

DR. RUBY GUPTA

Professor (Physics)



Email

rubygupta@ss.du.ac.in

Web-Page/Bio-data

Mobile:

Academic Qualifications: B.Sc., M.Sc., B.Ed., Ph.D

Teaching Experience (Year)

21 years

Research Experience(Year)

26 years

Area of Research

Plasma Physics

Publications

List of publications in International Journals:

1. TiN film Deposition using Dense Plasma focus.
M.P.Srivastava and **Ruby Gupta**
(Advances in Applied Plasma Science, Eds. A.Kobayashi and N.M.Ghomiem, 2, 161, 1999)
2. Current Sheath Dynamics and X-ray Emission Studies in Sequential Dense Plasma Focus Device
Ruby Gupta, S.R.Mohanty, R.S.Rawat and M.P.Srivastava.
(IEEE Transactions on Plasma Science, 28(4), 1263, August 2000)
3. Deposition of Nano sized grains of ferroelectric lead zirconate titanate on thin films using Dense Plasma Focus.
Ruby Gupta, M.P.Srivastava, V.R. Balakrishnan, R. Kodama and M.C. Peterson.
(J. Phys. D:Appl. Phys., 37, 1091, 2004)
4. Carbon ion implantation on titanium for TiC formation using a dense plasma focus device.
Ruby Gupta and M.P.Srivastava.

	(Plasma Sources Sci. Technol.,13, 371, 2004)
5.	Effect of beam premodulation on excitation of surface plasma waves in a magnetized plasma Ruby Gupta, Suresh C. Sharma and Ved Prakash (Physics of Plasmas, 17, 112701, 2010)
6.	Excitation of surface plasma waves by a density-modulated electron beam in a magnetized plasma cylinder Ruby Gupta, Suresh C. Sharma and Ved Prakash (Physics of Plasmas, 17, 122105, 2010)
7.	Excitation of surface plasma waves by a density-modulated electron beam at a conductor-dusty plasma interface Ruby Gupta, Suresh C. Sharma and Ved Prakash (Physics of Plasmas,18, 053704, 2011)
8.	Electron Beam driven Lower Hybrid Waves in a Dusty Plasma Ved Prakash, Vijayshri, Suresh C. Sharma and Ruby Gupta (Physics of Plasmas 20, 053701, 2013)
9.	Surface wave excitation by a density modulated electron beam in a magnetized dusty plasma cylinder Ved Prakash, Suresh C. Sharma, Vijayshri and Ruby Gupta (Laser and Particle Beams, 1-8, 2013)
10.	Ion-Beam driven Lower Hybrid Waves in a Dusty Plasma Ved Prakash, Vijayshri, Suresh C. Sharma and Ruby Gupta (Physics of Plasmas, 20, 063701, 2013)
11.	Excitation of Lower Hybrid Waves by an Ion Beam in a Magnetized Plasma Ved Prakash, Ruby Gupta, Suresh C. Sharma and Vijayshri (Laser and Particle Beams, 31, 747, 2013)
12.	Ion beam driven resonant ion-cyclotron instability in a magnetized dusty plasma Ved Prakash, Vijayshri, Suresh C. Sharma and Ruby Gupta (Physics of Plasmas 21, 033701, 2014)
13.	Effect of Dust grain parameters on ion beam driven ion cyclotron waves in a

	<p>magnetized plasma</p> <p>Ved Prakash, Suresh C. Sharma, Vijayshri and Ruby Gupta (Progress in Electromagnetic Research M 36, 161, 2014)</p>
14.	<p>Interaction of an electron beam with whistler waves in magnetoplasmas</p> <p>Ruby Gupta, Ved Prakash, Suresh C. Sharma and Vijayshri (Laser and Particle Beams, 33, 455, 2015)</p>
15.	<p>Excitation of Electromagnetic Surface Waves at A Conductor-Plasma Interface by An Electron Beam</p> <p>Ved Prakash, Ruby Gupta, Vijayshri and Suresh C. Sharma (Journal of Atomic, Molecular, Condensate & Nano Physics, 3(1), 35, 2016)</p>
16.	<p>Resonant Ion Beam Interaction with Whistler Waves in A Magnetized Dusty Plasma</p> <p>Ruby Gupta, Ved Prakash, Suresh C. Sharma, Vijayshri and D. N. Gupta (Journal of Atomic, Molecular, Condensate & Nano Physics, 3(1), 45, 2016)</p>
17.	<p>Alfven Wave Instability with Streaming Electrons in Magnetized Dusty Plasma</p> <p>Ved Prakash, Ruby Gupta and S. C. Sharma (Materials Today: Proceedings 5, 15366, 2018)</p>
18.	<p>Role of Dust Grains in Beam-Driven Instabilities</p> <p>S. C. Sharma, Ved Prakash and Ruby Gupta (Materials Today: Proceedings 5, 15466, 2018)</p>
19.	<p>Excitation of Gould-Trivelpiece Mode by Streaming Particles in Dusty Plasma</p> <p>Daljeet Kaur, Suresh C. Sharma, R .S. Pandey and Ruby Gupta (Laser and Particle Beams, 37, 122, 2019)</p>
20.	<p>Stabilization of Plane Polarized Alfven Waves by Anomalous Doppler Resonance Rajesh Gupta, Suresh C. Sharma and Ruby Gupta (AIP Conference Proceedings, 2136, 06005, 2019)</p>
21.	<p>Weibel Instability Oscillation in Dusty Plasma with counter-streaming Electrons Daljeet Kaur, Suresh C. Sharma, R .S. Pandey and Ruby Gupta (Laser and Particle Beams, 38, 08, 2020)</p>

	<p>22. Generation of Whistler Wave by Parametric Decay of Lower Hybrid Wave in a Complex plasma Amit Kumar, Ruby Gupta and Jyotsna Sharma (AIP Advances, 11, 115022, 2021)</p> <p>23. Effect of Dust Grains on the Parametric Coupling of a Lower Hybrid Wave Driven Ion Cyclotron Wave in a Tokamak Plasma Amit Kumar, Ruby Gupta and Jyotsna Sharma (AIP Advances, 12, 035026, 2022)</p> <p>24. Generation of Ion Cyclotron Instability by Parametric Coupling of Gyration Ion Beam with Lower Hybrid Wave in a Complex Plasma Amit Kumar, Rajat Dhawan, Ruby Gupta and Jyotsna Sharma (Materials Today: Proceedings 5, 15366, 2022)</p> <p>25. Electromagnetic Weibel Instability in Spatial Anisotropic electron-ion plasmas Amit Kumar, Ruby Gupta and Jyotsna Sharma (AIP Advances, 12, 0650131, 2022)</p> <p>26. Polarization Reversal of Oblique Electromagnetic Wave in Collisional Beam-Hydrogen Plasma Rajesh Gupta, Ruby Gupta and Suresh C. Sharma (Progress in Electromagnetics Research C, 127, 49, 2022)</p> <p>27. Generation of an obliquely propagating shear alfvén wave in dusty plasma by an ion beam Rajesh Gupta, Ruby Gupta and Suresh C. Sharma (Contributions to Plasma Physics, 63 (3-4), 1, 2023)</p> <p>28. Beam-driven growth of lower hybrid wave in a magnetized relativistic beam-plasma system Rajesh Gupta, Suresh C. Sharma, Ruby Gupta and Devki Nandan Gupta (Journal of Fusion Energy, 42:25, 1, 2023)</p> <p>29. Dust density effects on electron density gradient driven lower hybrid waves in magnetized plasma Himank Sagar, Suresh C. Sharma and Ruby Gupta</p>
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	<p>(Contributions to Plasma Physics, 63 (8), 1, 2023)</p> <p>30. Temperature Anisotropy Driven Weibel Instability in Carbon Plasma Amit Kumar, Ruby Gupta and Jyotsna Sharma (AIP Conference Proceedings, 2745, 030004, 2023)</p> <p>31. Theoretical Study on Weibel instability in the existence of large amplitude Langmuir wave inside a plasma Amit Kumar, Rajat Dhawan, Ruby Gupta, Namita Sabharwal and Jyotsna Sharma (E3S Web of Conferences, 430, 01272, 2023)</p>
	<p>List of publications in International Conferences:</p> <p>1. Titanium Carbide Film Deposition Using Dense Plasma Focus. Ruby Gupta, Rachna Garg and M.P.Srivastava. (Regional Conference on Plasma Research in 21st Century, 7-12 May, Bangkok, Thailand, 128, 2001)</p> <p>2. Effect of premodulated electron beam on excitation of surface plasma waves in magnetized plasma Suresh C. Sharma, Ruby Gupta and Ved Prakash (15th Intl. Congress on Plasma Physics (ICPP-2010) held from August 08-13, at Santiago, capital of Chile, 35, 162, 2010)</p> <p>3. Cerenkov excitation of a surface plasma wave over a plasmacylinder by a pre-modulated electron beam Ruby Gupta, Suresh C. Sharma and Ved Prakash (30th ICPIG, August 28 - September 2, Belfast, Northern Ireland, UK, 2011)</p> <p>4. Electron Beam Driven Whistler Waves in a Magnetized Dusty Plasma Maninder Kaur, Ruby Gupta, D. N. Gupta, Ved Prakash and Suresh C. Sharma (7th Intl. Conference on the Physics of Dusty Plasmas, New Delhi, India, March 3-7, 103, 2014)</p> <p>5. Alfvén Wave Excitation by an ion beam in Dusty Plasma Krishna Gopal, Ruby Gupta, D. N. Gupta, Ved Prakash and Suresh C.</p>

	<p>Sharma (7th Intl. Conference on the Physics of Dusty Plasmas, New Delhi, India, March 3-7, 126, 2014)</p>
6.	<p>Excitation of Electromagnetic Surface Waves at A Conductor-PlasmaInterface by An Electron Beam Ved Prakash, Ruby Gupta, Vijayshri and Suresh C. Sharma (4th International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with Applications, University of Delhi, Delhi, India, March 11-14, 166, 2015)</p>
7.	<p>Resonant Ion Beam Interaction with Whistler Waves in A Magnetized Dusty Plasma Ruby Gupta, Ved Prakash, Suresh C. Sharma, Vijayshri and D. N. Gupta (4th International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with Applications, University of Delhi, Delhi, India, March 11-14, 165, 2015)</p>
8.	<p>Alfven Wave Instability with Ion Streaming in Magnetized Dusty Plasma Ruby Gupta, Ved Prakash and Suresh C. Sharma (BUTIFEST-International Symposium on Nonlinear Waves in Fluids and Plasmas, IIT Delhi, India, March 1-2, 2017)</p>
9.	<p>Excitation of Lower Hybrid Waves in Streaming Dusty Plasma Ruby Gupta (International Conference On Innovative Research in Applied Physical, Chemical, Mathematical Sciences, Statistics and Emerging Energy Technology for Sustainable Development”(APCMSET-2018), Jawaharlal Nehru University, New Delhi, India, February 10, 119, 2018)</p>
10.	<p>Low Frequency Whistler Waves Excited by Electron Beam in Homogenous Plasma Ruby Gupta (International Conference On Innovative Research in Applied Physical, Chemical, Mathematical Sciences, Statistics and Emerging Energy Technology for Sustainable Development”(APCMSET-2018), Jawaharlal</p>

Nehru University, New Delhi, India, February 10, 120, 2018)

11. Surface Plasma Wave Excitation by an Annular Electron Beam
Ruby Gupta
(International Conference on Advances in Mathematics, Computers & Physical Sciences-2018” (IMCPS-2018), IMRF Chandigarh Chapter, Hotel Orbit, Industrial Cum Business Park, Chandigarh, India, February 22-24, 42, 2018)
12. Effect of Dust Charge Fluctuations on Lower-Hybrid Instability in Streaming Plasma
Ruby Gupta
(International Conference on Advances in Mathematics, Computers & Physical Sciences-2018” (IMCPS-2018), IMRF Chandigarh Chapter, Hotel Orbit, Industrial Cum Business Park, Chandigarh, India, February 22-24, 43, 2018)
13. Dust-Lower-Hybrid Instability in Streaming Dusty Plasma
Ruby Gupta
(International Conference On Emerging Trends in Science and Technology (ICETST-2018), Gateway Institute of Engineering and Technology (GIET), Gateway Campus, Sector 11, Sonipat, Haryana, India, April 13, 547, 2018)
14. Stabilization of Plane Polarized Alfvén Waves by Anomalous Doppler Resonance Rajesh Gupta, Suresh C. Sharma and **Ruby Gupta**
(International Conference On Photonics, Metamaterials and Plasmonics (PMP-2019), Jaypee Institute of Information Technology (JIIT), Noida, India, February 14-16, 91-92, 2019)
15. Effect of collisions on interaction of particle beam with Alfvén wave in magnetoplasma
Rajesh Gupta, Suresh C. Sharma and **Ruby Gupta**
(International conference on Advanced Futuristic Materials for Sustainable Society ICAFM-2022, Chandigarh School of Business, Jhanjeri, Mohali, August 22-23, 2022)

List of publications in National Conferences/Seminars:

	<ol style="list-style-type: none"> <li data-bbox="337 184 1443 451"> <p>1. Excitation of Lower Hybrid Waves by a Density Modulated Electron Beam in a Magnetized Dusty Plasma Cylinder Ved Prakash, Ruby Gupta, Suresh C. Sharma and Vijayshri (28th National Symposium on Plasma Science & Technology, KIIT University, Bhubaneswar, INDIA, December 3-6, 222, 2013)</p> <li data-bbox="337 451 1443 787"> <p>2. Cerenkov and cyclotron resonant electron beam interaction with lower hybrid wave in dusty plasma Ved Prakash, Ruby Gupta, Suresh C. Sharma and Vijayshri (29th National Symposium on Plasma Science and Technology and International Conference on Plasma Science and Technology, Mahatma Gandhi University, Kottayam, Kerala, India, December 8-11, 123, 2014)</p> <li data-bbox="337 787 1443 1008"> <p>3. Plasma: A Source of Renewable Energy Ruby Gupta, Ved Prakash and S. K. Sagar (National Seminar on Electrical Energy: Safety and Conservation, Swami Shraddhanand College, University of Delhi, Delhi, January 22-23, 2016)</p> <li data-bbox="337 1008 1443 1333"> <p>4. Analog to Digital Conversion of Historical Seismograms for Earthquake Mitigation Ruby Gupta, Ved Prakash and S. K. Sagar (National Workshop on Climate Change, Spatial Technology & Disaster Mitigation, Swami Shraddhanand College, University of Delhi, Delhi, February 16-17, 2017)</p> <li data-bbox="337 1333 1443 1669"> <p>5. Alfven Wave Instability in Magnetized Dusty Plasma with Streaming Negative Ions Ved Prakash, Ruby Gupta and Suresh C. Sharma (10th National Conference on Solid State Chemistry and Allied Areas- ISCAS 2017, Department of Applied Physics, Delhi Technological University, July 1-3, 2017)</p> <li data-bbox="337 1669 1443 1887"> <p>6. Cyclotron Interaction of Alfven Wave and Electron Beam Rajesh Gupta, Ruby Gupta and Suresh C. Sharma (National Conference on Smart Energy Resources and Sustainable Engineering, Swami Shraddhanand College, University of Delhi, Delhi,</p>
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March 28-29, 2019)

7. Plasma Route to Surface Cleaning
S. K. Sagar, **Ruby Gupta** and Ved Prakash
(National Conference on Smart Energy Resources and Sustainable Engineering, Swami Shraddhanand College, University of Delhi, Delhi, March 28-29, 2019)
8. Earthquake Recording: Past and Present
Ruby Gupta, Ved Prakash and S. K. Sagar
(National Conference on Smart Energy Resources and Sustainable Engineering,
Swami Shraddhanand College, University of Delhi, Delhi, March 28-29, 2019)

Chapters in Books:

1. “Role of Plasma Technology in Waste Management”
Ved Prakash, **Ruby Gupta** and S. K. Sagar
Chapter in the book titled “Progress in Environmental Management” edited by Subhash Anand (2013) [ISBN: 978-81-89131-91-3]
2. “Experiment-10 Determination of the Temperature Coefficient of Resistance by Platinum Resistance Thermometer”
Ruby Gupta and Sanjay Gupta
Chapter in book “BPHCL-136 Thermal Physics and Statistical Mechanics Laboratory” by Indira Gandhi National Open University, 2022.

Articles published in Magazines:

1. “Commandments for Teachers”
Ruby Gupta
Shraddha, Swami Shraddhanand College Magazine, 2009
2. “Migraine”
Ruby Gupta
Gravity, Physics Department Magazine, 2009

3. "Role of Physics in our daily life"
Ruby Gupta
Gravity, Physics Department Magazine, 2010
4. "Mysteries of Outer Space"
Ruby Gupta
Gravity, Physics Department Magazine, 8, 2013-14
5. "Dusty Plasma"
Ruby Gupta, S. K. Sagar and Shiva Upadhyay
Chemica, Chemistry Department Magazine, 2014
6. "Quantum Physics-An Overview"
Ruby Gupta
Gravity, Physics Department Magazine, 10-14, 2014-15
7. "Mangroves: The natural barrier to disaster"
S. K. Sagar and **Ruby Gupta**
Geo-Vision, Geography Department Magazine, 20, 2016
8. "Fiber Optic Lighting"
Ruby Gupta
Gravity, Physics Department Magazine, 2015-16

Participation in Conferences, Seminars and Workshops:

1. Participated in Thirteenth National Seminar on "Ferroelectrics and Dielectrics", held at Department of Physics and Astrophysics, University of Delhi from 23rd to 25th November, 2004.
2. Participated in International Conference on "Environment and Development: Challenges & Opportunities", held at Swami Shraddhanand College, University of Delhi from 4th to 6th March, 2005.
3. Participated in a 4 week UGC sponsored Orientation Course conducted by CPDHE, University of Delhi from 3rd April, 2006 to 3rd May, 2006.
4. Participated in Workshop on "Experiments in Physics and Electronics" organized by the Institute of Lifelong Learning and Keshav Mahavidyalaya,

University of Delhi from 23rd to 26th July, 2008.

5. Participated in International Conference on "Biodiversity, Environment and Sustainability, Challenges for Future", held at Swami Shraddhanand College, University of Delhi from 4th to 6th September, 2008.
6. Participated in National Seminar on "Physics in Quest of alternative source of energy", held at MotiLal Nehru College, University of Delhi from 19th to 20th December, 2008.
7. Attended 3rd National Conference on "Mathematical Techniques: Emerging Paradigms for Electronics and IT industries" held at University of Delhi from 30th to 31st January, 2010.
8. Attended Indo-European Conference on "Quality assurance in Higher Education" held at University of Delhi from 6th to 7th May, 2010.
9. Participated in 2nd National Workshop on "Quantum Mechanics: Theory and Application" held at Deen Dayal Upadhyay College, University of Delhi, from 22nd to 23rd October, 2010.
10. Participated in a 3 week UGC sponsored Refresher Course in Physics and Electronics conducted by CPDHE, University of Delhi from 23rd December, 2010 to 13th January, 2011.
11. Participated in National Seminar on Electrical Energy: Safety and Conservation, held at SSN College, University of Delhi, Alipur, Delhi from 9th to 10th April, 2012.
12. Participated in a 3 week UGC sponsored Refresher Course in Environmental Studies (Interdisciplinary) conducted by CPDHE, University of Delhi from 7th to 28th January, 2013.
13. Participated in National seminar on "Current Environmental Challenges and Possible Solutions" organised by Ramjas College, University of Delhi, from 15th to 16th February, 2013.
14. Participated in the "MATLAB and Simulink Academic Tour 2013" of MathWorks organized by Cluster Innovation Centre, University of Delhi on

23rd September, 2013.

15. Participated in Seminar on “New Frontiers in Physics for Society” organized by Department of Applied Physics, Delhi Technological University on 24th September, 2013.
16. Participated in Orientation Programme for Academic Counsellors, organized by IGNOU, Regional Centre, Delhi on 19th October, 2013.
17. Participated in the workshop on review of B.Sc. first level Physics Elective PHE-06 held at IGNOU, Maidan Garhi, New Delhi, from 16th to 19th December, 2013.
18. Participated in 7th International Conference on the Physics of Dusty Plasmas held at India Habitat Centre, New Delhi, India from 3rd to 7th March, 2014.
19. Participated in Fourth National Workshop on “Recent Trends in Semiconductor Devices and Technology” organized by Department of Electronics, Deen Dayal Upadhyaya College, University of Delhi from 13th to 14th September, 2014.
20. Attended the National Seminar on Recent Advances in Physics, held at Department of Applied Physics, Delhi Technological University, Delhi, on 16th February, 2015.
21. Participated and presented a paper in 4th International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with Applications held at University of Delhi, Delhi, India from 11th to 14th March, 2015.
22. Participated in Seminar on "Constitution and Ambedkar", held at Swami Shraddhanand College, University of Delhi on 24th November, 2015.
23. Participated and presented a paper in National Seminar on Electrical Energy: Safety and Conservation, held at Swami Shraddhanand College, University of Delhi, Delhi from 22nd to 23rd January, 2016.
24. Attended the National Seminar on Frontiers in Applied Science and Technology, held at Department of Applied Physics, Delhi Technological University, Delhi, on 22nd March, 2016.
25. Participated in Faculty Development Program on “Research Project

Management- Proposal to publication and beyond”, held at CIC-Centre for Science Education and Communication, University of Delhi, Delhi on 19th July, 2016.

26. Participated in TEQIP-II Sponsored Faculty Development Programme on “Advances in Microelectronics and Plasma Diagnostics” held at Department of Applied Physics, Delhi Technological University, Delhi, from 29th August to 2nd September, 2016.
27. Participated and presented a paper in National Workshop on Climate Change, Spatial Technology & Disaster Mitigation, held at Swami Shraddhanand College, University of Delhi, Delhi from 16th to 17th February, 2017.
28. Participated and presented a paper in BUTIFEST-International Symposium on Nonlinear Waves in Fluids and Plasmas, held at IIT Delhi, India from 1st to 2nd March, 2017.
29. Participated and presented a paper in 10th National Conference on Solid State Chemistry and Allied Areas- ISCAS 2017, held at Department of Applied Physics, Delhi Technological University, from 1st to 3rd July, 2017.
30. Participated in International Conference On Innovative Research in Applied Physical, Chemical, Mathematical Sciences, Statistics and Emerging Energy Technology for Sustainable Development”(APCMSET-2018), Jawaharlal Nehru University, New Delhi, India, on 10th February, 2018.
31. Participated in International Conference on Advances in Mathematics, Computers & Physical Sciences-2018” (IMCPS-2018), IMRF Chandigarh Chapter, Hotel Orbit, Industrial Cum Business Park, Chandigarh, India, from 22nd to 24th February, 2018.
32. Participated in 2 days online International Workshop on COVID-19 Mass Disaster and Possible Management: Challenges for Immediate Future, organized by Central University, Pondicherry and Deenbandhu Chhotu Ram University (DCRUST), Murthal, Haryana, India, from 5th to 6th May, 2020.
33. Participated in Webinar on Security Aspects of Virtual World, organized by Sri Aurbindo College, University of Delhi, Delhi, India, on 7th May, 2020.
34. Participated in Webinar on Material Science, Technology and Society,

organized by School of Physical Sciences, Jawaharlal Nehru University, New Delhi, India, from 8th to 9th May, 2020.

35. Participated in Webinar on What is Light: Evolution of Quantum Theory, organized by Department of Physics, Kalindi College, University of Delhi, Delhi, India, on 12th May, 2020.

36. Participated in Webinar on Constructive Living and Education in the times of Corona Crises, organized by Internal Quality Assurance Cell, Shivaji College, University of Delhi, Delhi, India, on 13th May, 2020.

37. Participated in National Webinar on 'An Introduction to Measurement of Light' organized by Department of Physics, Kalindi College, University of Delhi, Delhi, India, on 13th May, 2020.

38. Participated in National Webinar on 'Science, Society and Exponential Change: Reimagining the future' organized by Department of Physics, Kalindi College, University of Delhi, Delhi, India, on 13th May, 2020.

39. Participated in National Webinar on 'Emerging out a Winner in Lockdown' organized by Department of Physics, Kalindi College, University of Delhi, Delhi, India, on 14th May, 2020.

40. Participated in National Webinar on Emerging Trends in E-Learning: Complete Classroom and Evaluation Process using MOODLE LMS, organized by Internal Quality Assurance Cell (IQAC) and Department of Botany, Swami Shraddhanand College, University of Delhi, Delhi, India, on 18th May, 2020.

41. Participated in Webinar on Mind-body Medicine: In Present Scenerio of Covid, organized by Sri Aurvindo College, University of Delhi, Delhi, India, on 22th May, 2020.

42. Participated in Workshop on Google Classroom: Teaching, Learning and Managing, organized by Department of Computer Science, Swami Shraddhanand College, University of Delhi, Delhi, India, on 24th May, 2020.

43. Participated in Webinar on Covid19 and Environment : Present benefits, Future challenges and Way Forward, organized by Internal Quality Assurance Cell (IQAC) and Department of Environmental Studies, Swami Shraddhanand College, University of Delhi, Delhi, India, on 25th May, 2020.

44. Participated in Faculty Development Programme on 'Recent Advances in Science and Technology' organized by RPS Group of Institutions, Mahendergarh, Haryana, from 21st-27th May, 2020.
45. Participated in International Workshop on 'Rejuvenation through YOGA during COVID' organized by Department of Physical education, Dayanand College, Hisar, on 1st-2nd June, 2020.
46. Participated in the Webinar on 'Higher Education in India: COVID 19 and Beyond' organized by Swami Shraddhanand College, University of Delhi, and Akhil Bhartiya Itihas Sankalan Yojana on 2nd June, 2020.
47. Participated in the Webinar on 'The Impact of Corona Lockdown on Family System and Mental Health' organized by Internal Quality Assurance Cell (IQAC), Swami Shraddhanand College, University of Delhi, in association with GIA and SAKHI, on 3rd June, 2020.
48. Participated in the Webinar on Enhancing 'Research Interest' of Research Publications, organized by Internal Quality Assurance Cell (IQAC), Maharaja Agrasen College, University of Delhi, on 3rd June, 2020.
49. Attended the WeThinkDigital Webinar on "Cyber Crime and Redressal" on 10th June, 2020.
50. Participated in the Webinar on 'Challenges faced by Women during lockdown' organized by Gender Champion Cell, Daulat Ram College, University of Delhi, on 19th June, 2020.
51. Participated in International Webinar on 'Impact of COVID-19 on Society and Education: A Perspective' organized by Internal Quality Assurance Cell, Swami Shraddhanand College, University of Delhi, on 20th June, 2020.
52. Participated in International Webinar on 'Relevance of Education, Spiritualism and Yoga in the Present Global Crisis' organized by Department of Sanskrit, Swami Shraddhanand College, University of Delhi, on 20th June, 2020.
53. Participated in Lecture organized by Indian Association of Physics Teachers, Regional Council (Delhi & Haryana) on "Light and Einstein's $E=mc^2$ " on 20th June, 2020.
54. Participated in Lecture organized by Indian Association of Physics Teachers, Regional Council (Delhi & Haryana) and Delhi State Science Teachers' forum on Wave Optics-I "Interference and Diffraction" on 27th June, 2020.
55. Participated in Lecture organized by Indian Association of Physics Teachers,

	<p>Regional Council (Delhi & Haryana) and Delhi State Science Teachers' forum on "Electrostatics-I" on 18th July, 2020.</p> <p>56. Participated in Lecture organized by Indian Association of Physics Teachers, Regional Council (Delhi & Haryana) and Delhi State Science Teachers' forum on "Electrostatics-II" on 25th July, 2020.</p> <p>57. Participated in Lecture organized by Indian Association of Physics Teachers, Regional Council (Delhi & Haryana) and Delhi State Science Teachers' forum on "Magnetism and Matter" on 1st August, 2020.</p> <p>58. Participated in Webinar on "Questioning Skills: Mind is a Thinking Machine, Heart is the Engine" organized by Department of Microbiology, Swami Shraddhanand College, University of Delhi, on 1st August, 2020.</p> <p>59. Participated in Lecture organized by Indian Association of Physics Teachers, Regional Council (Delhi & Haryana) and Delhi State Science Teachers' forum on "Surprises in Elementary Physics: Examples from Mechanics, Optics and Thermodynamics" on 6th August, 2020.</p> <p>60. Attended Faculty Development Programme on "Innovation in Scientific Research Methods" organized by Kirori Mal College, University of Delhi, under the aegis of DBT Star College Scheme, on 14th-18th October, 2020.</p> <p>61. Participated in National Workshop on 'Challenges of Teaching Physics Laboratory Courses in Online mode' organized by Department of Physics under the aegis of IQAC, Kalindi College, in association with Department of Physics and Astrophysics, University of Delhi, and The National Academy of Sciences India (NASI) Delhi Chapter, on 23rd-25th January, 2021.</p> <p>62. Participated in Lecture organized by Indian Association of Physics Teachers, Regional Council (Delhi & Haryana) on "Scaling and Power Laws in the Natural Sciences and Beyond" on 17th July, 2021.</p> <p>63. Participated in the Webinar on 'Entanglement Entropy and Holography' organized under SLC Eminent Lecture Series by Shyam Lal College, University of Delhi on 8th September, 2021.</p> <p>64. Participated in the lecture series of 'Sound of Gravity' organized by the Physical Science Society "Spectra", Deshbandhu College, University of Delhi on 10th September, 2021.</p> <p>65. Attended Cancer Awareness Webinar organized by Pink October Campaign on 14th October, 2021.</p>
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66. Attended two days National Conference on 'Chandra's Contribution in Plasma Astrophysics' on 19-20 October, 2021.
67. Attended a Webinar on 'How to publish scholarly books with Taylor & Francis' on 29th November, 2021.
68. Participated in NAAC sponsored online workshop on Comprehending Quality Aspects in NAAC Accreditation Process organized by Department of Applied Science and Humanities, Jhulelal Institute of Technology, Nagpur during 3rd-7th May, 2022.
69. Attended a Webinar on 'Content Writing and Possible Avenues' organized by Internship Cell and IQAC, Swami Shraddhanand College, University of Delhi on 7th June, 2022.
70. Attended a Webinar on 'How to get into Corporate World' organized by Internship Cell and IQAC, Swami Shraddhanand College, University of Delhi on 18th June, 2022.
71. Attended Faculty Development Programme on "Research Techniques in Science and Technology" organized by K R Mangalam University, Gurugram in collaboration with Gargi College, University of Delhi, on 18th-23rd July, 2022.

Professional recognition, awards, fellowships received:

- Awarded Junior Research Fellowship (JRF) by CSIR in the NET examination held on 25th June, 1996.
- Awarded Senior Research Fellowship (SRF) by CSIR on 25th June, 1998.
- Counseling IGNOU students for Bachelor's Degree Programme in Science for Physics theory and practicals.
- Life-time member of Plasma Science Society of India (PSSI), Membership No.: LM-955.
- Life-time member of Indian Association of Physics Teachers. (IAPT), Membership No.: 8253 L-5619.
- Received Teaching Excellence Award on 1st May, 2014 from the Vice Chancellor, University of Delhi, for teaching of Thermal Physics.
- Received ISCAS Endowment Medal for significant contribution to Materials

Science in the 10th Biennial National Conference of ISCAS held at Delhi Technological University, Delhi during July 1-3, 2017.

- Received First Best Paper Presentation Award (Oral Categories) in International Conference On Innovative Research in Applied Physical, Chemical, Mathematical Sciences, Statistics and Emerging Energy Technology for Sustainable Development”(APCMSET-2018) held at Jawaharlal Nehru University, New Delhi, India on February 10, 2018.
- Received Best Paper Award in International Conference On Emerging Trends in Science and Technology (ICETST-2018), Gateway Institute of Engineering and Technology (GIET) held at Gateway Campus, Sector 11, Sonapat, Haryana, India on April 13, 2018.

Activities Organized:

- Organized a book exhibition in the college on December 6-7, 2010.
- Organized professional and personality development lectures separately for Humanities, Commerce and Science students in academic session 2013-14.
- Organized a Physics Fest ‘SAMVEG’ in Swami Shraddhanand College in 2018.
- Organized a Webinar on ‘How to express yourself in an interview’ as Placement Cell Convener in Swami Shraddhanand College on 23rd March, 2022.
- Organized an ‘Environmental Festival’ in Swami Shraddhanand College on 8th April, 2022.
- Organized ‘Topper’s Talk by Shruti’ as Placement Cell Convener in Swami Shraddhanand College on 4th August, 2022.
- Coordinated a motivational talk on ‘Towards Excellence in Science in India in the 21st Century: A Road Map’ in Swami Shraddhanand College on 21st April, 2023.