# CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

#### STAFF PROFILE

#### PERSONAL INFORMATION

1. Name : Dr.S.GOWRI

2. Date of Birth :26.01.1976

3. Address :

Residential	Office
1A, KESAVA RESIDENCY, AMK II	CAUVERY COLLEGE FOR
STREET, ANANDHA AVENUE, EB	WOMEN(Autonomous),
ROAD, TRICHY-620002.	ANNAMALAI NAGAR,TRICHY-18
Mobile: 9952645688	

#### **ACADEMIC INFORMATION**

4. Designation & Department: ASSOCIATE PROFESSOR-

#### PG AND RESEARCH DEPARTMENT OF PHYSICS

#### 5. Educational Qualification:

Degree	Year	College/University	
M.Sc.,	1998	BISHOP HEBER COLLEGE	
B.Ed	1999	ANNAMALAI UNIVERSITY	
M.Phil.,	2005	SEETHALAKSHMI RAMASWAMY	
		COLLEGE	
Ph.D	2014	St .JOSEPH'S COLLEGE(Autonomous)	

6. Researcher ID :

Google scholar ID

https://scholar.google.co.in/citations?hl=en&authuser=1&user=hbCLmvgAAAAJ

Scopus ID : 57196519379

Web of science researcher ID: Y-5613-2019

**Orcid ID** : https://orcid.org/0000-0001-8556-3328

**Vidwan ID** : 205864

Mendeley ID :

https://www.mendeley.com/search/?page=1&query=Spectral%2C%20thermal%20and%20optical%20properties%20of%20L-

tryptophanium%20picrate%3A%20A%20nonlinear%20optical%20single%20crystal&sortBy=relev ancel.clarivate.com/home

**Publons ID** :\_https://publons.com/researcher/3118869/s-gowri/

## 7. Experience :

Date of Joining Institution		Year of Experience
18.12.1999-31.10.2005	Shrimathi Indira Gandhi College	05Y-10 M- 14 days
10.07.2006-31.05.2007 Kurinji college of Arts & Science		00Y-10 M- 22 days
07.12.2005-31.05.2006	07.12.2005- 31.05.2006 Cauvery college for women	
& 25.06.2007 to till date		14Y-09M- 28 days
	22 Y- 0M -13days	

8. Areas of Specialization : CRYSTAL GROWTH & NANO MATERIALS FOR

**ENERGY STORAGE APPLICATIONS** 

9. Languages known : English

10. Subjects Taught :

UG	PROPERTIES OF MATTER, COMMUNICATION PHYSICS, WAVE MECHANICS
	&NUCLEAR PHYSICS, MECHANICS & RELATIVITY, ELECTRICITY,
	MAGNETISM &ELECTROMAGNETISM, MATERIAL SCIENCE, ALLIED PHYSICS
	II, APPLIED PHYSICS III, ENVIRONMENTAL STUDIES, OFFICE MANAGEMENT
	TOOLS, PROFESSIONAL SKILLS
PG	CLASSICAL MECHANICS, CRYSTAL GROWTH &THIN FILM, STATISTICAL MECHANICS,
	SOLID STATE PHYSICS, NON LINEAR OPTICS, MICROPROCESSOR&COMMUNICATION
	ELECTRONICS, ADVANCED PHYSICS
M.Phil	

## 11. Research Supervision:

		Thesis		
	University from where guideship obtained	Completed (in numbers)	Year of Completion	Pursuin g (in numbers)
M.Phil (Ref.No.5832)	Bharathidasan(Distance Education) Mother Teresa Women's University,Kodaikanal (Acted as an External guide)	03 & 01 05 &02	<b>2007&amp; 2008</b> 2017 & 2018	
Ph.D (Ref.No.22539 -25.11.2016)	Bharathidasan	-	-	-

## 12. Details of Publications:

S.No.	Journal Name & Volume	Year of Publicati on	ISBN/ISS N Number	Name of the Paper	Impact Factor
1.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Volume 81, Issue 1, Pages 257–260,	June 2011	1386-1425	Spectral, thermal and optical properties of L-tryptophanium picrate: A nonlinear optical single crystal	2.098
2.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Volume 89, Pages 119–122	December 2011	-do-	Spectral, thermal and optical properties of adenosinium picrate: A nonlinear optical single crystal,	2.098
3.	Spectrochimica Acta Part A: Molecularand BiomolecularSpectros copyVolume 95, Pages73–79	April 2012	ISSN: 1386- 1425	Synthesis,growth,spectral and thermal properties of a new organic crystal: 2- Carboxypyridin-1-ium trichloroacetate	1.917
4.	Optik - International Journal for Light and Electron Optics, Volume 124, Issue 16, Pages 2393–2396	December 2012	ISSN: 0030- 4026	Synthesis, growth and characterization of 2-carboxypyridinium hydrogen (2R,3R)-tartrate monohydrate: A new organic nonlinear optical crystal	0.524
5.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Volume 110, Pages 28–35	March 2013		Crystal growth, spectral, optical and thermal properties of semiorganic nonlinear optical material: Picolinic acid hydrochloride	2.129
6.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, vol, 15 May 2015, Pages 192-199.	March2015	-do-	Growth, structure, spectral and optical properties of Semiorganic crystal: Pyridine-1-ium-2-carboxylatehydrogenbromide	2.653

7.	International journalof current research and review,vol 9, issue 10, may2017. UGC ListedJournal: Jr. No. 62702	May 2017	ISSN: 0975- 5241	Enhancement Of Pure And Dye Doped Glycine Related Single Crystal'	International Prognostic Index (IPI)
8.	International journalof current research and review,   vol 9 , issue 11	May 2017.	-do-	Influence of Metal on Vibrational and Optical Properties of Mixed Tartrate Crystal in Silica Gel Medium	-do-
9.	Journal of Materials Science:Materials in Electronics, Volume 29,No.23	December 2018	ISSN 0957- 4522	Synthesis, crystal structure, optical and third order nonlinear optical properties of phosphoric acid pyridine-1-ium-2-carboxylate	2.195
10.	Journal ofMolecular Structure, Vol.1181, Page 660-667	December 2018	-do-	Novel metal -organic hybrid crystal with excellent transparency in the visible spectrum: growth, structure and properties of sodium tetraboro fumarate	2.011
11.	Mechanics and Mechanical Engineering, Vol.22,issue- 4,pages- 1261-1271	Nov.2018	ISSN: 1428- 1511	Effect of Dicarboxylic Acid Dopant on Adp Crystal by Slow Evaporation Method	-
12.	Mechanics and Mechanical Engineering Vol.23,issue 1, pp-23-27	july.2019	ISSN: 1428- 1511	Theoretical Investigation on Growth Kinetics and Thermodynamic Properties of Pyridine-2-Carboxylic Acid Crystals	Sciendo is a  De Gruyter  company
13.	International Journal of Scientific Research in Physics and Applied Sciences Vol.7, Issue.3, pp.156- 166	June 2019	E-ISSN: 2348- 3423	Growth and Characterization Studies on Nicotinic Acid Doped Kdp Crystals	ISROSET, Indore, India

14.	Physical Chemistry Chemical Physics 21, 1182911838	May 2019		Electrochemical performance of L- tryptophanium picrate as an efficient electrode material for supercapacitor application	Royal Society of Chemistry 3.906
15.	Optics and Laser Technology, 119 (2019) 105664	June 2019		Growth, structural, third order nonlinear optical properties, dielectric properties, conductivity mechanisms and spectroscopic characterization of a luminescent materialtransdiaqua-bis(pyridine-2-carboxylato)-cobalt(ii) dihydrate for optoelectronic applications.	Elsevier 3.319
16.	Bull. Mater. Sci. (2020) 43:17 doi.org/10.1007/s1 2034-019-1980-4	July 2019	0250-4707	A remarkable enhancement between optical transparency andSHG efficiency on doped- KHP single crystals	1.264 (springer)
17.	Results in Materials	Jan.,2020	2590-048X	Growth, spectral, dielectric, magnetic andantimicrobial studies ondye doped rochelle salt crystal	Elsevier
18.	Journal of MolecularStructure	May 2020	Volume 1218, 15 May 2020, 128460	Growth, structural, hirshfeld surface analysis, DFT and Z-scan techniqueof hybrid single crystal of piperazinium perchlorate	Elsevier2.011
19.	Bull. Mater. Sci. (2020)	June 23,2020		Spectroscopic and Third order Nonlinear optical properties of organic crystal	1.264 (springer)
20	Computational & theoretical chemistry	August 08,2021	Vol.120 2- pages11 3345	Computational molecular structure analysis, Hirshfield surface analysis and third order nonlinear optical profiling of ninhydrin derivative wirh Z-scan studies	1.403 Elsevier

21.	Optik	August 16,2021	6,Pages - 167836	Promising computational,structural, vibrational and optical properties of piperazinium bis(2 carboxypyridine)monoh ydrate crystal for NLO device applications	2.187 Elsevier
22	New journal of chemistry	8/10/2021	20612- 20623	NiWo4/PANI composites as potent electrodes material for high performance energy storage devices.	3.591 Royal Society of Chemistry
23.	Ionics	31/10/202	(2022)	Investigation on Electrochemical behavior of Aminophenol-doped ZnO as electrode material for High Performance Supercapacitors	2.817 Springer
24	Physica B: Condensed Matter	1/1/2022		Nucleation kinetics, Williamson-Hall analysis, hardness and dielectric properties of pyridine-2- carboxylictrichloroacetat e single crystals	2.436 Elsevier
25.	Journal of Indian Chemical Society	23/2/2022	97	Crystal, Growth, spectral, optical DFT analysis and Z-scan analysis of Pyridine-1-ium-2-carboxylate hydrogen bromide for NLO applications	0.284 Elsevier

## 13. Details of Papers Presented:

Date	Organizer	Name of the Seminar	Paper Name
1.2.08&	ISPA	National Conference	Undopped Cus Prepared By Chemical Method
2.2.2008		On Recent Advances In Physics	
25.06.08&	NATIONAL College	Laser &Non-Linear Optical Materials	Growth & characterization of single crystal
26.9.2008			
27- 29.01.2009	SSN Engineering College	National Seminar On Crystal GrowthCrystal Growth	Synthesis &Characterisation Of BGOX
7.08.2012- 9.08.2012	Bishop Moorecollege	International conference of Advanced Materials	Spectral ,thermal and optical properties of AP Crystal
6.08.13& 7.08.2013	Govt.Arts college for women	Perspectives in Material Science	Crystal Growth &Characterisation of PTA
15.02.2013	Dr.MGR University	Perspectives in laser&spectroscopy	Growth,Spectral,Optical Characterisation of NLO crystal
18.12.2014& 19.12.2014	Hindustan University	Advances in applied physics& Material Science	Influence of picric acid on organometallic bisthiourea chloride crystal
15.02.2017	Jammal Mohamed College	Recent Advancementin materials	Structural & optical characterization of dye doped crystal
29.01.2016& 30.01.2016	BARD	29 <sup>th</sup> Annual general meeting of MRSI	Growth, vibrational, Mechanical & Dielectric studies of EDTA dopped CU-Zinc chloride crystals
02-03.02.17	SCSVMV university	ICFM-2017 on Functional materials	Influence of Metal on Structure & optical properties of Tartrate crystals
22.08.17- 28.08.17.	Hitech City,Madhapur	24 <sup>th</sup> congress and general assembly of the international unionof crystallography	Presented with Bursary support, Growth and characterization of semi organic NLO crystal.
6&7/7/2020	Muthurangam Govt.Arts college,Vellore	National Web conference on Novel materials	Synthesis ,Growth and Characterization of a nonlinear optically active crystal by SEST technique

# 14. Details of Seminars / Conferences / Workshops Attended:

Year & Date	Organizer	Title	National /	Topic
			International	
03.03.2004	Thanthai Hans Rover	Seminar On	State	Microcontroller
	College,Perambalur	Microprocessor&		
		Microcontroller		
1.2.08&	ISPA&Spectrophysics	Recent Advances In	National	CuO nao
2.2.2008	Labarartory,Pachayappa college,chennai	Physics		particles
15.02.2008&	Cauvery college,Trichy	Recent Advances in	National	NLO materials
16.02.2008		Materials Science		
25.06.08&	National College, Trichy	UGC Sponsored	National	Optical materials
		Crystal Growth		
26.9.2008		&Non-Linear		
		Optical Materials		
15.03.2008	TEQIP-Metallurgical Engineering ,NIT,Trichy	Workshop on	National	-
		Advances in Bio		
		Materials		

27-29.01.2009	SSN College Of Engineering,chennai	workshop on Recent Trends in Crystal Growth	National	Organic NLO crystals
28.10.2009- 30,10,2009	ICTP&Crystal Growth Centre,Anna university,chennai	Workshop on Advances in Nano Science &Technology	International	Nano materials
30.03.2010	Crystal Growth Centre,Anna University,chennai	Workshop on  Recent trends in crystal growth	National	-
18.01.2011	Research Advisory Committee, St.Joseph's college	Orientation programme for Research & Development	State level	participated
28.02.2011	Dept.of Physics,  NIT -Trichy	NSDS'11	National	
15.03.2012- 17.03.2012	Indian Association For Crystal Growth, SSN college,chennai	on Crystal Growth and Nano Materials	National	LTP crystals

7.08.2012-	Bishop Moore	Molecular	International	Growth &
9.08.2012	college,Kerala	spectroscopy of		characterization
	_	Advanced Materials		
		and Biomolecules		of AP crystals
23.01.2013&	Cauvery college, Trichy	TNSCST	National	Participated Participated
		sponsored on		
24.01.2013		Current Trends in		
		Material Science&		
		Nanostructured		
		Materials		
6.08.13&	Govt.Arts college for	UGC&SERB	National	Acid doped
	women,Pudukkottai	sponsored on		organic materials
7.08.2013		Perspectives in		organic materials
		Material Science		
15.02.2013	Faculty of	Perspectives in	National	Organic crystals
	Humanity&Science,MGR	Laser and		in Laser
	iniversity,chennai	Spectroscopy		
	-			applications
18.12.2014&	Dept.of Physics, Hindustan	Frontier Area	International	participated
19.12.2014	University, chennai	ofPhysics		
19.02.15&	ISPA Association	UGC	National	Characterizatio
		sponsored on		nof NLO
20.02.15		Emerging		
		Trends in		crystals
		Applied		
		Physics		
29.01.2016&	Material Research	Advances in applied	National	
30.01.2016	Society&IEEE Nano	physics&		
2010112010	Technology Council,BARD	Material Science		
4.10.2016-	Satish Dhawan space	World Space Week	National	participated
10.10.2016	centre,ISRO	celebrations	rutional	participated
	<b>50</b> 1010,15110	Colorations		
24.10.2016	SPIE.Student	Workshop on		participated
	chapter,Gandhigram	Optical		Participated
	university,	Characterization of	National	
		Materials		
	dindugal			
06&07.02.17	INDIAN SCIENCE	Science		Advances in
	ACADEMIES,EVR	Academie's	NI-4:- 1	Particle physics
	college	Lecture workshop	National	
15.02.2017	Jammal Mohamed	Recent	National	Metal organic
	college,NLS-RAM:17	Advancement in		Materials
		materials		IVIAUCI IAIS
21.08.2017	Urumu Dhanalakshmi	Recent trends in	International	Spectral &
21.00.201/	college,Trichy	material science	incinational	1 -
	conege, mony	&its applications		Mechanical
				behaviour of
		ICRM-17		KHP crystals

02-03.02.17	ICFM-2017 on Functional matrials,SCSVMV university,Kancheepur am	ICFM-2017 on Functional matrials	International	Mixed Tartrate crystals
22.08.17- 28.08.17.	international union of crystallography(IUCR )	24 <sup>th</sup> congress and general assembly of the international union of crystallography	International	Semiorganic NLO crystals
23.11.2017	Mahendra Engineeringcollege	Advanced materials for Photovoltaic & supercapacitors	National	Photovoltaic &supercapacitors materials
27.11.2017- 9.12.2017	Science Academies – Refresher course	Science Academies  -Refresher course	National conference	Quantum Mechanics
23-24.03.2018	Concept on Newer Engineering and Technology- ICONNECT-2K18	Concept on Newer Engineering and Technology-2K18	International	Characterizatio nof ADP crystal
14-16.02.18	29 <sup>th</sup> Annual <b>general meeting of MRSI</b> on Functional and Exotic Materials	29 <sup>th</sup> Annual general meeting of MRSI on Functional and Exotic Materials	National Symposium	Advances in Exotic materials-EDTA doped Cu-Zn crystal
20-21.04.18	LAMSYS'18	LAMSYS'18	National conference	Acqua SAT
6-10.08.18	GIAN course for AcademicNetworks on crystal growthon Functional materials	GIAN course for Academic Networks on crystal growth on Functional materials	National	CRYSTAL GROWTH OF FUNCTIONAL &EXOTIC MATERIALS
11.8.18- 12.8.18	Workshop on Computeraided Drug discovery	Workshop on Computer aidedDrug discovery	National	Aided Drug discovery
29.10-18- 2.11.18	e-Content Development	e-Content Development	State level Workshop	e-Module on Halleffect
04.02.2019- 06.02.2019	Sponsored by DST- SERB,BRNS,TNSCST &TANSCHE	ICRAMS-2019	International	Advances in material science
14-15.03.2019	Ramakrishnan college of Technology supported by ELSEVIER	ICONEEEA-2K19	International	Characterizatio nof Nano particles
May 21-22,2020	Department of Chemistry,Gandhigram RuralInstitute,Dindugal	FDP	International	International Webinar on Materials for Energy,

				Environment and
				Health care
				Applications
May 1-3,2020	Dr.Vivek	FDP	National	Virtual
11144 1 3,2020	Polshettiwar&Dr.Sayan		1 (acional	Conference on
	bhattachariya			
	TIFR Mumbai &IISER			"Materials for
	Kolkatta			Energy
				Harvesting and
				Catalysis
May5-8	Jointly organized by	Webinar Series on	National	Prof.Hari Om
	Department of Physics,	Conceptual and		Vats
	RK university and	Applied Physics		Director, Space
35 44 0000	Department of			g : p 1 : 1
May 11-2020	Five days FDP R	Spoken tutorial ,IIT Bombay funded	. Five days	Sri Ramakrishna
	training Program	by the National	FDP R training	College of Arts
		Missionon Education	Program	(Autonomous),
		through ICT,	110g1	Coimbatore with
		MHRD, Govt. of India,		course material
May 15,2020	Functional Novel	Dr.chella durai,	International	Thiyagaraja
11111 10,2020	Materials for	Dischena daran,		college,Madurai
	Electrochemical	Dr.chun chen		
	Sensors and Energy	yang		&MING CHI
	Storage Devices	MING CHI		University, Taiwan
		University, Taiwan		Taiwaii
July 05, 2021	Modeling of crystal	SSN research centre	International	SSN institution
	growth processes and			
	devices(online)			
April 24,2021	Design of	Faculty	National	GITA -
71p111 2 1,2021	nanoelectronics and	development	1 (acional	Bhuvaneswar
	nanophotonics using	program(online)		
	Advanced soft tool			
December 2021	EDP on fostering Start-	Faculty	National	ALL INDIA
(6-10)	up, Innovation and	development		COUNCIL
	Entrepreneurship/Intra	program(online)		FOR
	preneurship			TECHNICAL
				EDUCATION
				& Andhra

## 15. Details of Seminars / Conferences / Workshops Organized:

Year	Date	Title	National /	Topic	Resource
			International		Person
04.10.2016- 06.10.2016	WORSHOP (act as Co- ordinator)	WORLD SPACE WEEK	National	-	-

## 16. Details of Orientation / Refresher Course Attended:

Date	Title of the Course	Organizer
27.11.2017-9.12.2017	Science Academies –Refresher course	Indian Academy of
		Sciences
	GIAN course for Academic Networks on	Centre for High Pressure
6.10.2018-10.08.2018	crystal growth on Functional materials	Research,Dept.of
		Physics,BARD&supportedby
		Ministry of Human
		Resource & Development

## 17. Details of Study Materials / Books written and published:

S.No.	Journal Name	Year of	ISBN/ISSN Number	Name of the Dance
	/Book &	Publication	15DIV/155IV INUMBER	Name of the Paper
	Volume			
1.	"Cauvery Research	July 2008	ISSN No.: 0975-1300	Mass Media in Higher
	Journal, Trichy,			Education '':
	Vol2, Issue 1. Chapter-7			
2.	Growth and characterization of metal cation on Pottasium hydrogen Pthalate single crystals	Book of Recent Researches in crystal growth and characterization-	Asian press	
3.	Novel Materials for	October 2021	ISBN:978-93-91373-10-8	Shanlax Publications
	Emerging Applications			

## 18. Details of Chairing as Resource Person:

	Title of the Seminar/Conference	Session Chaired
Date		
28.02.2015	Science day celebrations	St.Joseph's college,Trichy
	Guest Lecture Program	As a Resource person in Vivekananda
15.08.2017	(Growth of NLO single crystals for	college of Arts and Science For Women,
	practical device applications)	Thiruchengode.
27.02.2020	As a Chair person for Posterpresentation	NCAMA-2020 by UDC ,trichy19
10.07.2020	As a resource person for Scientific Profile Database Tools	FDP on Scientific Profile Database Tools in CCW
2021-2022	Inter amritha seminar competition  As a resource person for Design	Amritha School, Trichy
	Thinking	Jammal mohammed college

## 19. Administration Positions held in the College:

## 20. Details of In-Charge / Membership in Committees for Autonomous:

Nature of Position	Year
Research Committee member & Dept. Research Coordinator IIC Coordinator	2017-2018 to 2019-2022 ,2021-2022
Criterion VI -incharge	2018-19 to 2019-2022

## 21. Details of In-Charge / Participation in Extracurricular Activities:

(NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):

#### 22. Details of Participation in Consultancy, Training, Development etc..:

Nature of recharging strategy(research training)	Duration
1.Research Training Program – SSN	16-11-2016 &
Research Centre, Chennai 2.Short	18-11.2016
term training Program Department	14-11-2017 &
of Physics,	15-11-2017
Bishop Moore College, Mavelikara.	

#### 23. Details of Membership in Academic Bodies/ Board of Studies and Reviewer Details:

Editorial Board Member-JOAASR

#### 24. Details of Membership of Professional Bodies:

Act as Life member of ISSE, Trichy chapter, SDSC-SHAR Centre, Sriharikota. Act as Life Member of Indian Association for Crystal Growth (Ref.No.2016-02) Act as TERA (Teaching and Education Research Association) life time member (TERA-M192050)

## **25.** Country visited:

#### 26. Any other information if any:

Act as DC Member –(Ref.No:8197-17.05.16)

Awarded a BURSARY SUPPORT of Rs.15, 000/- from DST funds to attend the 24<sup>th</sup> IUCR congress and General Assembly on 21-28 August 2017 at Hyderabad.

Editorial Member in JOAASR in the year 2016-17.

Reviewer in Journal of Physical Science & Material Research Innovation ,and

IONICS, Rasayan Journal in the year (2016-17&17-18,18-19,19-20)

Act as a Technical Committee in NCETAP-2015, Lekshmipuram College,

Act as a resource person for Poster presentation in NCAMA -2020, UDC college, Trichy

Act as a Committee member in NSMAS-2020, Meenakshi Chandrasekaran college,

Pattukkottai

As a NPTEL mentor for the course "A brief course on superconductivity" from Jan-Dec

2020

Has undergone Innovation Ambassador training (foundation level) conducted by

Ministry of Innovation cell during 30<sup>th</sup> June-30<sup>th</sup> July 2021 in online mode.

Undergone skill development Training program on January(25-29) 2021 on virtual mode

by CSIR-CECRI ,Karaikudi