor applications	May 2022
29	C. DEEPIKA (R2020521007)	Hybridization of carbon sphere–graphitic carbon nitride based nano composite for high performance supercapacitor application	May 2022
28	C. NITHYASHREE (R2020521029)	Fabrication of multilayered MoO_3-Sb nanocomposite based electrode for electrochemical supercapacitor	May 2022
27	S. PUSHPA (R2020521034)	Exploration of two dimensional antimony@rGO nanocomposite for high performance of supercapacitor	May 2022

26	M. THENMOZHI (R2020521044)	Investigation on two dimensional layered MoO_3-La_2O_3 nanocomposite for supercapacitor applicaton	May 2022
25	S. ARCHANA (R2019521003)	A novel 2D-Sb/rGO nanocomposites as a potential electrode material for high performance supercapacitor application	April 2021
24	P. MUTHUMARI (R2019521017)	Greern synthesis of ZnO nanoparticles via erythrina indica leaf extract for antimicrobial application	April 2021
23	G. SEETHALAKSHMI (R2019521031)	Development of high performance electrode based on Cr_2O_3-Co_3O_4 nanocomposite in aqueous electrolyte	April 2021
22	C. SELVI (R2019521032)	Exploration of Cr_2O_3-NiO nanocomposites as a superior electrode material for supercapacitor application	April 2021
21	S. SUGANYA (R2019521038)	Green synthesis CuO nanoparticls via capsicum frutescens leaf extract for antibacterial application	April 2021
20	R.M. ASWIN KUMAR (R2018521006)	Green synthesis of copper oxide nanoparticles using tamarindus Indica pulp extract and its antibacterial activity	June 2020
19	M. MALAISELVI (R2018521019)	Green synthesis of lanthanum oxide nanoparticles using moringa oleifera leaves extract with its antioxidant,anti-inflammatory and antidiabetic activities	June 2020
18	A. NIVEDHITHA BHARATHI (R2018521026)	Green synthesis of silver nanoparticles via zeephyranthes roses flower extract for antibacterial and anti-inflammatory application	June 2020
17	R. PREETHI (R2018521030)	Green synthesis of silver nanoparticles via allium sativum flower extract for antimicrobialand anti-inflammatory application	June 2020
16	R. SELVA MUNEESWARI (R2018521039)	Eco friendly synthesis of lanthanum oxide nanoparticles using eucalyptus globules leaves extract for biomedical application	June 2020
15	V. ATCHAYA (R2017521006)	Crystal growth and characterization of vanillium succinate and 2-aminopyridinium 3,5-dinitrobenzoate organic nonlinear optical single crystals	April 2019
14	M. KARTHIKA (R2017521019)	Synthesis, growth and characterization of benzilate 2-amino 6-methyl pyridium and 5-chlorosalicylate 2-amino pyridinium nonlinear optical single crystal	April 2019
13	R. MANGALA BHARATHI (R2017521023)	Synthesis, crystal growth, structural, spectral and optical properties of nicotinamide 8-hydroxy quinoline and 2-amino 6-methylpyridinium myristate NLO single crystal	April 2019
12	K. RAJIYA BEGAM (R2017521033)	Synthesis, structural and optical properties of $MnFe_2O_4$ nanoparticles	April 2019
11	V. VINOTHINI (R2017521047)	Synthesis, structural and optical properties of pure and copper doped ZnS nanocrystals	April 2019
10	A. CAROLIN AMALA (R2016521004)	Synthesis, growth, spectral and optical properties of 2-aminopyridinium succinate and vanillinium 2-chlorobenzoate nonlinear optical single crystals	April 2018
09	P. ISWARYA (R2016521009)	Synthesis, growth and characterization of piperazinium benziliate NLO single crystal	April 2018
08	M. MUNEESWARI (R2016521017)	Synthesis, growth and characterization of 4-amino pyridinium p-chlorobenzoate and 8-hydroxyquinolinium sebaciate nonlinear optical single crystal	April 2018
07	M. VALLIKKODI (R2016521040)	Synthesis, growth and characterization of piperazinium p-aminobenzoate and piperazinium p-chlorobenzoate	April 2018

		nonlinear optical single crystals	
06	K. VELSANKAR (R2016521041)	Synthesis, growth, structural, spectral and optical studies on piperazinium salicylate and vanillinium 3,4-dimethoxy benzoate single crystal	April 2018
05	S. ANUSIYA (R2015521002)	Synthesis, growth, structural and optical properties of 8-hydroxyquinolinium 4-hydroxybenzoate NLO single crystal	April 2017
04	R. KRISHNA (R2015521018)	Synthesis, growth, structural, optical, thermal properties of 2-aminopyridinium copper acetate single crystal	April 2017
03	G. PARVATHY (R2015521024)	Synthesis, growth, spectral, and optical properties of piperazinium p-hydroxybenzoate nonlinear optical single crystal	April 2017
02	M. PERIYANAYAKI (R2015521025)	Synthesis, crystal growth, structural, spectral, thermal and optical properties of piperidinium p-hydroxybenzoate NLO single crystal	April 2017
01	S. SIVARANJANI (R2015521038)	Synthesis, crystal growth, structural, spectral and optical properties of 2-aminopiridinium p-chlorobenzoate NLO single crystal	April 2017

Publications

International		National		Others
Journals	**Conferences**	**Journals**	**Conferences**	**Books / Chapters / Monographs / Manuals**
131	**34**	**05**	**36**	**01**

Cumulative Impact Factor (as per JCR) : **492.4**
h-index : **31**
i10 index : **72**
Total Citations : **2897**

Publications: Books/Chapters

S. No.	Authors Name	Title of the Book	Title of the Chapters	Year with pages
1	P. Krishnan, K. Rajesh **S. Sudhahar***	Introduction to Functional Nanomaterials	Determination of Kinetic Parameters and Mechanical Properties of Nonlinear Optical Single Crystals	20/11/2024 (166-173)

Funded Research Projects

Ongoing Projects:

S. No.	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST SERB-	17/02/2024	16/02/2027	Development of SnO_2/Co-Ni double	36.34

	EEQ			hydroxide (core/shell) nanostructured towards enhanced performance in supercapacitor application	
2	MHRD-RUSA	2018	2019	Advanced Materials for Sustainable Energy and Sensors	5.00

Completed Projects:

S. No.	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	MHRD-RUSA	2018	2019	Advanced Materials for Sustainable Energy and Sensors	5.00

Invited Talk/ Resource Person

S. No.	Role	Title of the Talk/ Conferences	Name of the Institute, year, Place & Duration	Sponsor (Nat./Int.)
17	Invited Talk	Crystal Growth-Importance/ Materials Research Internship Training Program (MRITP)	Centre for Materials Research, at Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, 09-14th Sep, 2024.	National
16	Invited Talk	Structural, optical and theoretical studies of 2,4-dichlorobenzoic acid benzamide in nonlinear optical applications using Z-scan technique/XXVI NSCGA 2024	Department of Physics, Bharathidasan University, Trichy-24, 29-31 August 2024	National
15	Invited Talk	Basics of Materials Science Related Research Activities	P.G. & Research Department of Physics, Gobi Arts & Science College, Gobichettipalayam, 23/12/2021.	National
14	Invited Talk	Teaching and Research Opportunities	Department of Physics, Kalasalingam Academy of Research and Education, Krishankoil, 30 July - 01 August 2020.	National
13	Invited Talk	Crystal Growth & Techniques	Department of Physics, Ananda College, Devakottai, 28/02/2018.	National
12	Chair Person	2nd International conference on "Materials and Applied Science for Society (ICMASS-2025)".	P.G. & Research Department of Physics, Alagappa Govt. Arts College, Karaikudi. during 13-14 March 2025.	National

11	Chair Person	International conference on Emerging Advanced Materials (ICEAM-2024)	Anna University, Chennai during 27-28th March, 2024.	National
10	Chair Person	International conference on "Advanced Materials for Energy, Environmental and Biomedical Applications".	P.G. & Research Department of Physics, Alagappa Govt. Arts College, Karaikudi. during 1-2 March 2024.	National
09	Chair Person	One day National Conference on Semiconductors, Surfaces, Alloys Modeling and Preparation.	PG & Research Department of Physics, Sree Sevugan Annamalai College, Devakottai, 06/12/2019.	National
08	Chair Person	Act Next 2021	Department of Physics, Alagappa University, Karaikudi, 17 March 2022.	National
07	Chair Person	International Tamil Conference on Crystal Growth & Crystal Techniques	SSN Research Centre, SSN Institutions, Chennai, 10/01/2022-12/01/2022.	National
06	Chair Person	International Conference on Solution Grown Crystals and Their Useful Applications.	SSN Research Centre, SSN Institutions, Chennai, 13/09/2021-15/09/2021.	National
05	Chair Person	International conference on Advanced materials for sustainable energy and sensors.	Department of Physics, Alagappa University, Karaikudi, 16-17 September 2019.	National
04	Chair Person	National conference on Advanced materials for sustainable energy and sensors.	Department of Physics, Alagappa University, Karaikudi, 20/03/2019-22/03/2019.	National
03	Chair Person	National conference on futuristic materials.	Department of Physics, Alagappa University, Karaikudi, March 27-28, 2017.	National
02	Chair Person	Business Oriented Hands-on Training on Analytical Instrumentation	Department of Physics, Alagappa University, Karaikudi, 2-3, March 2017.	National
01	Chair Person	National Seminar on "Advanced Materials Research"	Department of Physics, Alagappa University, Karaikudi, 19th January 2017.	National

Events organized in leading roles

Number of Seminars /Conferences /Workshops/ Events Organized:

S. No.	Position	Programme	Duration	Institution
07	Organizing Secretary	A Special Lecture on Construction of Biologically Interesting Aromatics via Benzannulation	26 February, 2024	Alagappa University

06	Organizing Secretary	25th national seminar on crystal growth and applications (XXV NSCGA–2023).	21-23, June 2023	Alagappa University
05	Organizing Secretary	ACT NEXT-2020	12 February 2021	Alagappa University
04	Organizing Secretary	International virtual conference on recent trends in energy materials (INCRTEM – 2020)	09-11 September 2020	Alagappa University
03	Organizing Secretary	Online Webinar	13 May 2020	Alagappa University
02	Organizing Secretary	World Standards Day	21 October 2019	Alagappa University
01	Organizing Secretary	International Conference on Advanced Materials for Sustainable Energy and Sensors	16-17 September, 2019	Alagappa University

Events organized as an active member

1. Active Member of Organized Alagappa University Celebrates Themed Nobel Excellence Talks – 2022 **ACT NEXT-2022**, Department of Physics, Alagappa University, Karaikudi on 10.01.2023.
2. Active Member of Organized One day Workshop on "Entrepreneurship and Innovation" as Career Opportunity, on 14.11.2022, held at Alagappa University by Entrepreneurship Development Cell (TN Scheme) of Alagappa University.
3. Active Member of Organized **World Standards Day** on 14.10.2022 in the Department of Physics, Alagappa University**.**
4. Active Member of Organized **World Standards Day** on 13.11.2021 in the Department of Physics, Alagappa University**.**
5. Active Member of Organized **World Standards Day** on 14.10.2020 in the Department of Physics, Alagappa University.
6. Active Member of Organized Alagappa University Celebrates Themed Nobel Excellence Talks – 2019 ACT NEXT-2019 on 28th August 2020.
7. Active Member of Organized a Two days **National Conference on Advanced Materials for Sustainable Energy and Sensors** (**NCAMSES–2019**) during 20-22, March 2019 by the Department of Physics, Alagappa University, Karaikudi-630 003.
8. Active Member of Organized an **International Conference on Momentous Role of Nanomaterials in Renewable Energy Devices – 2018 (IC MNRE-2018)** during 1-2, March 2018 by the Department of Physics, Alagappa University, Karaikudi-630 003.
9. Active Member of Organized a National Workshop on **Business Oriented Analytical Research and Development 2018 (BOARD-2018),** by the Department of Physics, Alagappa University, Karaikudi-630 003 during 31st Jan' to 1st Feb' 2018.
10. Active Member of Organized a **National Theme Meet on University-Industry Interface 2017 (NTM U2I-2017)** by Industry & Consultancy Cell in association with the Department of Physics, Alagappa University, Karaikudi India in Alagappa University, Karaikudi during 20-21, September 2017.

11. Active Member of Organized Alagappa University Celebrates Themed Nobel Excellence Talks – 2016 ACT NEXT-2016, on 28th April 2017.
12. Active Member of Organized UGC sponsored "National Conference on Futuristic Materials (NCFM-2017)" by Department of Physics, Alagappa University, Karaikudi, India held during 27-28, March 2017.
13. Active Member of Organized "Business Oriented Hands-on Training on Analytical Instrumentation (HI-BOAT-2017)" by Department of Physics, Alagappa University, Karaikudi, India held during 2-3, March 2017.
14. Active Member of Organized "Alagappa University Inter Collegiate Yoga Competition 2016-17" by Centre for Yoga Education, Alagappa University, Karaikudi-630003 on 24th February 2017.
15. Active Member of Organized "Workshop and Activity based Yoga (WAY-2017)" by Centre for Yoga Education, Alagappa University, Karaikudi-630003 on 8th February 2017.
16. Active Member of Organized "National Seminar on Advanced Materials Research NSAMR-2017" by Department of Physics, Alagappa University, Karaikudi-630003, Tamil Nadu, India on 19.01.2017.
17. Active Member of Organized a "National Seminar on "Recent Advancements in Frontier Areas of Materials Science" by Department of Physics, Alagappa University, Karaikudi, India held on 23-24th March, 2016.
18. Active Member of Organized Alagappa University Celebrates Themed Nobel Excellence Talks – 2015 ACT NEXT-2015, on 18th March 2016.

Events Participated

International Conferences/Seminars

37. A Nivedhitha Bharathi, V Kousalya Devi, **S. Sudhahar,** Improved electrochemical performance of bio-derived nickel oxide Nanoparticles using zephyranthes rosea flower extract and investigation on charge storage mechanism, International Conference on Advanced Energy Materials and Energy Storage (ICAEMES-2023), Department of Chemisty, School of Basic sciences, VISTAS, Chennai, (October 12-13, 2023).

36. S. Suganya, **S. Sudhahar,** Fabrication of $ZnMn_2O_4$ Nanocomposites as a Potential Electrode for High Performance Supercapacitor Applications, International Conference on Recent Innovations in Materials Science and Spectroscopy (ICRIMS – 2023) by PG & Research Department of Physics Jamal Mohamed College, 10th January 2023.

35. V Kousalya Devi, **S. Sudhahar,** Growth and synthesis of 2-amino 2-picolinium p-carboxychlorobenzoate dihydrate organic single crystal for nonlinear optical applications on International Conference on Crystal Growth and Spectroscopy, St. Joseph's College, Trichy, 620002, (August, 29-31, 2022).

34. G Parvathy, **S.Sudhahar**, Growth and synthesis of 2-amino 2-picolinium p-carboxychlorobenzoate dehydrate organic single crystal for nonlinear optical applications, International Conference on Crystal Growth and Spectroscopy, St. Joseph's College, Trichy-620002, (August 29-31, 2022).

33. R Kaliammal, **S.Sudhahar**, Crystal growth and characterization of 2-aminopyridine

nicotinamide single crystal for nonlinear optical applications, International Conference on Emerging Trends in Materials for Energy and Biological Applications (ICMEEBA-2020), M. Kumarasamy College of Engineering, (March 7, 2020).

32. G Maheshwaran, **S.Sudhahar**, Eco-friendly synthesis of Lanthanum oxide nanoparticles by Eucalyptus Globulus leaves extract for effective biomedical applications, International Conference on Emerging Trends in Materials for Energy and Biological Applications (ICMEEBA-2020), M. Kumarasamy College of Engineering, (March 7, 2020).

31. R Kaliammal, **S.Sudhahar**, Physicochemical and density functional theories of 2-amino-6-methylpyridinium tetracanoate single crystal, International Conference on Emerging Trends in Materials for Energy and Biological Applications (ICMEEBA-2020), M. Kumarasamy College of Engineering, (March 7, 2020).

30. R Kaliammal, **S.Sudhahar**, Growth and characterization of 2-aminopyridinium veratriate single crystal for nlo applications, International Conference on Emerging Trends in Materials for Energy and Biological Applications (ICMEEBA-2020), M. Kumarasamy College of Engineering, (March 7, 2020).

29. R Kaliammal, **S.Sudhahar**, Crystal growth and characterization of 2-amino pyridinium pelminate single crystal for nonlinear optical applications, International Conference on Physics of Advanced Materials and Molecules (ICPAMM-2020), Dr. Ambedkar Govt. Arts. College, Vyasarpadi, Chennai,(Jan 30-31, 2020).

28. R Kaliammal, **S.Sudhahar**, Growth and characterization of 2-aminopyridinium 3,4-dimethoxybenzoate for nonlinear applications, International Conference on Physics of Advanced Materials and Molecules(ICPAMM-2020), Dr. Ambedkar Govt. Arts. College,Vyasarpadi, Chennai, (Jan 30-31, 2020).

27. G Parvathy, **S.Sudhahar**, Physicochemical and DFT simulation studies of 6-methyl-2-pyridilaminium veratrumenoate single crystal for nonlinear optical applications, International Conference on Recent Advances in Materials and Mathematical Sciences (RTMMS-2019), Kalasalingam Academy of Research and Education, Krishnankoil, (Dec 18-20, 2019).

26. G Parvathy, **S.Sudhahar**, Experimental and theoritical studies of vanillic aldehyde 2-hydroxy-5-chlorobenzooic acid nonlinear optical single crystal, International Conference on Recent Advances in Materials and Mathematical Sciences (RTMMS-2019), Kalasalingam Academy of Research and Education, Krishnankoil, (Dec 18-20, 2019).

25. K Velsankar, **S.Sudhahar**, Biosynthesis of ZnO Nanoparticles by Using Cucurbita Seed Extract on Mosquito Larvae with its Bioactive Behavior, International Conference on Recent Advances in Materials and Mathematical Sciences (RTMMS-2019), School of Advanced Sciences, Kalasalingam Academy of Research and Education, Krishnankoil, (Dec 18-20, 2019).

24. G Parvathy, **S.Sudhahar**, Growth, optical, thermal and mechanical properties of piperazinium orthophthalate single crystal, International Conference on Recent Advances in Materials and Mathematical Sciences (RTMMS-2019), Kalasalingam Academy of Research and Education, Krishnankoil, (Dec 18-20, 2019).

23. G Parvathy, **S.Sudhahar**, Synthesis, Growth and Characterization of New Organic 6-Amino-2-Picolinium Myristate Single Crystal for Nonlinear Optical Applications, International Conference on Recent Advances in Materials and Mathematical Sciences (RTMMS-2019), Kalasalingam Academy of Research and Education, Krishnankoil, (Dec 18-20, 2019).

22. G Parvathy, **S.Sudhahar**, Crystal growth and characterization of Bis-(6- Amino-2-picoline) succinate monohydrate organic nonlinear optical single crystal, International Conference on Recent Trends in Applied Science and Technology (ICRTAST-2019), SSN institute of technology, Chennai, (Sep 19-21, 2019).

21. G Parvathy, **S.Sudhahar**, Vibrational, optical, thermal and density functional theories of vanillin nicotinamide nonlinear optical crystal, International Conference on Recent Trends in Applied Science and Technology (ICRTAST-2019), SSN institute of technology, Chennai, (Sep 19-21, 2019).

20. R Kaliammal, **S.Sudhahar**, Structural, optical, thermal, mechanical and Quantum chemical calculations of Bis-(2-amino-6-methylpyridinium) succinate monohydrate organic single crystal, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Alagappa University, Karaikudi, (Sep 16-17, 2019).

19. G Parvathy, **S.Sudhahar**, Spectral, optical, thermal, mechanical and Quantum chemical computations of 4-hydroxy-3-methoxybenzaldehyde nicotinamide organic co-crystal for NLO applications, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Alagappa University, Karaikudi, (Sep 16-17, 2019).

18. K Velsankar, **S.Sudhahar**, Cytotoxicity and Antibacterial activity of Biosynthesis of ZnO nanoparticles by Echinochloafrumentacea grains extract, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Alagappa University, Karaikudi, (Sep 16-17, 2019).

17. G Parvathy, **S.Sudhahar**, Investigation of piperaziniumorthophthalatesingle crystal with its mechanical, thermal and optical properties for non-linear optical applications, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Alagappa University, Karaikudi, (Sep 16-17 2019).

16. G Parvathy, **S. Sudhahar,** Synthesis, growth and non-linear optical properties of 8-hydroxyquinolinium myristate optical single crystal, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Department of Physics, Alagappa University, Karaikudi, (September 16-17, 2019).

15. K Velsankar, **S. Sudhahar,** Biosynthesis of Ag nanoparticles by *Allium Sativum*flower extract as a capping agent and its antibacterial activity, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Department of Physics, Alagappa University, Karaikudi, (September 16-17, 2019).

14. K Velsankar, **S. Sudhahar,** Antibacterial activity of Biosynthesis of cuo nanoparticles by *Allium Sativum*extract as a stabilizing agent, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Department of Physics, Alagappa University, Karaikudi, (September 16-17, 2019).

13. R Kaliammal, **S. Sudhahar,** Effective growth of 2-aminopyridinium p-hydroxybenzoate single crystals and its structural optical properties for non-linear optical applicatons, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Department of Physics, Alagappa University, Karaikudi, (September 16-17, 2019).

12. R Kaliammal, **S. Sudhahar,** Structural, vibrational, optical and second harmonic NLO properties of 2-amino-6-methylpyridinium myristate single crystal, International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES – 2019), Department of Physics, Alagappa University, Karaikudi, (September 16-17, 2019).

11. R Kaliammal, **S. Sudhahar,** Studies on the spectral and optical properties of organic non-linear optical 2-aminopyridinium 5-chlorosalicylate single crystal, International Conference on Recent Advances in Applied Chemical Sciences (ICRAACS - 2019), Department of Chemistry, Sree Sevugan Annamalai College, Devakottai, (September 6, 2019).

10. G Parvathy, **S. Sudhahar,** Synthesis, growth, structural and optical properties of 8-hydroxyquinolium myristatenonlinear optical single crystal, International Conference on Recent Advances in Applied Chemical Sciences (ICRAACS - 2019), Department of Chemistry, Sree Sevugan Annamalai College, Devakottai, (September 6, 2019).

9. K Velsankar, **S. Sudhahar,** Effect of cytotoxicity and antibacterial activity of biosynthesis of zno hexagonal shaped nanoparticles by echinochloafrumentacea grains extract as a reducing agent, International Conference on Recent Advances in Applied Chemical Sciences (ICRAACS - 2019), Department of Chemistry, Sree Sevugan Annamalai College, Devakottai, (September 6, 2019).

8. R Kaliammal, **S. Sudhahar,** Spectral and optical properties of 2-aminopyridinium p-hydroxybenzoate nonlinear optical single crystal, International Conference on Recent Advances in Applied Chemical Sciences (ICRAACS - 2019), Department of Chemistry, Sree Sevugan Annamalai College, Devakottai, (September 6, 2019).

7. R Kaliammal, **S. Sudhahar,** Crystal growth and characterization of 2-amino 6-methylpyridinium 3,4-dimethoxybenzoate organic nonlinear optical single crystal, International Conference on Modelling Crystal Growth Processing and Devices (MCGPD-2019), Department of Physics, SSN Institute of Technology, Chennai, (February 26-28, 2019).

6. M. Krishna Kumar, **S. Sudhahar,** R. Mohan Kumar, Investigation on Spectral, Thermal and Dielectric Properties of DAST Crystal, International Conference Recent Trends in Applied Physics & Materials Science (RAM 2013), Govt. College of Engineering and Technology, Bikaner, Rajasthan, (February 1-2, 2013).

5. **S. Sudhahar,** M. Krishna Kumar, R. Mohan Kumar, Studies on structural, spectral and optical properties of organic nonlinear optical single crystal: 2-amino-4,6-dimethyl pyrimidinium p-hydroxybenzoate, International conference on Research, Perspectives and Procedures, SDNB Vaishnav College for Women, Chennai-44, (August 23-24, 2012).

4 M. Krishna Kumar, **S. Sudhahar,** R. Mohan Kumar, Crystal growth, X-ray diffraction, spectroscopic, Optical studies on 4-bromo-4'-N'methylstilbazolium tosylate single crystals, International conference: Research: Perspectives & Procedures, SDNB Vaishnav College for Women, Chennai-44, (August 23-24, 2012).

3. **S. Sudhahar,** M. Krishna Kumar, R. Mohan Kumar, Effect of Sm^{3+} ion on structural, thermal, mechanical, linear and nonlinear optical properties of potassium hydrogen phthalate single crystals, International Conference on Materials Science and Technology (ICMST-2012), St. Thomas College, Pala, Kerala, (June 10-14, 2012).

2. **S. Sudhahar,** M. Krishna Kumar, R. Mohan Kumar, Investigation on rare earth doped nonlinear optical potassium hydrogen phthalate single crystals, International conference on Recent Trends in Advanced Materials (ICRAM-2012), VIT University, Vellore, (February, 20-22 2012).

1. **S. Sudhahar,** M. Krishna Kumar, R. Mohan Kumar Growth and characterization of inorganic nonlinear optical Lithium sodium Sulfate hydrate single crystals, International Conference on Advanced Materials ICAM2012, Department of Physics, Loyola College, Chennai, (January 5-7, 2012).

National Conferences/Seminars

34. V Kousalya Devi, A Nivedhitha Bharathi, **S. Sudhahar**, Growth and synthesis of bis (creatininium 2,4-dichlorobenzoate) organic single crystal for nonlinear optical applications, 25th National Seminar on Crystal growth and applications, Department of Physics, Alagappa University, Karaikudi, (June 21-23, 2023).
33. A Nivedhitha Bharathi, V Kousalya Devi, **S. Sudhahar,** MnS_2, a transition metal dichalcogenide nanoparticle, as effective electrode material for supercapacitor applications, 25th National Seminar on Crystal growth and applications, Department of Physics, Alagappa University, Karaikudi, (June 21-23, 2023).
32. A Nivedhitha Bharathi, **S. Sudhahar,** Transition Metal dichalcogenide Nanoparticle, MnS_2 as an effective electrode material for supercapacitior applications, National Conference on Recent Trends in Green Energy Technologies, Department of Green Energy Technology, Pondicherry University, (December 8-9, 2022)
31. G. Parvathy, R. Kaliammal, G. Maheshwaran, **S. Sudhahar,** Studies on the spectral and optical properties of organic non-linear optical L-alaninium 3,5 dinitrobenzoate (LADN) single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March, 2019.
30. R. Kaliammal, G. Parvathy, **S. Sudhahar**, Synthesis, growth, spectral and optical optical properties of 2-amino 6-methylpyridinium benziliate organic nonlinear optical single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March 2019.
29. K. Velsankar**,** V. Muthulakshmi, G. Maheshwaran, **S. Sudhahar**, Second order nonlinear optical characterization of vanilium 3,4- Dimethoxybenzoate organic single crystal, Participated and presented an Oral in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March 2019.
28. G. Maheswaran, U. Karuppasamy, K. Velsankar, **S. Sudhahar**, Structural and nonlinear optical properties of 8-hydroxyquinolium 6- aminocaproate non –centrosymmetric single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March 2019.
27. V. Atchaya, K. Velsankar, K. Rajiyabegam, **S. Sudhahar,** Crystal growth and characterization of a succiniate vanillium organic nonlinear optical single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March 2019.
26. M. Karthika, G. Parvathy, G. Maheswaran, **S. Sudhahar,** Synthesis, growth, structural and optical properties of 5-chlorosalicylicate 2-aminopyridinium nonlinear optical single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-

22nd March 2019.

25. K. Rajiyabegam, R. Kaliammal, G. Parvathy, **S. Sudhahar,** Synthesis, growth, optical and second harmonic generation studies of 2-amino 6-methylpyridinium barbutriate organic nonlinear optical single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March 2019
24. R. Mangala Bharathi, V. Vinothini, **S. Sudhahar,** Synthesis, crystal growth, structural and optical properties of 2-amino 6-methylpyridinium myristiate nonlinear optical single crystal, Participated and presented a poster in National conference on Advanced materials for sustainable energy and sensors (NCAMSES) at Alagappa University, Karaikudi on 20-22nd March 2019.
23. G. parvathy, R.Kaliammal, K.Velsankar, **S. Sudhahar,** Synthesis, Growth and characterization of piperazinium p-hydroxybenzoate nonlinear optical single crystal, Participated and presented an Oral in National seminar on recent advanced materials and applications (RAMA 2019) at Theivanaiammal college for women Viluppuram on 6th February 2019.
22. R. Kaliammal, G. parvathy, G.Maheswaran, **S. Sudhahar,** Synthesis, growth, structural and optical properties of 2-amino 6-methylpyridinium 6-aminocaproate nonlinear optical single crystal, Participated and presented an Oral in National seminar on recent advanced materials and applications (RAMA 2019) at Theivanaiammal college for women Viluppuram on 6th February 2019.
21. S. Anusiya, G. Parvathy, M. Periyanayaki, A. Savari Rajeev, **S. Sudhahar**, 'Synthesis, growth, structural and optical properties of 8-Hydroxyquinolinium p-hydroxybenzoate nonlinear optical single crystal', participated and presented in national conference on futuristic materials, held at Department of Physics, Aalagappa University, Karaikudi, March 27-28, 2017.
20. R. Krishna, S. Sivaranjani, S. Muniyasamy, **S. Sudhahar**, 'Synthesis, growth, spectral, thermal, mechanical and optical properties of piperidinium p-chlorobenzoate nonlinear optical single crystal', participated and presented in national conference on futuristic materials, held at Department of Physics, Alagappa University, Karaikudi, March 27-28, 2017.
19. G. Parvathy, M. Periyanayaki, S. Anusiya, S. Muniyasamy, **S. Sudhahar**, 'Synthesis, growth, spectral and optical properties of piperazinium p-hydroxybenzoate nonlinear optical single crystal', participated and presented in national conference on futuristic materials, held at Department of Physics, Alagappa University, Karaikudi, March 27-28, 2017.
18. M. Periyanayaki, S. Anusiya, G. Parvathy, A. Savari Rajeev, **S. Sudhahar**, 'Synthesis, crystal growth, structural, spectral, thermal and optical properties of 8-Hydroxyquinolinium 5-chlorosalicylate nonlinear optical single crystal', participated and presented in national conference on futuristic materials, held at Department of Physics, Alagappa University, Karaikudi, March 27-28, 2017.
17. S. Sivaranjani, S. Muniyasamy, R. Krishna, A. Savari Rajeev, **S. Sudhahar**, 'Synthesis, growth, spectral, thermal, mechanical and optical properties of 2-Aminopyridinium p-chlorobenzoate nonlinear optical single crystal', participated and presented in national conference on futuristic materials, held at Department of Physics, Alagappa University, Karaikudi, March 27-28, 2017.

16. A. Savari Rajeev, R. Ernast Amala, S. Anusiya, **S. Sudhahar**, 'Third Harmonic Properties Of 2-Phenylethylaminium p-Nitrophenolate Monohydrate Nonlinear Optical Single Crystals', Participated and presented in National Seminar on Advanced Materials Research (AMR) held at Department of Physics, Alagappa University, Karaikudi, January 19, 2017.

15. S. Muniyasamy, M. Periyanayaki, **S. Sudhahar**, 'Effect of rare earth Yttrium doped triglycine sulphate single crystals and its characterization', Participated and presented in National Seminar on Advanced Materials Research (AMR) held at Department of Physics, Alagappa University, Karaikudi, January 19, 2017.

14. G. Parvathy, R. Krishna, S. Sivaranjani, **S. Sudhahar**, 'Synthesis, growth, structural, thermal and third order nonlinear optical studies of 2-phenyl-ethanaminium 3–caroboxyprop-2-enoate single crystals', participated and presented in national seminar on advanced materials research (AMR) held at Department of Physics, Alagappa University, Karaikudi, January 19, 2017.

13. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Crystal growth and optical studies of 4-hydroxy-4'-N'- methylstilbazolium tosylate single crystals for nonlinear optical applications', Participated and presented in 22nd DAE-BRNS National Laser Symposium held at MIT, Manipal University, Manipal, Karnataka, Jan 7-11, 2014.

12. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Synthesis, Crystal growth and optical studies of Urea 2-hydroxy 5- sulfobenzoate single crystal', Participated and presented in XVIII National Seminar on Crystal Growth held at Centre for Crystal Growth, SSN College of Engineering, Chennai, 24-26, February 2014.

11. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Synthesis, crystal growth and characterization of pi-conjugated stilbazolium 4-hydroxy-3-methoxy-4'- N'-methylstilbzolium tosylate monohydrate crystals', Participated and presented in National Seminar on Recent Advances in Physics held at Department of Physics, Presidency College, Chennai, 7-8, March 2014.

10. **S. Sudhahar**, M. Krishna Kumar, R. Mohan Kumar, '2-Phenylethylammonium p-hydroxybenzoate: Growth, structural, spectral, thermal, optical and mechanical characterization', Participated and presented in National Seminar on Recent Advances in Physics held at Department of Physics, Presidency College, Chennai, 7-8, March 2014.

9. **S. Sudhahar**, I. MD Zahid, M. Krishna Kumar, R. Mohan Kumar, 'Crystalline perfection, birefringence and laser damage threshold properties of piperidinium p-hydroxybenzoate', Participated and presented in 59th DAE-Solid State Physics Symposium held at VIT University, Vellore, 16-20, December 2014.

8. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Crystal growth and optical properties of 4-hydroxy-3- methoxy-4'-N'- methylstilbazolium tosylate monohydrate crystals', Participated and presented in 21st DAE–BRNS National Laser Symposium (NLS-21) held at Bhabha Atomic Research Centre, Mumbai, February 06-09, 2013.

7. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Growth and electrical properties on NLO crystal: 4-N,N-dimethylamino 4-N- methylstilbazolium iodide', Participated and presented in 58th DAE-BRNS Solid State Symposium held at Thapar University, Patiala, Punjab, Dec 17-21, 2013.

6. **S. Sudhahar**, M. Krishna Kumar, R. Mohan Kumar, 'Synthesis, crystal growth, structural, spectral, thermal, optical and mechanical properties of solution grown 4-methylpyridinium 4-hydroxybenzoate single crystal', Participated and presented a poster in 21st DAE–BRNS National Laser Symposium (NLS-21), at Bhabha Atomic Research Centre, Mumbai-400 085, during February 06-09, 2013.
5. **S. Sudhahar**, M. Krishna Kumar, R. Mohan Kumar, '2-phenylethylammonium p-hydroxybenzoate: Synthesis, structural, spectral, thermal, optical and mechanical characterization', Participated and presented a poster in Twenty Fourth National Seminar on Crystal Growth, organized by Crystal Growth Centre, Anna University, Chennai-25, during December 20-22, 2012.
4. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Synthesis, Crystal Growth, Structural and optical studies of Third-Order Nonlinear Optical Crystal: 4-Methyl-4'-N'-Methylstilbazolium Tosylate', Participated and presented in Twenty Fourth National Seminar on Crystal Growth held at Crystal Growth Centre, Anna University, Chennai December 20-22, 2012.
3. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Investigation on the growth and Optical Properties of the DAST crystal', Participated and presented in National conference on Spectrophysics 2012 held at Indian Spectrophysics Association, Chennai March 7-8, 2012.
2. **S. Sudhahar**, M. Krishna Kumar, R. Mohan Kumar, 'Crystal growth, spectral, optical, thermal and mechanical properties of piperidinium p-hydroxybenzoate single crystal', Participated and presented a poster in National conference on Spectrophysics 2012, organized by Indian Spectrophysics Association, Chennai-30, during March 7-8, 2012.
1. M. Krishna Kumar, **S. Sudhahar**, R. Mohan Kumar, 'Growth and characterization of Inorganic nonlinear optical lithium sodium sulfate hexahydrate single crystals', Participated and presented in DAE-BRNS National Laser Symposium (NLS-20) held at Crystal Growth Centre, Anna University, Chennai January 9-12, 2012.

Short Courses/Workshops

1. **S. Sudhahar,** Participated in seminar on 'Awareness workshop on nanoscience and nanotechnology', organized by Science city from 24th to 27th, August 2010 at the Science City, Chennai.
2. **S. Sudhahar**, Participated in 'One day Seminar on 50 years of Lasers', held at Department of Physics, RKM Vivekananda College, Chennai-600004 on 19th February 2011
3. **S. Sudhahar,** Participated in Short course on 'Crystal Growth and characterization of Laser Materiials', Organised by Indian Laser Association, January 07-08, 2012 at Crystal Growth Centre, Anna University, Chennai.
4. **S. Sudhahar,** Participated in 20th DAE–BRNS National Laser Symposium (NLS-20), at Crystal Growth Centre, Anna University, Chennai-600025, during January 09-12, 2012.
5. **S. Sudhahar**, Participated in National conference on 'GREEN CHEMISTRY', held on 10th February 2012 at Department of Chemistry, Presidency College, Chennai.
6. **S. Sudhahar**, Participated in 'National Seminar on Emerging Trends in Physics', Organized by Department of Physics, Government Arts College, Nandanam, Chennai-600035 on 29th

February 2012

7. **S. Sudhahar,** Participated in seminar on 'Higgs Boson and Neutrino', held on 7th December 2012 at Department of Nuclear Physics, University of Madras, Chennai-600025.
8. **S. Sudhahar,** Participated in Science Academies Lecture workshop on "Topics in Theoretical Physics", Organized by Department of Physics, Presidency College, Chennai-600005 on 10-11 March 2014

Membership

Professional Bodies

1. Life Member: Indian Physics Association, Life Membership No. GEN/LM/13173
2. Life Member: Indian Laser Association.
3. Life Member: Society for Advancement of Electrochemical Science and Technology
4. Life Member – Indian Physics Association (IPA)
5. Fellow Member - Bose Science Society
6. Life Member- Indian Society for ElectroAnalytical Chemistry

Academic Bodies in Other Institutes/Universities

Year/Period	Name of the BoS/AdministrativeCommittee / Academic Committee	Role
2016–Till Date	Question paper setter – Bharathidasan University, Trichy	Question paper Setter
2021	Question paper setter – Jamal Mohammed College, Trichy	Question paper Setter

List of Research Articles / Recent Publications

S. No.	Authors/Title of the paper/Journal	Impact Factor
136	R. Ramya, **S. Sudhahar**, A. Bhaskaran, Eco-friendly synthesis trend of Sn-V bimetallic nanoparticles and its potential biological applications, Matterials Letters, 387 (2025) 138277.	**2.7**
135	S. Suganya, G. Mani, **S. Sudhahar**, Chih-Yu Kuo, Exploration of CeO_2 decorated on MoO_3 as a potential electrode for high performance hybrid supercapacitors, J. Alloys and Compounds, 1013 (2025) 178518.	**5.8**
134	S. Suganya, V. Muthulakshmi, F. Kousi, A. Venkatesan, M. Krishna Kumar, **S. Sudhahar,** Designing a One-Pot Ternary Fe−Mn−Zn Oxide Positive Electrode with Enhanced Energy-Storage Properties for Hybrid Supercapacitors, ACS, Energy & Fuels, 39 (2025) 906-920.	**5.3**
133	S. Suganya, F. Kousi, S. Sambasivam, A.M. Tighezza, K. Velsankar, **S. Sudhahar,** Investigations of ternary Cu-Mn-Zn oxide nanocomposites as potential electrode for hybrid supercapacitors by one-pot hydrothermal method, Journal of Energy Storage, 109 (2025) 115181.	**8.9**

132	S. Suganya, G. Janani, M. Aparna, S. Sambasivam, Kareem Yusuf, Fen Ran, **S. Sudhahar,** Exploration of MoS_2 Nanoflowers on g-C_3N_4 Nanosheets as a Cathode Electrode Material for Hybrid Supercapacitor Applications, Electrochimica Acta, 513 (2025) 145595.	**5.5**
131	S. Suganya, M. Aparna, G. Janani, S. Sambasivam, Aboud Ahmed Awadh Bahajjaj, Fen Ran, **S. Sudhahar**, Fabrication of Cathode Bi_2S_3-rGO Nanocomposites Electrode for Hybrid Supercapacitors to Enhance the Energy Storage Properties, Materials Science in Semiconductor Processing, 187 (2025) 109164.	**4.2**
130	C. Ashwin, V. Muthulakshmi, K. Thirunavukkarasu, N.H. Alotaibi, S. Sambasivam, M. Krishna Kumar, S. Mohandoss, **S. Sudhahar**, Facile synthesis of Bi2WO6-NiO nanocomposite for supercapacitor application, Materials Science and Engineering B 313 (2025) 117939.	**3.9**
129	B. Arjun Kumar, G. Ramalingam, S.A.B. Al Omari, Z. Bakenov, S. Sangaraju, **S. Sudhahar**, Efficient processed carbon Soot@MoS2 hybrid Bi-functional electrode for dye-sensitized solar cell and asymmetric supercapacitor devices, Nano Materials Science, 6 (2024) 484-494.	**12.6**
128	A. Nivedhitha Bharathi, V. Kousalya Devi, S. Sambasivam, Munirah D. Albaqami, M. Krishna Kumar, K. Velsankar, **S. Sudhahar**, Investigating MnSe@Y2O3 nanocomposite as an electrode for asymmetric hybrid supercapacitor, J. Alloys and Compounds, 1009 (2024) 176867.	**5.8**
127	G Rajasekar, A Venkatesan, P Rekha, S Reena Devi, S Usharani, A Bhaskaran, S Mohandoss, **S Sudhahar**, Investigation on synthesis, growth, optical, thermal, etching, and mechanical characterization of lithium bis (oxalato) borate organo-metallic single crystal, J Mater Sci: Mater Electron, (2024) 35:2291.	**2.8**
126	G. Maheshwaran, Y. Saisrinu, K. Sujith, **S. Sudhahar**, S. Sambasivam, M. Pardha Saradhi, Novel 2D bismuthene-molybdenum disulfide nanocomposite for high energy density supercapacitors and fabrication scaled to pouch cell, J. Energy Storage, 85 (2024) 11104.	**8.9**
125	R. Ranjithkumar, P. Lakshmanan, N. Palanisami, **S. Sudhahar**, N. Nallamuthu, G. Thrimurthulu, I. Tae Kim, M. Krishna Kumar, Facile fabrication of 3D-α-Fe2O3@2D-g-C3N4 heterojunction composite materials: Effect of iron oxide loading on the electrochemical performance, Inorganic Chemistry Communications, 165 (2024) 112553.	**4.4**
124	P. Senthil Pandi, P. Krishnan, S. Sathish, **S. Sudhahar**, Biomedical applications of terbium oxide nanoparticles by Couroupita guianensis aubl leaves extract: A greener approach, Nano-Structures & Nano-Objects, 40 (2024) 101341.	
123	R. Ramya, G. Muthulakshmi, **S. Sudhahar**, A. Bhaskaran, Green synthesis and characterization studies of TiO2 nanoparticles and its potential biological performance, Nano-Structures & Nano-Objects, 39 (2024) 101322.	
122	V. Kousalya Devi, A. Nivedhitha Bharathi, S. Sambasivam, Kholood A Dahlous, T.C. Sabari Girisun, K. Velsankar, **S Sudhahar**, Structural, optical and theoretical studies of 2, 4-dichlorobenzoic acid benzamide in nonlinear optical applications using Z-scan technique, Journal of Molecular Structure, 1311 (2024) 138431.	**4.0**
121	A. Priyadharsini, M. Saravanakumar, A. Sakunthala, A. Banu, J. Suryakanth, S. Pavithra, K. Anbazhakan, **S. Sudhahar**, S. Sambasivam, Role of preparation conditions on the pseudocapacitor properties of SnO_2 nanoparticles by co-precipitation method, J Mater Sci: Mater Electron, (2024) 35:451.	**2.8**
120	D. Satheesh, V. Muthulakshmi, A. Jagadesan, A. Venkatesan, K. Suresh, K. Parthipan, S.M, Rayappan, G. Senthilkumar, **S. Sudhahar**, A Review on Anthropogenic Biomass Burning: Emission of Aerosol Pollutants, Impact on Climate Change, Human Health and its Mitigation Strategies, Asian Journal of Chemistry, 36(3) (2024) 521-530.	
119	V. Kousalya Devi, F. Kousi, M. Mujahid Alam, S. Sambasivam, G. Ramalingam, M. Abith, T.C.	**4.3**

	Sabari Girisun, **S. Sudhahar**, Third-order NLO properties and optical limiting behavior of p-toluidinium 2,4-dichlorobenzoate organic single crystal, Spectrochimica Acta Part A, 305 (2024) 123527.	
118	M. Jeevaraj, D. Sivaganesh, S. Saravanakumar, S. Asath Bahadur, **S. Sudhahar**, M. Krishna Kumar, Extrinsic electronic states to tune the luminescence and bonding nature of $Cs_2NaInCl_6$ double perovskite, Materials Chemistry and Physics, 311 (2024) 128569	**4.3**
117	G. Maheshwaran, M. Ramesh Prabhu, G. Ravi, K. Sankaranarayanan, **S. Sudhahar**, Probing the energy conversion and storage process in two dimensional layered bismuthene-hexagonal boron nitride nanocomposite electrode and PVA-KOH-BaTiO3 piezoelectrolyte nanogenerators, Nano Energy, 106 (2023) 108060	**16.8**
116	G Vignesh, G Rajesh, **S. Sudhahar**, T Theivasanthi, M Krishna Kumar, Influence of annealing on the morphological, structural and electrochemical properties of Co3O4 spinel electrodes, Journal of Energy Storage 73 (2023) 109115	**8.9**
115	K Velsankar, K Aravinth, Paiva-Santos Ana Cláudia, Yong Wang, Fuad Ameen, **S. Sudhahar**, Bio-derived synthesis of MgO nanoparticles and their anticancer and hemolytic bioactivities, Biocatalysis and Agricultural Biotechnology, 53 (2023) 102870.	**3.4**
114	K. Neethidevan, K. Ravichandran, M. Ayyanar, P. Kavitha, S. Amalraj, R. Mohan, N. Dineshbabu, **S. Sudhahar**, G. Maheshwaran, Wattakaka volubilis powered green synthesized CuO, NiO and ZnO nanoparticles for cost-effective biomedical applications, Biomass Convers. and Biorefin. (2023) 1-15	**3.5**
113	M Jeevaraj, D Sivaganesh, S Saravanakumar, S Asath Bahadur, **S. Sudhahar**, M Krishna Kumar, Broadband near infrared emission in Cr3+: Cs2AgBiCl6 double perovskite halides, Optical Materials, 143 (2023) 114294	**3.8**
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