

RESUME



Name: Dr.B.Helina
Designation: Assistant Professor(Senior Grade) & Head
Department: Physics
Address: 325, Sri Jeyanthi Nagar East,
V.O.C.Nagar, V.M.Chatram, Palayamkottai-627011.

PERSONAL DETAILS

Date of Birth : 12/11/1971
Qualification : M.Sc., B.Ed.,M.Phil.,Ph.D.
Designation : Assistant Professor
Department : Physics
Religion : Christian
Nationality : Indian
Mobile : 9994025814
Email ID : helinafredy@gmail.com

ACADEMIC QUALIFICATIONS

Degree	Specialization	College	University	Year of Passing
B.Sc.	Physics	J.A.College, Periyakulam	Madurai Kamaraj University	1995
B.Ed.	Physical Science		Madras University	1996
M.Sc.	Physics		Annamalai University	1999
P.G.D.C.A.	Computer Applications		Madurai Kamaraj University	2000
M.Phil.	Ultrasonics		Madurai Kamaraj University	2007

Ph.D.	Crystal Growth		Manonmaniam Sundaranar University	2013
ACADEMIC IDENTITY				
*VIDWAN ID		284041		
*ORCID ID		https://orcid.org/0000-0003-1780-8260		
*SCOPUS ID				
*RESEARCHER ID/ PUBLONS ID				
GOOGLE SCHOLAR LINK		https://scholar.google.co.in/citations?user=boGFEGsAAAAJ&hl=en		

TEACHING EXPERIENCE	
Date of Appointment	01/07/2014
Date of Retirement	30/11/2031
Teaching Experience	UG - 10
	PG - 06
	M.Phil. - NIL
Research	Guided M Phil: NIL Guided Ph D: 04 Guiding Ph Scholar: 01

COURSES/CLASSES TAUGHT	NAME OF THE INSTITUTIONS	DURATION		Years
		From	To	
Served as a B.T Assistant (IX & X)	St.Mary's Convent run by salesian orders, vellore.	1995	1997	2
Served as a B.T Assistant (IX & X)	A.P.C Veerabahu Matriculation School, Thoothukudi.	1997	1999	2
Served as a P.G. Assistant (XI & XII)	St.Aloysius Girl's Hr.Sec.School, Thoothukudi.	1999	2000	1
Served as a B.T Assistant (IX & X)	Rev.George Memorial Matriculation School, Thoothukudi.	2000	2001	1
Served as a P.G. Assistant (XI)	St.Thomas Matriculation Hr.Sec School, Thoothukudi.	2007	2009	2

Served as an Assistant Professor (PG)	V.O.C. College, Thoothukudi.	2009	2014	5
Serving as an Assistant Professor (UG)	St.Xavier's College, Palayamkottai.	2014	till date	10

AWARDS RECEIVED

1.	Best Paper Presentation at UGC sponsored National Seminar on New Materials Research and Nanotechnology (NSNMRN – 2012), Department of Physics, Government Arts College, Ooty, 12-14 September - 2012.
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ADMINISTRATIVE EXPERIENCE

S. No	DESIGNATION	INSTITUTIONS	YEAR
1.	Assistant Professor	V.O.C. College, Thoothukudi.	2009-2014
2.	Assistant Professor	St.Xavier's College, Palayamkottai.	2014 to Till date

MEMBERSHIP

S. No	Designation	Particulars
01	Research Supervisor	
02	External Evaluator	
03	Board of Minutes Chairman	

ORIENTATION / REFRESHER COURSES / FACULTY DEVELOPMENT PROGRAMME UNDERGONE ()

S. No	Name of the Training	Name of the Sponsoring Agency	Place and Date
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1.	UGC-Sponsored Orientation Programme	UGC-Human Resource Development Centre, Madurai Kamaraj University.	05/02/2020 to 25/02/2020
2.	FDP On“Application Of Google Classroom As A Tool For Teaching And Learning Process – Hands On Training”	AKM Educational Trust	24/04/2020
3.	FDP On “Effective Usage Of Ict Tools For E-Content Preparation”	Jeyaraj Annapackiam College for Women, Periyakulam.	27/04/2020 to 02/05/2020
4.	FDP On “Digital Tools For Smart Classrooms In Higher Education”	Jeyaraj Annapackiam College for Women, Periyakulam.	06/05/2020 & 07/05/2020
5.	FDP On “Moodle Learning Management System”	V. P.Institute of Management Studies and Research, Sangli in association with Spoken-Tutorial IIT Bombay	12/05/2020 to 17/05/2020
6.	FDP On “Managing Online Classes And Co-Creating Moocs : 2.0”	Teaching Learning Centre, Ramanujan College, University of Delhi.	18.05.2020 to 03.06.2020
7.	MOOKIT (Four Weeks Program) on “Cooperative Learning Pedagogy”	GHG Khalsa College of Education, Gurusar Sadhar, Punjab	22/05/2020 to 18/06/2020
8.	FDP on “ADVANCED MATERIALS RESEARCH”	BIET & Indian Ceramic Society	15/06/2020 to 19/06/2020
9.	FDP	Mohamed Sathak A J College of Engineering, Chennai.	10/06/2021 to 12/06/2021
10.	Refresher Course on “REFRESHER COURSE IN PHYSICS”	Teaching Learning Centre, Ramanujan College, University of Delhi	27.10.2021 to 10.11.2021

DETAILS OF RESEARCH WORK

Research Stages	Title of the Thesis	University where the work was carried out
Ultrasonics	Acoustic Study of Organic Liquids & Liquids Mixtures	Madurai Kamaraj University
Crystal	Studies on Growth and Characterization of Single	Manonmaniam

Growth	Crystals of γ -Glycine and Some Glycine Complexes.	Sundaranar University
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RESEARCH PROJECTS CARRIED OUT			
S. No	Title of the Project (Minor)	Name of the Funding Agency & Amount	Duration
	-	-	-

PUBLICATIONS				
BOOKS	BOOK CHAPTERS	SCOPUS	WEB OF SCIENCE	UGC LISTED
				1
OTHER INDEXED	AS A RESOURCE PERSON	PAPERS PRESENTED IN NATIONAL AND INTERNATIONAL SEMINARS	WEBINARS, SEMINARS, WORKSHOPS ATTENDED	
PUBLICATIONS: BOOKS ()				
S. No	Title of the Book	Publication	Year	
01.	INTERNATIONAL CONFERENCE CUM WORKSHOP ON THE TECHNIQUES OF NANOMATERIALS CHARACTERISATION, HYDROGEN ENERGY AND FUEL CELLS	ST.XAVIER'S COLLEGE, PALAYAMKOTTAI	2022	
BOOK CHAPTERS ()				
S. No	Title of the Paper	Name of the Book	ISSN No., Pg.No	
	-	-	-	
PUBLICATIONS: SCOPUS INDEXED JOURNALS () WEB OF SCIENCE ()				
S. No	Title of the Paper	Name of the Journal	ISSN No., Volume, Issue, Impact factor & Pg. No	
01.	Structural, Optical, Thermal, Mechanical And Dielectrical Characterizations Of Γ -Glycine Crystals Grown In Strontium Chloride Solution.	Physica Scripta	ISSN No. 0031-8949, Volume 85, Issue 5. PP. 055803.	
02.	Synthesis, Growth And Characterization Of Semi-Organic Non-Linear Optical Triglycine Phosphoric Acid (TGPA) Single Crystals.	Journal of Advanced Applied Scientific Research (JOAASR)	ISSN: 2454-3225, Vol-1-9, March-2017: Pg.34- 38.	
03.	2D hexagonal Yttrium doped SnO ₂ Nanoplatelets for Photocatalytic	Chemical Papers	November 2022 03666352, 13369075	

	Degradation.		https://doi.org/10.1007/s11696-022-02574-6
04.	Effect of Calcium on Two-Dimensional Morphology and Photocatalytic Properties of Tin Oxide Nanoparticles	Asian Journal Of Chemistry	February 2022 ISSN: 0975-427X (Online) ISSN: 0970-7077 https://doi.org/10.14233/ajchem.2023.27550
05.	Cauliflower-like Strontium-doped SnO ₂ Nanoparticles for Photocatalytic Degradation.	Materials Science and Technology	February 2022 02670836, 17432847 https://doi.org/10.1080/02670836.2023.2197725
06.	Characterization Of Gamma-Glycine Crystals Grown In Aqueous Solution Of Cerous Chloride.	European Chemical Bulletin	July 2022, ISSN 2063-5346 DOI: 10.31838/ecb/2023.12.6.243
07.	Synthesis and Structure of Zinc Oxide doped Polyindole Nanocomposites.	South Asian Journal of Engineering and Technology	2454-9614 DOI: 10.26524/sajet.2024.14.23
08.	Efficient Photocatalytic Degradation of Rhodamine B dye by Undoped and Zinc doped Zirconium Dioxide NPs.	Journal of the Indian Chemical Society	0019-4522 DOI:10.1016/j.jics.2024.101461
09.	XRD, Electrical, Mechanical, Second and Third-Order NLO Studies of L-Leucinium Perchlorate Crystals.	Indian Journal of Pure & Applied Physics (IJPAP)	Published on 2024-08-01 Vol. 62 No. 8 (2024): 0975-1041 DOI:10.1016/j.jics.2024.101461
10.	Investigations on the Growth and Optical, Dielectric and Antibacterial activity of L-Leucine Barium Chloride crystals.	Eurasian journal of physics and functional materials	October 2024 2616-8537 DOI:10.69912/2616-8537.1227
11.			

PUBLICATIONS: UGC LISTED JOURNALS ()			
S. No	Title of the Paper	Name of the Journal	ISSN No., Volume, Issue, Impact factor & Pg. No
01.	Growth And Characterization Of The Semi Organic Nonlinear Optical Crystal:	Optik	Volume 127, Issue 3, Pages 1401-1404 Impact factor : 0.686, ISSN NO. 0030 – 4026.

	Di-Glycine Ammonium Sulphate		
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PUBLICATIONS: OTHER INDEXED JOURNALS ()

S. No	Title of the Paper	Name of the Journal	ISSN No., Volume, Issue, Impact factor &Pg.No
01.	Structural and Optical Properties of Pure and Cobalt Doped Tin Oxide Nanoparticles	EPRA	ISSN: 2455-7838, Volume 4, Issue 9, IF – 6.260, Pg. No.
02.	Antibacterial Effect of Silver Nanoparticles obtained by Green Synthesis Method using Millettia Pinnata aqueous extract	EPRA	ISSN: 2455-7838, Volume 4, Issue 9, IF – 6.260, Pg. No.61-67.
03.	Studies on growth and various properties of Urea doped tetra glycine barium chloride crystals.	National Seminar on New Materials Research and Nano Technology. (2012)	ISBN No. 978-93-81104-23-1 Pg. 342 – 345. 6
04.	Synthesis, Growth And Studies Of Di-Glycine Sodium Nitrate Single Crystals	International Journal Of New Innovations	ISSN:2277– 459 Vol.1 Issue 4, 15-17 March 2012, 1(4), 461 – 463.
05.	Synthesis, Growth and Characterization of Ammonium Chloride Doped Tris-Thiourea Zinc Sulphate Single Crystals	International Conference on Research in Condensed Matter Physics.	ISBN No.978-93-82062-63-9 (2012) Pg. 244-247.
06.	Growth and Characterization of Tetra glycine barium chloride crystals doped with strontium chloride.	International Conference on Advanced Materials.	ISBN No. 9-788190-949019. (2012) Pg. 235 – 239.

AS A RESOURCE PERSON (26)

S. No	Name of the Event	Name of the Sponsoring Agency	Place and Date
01.	Star College Programme on “Nano Technology”	Department of BioTechnology, Govt. Of India, New Delhi.	St.Xavier’s College, Palayamkottai. 22/01/2015
02.	National Conference on “Recent Developments in Effective Materials”	Recent Developments in Effective Materials – REDEEMS ’18	Sarah Tucker College, Palayamkottai. 19/02/2018

03.	Physics Association	Applications, Advances and Issues on Nano-Materials	St.Mary's College, Thoothukudi 17/12/2018
04.	UGC- National Seminar on “Emerging Trends in Physics”	Emerging Trends in Physics (NSETP-2019)	Sadakathullah Appa College, 10&11/01/2019
05.	UGC-National Seminar on “Emerging Trends in Physics”	Emerging Trends in Physics (NSETP-2020)	Sadakathullah Appa College, Tirunelveli. 28 & 29/02/2020

S.No.	Name of the Event	Place & Date	Served/Organized
01.	National Level Drawing Competition On "The Corona Warriors"	St.Xavier's College, Palayamkottai. 04/08/2020 to 20/08/2020	Organized
02.	“National Level Online Quiz”	St.Xavier's College, Palayamkottai. 15/06/2020 to 22/06/2020	Organized
03.	International Webinar On "Optical Nano Biosensors And Microfluidics In X-Ray Spectroscopy"	St.Xavier's College (Autonomous), Palayamkottai 24/07/2020	Served as Organizing Secretary
04.	National Webinar on “THE DYNAMIC SUN”	St.Xavier's College, Palayamkottai 16/08/2021	Served as Organizing Secretary
05.	International Conference on “Emerging Materials and It's Applications”	St.Xavier's College, Palayamkottai. 01/03/2022	Served as Organizing Secretary
06.	Summer Training Programme on “Domestic Appliance Services and Solar Panel Installation Techniques”	St.Xavier's College, Palayamkottai. 27/06/2022 to 01/07/2022	Served as Organizing Secretary

WEBMINARS/SEMINARS/ CONFERENCES / SYMPOSIA / WORKSHOP
PAPER PRESENTED: National () International ()

S. No	Name of the Event	Name of the Sponsoring Agency	Place and Date
01.	National Seminar on “Recent Advances in Chemical Research(RACR – 2017)”	UGC	V.H.N.Senthikumara Nadar College, 24 & 25/01/2017
02.	National Seminar on “Recent Trends in Materials Science”	UGC	Sadakathullah Appa College, 06/03/2017

WEBMINARS/SEMINARS/ CONFERENCES / SYMPOSIA / WORKSHOP
ATTENDED:

S. No	Name of the Event	Name of the Sponsoring Agency	Place and Date
01 .	Orientation Programme on “Innovative Teaching Strategies for Student-Centered Education”	IQAC	St.Xavier’s College, Palayamkottai. 05/07/2014
02 .	Orientation Programme on “Classroom Management and Teaching Skills”	IQAC	St.Xavier’s College, Palayamkottai. 21/08/2014
03 .	National Seminar on “Innovations in Student-centered Teaching – Learning Process in 21 st Century”	NAAC-IQAC	St.Xavier’s College, Palayamkottai. 29&30/01/2015
04 .	International Conference on “Solar Energy”	Department of Physics,	St.Mary’s College, Thoothukudi 11/02/2015
05 .	Workshop on “Physics in Engineering”	TEQIP II	Thiagarajar College of Engineering, Madurai. 05&06/11/2015
06 .	International Conference on “Foundations of Human Excellence”	School of Human Excellence	Loyola College, Chennai. 03 to 05/02/2016
07 .	State-Level Seminar on “Equity and Access: Women Empowerment in Higher Institutions”	TANSCHE	St.Xavier’s College, Palayamkottai. 11/03/2016
08 .	Orientation Programme on “Millennium Psychology of Students”	IQAC	St.Xavier’s College, Palayamkottai. 14&15/06/2016
09 .	Seminar on “Psychology of Students”	IQAC	St.Xavier’s College, Palayamkottai. 30/09/2016
10 .	Orientation Programme on “Counselling and Mentoring”	IQAC	St.Xavier’s College, Palayamkottai. 19&20/06/2017
11 .	Online Course on “HOUSEHOLD ELECTRICAL DEVICES AND	Department of Physics	AVS College of Arts & Science, Salem.

	APPLIANCES"		20/04/2020 & 21/04/2020
12	National Webinar	Department of Science & Humanities	Er.Perumal Manimekalai college of Engineering, Hosur 8/05/2020
13	Symposium on "International Day of Light"	IEEE and Photonic Society and SPIE Student Chapters	IIT, Guwahati, 16/05/2020
14	National Webinar on "SUPERCAPACITORS : NEW AGE ENERGY STORAGE DEVICES"	Department of Physics	Ayya Nadar Janaki Ammal College, Sivakasi. 19/05/2020
15	National Webinar on "History of Nuclear Fission"	Department of Physics	V.O.Chidambaram College, Thoothukudi. 25/05/2020
16	National Webinar	Department of Physics	V.O.Chidambaram College, Thoothukudi. 01/06/2020
17	National Webinar On "Recent Trends In Crystal Growth"	Department of Physics	St.Xavier's College (Autonomous), Palayamkottai 10/07/2020
18	International Webinar On "Frontiers On Nanotechnology And Applications (Fina 2020)"	Department of Physics	St.Xavier's College (Autonomous), Palayamkottai 15/07/2020
19	International Webinar On "Recent Advances In Chemical Sciences"	Department Of Chemistry And Research	St.Xavier's College, Palayamkottai 18/07/2020
20	International Webinar on "Recent Advances in Chemical Sciences"	Department of Chemistry	St.Xavier's College, Palayamkottai 28/07/2020
21	National Seminar on "Recent Trends in Physical Sciences"	Department of Physics in collaboration with IQAC	Government Lahiri P.G. College, Koriya. 30/07/2020
22	International Webinar on "Quantum Materials and Nanoparticles for Advanced Application"	Department of Physics,	Kamaraj College, Thoothukudi 06/08/2020
23	International Webinar on "Astronomy and Astrophysics" -	Department of Applied Physics	Karunya Institute of Technology & Sciences, Coimbatore 01/07/2021
24	International Webinar on "Astronomy and Astrophysics" entitled "The Dark Side of the Universe".	Department of Applied Physics	Karunya Institute of Technology & Sciences, Coimbatore 22/07/2021
25	National Webinar on "Matrices in Physics"	Research Department of Physics	St.Xavier's College, Palayamkottai 04/08/2021

26	National Webinar	Research Department of Physics	St.Xavier's College, Palayamkottai 19/08/2021
27	Summer Training Programme on Domestic Appliance Services and Solar Panel Installation Techniques	Department of Physics	St.Xavier's College (Autonomous), Palayamkottai 27/06/2022 to 01/07/2022
28	“Orientation Programme for Teachers”	IQAC	St.Xavier's College, Palayamkottai. 15/07/2022 & 16/07/2022
29	“SXC – Centenary – Faculty Empowerment Programme (FEP)”	IQAC	St.Xavier's College, Palayamkottai. 23/07/2022
30	Orientation Programme for Teachers	IQAC	St.Xavier's College, Palayamkottai 16 & 17.06.2023
31	Workshp on UV Spectrophotometer	Department of Physics	St.Xavier's College, Palayamkottai 27.07.2023
32	Workshop on Research Publications in Scopus Indexed Journals	Department of Physics	St Xaviers College (Autonomous) Palayamkottai 25.08.2023
33	E-Content Preparation & ICT - Tools	IQAC	St Xaviers College (Autonomous) Palayamkottai 19, 26.09.2023 & 03, 10, 17.10.2023
34	State Level Workshop on Gaussian 16W	Department of Physics	St Xaviers College (Autonomous) Palayamkottai 08.12.2023
35	Workshop on Publications in Journals	IQAC	St Xaviers College (Autonomous) Palayamkottai 13.12.2023
36	ICT –Enabled Teaching and Learning	IQAC	St Xaviers College (Autonomous) Palayamkottai 29/05/2024-14/06/2024
37	Teaching Teachers: Style and Professionalism	IQAC	St Xaviers College (Autonomous) Palayamkottai 23/07/2024
38	Preparation and Finalizing Research Papers For Journals Recognized By the Institute For Scientific Information	IQAC	St.Xavier's College, Palayamkottai. 08/08/2024

39	International conference Cum Workshop on “ The Techniques on Nanomaterials Characterization, Hydrogen Energy and Fuel Cells”	Department of Physics	St Xaviers College (Autonomous) Palayamkottai 18/02/2025-19/02/2025
40	“ Nurturing Minds, Igniting Hearts: An Orientation towards Ignition Pedagogy, Holistic Well-being and Outcome Based Learning”	IQAC	St Xaviers College (Autonomous) Palayamkottai 11/06/2025-13/06/2025

COUNTRIES VISITED

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EXTRA-CURRICULAR ACTIVITIES/ CO-CURRICULAR ACTIVITIES

ATTENDED(NCC/NSS/YRC/SPORTS/LITERARY AND CULTURAL ACTIVITIES)

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Date: 19/07/2025

Name: Dr.B.Helina