

**RESEARCH CONTRIBUTION:**

**Projects Supervised:**

1. Supervised five students from B.Tech. (Electronics) in the project entitling “*Envisioning Efficient Roads: Versatile Traffic Control System*” in the academic session 2016-17 at Hansraj College, University of Delhi.
2. Supervised ten students from B.Sc. (H) Physics and B. Sc.(H) Botany in Innovation Project (HRC-302) entitling “*Development of a Mobile Based Application for the Real Time Localization and Identification of Flora in North Campus, University of Delhi*”, in the academic session 2015-16 at Hansraj College, University of Delhi. The project was funded by the Research Council, University of Delhi. During the project we were able to launch a fully functional Android based App "Tree Locator" successfully.

**Publication in International Refereed Journals**

“Magnetoelectric effects in  $[\text{BaTiO}_3]_{1-x}[\text{CoFe}_2\text{O}_4]_x$  bulk composites”, **Shivani Agarwal**, O. F. Caltun & K. Sreenivas, *Solid State Communications* . [doi:10.1016/j.ssc.2012.08.002]

**International Conference Attended:**

- “*Structural and dielectric properties of pulse laser deposited  $\text{BaTiO}_3 - \text{CoFe}_2\text{O}_4$  multiferroic composite thin films*”, **Shivani Agarwal**, K. Sreenivas and Vinay Gupta, *International Conference on Nano and Microelectronics*, ICONAME – 08, Jan 03 – Jan 05, 2008, Pondicherry, Pudducherry (Oral Presentation)
- *Indo – Australian Symposium on Multifunctional Nanomaterials Nanostructures and Applications (MNNA 2007)*, Dec. 19 – Dec.21, 2007, Department of Physics & Astrophysics, University of Delhi, Delhi - 110007

**National Conferences:**

- “*Synthesis of  $(\text{BaTiO}_3)_x - (\text{CoFe}_2\text{O}_4)_{1-x}$  multiferroic ceramics*”, **Shivani Agarwal**, K. Sreenivas and Vinay Gupta, *National Seminar on Electroceramics, NSE 07*, Nov 05 – Nov 06, 2007, Sonapat, Haryana (Oral Presentation)
- “*Preparation and studies on  $(\text{BaTiO}_3)_x - (\text{CoFe}_2\text{O}_4)_{1-x}$  ( $x= 0$  to  $1$ ) Magnetoelectric ceramic composites*”, **Shivani Agarwal**, Vinay Gupta and K. Sreenivas, *2<sup>nd</sup> ISSS National Conference on MEMS; Microsensors, Smart Materials, Structures and Systems*, Nov 16 – Nov 17, 2007, CEERI, Pilani (Poster Presentation)

**Lectures and FDPs:**

- Participated in DBT Sponsored *Faculty Development Workshop* on “*Embedded Systems and Synthesis of Nanomaterials*” dated January 6-7, 2017 at Department of Physics & Electronics, Hansraj College, University of Delhi.
- Attended the *Faculty Development Programme* on MATLAB dated October 4, 2016 at Department of Physics & Electronics, Hansraj College, University of Delhi
- Served as RESOURCE PERSON in the DBT Sponsored Workshop on “*Integrating ICT in Teaching and Learning*” dated December 11-18, 2015 at Department of Physics & Electronics, Hansraj College, University of Delhi.

**Workshops and Seminars:**

- Attended workshop on “*Functional Analysis and Troubleshooting of Electronic Devices for Biotechnology and Biomedical Applications*” dated March 12-14, 2014 at Dept. of Physics & Electronics, Hansraj College, University of Delhi
- Attended workshop on “*Fluorescence Studies of Organic Structures*” dated September 26-27, 2014 at Dept of Physics & Electronics, Hansraj College, University of Delhi

- Attended DBT sponsored workshop on “*Characterization of materials by X-ray Diffraction*” dated February 23-24, 2016 at Dept. of Physics and Electronics, Hansraj College, University of Delhi
- Attended DBT-sponsored seminar on “*Physics of Stars*” dated April 1, 2016 at Dept. of Physics & Electronics, Hansraj college, University of Delhi.
- Participated in Seminar cum Workshop on “*Quantum Entanglement and the EPR paradox*” and “*Computer Interfaced Science Experiments using EXPEYES*” dated March 30, 2017 at Department of Physics & Electronics, Hansraj College, University of Delhi.

#### **CONTRIBUTION TO THE UNIVERSITY:**

- Involved in the conduct of theory examinations (as invigilator/ control room member) at the University examination centers.
- Involved in the University practical examinations as Internal/ External Examiner.
- Involved in the evaluation (as Examiner) of answer scripts of the undergraduate examinees.

#### **CONTRIBUTION TO THE COLLEGE:**

- Worked as presiding officer in the DU Students’ Elections.
- Worked as ***Content Developer and Designer*** for the Annual Festival, Antardhvani-2014 organized by University of Delhi.
- Member of the team (2015-16) working for the college for Criterion-3 (Research) of NAAC.
- Member of organizing committee in various workshop/seminars at the college.
- Involved in duties (other than teaching) assigned time to time by the college.

#### **NET Details : Qualified CSIR-UGC-NET**

Year of NET	2005
Details of NET Exam	JRF-NET
Subject of NET	Physical Sciences

#### **Teaching Experience: ~9years**

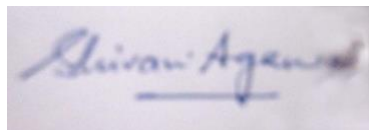
Institution	Post Held	From	To	Experience Type
Miranda House, DU	Lecturer	02.08.2004	23.12.2004	Ad hoc
Miranda House, DU	Lecturer	14.02.2005	24.03.2005	Ad hoc
SRCASW, DU	Lecturer	18.07.2005	23.03.2006	Ad hoc
Kalindi College, DU*	Lecturer	19.07.2006	17.11.2006	Ad hoc
Daulat Ram College, DU*	Lecturer	05.09.2007	31.03.2008	Ad hoc
Kirori Mal College, DU	Asst. Professor	09.01.2013	23.07.2013	Ad hoc
Hansraj College, DU	Asst. Professor	24.07.2013	Till date	Ad hoc

*\*During residency period of Ph.D.*

#### **Academic Qualifications**

S.N.	Examination	Year	Division %	Marks	College Name	Board/University
1.	XII	1998	I 72%	360/500	J.K.G. Sr. Sec. School	CBSE
2.	B.A.Sc.(H) Electronics	2001	I 73.8%	1810/2450	SRCASW	University of Delhi
3.	M.Sc. (Physics)	2004	I	7.96/10 (CGPA)	Department of Physics	IIT Roorkee
4.	Ph.D.	2014	<b>Thesis Title:</b> Studies on Multiferroic Ceramics and Thin Films			Department of Physics & Astrophysics University of Delhi

**Knowledge of Scilab, C++, FORTRAN, 8085 microprocessor, 8051 microcontroller, PSpice etc**



(Dr Shivani Agarwal)