



### Career Profile

- Worked as Physics teacher (11th class) for 3 months in “Sachdeva Public School” FPblock, Maurya Enclave, Pitampura, Delhi-110088 from 01-08-2008 to 31-10-2008.
- Worked as Assistant Professor (Guest) in A.R.S.D. (Atma Ram Sanatan Dharma) College, South Campus, Dhaula Kuan, New Delhi-110021 from January 2012 to April 2012.
- Worked as Assistant Professor (Ad-hoc) in Motilal Nehru College, South Campus, Dhaula Kuan, New Delhi-110021, from July 2013 to February 2015.
- Worked as Assistant Professor (Ad-hoc) in Lady Irwin College, Sikandra Road, New Delhi-110001 from July 2015 to November 2015.
- Worked as guest in Lady Irwin College DU and ANDC DU from January 2016 to April 2016.
- Currently working as Assistant Professor (Adhoc) in Shivaji College, DU from 2016 onwards.

### Administrative Assignments

- Member of organizing committee in the workshop named “Pratibimb” organized by Physics Dept. Shivaji College held on 31<sup>st</sup> January 2017.
- Member of organizing committee in the workshop “Spectrum-2018” organized on 12<sup>th</sup> Feb 2018 in Shivaji College.
- Member of organizing committee in the Annual Fest “Invenio” organized on 30<sup>th</sup> – 31<sup>st</sup> March 2017 in Shivaji College.
- Member of organizing committee in the seminar “Semiconductor Opto-electronic Devices: A Perspective” organized on 27<sup>th</sup> Oct 2017 in Shivaji College.
- Member of organizing committee in the Annual Fest “Tech-Invenio” organized on 19<sup>th</sup> – 20<sup>th</sup> March 2018 in Shivaji College.
- Member of organizing committee in the Physics Society event “Invenio” organized on 30<sup>th</sup> September 2019 in Shivaji College.
- **Committee Member** of “Research & Innovation Cell” of Shivaji College, University of Delhi for the academic year 2021-22.
- **Committee Member** of “Cultural Committee” of Shivaji College, University of Delhi for the academic year 2021-22.
- **Committee Member** of “Magazine Committee” of Shivaji College, University of Delhi for the academic year 2021-22.
- Member of organizing committee for the screening & discussion of film by “SPIC MACAY IN COLLABORATION WITH SHIVAJI COLLEGE” on 27<sup>th</sup> August 2021.
- Member of organizing committee in the National Level Webinar on “Art of Academic Writing : A Systematic Approach” organized by “Research & Innovation Cell of Shivaji College, University of Delhi, India” on 4<sup>th</sup> September 2021.

### Areas of Interest/Specialisation

THEORETICAL CONDENSED MATTER PHYSICS, COMPUTATIONAL PHYSICS & QUANTUM OPTICS, COLD ATOMS, CHAOS IN BEC

### Subjects Taught

Mathematical Physics (I, II, III), Mechanics, C/C++/Scilab/Microprocessors, Solid State Physics, EMT/Electricity & Magnetism, Waves & Optics, Thermal & Statistical Mechanics, Nuclear & Particle Physics, Applied Optics

**Innovation Project/Research Projects (Major Grants/Research Collaboration)**

**Publications Profile (Research Papers/Books)**

- Entangling Two Bose Einstein Condensates in a Double Cavity System.  
Tarun Kumar, Aranya B. Bhattacharjee, **Priyanka Verma** and Man Mohan., Journal of Physics B At. Mol.Opt. Phys.44, 065302, (25-02-2011).
- Optomechanical Effects in Superfluid Properties of BEC in an Optical Lattice.  
**Priyanka Verma**, A. B. Bhattacharjee, and Man Mohan., Cent. Europ Jour. Physics 10, 335-341 (19-11-2012).
- Optomechanical Effects in self-organization of a Bose-Einstein Condensate in an Optical Cavity.  
**Priyanka Verma**, Aranya B. Bhattacharjee and Man Mohan., Canadian Journal of Physics 90, 1223–1231 (15-08-2012).
- Oscillations in a Parametrically Excited Bose-Einstein Condensate in a Combined Harmonic and Optical Lattice Trap.  
**Priyanka Verma**, Aranya B. Bhattacharjee and Man Mohan., Cent. Europ Jour. Physics 10, 335-341 (24-02-2012).
- Non Degenerate Dual Atomic Parametric Amplifier: Entangled Atomic Fields.  
Tarun Kumar, Aranya B. Bhattacharjee, **Priyanka Verma**, Narine Gevorgyan and Man Mohan., Cent.Europ Jour. Physics 10, 132-139 (04-11-2012).
- Chaos in BEC trapped in tilted optical superlattice potential with attractive interaction  
**Priyanka Verma**, Aranya B. Bhattacharjee and Man Mohan., Journal of Physics : Conference Series 350 (14-03-2012) 012003 doi:10.1088/17426596/350/012003.
- Chaos in Dynamical Bose-Einstein Condensate.  
**Priyanka Verma**, A. B. Bhattacharjee and Man Mohan., Journal of Chemical, Biological and Physical Sciences, Section-C, Vol. 6, No. 2 (504-514), (10-04-2016).
- The Matrix formulations and Algebraic equations using Scilab.  
Ravindra Singh, A. K. Shukla, S.S.Gaur, **Priyanka Verma**, Polly Biswas and Omwati Rana., National Journal of Environment and Scientific Research (NJESR), Vol. 2, Issue 7, (22-7-2021).
- Comparison of Differential Equation by ordinary method and Euler’s method using Scilab.  
R. Singh, A. K. Shukla, S.S.Gaur, **Priyanka Verma**, P Biswas and O. Rana., Vidyabharati International Interdisciplinary Research Journal (Special Issue), August 2021 Part-II, 126-128, ISSN 2319-4979

**Conference/Seminar/Faculty Development Programme/Workshop**

- International DAE-BRNS Symposium on Atomic, Molecular and Optical Physics, Inter University Accelerator Centre (IUAC), New Delhi, 10<sup>th</sup> – 13<sup>th</sup> February **2009**.
- International School on Cold ions and atoms, IACS, Kolkata, 6<sup>th</sup> – 16<sup>th</sup> January, **2010**.
- “Workshop on Information Literacy and Competency”, Conference Centre, Opposite Department of Botany, University of Delhi (North Campus), Delhi-110007. 23<sup>rd</sup> February **2010**.
- Introductory Workshop I (workshop on computational tools used in scientific research), School of Physical Sciences, Jawaharlal Nehru University, Delhi, India, 21<sup>st</sup> February, **2010**.
- Introductory Workshop II (workshop on computational tools used in scientific research) DSK Lecture Hall, Department of Physics and Astrophysics, University of Delhi, Delhi-110007, India, 17<sup>th</sup> July, **2010**.
- International Conference on Research Frontiers in Ultra-Cold Atomic & Molecular Gases, ICTP (Goa), 10<sup>th</sup>–14<sup>th</sup> January, **2011**.
- 3<sup>rd</sup> International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with applications (CDAMOP 2011), Dept. of Physics & Astrophysics (University of Delhi, India), 14<sup>th</sup>–16<sup>th</sup> Dec., **2011**.
- International Conference on Nanomaterials & Nanotechnology, Conference Centre at University of Delhi, India. 18<sup>th</sup> -21<sup>st</sup> Dec., **2011**.
- International DAE-BRNS Symposium on Atomic, Molecular and Optical Physics 2012, Indian Institute of Science Education and Research (IISER) Kolkata, , 14<sup>th</sup> – 17<sup>th</sup> December **2012**.
- International advanced workshop on Non-Equilibrium Bosons: From driven condensates to Non-linear optics, ICTP (International Centre for Theoretical Physics), Trieste, Italy. 19<sup>th</sup> - 23<sup>rd</sup> August **2013**.
- Seminar on “Atomic, Molecular and Optical Physics (AMOP-2013)”, D. S. Kothari Lecture Hall, Department of Physics and Astrophysics, University of Delhi, Delhi-110007, India. 30<sup>th</sup> September **2013**.
- Course on “Digital Literacy for Teachers” (under UKIERI – UK India Education and Research Initiative) at COL (Campus of Open Learning), University of Delhi, India. 18<sup>th</sup> – 22<sup>nd</sup> November **2013**.
- International seminar on current trends in Quantum gases, BEC and solitons at Department of Physics, Panjab University, Chandigarh from 3<sup>rd</sup> March 2014 to 6<sup>th</sup> March **2014**.
- National workshop on analysis, differential equations & applications at Department of Mathematics & Statistics, Mohanlal Sukhadia University, Udaipur (Rajasthan) from 25<sup>th</sup> - 27<sup>th</sup> Feb **2016**.
- Faculty development programme (FDP) on Research Methodology and Data Analysis Using SPSS and AMOS at Satyawati College (Evening), University of Delhi, Ashok vihar, Phase III from 15<sup>th</sup>-20<sup>th</sup> March, **2017**.

- Seminar on Recent Advances In Atomic & Molecular Physics held at Deen Dayal Upadhyay College on 19th September **2017**.
- International Conference on “Quantum Dynamics of Disordered Interacting Systems” ICTP (International Centre for Theoretical Physics), Trieste, Italy. 11<sup>th</sup> – 15<sup>th</sup> June **2018**.
- Virtual Symposium on “International Day of Light (IDL-2020)” organized by IEEE Photonics society and SPIE student chapters, Department of Physics, IIT Guwahati on 16<sup>th</sup> May **2020**.
- National Webinar Series on “Experimental & Computational Tools For Materials Research (ECTMR) organized by Discipline of Natural Sciences, PDPM IIITDM Jabalpur and Department of Physics, Central University of Rajasthan from 1<sup>st</sup> June 2020 – 8<sup>th</sup> June **2020**.
- International Webinar on “An Introduction to Robust control by Q-CTRL” organized by “Q-Control company, Australia”, on 18<sup>th</sup> June **2020**.
- National Level Workshop on “Various Aspects of Research Funding, Academic Writing and Publication Ethics” organized by “Research Cell of Shivaji College, University of Delhi, India” on 30<sup>th</sup> January **2021**.
- National Level Webinar on “Art of Academic Writing : A Systematic Approach” organized by “Research & Innovation Cell of Shivaji College, University of Delhi, India” on 4<sup>th</sup> September **2021**.

#### PAPER PRESENTATION

- In National workshop on analysis, differential equations & applications at Department of Mathematics & Statistics, Mohanlal Sukhadia Univeristy, Udaipur (Rajasthan) from 25<sup>th</sup> - 27<sup>th</sup> Feb **2016**.

#### POSTER PRESENTATION IN

- In International conference OPTICS & its applications 2011, Yerevan State University, Armenia 5<sup>th</sup> -9<sup>th</sup> Sep. **2011**.
- In International conference CDAMOP 2011, Department of Physics & Astrophysics (University of Delhi, India), 14<sup>th</sup>-16<sup>th</sup> Dec., **2011**.
- Advanced workshop on Non-Equilibrium Bosons: From driven condensates to Non-linear optics, ICTP (International Centre for Theoretical Physics), Trieste, Italy. 19<sup>th</sup> -23<sup>rd</sup> August **2013**.
- International seminar on current trends in Quantum gases, BEC and solitons at Department of Physics, Panjab University, Chandigarh from 3<sup>rd</sup> March 2014 to 6<sup>th</sup> March **2014**.
- International Conference on “Quantum Dynamics of Disordered Interacting Systems” ICTP (International Centre for Theoretical Physics), Trieste, Italy. 11<sup>th</sup> – 15<sup>th</sup> June **2018**.

#### Research Guidance (*Supervision of Doctoral Thesis/Dissertations*)

#### Awards and Distinctions

Cleared UGC-Junior Research Fellowship in June 2009  
Cleared NET-LS in 2009 December

### Memberships

### Other Academic Activities

- Member of organizing committee in the International conference CDAMOP 2011 held at Department of Physics & Astrophysics (University of Delhi, India), 14<sup>th</sup> -16<sup>th</sup> December 2011.
- Coordinating for the content development of <http://vaisesika.org.in/index.html> from 2013.
- Member of organizing committee in the International conference CDAMOP 2015 held at Department of Physics & Astrophysics (University of Delhi, India), 11<sup>th</sup> -14<sup>th</sup> March 2015.
- Assisted in the content development with Dr. Aranya B. Bhattacharjee for Solid State Physics subject in e-pg pathshala.com initiative of Govt. of India (MHRD).
- Worked as a Resource person in the DST (gov. of india) INSPIRE CAMP organized by Shivaji College, DU, 14<sup>th</sup> -18<sup>th</sup> December 2016.

### Cultural/Extracurricular Activities

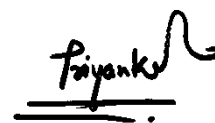
Women Cricket team member in Shivaji College on sports day held in 2017.

Participated and performed in the skit of “Ignited Week” event (dramatics) held in Department of Physics & Astrophysics, University of Delhi, India, February 2010.

Class representative, M.Sc. Physics 2<sup>nd</sup> year in 2008.

Participation in “Physics Fest (singing competition)” B.Sc. (Honors) II year 2005, Ramjas College, University of Delhi, Delhi-110007, India.

Participated and won in many school level, state level, national level competitions (speech, debate, poem recitation, science (math) quiz, cultural activities, dance etc) before 2003.



**Signature of Faculty Member**