

Dr. Vandita Srivastava Assistant ProfessorDepartment of Physics,
Kanahiya Lal D.A.V. (P.G.) College, Roorkee- 247667

Ph. No: +91 09410561587 (M) Email: <u>vandita61@gmail.com</u>

Areas of Interest/ Specialization

Auroral Emissions, Atmospheric chemistry, Air Pollution and Its Effects on Atmospheric Electricity Remote Sensing in Determination of Various Crop Parameters, Physics Education

Educational Details

Degree		Subjects	University	Year	Division
Doctor (Ph.D.)	of Philosophy	Physics (Specialization – Atmospheric Physics)	University of Roorkee (Now IIT Roorkee)	1988	
Master (M.Sc.)	of Science	Physics (Specialization – Electronics)	Ravishankar University, Raipur	1982	First (2 nd Position in University)
Bachelor (B.Sc.)	of Science	Physics, Chemistry, Mathematics	Ravishankar University, Raipur	1980	First (8 th Position in University)

Professional Background

Designation	Work Experience	Organization	From	То
Assistant Professor	Teaching	K. L. D. A. V.(P.G.) College, Roorkee	Aug. 2010	Continuing
NSS Programme Officer		K. L. D. A. V.(P.G.) College, Roorkee	Sept. 2010	Sept,2013
Sr. Lecturer	Teaching	College of Engineering Roorkee, Roorkee	Aug.2007	Aug. 2010
Lecturer	Teaching	Roorkee Institute of Technology, Roorkee	Sept.2005	Aug. 2007
Lecturer (Temp.)	Teaching	S.S.D.P.C. Girls' P.G. College, Roorkee	Aug.1998	Aug. 2005
Guest Faculty Dept. Physics	Teaching	DPT, Saharanpur Campus, IIT Roorkee,	Jan. 2007	May. 2007
Research	Research & Lab	Department of Physics, University of	July 1992	Feb. 1995
Associate (CSIR)	Guidance	Roorkee (Now IIT Roorkee)		
Visiting Scientist	Research	Centre for Research in Earth and Space Science (CRESS), York University, Toronto, Canada	Jan.1991	Dec.1991
Research	Research & Lab	Department of Physics,	Sept.1988	Dec. 1990
Associate (CSIR)	Guidance	University of Roorkee (Now IIT Roorkee)	Sept.1900	Dec. 1990
Lecturer (Adhoc)	Teaching	Govt. Girls' PG College, Bilaspur (M.P.) (Now Chhatisgarh)	Aug. 1982	July 1983

Papers in Refereed Journals (10)

• Vandita Srivastava

Role of skill enhancement courses & under-graduate research in Physics in shaping the future of young aspirants and contributing to country's scientific achievements, economic growth & social development, *Int. J Env. Rehab. & conserv.* IX (2): 64-71, 2018.

• Vandita Srivastava

Gravitational wave detection opens a new era in astronomy, Bullatin of IAPT, 8 (2016) 276-281.

• D. Singh, V. Srivastava, B. Pandey, and D. Bhimsaria

Application of neural network with error correlation and time evolution for the retrieval soil moisture and other vegetation variables, *Progress in Electromagnetic Research* B, 15 (2009) 245.

• V. Srivastava & N. C. Varshneya

Variation of effective attachment coefficient with pollution and its effect on the atmospheric electric parameters over Indian subcontinent, *Ind. J. Radio & Space Physics* 24 (1995) 1.

• V. Srivastava & V. Singh

Transport model calculations of 5577A and 6300A OI emissions in proton precipitation, *Ind. J. Radio & Space Physics* 20 (1991) 428.

• V. Srivastava & V. Singh

Thermosperic heating under proton precipitation, J. Geophys. Res. 93 (1988) 5845

• V. Srivastava & V. Singh

Model calculations of O(¹S) and O(¹D) emissions under proton precipitation, *J. Geophys. Res.* 93 (1988) 5855

• V. Srivastava & V. Singh

Model calculations of hydrogen Balmer emissions under various modes of proton precipitation, *Advance Space Res.* 93 (1987) 21.

• V. Srivastava & V. Singh

Model calculations of hydrogen Balmer emissions in case of proton precipitation of different energy distributions, *J. Hungarian Meteo. Service (Idojaras)*, 90 (1986) 339.

• V. Srivastava & V. Singh

Study of hydrogen Balmer emissions in proton Aurora, Ind. J. Radio & Space Physics, 14(1985) 147

Papers in Conferences/Symposia (15)

• Vandita Srivastava

Role of Skill Enhancement Courses & Under-Graduate Research in Physics in Shaping the Future of Young Aspirants and Contributing to Country's Scientific Achievements, Economic Growth & Social Development, *National Conference on "Holistic approach towards quality enhancement in*

higher education" held at Pt. L.M.S. Govt.P.G. College, Rishikesh Jan 29-30, 2019.

• Vandita Srivastava

Indoor Air Pollution and its effects on human Health, *International Conference on Aerosol, Air Quality & Climate Change on Homalayan Region of Uttarakhand* (AAC-2018) organized by Department of Physics, HNB Garhwal University Srinagar, Garhwal (Uttarakhand) October21-23, 2018, page 76

• Vandita Srivastava

Microwave absorbing materials with stealth applications: A Review, 2nd Prof. Vijaya Agarwala Memorial National Symposium on microwave absorbing materials, August 24-25, 2018, page 39

• Vandita Srivastava

Choice Based Credit System: A boon or a burden in context to physics education at bachelor Level in India, *XXXII Annual IAPT Convention & National Symposium on Recent Treands in Physics at Different Scales*, October 29-31, 2017, Department of Physics, Gurukul Kangri University, Haridwar, (Uttarakhand), page 83

• Vandita Srivastava

Need for skill development cources in the modern education system, *National Seminar on Vision India Empowering Youth*, March18-19, 2016, Mathodist Girls' P.G. College, Roorkee, page 5.

• Vandita Srivastava & Dharmendra Singh

Approach to Optimize the Sensor Parameters for Estimating the Soil Moisture and Soil Thickness with Microwave Remote Sensing Data, *National Conference on Advances in Physics*, 25-26 February 2012, IIT, Roorkee, Page 119-120

• Vandita Srivastava

Management of Patent Related Expenditure, *National Conference on Knowledge Sharing and IP Management Evolving Stretegies in India*, March 25, 2012, K LDAVPG college, Roorkee, page 78-85

• Vandita Srivastava & Mithlesh Kumari

Landmark Judgment in Indian Patent History, *National Conference on Knowledge Sharing and IP Management Evolving Stretegies in India*, March 25, 2012, K LDAVPG college, Roorkee, page 52-53

• V. Srivastava & N. C. Varshneya

Effect of pollution on attachment processes and atmospheric electricity over the Indian subcontinent, *Proc. Nat. Space Sci. Sympo*. Dec 20 – 24, 1994, VSSC, Thiruananthpuram, p174.

• V. Srivastava, R. H. Wiens and G. G. Shepherd

Twilight enhancement of O2(b1?+g) emissions: Measurement and Theory, *Proc. AGU/ CGU Joint Spring Meeting*, May 1992, Montreal, Canada, p230

• V. Srivastava & V. Singh

Transport model calculation of 5577A and 6300A OI emissions in proton aurora, *Proc. Nat. Space Sci. Sympo.* Mar 5 – 9, 1990, Nagpur Univ., Nagpur, p77.

• V. Srivastava & V. Singh

Thermosperic heating under proton precipitation, *Proc. Nat. Space Sci. Sympo*. Dec 21 – 24, 1987, PRL, Ahmedabad, p78.

• V. Srivastava & V. Singh

Model calculation of O(1S) and O(1D) emissions under proton bombardment, *Proc. Nat. Space Sci. Sympo.* Dec 21 - 2, 1987, PRL, Ahmedabad, p80.

• V. Srivastava & V. Singh

Model calculations of hydrogen Balmer emissions under various modes of proton precipitation *Proc. Abstr.* 26th COSPAR Jun 30- July 11, 1986, Toulouse, France, p264

• V. Srivastava & V. Singh

Effects of changing proton fluxes on hydrogen emissions in proton aurora *Proc. Nat. Space Sci. Sympo.* Feb 19-22, 1986, Gauhati Univ., Gauhati, p460.

Professional Courses/Conference Seminars Attended (10)

- 'Interdisciplinary Refresher Course in Information Technology' Dec3-22, 2018 organized by UGC-HRDC, Kurukshetra University, Kurukshetra
- 'Public Outreach Programme- A Precursor Event of 3rd International Science Festival (IISF2017)' on Sept 15, 2017 organized by CSIR-CBRI Roorkee
- Conference on 'Scientific validation of Traditional Knowledge-II' Feb 24-25, 2017, organized by IPR-Chair, Department of Management Studies, IIT Roorkee, Roorkee.
- 'Workshop on Teachers' Training cum Motivation' under CSIR Programme on Faculty Training & Motivation and Adoption of Schools & colleges by CSIR Labs, on Oct 5, 2016 organized by CSIR-CBRI Roorkee
- 'Workshop on Low cost experiments & Hands on training in Physics' Sept 19-20, 2016, organized at Department of Physics, Gurukul Kangri Vishwavidyalaya, Haridwar sponsored by UCOST, & IAPT (RC-5).
- QIP workshop on 'Playing with Light- Miracles of Optoelectronics' on Feb 20, 2016 organized by Department of Physics, IIT Roorkee
- 'National conference on Recent Advances in Electronics & Computer Engineering (RAECE-2015)' during Feb13-15, 2015, organized by Department of Electronics & Communication Engineering and Department of Computer Science & Engineering, IIT Roorkee.
- 'One day Awareness Workshop on Standard Training Assessment and Reward Scheme of NSDC' on March 20, 2014 orgnized by Department of Higher Education, Uttarakhand & National Stock Exchange.
- 'Refresher Course on Physics & Electronics' during Sept 20- Oct 11, 2012 organized by UGC-ASC, CPDHE, University of Delhi and obtained grade 'A'.

• '8th Orientation Programme' organized by ASC, Punjabi University, Patiala and obtained grade 'A'.

Orientation Programme/Workshops Attended as NSS Programme Officer (4)

- Orientation programme for NSS programme officers organized by NSS Cell Kumaon University, Nainital sponsored by Ministry of Youth Affairs & Sports, Govt of India from April 24-29, 2012
- 'Three day workshop of Red Ribbon Club Formation for Programme Officers' organized by NSS Cell HNB Garhwal University, Srinagar (Garhwal) with technical & Financial support of Uttarakhand State AIDS Control Society during Nov 18-20, 2011
- One day workshop for NSS Programme Officers' on Aug 20, 2011 organized at Haridwar and donated blood also.
- 'One day Training Workshop of NSS at District level' on Sept 9, 2010 organized at Gurukul Mahavidyalaya, Jwalapur, Haridwar.

Membership

• Life Member, Indian Association of Physics Teachers (IAPT)

Other Distinctions

- Editor, National Conference on Knowledge Sharing and IP Management Evolving Stretegies in India, March 25, 2012, K LDAVPG college, Roorkee.
- Awarded for Donating blood and motivating the students to donate blood by Indian Red Cross Society State Branch Uttarakhand on June 14, 2012.
- Centre Incharge for National Graduate Physics Examination (NGPE) organized by IAPT of the college (Centre No. 2204)
- Awailed National Scholarship during M.Sc.