

Date: 3<sup>rd</sup> October, 2015

**CURRICULUM – VITAE**

**Name:** Dr. RUBY GUPTA

**Personal Information:**

Date of Birth: 05-FEB., 1974

Citizenship: INDIAN

Present Position: PERMANENT

Official Address: SWAMI SHRADDHANAND COLLEGE,  
UNIVERSITY OF DELHI,  
ALIPUR, NEW DELHI -110036

Address for  
Correspondence: 219/1, GALI NO. 8, PADAM NAGAR,  
KISHAN GANJ, DELHI-110007

Mobile No.: 9811064709

E-mail address: rubyssndu@gmail.com

Date of Appointment  
in the College: 31<sup>st</sup> AUGUST, 2005

Total Teaching  
Experience: 12 YEARS 10 MONTHS

Native Place: DELHI

**Education:**

S.No.	Degree	University	Year	Subjects	Percentage
1.	B.Sc.(Hons.)	Delhi University	1994	Physics	75.1
2.	M.Sc.	Delhi University	1996	Physics	71.6
3.	B.Ed.	Delhi University	1997	Education	65.8
4.	Ph.D	Delhi University	2005	Plasma Physics	

### **Fellowship and Awards:**

1. Awarded **CSIR** Junior Research Fellowship (JRF) for the period from 25<sup>th</sup> May, 1997 to 24<sup>th</sup> May, 1999, via National Eligibility Test held on 25<sup>th</sup> June, 1996.
2. Awarded **CSIR** Senior Research Fellowship (SRF) for the period from 25<sup>th</sup> May, 1999 to 24<sup>th</sup> May, 2004.
3. **Member** of Organizing Committee for National Seminar on Electrical Energy: Safety and Conservation, held at SSN College, University of Delhi, Alipur, Delhi from 9<sup>th</sup> – 10<sup>th</sup> April, 2012.
4. Received **Teaching Excellence Award** on 1<sup>st</sup> May, 2014 from the Vice Chancellor, University of Delhi, for teaching of Physics.

**International /National Positions and/or Awards/ Fellowships** NA

**List of Students Awarded Ph.D./M/Phil.:** NA

**List of Students Pursuing Ph.D./M.Phil. :** NA

**List if Students guided for /M.Tech./B.Tech/B.Sc./M.Sc./B.A./M.A. Projects etc.**  
NA

**List of students guided for Summer projects** NA

**List of Students guided for Innovation Projects** Project is still in progress

**REVIEWER INTENATIONAL/National JOURNALS:** None

**Member International/National Journal editorial Board etc.** NA

### **Research Projects/ Innovation Projects Undertaken :**

(i) **Completed** None

(ii) **Ongoing** Innovation Project “Plasmonic Nanostructures in chemical and biological sensing” Code-302 sanctioned in 2015 from Delhi University

**Research Interest:** Plasma Physics, Dusty plasma, Plasmons

**Computer Literacy:** The numerical analysis in the research work is performed using C-programming

## Contribution in International Conferences/Seminars/Workshops :

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, vol. 2, p. 161, 1999).
2. Titanium Carbide Film Deposition Using Dense Plasma Focus.  
**Ruby Gupta**, Rachna Garg and M.P.Srivastava.  
(Regional Conference on Plasma Research in 21<sup>st</sup> Century, 7-12 May, Bangkok, Thailand, p.128, 2001)
3. Effect of premodulated electron beam on excitation of surface plasma waves in magnetized plasma  
Suresh C. Sharma, **Ruby Gupta** and Ved Prakash  
(15<sup>th</sup> Intl. Congress on Plasma Physics (ICPP-2010) held from August 08-13, 2010 at Santiago, capital of Chile, P 35, 162)
4. Cerenkov excitation of a surface plasma wave over a plasma cylinder by a premodulated electron beam  
**Ruby Gupta**, Suresh C. Sharma and Ved Prakash  
(30th ICPIG, August 28 - September 2, 2011, Belfast, Northern Ireland, UK)
5. Electron Beam Driven Whistler Waves in a Magnetized Dusty Plasma  
Maninder Kaur, **Ruby Gupta**, D. N. Gupta, Ved Prakash and Suresh C. Sharma  
(7<sup>th</sup> Intl. Conference on the Physics of Dusty Plasmas New Delhi, India, March, 3-7, 103 (2014))
6. Alfvén Wave Excitation by an ion beam in Dusty Plasma  
Krishna Gopal, **Ruby Gupta**, D. N. Gupta, Ved Prakash and Suresh C. Sharma  
(7<sup>th</sup> Intl. Conference on the Physics of Dusty Plasmas New Delhi, India, March, 3-7, 126 (2014))
7. Resonant ion beam interaction with whistler waves in a magnetized dusty plasma  
Ruby Gupta, Ved Prakash, Suresh C. Sharma, Vijayshri and D.N. Gupta  
(4<sup>th</sup> International Conference on Current Developments in Atomic Molecular Optical and Nano Physics with Applications 'CDAMOP-2015' New Delhi, India, March 11-14, 165 (2015))
8. Excitation of electromagnetic surface waves at a conductor-plasma interface by an electron beam  
Ved Prakash, Ruby Gupta, Vijayshri and Suresh C. Sharma  
(4<sup>th</sup> International Conference on Current Developments in Atomic Molecular Optical and Nano Physics with Applications 'CDAMOP-2015' New Delhi, India, March 11-14, 166 (2015))

### **Contribution in National Conferences Seminars/Workshops :**

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  
(28<sup>th</sup> National Symposium on Plasma Science & Technology, KITT University, Bhubaneswar, INDIA, December 3-6, 222-223 (2013))
2. Cerenkov And Cyclotron Resonant Electron Beam Interaction With Lower Hybrid Wave In Dusty Plasma  
Ved Prakash, **Ruby Gupta**, Suresh C. Sharma and Vijayshri  
(29<sup>th</sup> National Symposium on Plasma Science & Technology, Mahatma Gandhi University, Kottayam, Kerala, INDIA, December 8-11, 123 (2014))

### **LIST OF PUBLICATIONS (with title of the papers/articles, list of authors along with journal title , year of publication, ISSN/ISBN No. and Impact factor) :**

1. 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, vol. 28, no. 4,p. 1263, August 2000, Impact Factor 0.95) [ISSN: 0093-3813]
2. 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., vol. 37, p. 1091, 2004, Impact Factor 2.521)  
[ISSN: 0022-3727]
3. Carbon ion implantation on titanium for TiC formation using a dense Plasma focus device.  
**Ruby Gupta** and M.P.Srivastava.  
(Plasma Sources Sci. Technol.,vol.13, p. 371, 2004, Impact Factor 3.056)  
[ISSN: 0963-0252]
4. 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, Impact Factor 2.376) [ISSN: 1070-664X]
5. 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, Impact Factor 2.376) [ISSN: 1070-664X]

6. 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, Impact Factor 2.376) [ISSN: 1070-664X]
7. 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, Impact Factor 2.376) [ISSN: 1070-664X]
8. 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, Impact Factor 2.016) [ISSN: 0263-0346]
9. 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, Impact Factor 2.376) [ISSN: 1070-664X]
10. 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, 747-752, 2013, Impact Factor 2.016) [ISSN: 0263-0346]
11. 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, Impact Factor 2.376) [ISSN: 1070-664X]
12. Effect of Dust grain parameters on ion beam driven ion cyclotron waves in a magnetized plasma  
Ved Prakash, Suresh C. Sharma, Vijayshri and **Ruby Gupta**  
(Progress in Electromagnetic Research M 36, 161-168, 2014, Impact Factor 5.298) [ISSN: 1559-8985]
13. Interaction of an electron beam with Whistler waves in magnetoplasmas  
**Ruby Gupta**, Ved Prakash, Suresh C. Sharma and Vijayshri  
(Laser and Particle Beams, 33, 455-461, 2015, Impact Factor 2.016) [ISSN: 0263-0346]

**List of Books/Monographs Published** (along with the Publisher's name and ISBN No. and year of Publication)

NA

**Articles in Edited Books/Conference Proceedings/Book Chapter Published** (along with title of the book, publisher and ISBN No and year of publication).

1. Chapter "Role of Plasma Technology in Waste Management" by Ved Prakash,

**Ruby Gupta** and S. K. Sagar in the book titled “Progress in Environmental Management” edited by Subhash Anand (2013) [ISBN: 978-81-89131-91-3]

**Journal Proceedings/ Journals Edited (with title of the journal , year of publication etc.)**

NA

**Popular articles published / Articles published in newspapers etc.**

NA

Professional Association and Membership of Learned Bodies

1. Life-time member of Plasma Science Society of India (PSSI), Membership No.: LM-955.
2. Life-time member of Indian Association of Physics Teachers. (IAPT), Membership No.: 8253 L-5619.

**Any Other information:**

None