




# SLC (University of Delhi) Shyam Lal College



NAAC A++

## Faculty Profile

<b>Title</b>	Dr	<b>First Name</b>	Monica	<b>Last Name</b>	Gambhir	<b>Photograph</b> 
<b>Designation</b>	Assistant Professor					
<b>Department</b>	Physics					
<b>Address</b>						
<b>Email</b>	<a href="mailto:monica.gambhir@shyamlal.du.ac.in">monica.gambhir@shyamlal.du.ac.in</a>					
<b>Web-Page</b>						

### **Educational Qualification**

Degree	Subject	University/ College/Institution	Year
PhD	Physics	Department of Physics and Astrophysics, University of Delhi.	2010
M.Sc.	Physics	Miranda House College, University of Delhi	2003
B.Sc.(Hons.)	Physics	Miranda House College, University of Delhi	2000

### **Experience**

	Name of the University/College/ Institute/Organisation	Designation & Status (Permanent/Ad-hoc)	From	To	Effective time period
Teaching	Shyam Lal College, University of Delhi	Permanent	August 2023	Continuing	
	Swami Shraddhanand College, University of Delhi	Ad-hoc	August 2011	June 2023	12 years
	Miranda House, University of Delhi	Ad-hoc			1.5 year
	Daulat Ram College, University of Delhi	Ad-hoc			2.5 years
Research/ Corporate					
Consultancy					

### **Teaching-Learning Process (Academic Year 2022-23 Onwards)**

Are You using ICT (LMS, E-Resources)?	If yes, please give the details below:	
	Name	Total Numbers
E-Resources		
Techniques and		

Platforms								
<b>Career Advancement and Contribution to College Corporate Life (2022-23 Onwards)</b>								
	Name of the Committee/ Centre/ Society/ Cell	Designation	From	To				
Convenor/Member of Committees	Admission Committee of B.Sc (Physical Science)	Convener	2022	2023				
	Fee Concession Committee	Member	2022	2023				
	Computer Committee	Member	2022	2023				
	Fee Concession Committee – Science	Member	2023	2024				
	Fine Arts Committee (Performing)	Member	2023	2024				
Any Other Administrative Responsibility (Bursar, Coordinator, Superintendent etc.)								
<b>Areas of Interest/Specialisation</b>								
S. No.	Areas of Interest/ Specialisation							
1	Condensed Matter Physics							
2	Computational Physics							
3.	Quantum Physics							
<b>Subjects Taught</b>								
S. No.	Subject			S. No.	Subject			
1.	Mathematical Physics			5.	Electromagnetic Theory			
2.	Quantum Physics			6.	Electricity and Magnetism			
3.	Elements of Modern Physics			7.	Mechanics			
4.	Solid State Physics			8.	Waves and Optics			
<b>Publications: Citation Index in Scopus/Web of Science or Pub Med/ Indian Citation Index</b>								
Title of Paper	Name of the Author	Title of the Journal	Year of Publication	Citati on Index	h-Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self- citations	Impact factor, if any
Impact of asymmetry of Razavy-type coupled well system and static electric field on the time- dynamical studies of entanglement		Eur. Phys. J. Plus	2023			University of Delhi		
Anomalous Stark effect and optical		Current Applied Physics	2023			University of Delhi		

properties of exciton in a quantum dot with linear potential under ionized donor hydrogenic impurity								
Effect of electric and magnetic field on thermal property of two dimensional harmonic oscillator		Results in Physics	2023			University of Delhi		
Investigation of linear and third-order nonlinear optical properties in a laser-dressed parabolic quantum dot with a hydrogenic donor impurity in the presence of a static electric field		Indian J Phys	2023			University of Delhi		
Pressure and temperature-dependent EIT studies in a parabolic quantum dot coupled with excitonic effects in a static magnetic field		Pramana – J. Phys.	2021			University of Delhi		
Dependence of nonlinear optical properties on electrostatic interaction in an excitonic parabolic quantum dot in		Journal of Modern Optics	2021			University of Delhi		

a static magnetic field,								
Non-perturbative multiphoton excitation studies in an excitonic coupled quantum well system using high-intensity THz laser fields.		Chin. Phys. B	2019			University of Delhi		

**Books and Chapters in Edited Volumes/Books published, and papers in National /International conference Proceeding per teacher during the Year**

Title of Book/Paper/ Book Chapter	Publisher	National/International	Year

**Conference/ Seminar/ Symposium/ Workshop/ Presentation**

Sr. No.	National/ International/state	Topic	Presentation/Attended /Resource Person	Date	Duration	
1.	International Conference	“International Conference on Atomic, Molecular, Material, Nano & Optical Physics with Applications Delhi Technological University (DTU), New Delhi, India.	Invited Talk		December 20-22, 2023	Conferences
2.	International Conference	International Conference on “Recent Advances in Basic and Applied Sciences” held at Faculty of Sciences, Baba Mastnath University, Asthal Bohar (Rohtak), on 27th-28th August 2021.	Key Note Address		27th-28th August 2021	
3.	International Conference	International Conference on Recent Advances in Functional Materials organized by the Department of Physics, ARSD College	Oral Presentation		14 -16th March 2022.	

		University of Delhi from				<i>Workshops</i>
4.	National	National Conference On Recent Advances in Materials and Field Theory (NCRAMFT), Department of Applied Science, Bhagwan Parshuram Institute of Technology (BPIT), Rohini	Oral presentation		December 2015.	

#### Research Projects/ Innovation Projects (Major Grants/Research Collaboration)

S.No.	Title of the Project	Funding Agency	Status/Output

#### Research Guidance (Ph. D./ M. Phil.)

	No. of Ph.D. Students	No. of M.Phil. Students
Awarded		
Submitted		
Under Progress		

#### Fellowships/Awards /Distinctions/Recognitions

Year of Award	Name of the Fellowship/Award/ Distinction/ Recognition	Designation	Name of the Academic Bodies /Association	International /National/ State

#### Incentive to the teachers who receive recognition/awards

State	National	International

#### Association with the Professional Bodies

	Name of the Organisation	Year
Membership		
Any Other		

#### Development of E-Learning Delivery Process/Material

S.No.	Title of the Module	Recognized by/Submitted at/ Delivered at any government setup

#### Refresher/ Orientation Programme/ FDP / Other Specialised Courses

S.No.	Topic	Name of the Organiser	Place	Duration and Year
1.	4-Week Faculty Induction/	Teaching Learning Centre	Delhi	21 August – 19

	Orientation Programme for “Faculty in Universities/ Colleges/Institutes of Higher Education”	Ramanujan College, University of Delhi		September, 2023
2.	One Week Faculty Development Program (Online-Self Paced) on “Advanced Python Programming for All”	Department Of Electronic Science & Internal Quality Assurance Cell (Iqac) Atma Ram Sanatan Dharma College And Teaching Learning Centre, Ramanujan College (University Of Delhi)	Delhi	09 <sup>th</sup> October – 15 <sup>th</sup> October, 2023
3.	Two Weeks Online Training Programme on NEP 2020 Orientation & Sensitization Programme”	Organized by Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College, University of Delhi	Delhi	01st January – 14th January, 2024
4.	Faculty Induction Programme: NEP 2020	Organized by University of Delhi	Delhi	December 1, 2023
5.	One Week Online Faculty Development Programme On “Recent Advances in Basic and Applied Sciences”	Shyam Lal College in collaboration with Mahatma Hansraj Malaviya Mission Teacher Training Centre (Hansraj College, University of Delhi)	Delhi	11th – 16th December, 2023

### **Declaration**

I do hereby solemnly declare that the information given and the statements made by me are correct and true to the best of my knowledge.

**Signature with Full Name**