



DR. I. JANET SHERLY

Designation : Assistant Professor
Department : Physics
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Languages Proficiency

Read : English & Tamil
Write : English & Tamil
Speak : English & Tamil

1. QUALIFICATION

S. No.	Degree / Diploma / Certificate	Discipline	Name of the Institution	Year of Passing
1.	UG	Physics	The Gandhigram Rural Institute – Deemed to be University	2012
2.	PG	Physics	The Gandhigram Rural Institute – Deemed to be University	2014
3.	M.Phil.	Physics	The Gandhigram Rural Institute – Deemed to be University	2015
4.	Ph.D.	Physics	The Gandhigram Rural Institute – Deemed to be University	2023
5.	SET/NET	SET	-	2016
6.	Other (Additional Certification)	GATE	-	2019

2. TEACHING EXPERIENCE / OTHER EXPERIENCE

S. No.	Institution / Organization	From - To
1.	Fatima college	13.09.2021 – Till now

3. POSITION HELD IN FATIMA (VICE PRINCIPAL, HOD, DEAN, COORDINATOR, MEMBER ETC.)

S. No.	Name of the Position	From - To
1.	NSS Programme Officer	2022 - 2023

4. AREAS OF SPECIALIZATION

❖ SEMICONDUCTOR NANOSTRUCTURES

5. NATIONAL/INTERNATIONAL SEMINARS, WORKSHOPS, CONFERENCES & SYMPOSIUMS

S. No.	Programme & Theme	Organized by	Date	Title of the Paper
1.	Second International Conference on Materials science and Technology	St. Thomas College, Palai, Kerala	June 05 - 08, 2016	Effect of Geometry on the Exciton Binding Energy in a Quantum Ring
2.	International Conference on Renewable Energy Science and Technology	Alagappa University, Karaikudi.	Mar. 10 & 11, 2017	Binding Energy of a Donor in a Concentric Double Quantum Ring
3.	International Conference on Nanoscience and Nanotechnology	SRM University, Kattankulathur, India	Aug. 09 - 11, 2017	Binding Energy of a Donor in a Concentric Double Quantum Ring Structure
4.	International Conference on Recent Advances in Materials	National College, Tiruchirappalli.	Mar.22 & 23, 2018	Effect of Magnetic Field on the Binding Energy of a Donor in a Single Quantum Ring
5.	International Conference on Advanced Nanomaterials for Energy and Healthcare Applications	KSR College of Arts and Science for Women Thiruchengodu, Tamilnadu, India.	Aug. 31 - Sep. 01, 2018	Excitonic States in a Concentric Double Quantum Ring Structures
6.	International Conference on Exploring Nanostructures for Enhanced Power Conversion Efficiency of Solar Cells	The Gandhigram Rural Institute- Deemed to be University, Gandhigram	Jan. 07 & 08, 2019	Theoretical Investigation on the Inter band Transition Energy of an Exciton in a Double Quantum Ring for Solar Cell Applications
7.	International Conference on Nanoscience and Nanotechnology	SRM University, Kattankulathur, India	Jan. 28 - 30, 2019	Influence of Electric Field of Exciton in a Concentric Double Quantum Ring Embedded in SiO ₂ matrix
8.	National Conference on Advanced materials for Energy and Environmental Applications	Bharathiar University, Coimbatore.	Mar. 18 - 20, 2015	Effect of Stress and Nonparabolicity on the Diamagnetic Susceptibility of a Donor in a Double Quantum Well
9.	National Conference on Advanced materials for Energy and Environmental Applications	Bharathiar University, Coimbatore.	Mar. 18 - 20, 2015	Localisation of a Donor in a Double Quantum Well through Diamagnetic Susceptibility
10.	National Conference on Advances in Material Science	MVM College, Dindigul.	Feb. 12, 2016	Exciton Confined in a Quantum Ring: An Ideal One-Dimensional Structure
11.	National Conference on Recent Advances in the Applications of Macromolecular Materials	The Gandhigram Rural Institute, Gandhigram	Mar. 02 & 03, 2017	Effect of Ring Width on Binding Energy of Donor in a Quantum Ring
12.	26 th DAE-BRNS National Laser Symposium	Bhabha Atomic Research Centre, Mumbai, India.	Dec. 20 - 23, 2017	Oscillator Strength of an Exciton in a Single Parabolic Quantum Ring

S. No.	Programme & Theme	Organized by	Date	Title of the Paper
13.	62 nd DAE-Solid State Physics Symposium	Bhabha Atomic Research Centre, Mumbai, India	Dec. 26 - 30, 2017	Combined Effect of Stress and Nonparabolicity on the Diamagnetic Susceptibility of Donor States in a Double Quantum well
14.	64 th DAE-Solid State Physics Symposium	Indian Institute of Technology, Jodhpur, India.	Dec. 18 - 22, 2019	Stability of Indirect and Direct Excitons through Diamagnetic Susceptibility in a Concentric Double Quantum Ring Structure
15.	64 th DAE-Solid State Physics Symposium	Indian Institute of Technology, Jodhpur, India.	Dec. 18 - 22, 2019	Carrier Dynamics in Quantum Ring in a Quantum Well: Magnetic Field and Non-Parabolicity Effects

6. PARTICIPATED ON NATIONAL/INTERNATIONAL SEMINARS, WORKSHOPS, CONFERENCES & SYMPOSIUMS

S. No.	Programme & Theme	Organized by	Date
1.	National Workshop on Recent Advances and Applications of Material Science	Gandhigram Rural Institute- Deemed to be University, Gandhigram.	Nov. 02 & 03, 2017
2.	National Workshop on Advanced Materials and their Applications (NWAMA-2020)	Gandhigram Rural Institute- Deemed to be University, Gandhigram.	Feb. 03 & 04, 2020
3.	International Seminar on Recent Trends in Materials and Environmental Science	Seethalakshmi Ramaswamy College, Tiruchirapalli.	Aug. 22, 2017
4.	One Day National Seminar on Online Tools for Research	Gandhigram Rural Institute, Gandhigram.	Jan. 11, 2018
5.	Webinar on Characterization Techniques for Nanomaterials	The National Institute of Engineering, Karnataka	June 26, 2020
6.	International Webinar on Semiconductor Design Process in Industries- 2k20	Manonmaniam Sundaranar University Constituent College	June 29, 2020
7.	International Webinar on Exploring the Opportunities for Research Abroad and Motivation for Young Minds in STEM	Sarah Tucker College (Autonomous), Tirunelveli.	July 03, 2020
8.	National Level Webinar on Exploration of Physical Science and Engineering with Mathematica	Gayatri Vidya Parishad College for Degree and PG Courses, Visakhapatnam.	July 06, 2020
9.	National Webinar on Glimpse of Nanomaterials	P. A. College of Engineering and Technology, Pollachi	July 09 & 10, 2020
10.	Webinar on Nanoscale Trends and Applications	Francis Xavier Engineering College, Tirunelveli.	July 10, 2020
11.	National Level Webinar on Nanoparticles for High Magnetic Field Applications	Chikkaiah Naicker College, Erode.	July 23, 2020

7. ARTICLES PUBLISHED IN JOURNALS/PROCEEDINGS/MAGAZINES/BOOKS

S. No.	Journal/Proceeding/Magazine/Book Name	Title of the Article	Month/Year	Vol. No.	Issue No.	Page No.	ISSN	Publisher
1.	Journal of Applied Physics	Tailoring the Electronic Properties of Concentric Double Quantum Rings in the Presence of a Donor Impurity	2019	125		165707		AIP
2.	Superlattices and Microstructures	Influence of Electric Field on Direct and Indirect Exciton in a Concentrically Coupled Quantum Ring Heterostructure Embedded in SiO ₂ Matrix	2020	137		106334		ELSEVIER
3.	Physica Scripta	Effect of Confining Potential on the Exciton Stability at Various Locations in a Parabolic and Square Quantum Ring	2020	95		055102		IOP
4.	Physica B	Tuning the Dynamics of Bound Magnetic Polaron in Asymmetric Cd _{1-x} Mn _x Te/Cd _{1-x} 2Mn _x 2Te Semi magnetic Concentric Double Quantum Rings: Through Magnetic Ion Concentration and Magnetic Field	2021	600		412615		ELSEVIER
5.	European Physical Journal Plus	Diluted Magnetic Concentric Double Quantum Rings Embedded in a Quantum Well: Effect of Magnetic Field and Ring Dimension	2021	136(6)		1-13		SPRINGER
6.	Physica Scripta	Electrically induced direct to indirect exciton transition in CdTe/CdMnTe concentric double quantum ring rooted in	2024	99				IOP

S. No.	Journal/Proceeding/Magazine/Book Name	Title of the Article	Month/Year	Vol. No.	Issue No.	Page No.	ISSN	Publisher
		SiO ₂ matrix						
7.	AIP Conference Proceedings	Combined Effect of Stress and Nonparabolicity on the Diamagnetic Susceptibility of Donor States in a Double Quantum Well	2018	1942		050085		AIP
8.	AIP Conference Proceedings	Stability of Indirect and Direct Excitons through Diamagnetic Susceptibility in a Concentric Double Quantum Ring Structure	2020	2265		030064		AIP
9.	AIP Conference Proceedings	Carrier Dynamics in Quantum Ring in a Quantum Well: Magnetic Field and Non-Parabolicity Effects	2020	2265		030063		AIP