Name		DR. POONAM SILOTIA				
Designation		PROFESSOR				
Department		DEPARTMENT OF PHYSICS & ASTROPHYSICS				
Address	(Campus)	DEPARTMENT OF PHYSICS & ASTROPHYSICS UNIVERSITY OF DELHI DELHI- 110 007				
(Residence)		D-13, MAURICE NAGAR, UNIVERSITY OF DELHI, DELHI- 110 007				
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Web-Page						
Education		Ph.D.				
Subject		Institution	Year	Det	ails	
CONDENSED MATTER PHYSICS (THEORETICAL)		UNIVERSITY OF DELHI	1992	ATC FUN	sis topic: DMIC AUTO-CORRELATION NCTIONS IN HIGHLY SOTROPIC CRYSTALS AND	



SIMPLE PROTEINS

Career Profile							
Organisation / Institution	Designation	Duration	Role				
C.R.R.I.T Kanjhawala	Lecturer	1.08.85-1.07.90	Taught Diploma classes of Civil Engg. and Electronics Engg.				
Deen Dayal Upadhyaya College	Lecturer	16.10.92-1.11.92 8.01.93-30.04.93	Research and Teaching (B.Sc. classes)				
Department of Physics & Astrophysics, University of Delhi	Research Associate	1.05.93-14.09.93	Research work				
Department of Physics & Astrophysics, University of Delhi	Lecturer	16.09.93-1.11.97	Research and Teaching				
Department of Physics & Astrophysics, University of Delhi	Lecturer Senior Scale	2.11.97-2.11.01	Research and Teaching				
Department of Physics & Astrophysics, University of Delhi	Reader /Associate Professor	3.11.01-31.12.10	Research and Teaching				
Department of Physics & Astrophysics, University of Delhi	Professor	01.01.11-till date	Research and Teaching				

# CONDENSED MATTER PHYSICS (THEORETICAL)

Research Interests / Specialization

Atomic auto-correlation functions, Bose-Einstein Condensation, Fullerenes, Collective dynamics of fluids, Optical transitions in semiconductor hetero-structures, Manipulation of molecules in inhomogeneous fields.

## Teaching Experience (Subjects/Courses Taught)

Twenty five years of post-graduate teaching of both 'core' and 'special' papers. Practical classes of M.Sc. Previous (Solid State Physics Lab.)

## **Honors & Awards**

- 1. Awarded 'Research Associateship' of UGC 1993
- 2. Awarded 'Research Associateship' of Department of Physics & Astrophysics, University of Delhi, Delhi.

# **Publications**

Please see the attached list of publications

#### Member of:

- 1. Indian Association of Physics Teachers (IAPT)
- 2. Indian Women's Science Association (IWSA)

## Other Details

1. Guided and supervised students for the award of Ph.D. degree:

Awarded: 06

- 2. Was associated with the election of office bearers of Departmental Physical Society.
- 3. Took Educational tours outside Delhi twice and once to NSC, Delhi
- 4. Was involved in the training program of Laboratory staff.
- 5. Warden of Rajiv Gandhi Hostel for Girls, Dhaka Hostel Complex from 30<sup>th</sup> April 2012- 31<sup>st</sup> Jan. 2018.
- 6. Provost of Rajiv Gandhi Hostel for Girls, Dhaka Hostel Complex from 1<sup>st</sup> Feb. 2018- till date.

# <u>LIST OF PUBLICATIONS OF DR. POONAM SILOTIA</u> <u>LAST FIVE YEARS</u>

- 1. Asymmetric effects on the optical properties of double-quantum well systems, Optical Engineering, 53, 027105 (2014). **Poonam Silotia**, Kriti Batra and Vinod Prasad.
- 2. Multiple quantum well in static magnetic and intense laser pulses, Physics Letters A, 378, 3561 (2014). **Poonam Silotia**, Hira Joshi and Vinod Prasad.
- 3. Two electron quantum ring in short pulses, Chinese Physics B, 24, 020303 (2015). **Poonam Silotia**, Rakesh Kumar Meena and Vinod Prasad.
- 4. Acoustic phonon spectrum of unaligned multiwalled carbon nanotubes and zero phonon Rayleigh Mossbauer scattering, Indian J. Phys., 89, 417 (2015) **Poonam Silotia**, S. Dabas, A. Saxena, S.P.Tewari.
- 5. Engineering optical properties of double quantum well system, accepted for publication in IJPAP (2016). **Poonam Silotia**, R. Giri and Vinod Prasad.
- 6. Excitation of exciton states on a curved surface, Physics Letters A 380, 2116 (2016). **Poonam Silotia**, Vinod Prasad.
- 7. Adsorbed molecules in external fields: Effect of confining potential, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 169, 238 (2016). Ashish Tyagi, **Poonam Silotia**, Anjali Maan, Vinod Prasad.
- 8. Spectra of confined positronium, Physics of Plasma, 24, 122118 (2017). D. Munjal, **Poonam Silotia** and Vinod Prasad.
- 9. Erratum: "Spectra of confined positronium" [Phys. Plasmas, 24, 122118 (2017)], Physics of Plasma, 25, 079901 (2018). D. Munjal, **Poonam Silotia** and Vinod Prasad.
- 10. Second harmonic generation in a disk shaped quantum dot in the presence of spin-orbit interaction, Physics Letters A, 382, 2061 (2018). Vijit V. Nautiyal and **Poonam Silotia.**
- 11. Spectra of distorted quantum ring in external fields, Indian Journal of Pure and Applied Physics, 56, 941 (2018). **Poonam Silotia**, Rajesh Giri and Vinod Prasad.

### PARTICIPATION IN CONFERENCES/ SYMPOSIA/ WORKSHOPS

(Both National and International)

- "Absorption spectra of two-electron quantum ring", *National Conference on Nanotechnology and Renewable energy (NCNRE-2014)*, April 28-29 (2014), Poster presentation, Jamia Millia Islamia Central University, New Delhi.
   Poonam Silotia, Rakesh Kumar Meena and Vinod Prasad.
- 2. "Quantum heterostructures in external fields, In National Conference on "Recent Advances in Materials and Field Theory", Bhagwan Parshuram Institute of Technology, Delhi, GGSIP University, Delhi, December 28-29, 2015 (Invited talk).
- 3. Dynamics of weakly bound atoms in the presence of two color fields and magnetic field. Kriti Batra, Anjali Maan, **Poonam Silotia** and Vinod Prasad, National Conference on "Recent Advances in Materials and Field Theory", Bhagwan Parshuram Institute of Technology, Delhi, GGSIP University, Delhi, December 28-29, 2015.
- 4. "Excitonic transitions on a curved surface in external fields, **Poonam Silotia**, R. K. Meena and V. Prasad, National Conference *on "Recent Advances in Materials and Field Theory"*, Bhagwan Parshuram Institute of Technology, Delhi, GGSIP University, Delhi, December 28-29, 2015.
- 5. Excitonic transitions in a spherical quantum dot modified by Kratzer potential in a magnetic field, Poster presentation, Varsha, P. Silotia, V. Prasad, Poster presentation at "International Conference on Physics, Society and Technology (ICPST-2019)" organised by Deshbandhu College and Department of Physics & Astrophysics, Conference Hall, Delhi University from 17-19 January 2019.

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