

## **Mona Bhatnagar**

### Career Profile:-

1989-1996 Lecturer

1996-1998 Senior Lecturer

1998-2006 Reader

Since 2006 Associate Professor

### Specialization:-

Microprocessors, Photovoltaic

### Subjects:-

IC Technology, Applied Mechanics, Engineering Drawing, Mechanics and Strength of Materials, Instrumentation, Microprocessors and Microcontrollers, Analog Electronics II.

### Administrative Assignments:-

#### Year 2017-2018

Convener, College Purchase Committee

Convener, Portal Committee

Convener, Placement Cell

Convener, Entrepreneurial Cell

Member, Internal Quality Assurance Cell (IQAC)

Convener, Annual Function

Convener, Foundation Day

#### Year 2016-2017

Convener, College Purchase Committee

Convener, Placement Cell

Convener, Entrepreneurial Cell

Member, Internal Quality Assurance Cell (IQAC)

Convener, Annual Function

Convener, Foundation Day

Year 2015-2016

Convener Placement Cell

Deputy Coordinator, Central Evaluation Centre Hansraj College DU

Member, Internal Quality Assurance Cell (IQAC)

Convener, Annual Function

Year 2014-2015

Content Developer in the Good practices stall of Hansraj College at the Annual festival "Antardhvani" organized by DU

Year 2012-2013

Superintendent, Practical Exams (Physics and Electronics Dept)

Year 2009-2012 (For three continuous years)

Secretary, Alumni Association of Hansraj College (HRCAA)

Year 2009-2010

Member, Development Fund Committee

Year 2007-2008

Convener, Finance Committee

Year 2006-2007

Member, Development Fund Committee

Year 2005-2006

Secretary, Staff Council

Year 2004-2005

Convener, Admissions (Science)

Year 1999-2000

Convener, Admissions (Science)

Projects:-

Projects (As Co-Principal Investigator)

1.) Title: Fabrication characterization and enhancement of efficiency of Conducting polymer DNA based white light emitting diodes.

Funding agencies: DST

Year: 2009

Grant Received: Rs. 38 lakhs

2.) Title: Mutation Detection for Medical Diagnostics using Fret Between Cationic Conjugated Polymer and Labeled PNA Probes .

Funding agencies: DBT

Year: 2010

Grant Received: Rs. 54 lakhs

3.) Title: Masses of charmonium states in isospin asymmetric strange hadronic matter and their implications in heavy ion collision experiments Innovation.

Funding agencies: DU

Year: 2015

Grant Received: Rs. 5 lakhs

Journals articles:-

1. "Compositional effect on the optical absorption and photoluminescence of CdSxSe1-x quantum dots embedded in borosilicate glasses" by Jitender Kumar, A Verma, PK Pandey,

PK Bhatnagar, PC Mathur, M Bhatnagar, W Liu & SH Tang, International Journal of Nanoscience, Vol.08, Issue 04n05 (Aug & Oct 2009)

2. "Two-photon absorption in quantum dots of CdSxSe1-x using open aperture Z-scan and femtosecond laser" by Jitender Kumar, A Verma, PK Pandey, PK Bhatnagar, PC Mathur, M Bhatnagar, W Liu & SH Tang, Nano Brief Reports & Reviews (World Science Net) Vol.04, Issue01 (Feb 2009), p23-29
3. "High level Illumination effect on MS'S solar cell characteristics with new material Ga2Se3 as intermediate layer" by Mona Bhatnagar & PK Bhatnagar, Journal of Materials Science, 33 (1998), p2179-2180
4. "Temperature considerations in Metal- Ga2Se3-Si (MS'S) solar cell" by Mona Bhatnagar & PK Bhatnagar – Published in Book of Proceedings of 14th European Photovoltaic Solar Energy Conference & Exhibition, Barcelona, Spain, 30th Jun – 4th July, 1997
5. "Fabrication of a new basic structure (Al-Ga2Se3-pSi) for photovoltaic application" by Mona Bhatnagar, Pankaj Pathak & PK Bhatnagar, at 3rd International Conference on Semiconductor Materials & Technology, ICSMT, 16th – 21st Dec'96 at New Delhi, organized by Semiconductor Society (India).
6. "MS'S – An alternative Structure for MOS type solar cells" by PK Bhatnagar & Mona Bhatnagar, Physica Status Solidi (A), Vol.158, No.1 (Nov 1996), p.K9-k12.
7. "MS'S Solar Cell .... " By PK Bhatnagar & Mona Bhatnagar, Regional Workshop on Low Dimensional Semiconductor Structures, LDSS'95, 18th-20th Dec 1995 at New Delhi Organized by Semiconductor Society (India).
- 8.

9.

Article in HT dated 20.06.2017 on BSc(Hons) Electronics Course Profile.

Conference:-

1. 2017, April 10th - Convener of Seminar on "Radiation Hazards and Monitoring: Techniques and Materials" at Hansraj College held.
2. 2017, January 6th-7th - Convener of Faculty Development Programme on "Embedded Systems and Synthesis of Nano-materials" at Hansraj College sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India under Star College Scheme.
3. 2016, February 23rd-24th - Organized Workshop on "Characterization of Materials by X-Ray Diffraction" at Hansraj College sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India under Star College Scheme.
4. 2014, September 26th-27th - Organized National Workshop Fluorescence Studies of Organic Structures at Hansraj College sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India under Star College Scheme.