MANSI DHINGRA

R-Block, 32-B
Dilshad Garden
Delhi 110095
Ph 8800305135
E-Mail ID-mansidhingra84@gmail.com

EDUCATIONAL QUALIFICATION:

Sr.No.	Examination Passed	Year	Name of School/University	Percentage
1.	C.B.S.E	2000	V.V.D.A.V Vikas puri	79.25%
2.	Senior Secondary	2002	V.V.D.A.V Vikas puri	70.1%
3.	B.Sc.(H) Physics	2005	Kalindi college, University of Delhi	74.2%
4.	M.Sc. Physics	2007	Department of Physics and Astrophysics, University of Delhi	61.5%
5.	Bachelor of Education (B.Ed.)	2008	G.G.S.I.P.U	74.8%
6.	Ph.D.	2014	University of Delhi	Awarded

WORKING EXPERIENCE:

- PhD from Department of Physics and Astrophysics, University of Delhi. Topic of my Thesis is "***ZnO/Conducting polymer interfaces and nanocomposites: Optical, Electrical and Sensing properties***" under supervision of Prof S. Annapoorni in Delhi university
- Cleared NET(LS) in 2007
- Authored a book "**Programming in Scilab**" in Year 2019
- Worked as a Guest Faculty in Gargi College and Dyal Singh College (University of Delhi)

Working as an Assistant Professor (Adhoc) of Physics in Maitreyi College, University of Delhi since January 2013

PERSONAL PROFILE:

Father`s Name : Mr.S.P.DHINGRA

Date of Birth : 17 NOVEMBER 1984

Sex : Female

Religion : Hindu (Punjabi)

Nationality : Indian

Languages Known : English & Hindi

Category : Unreserved

Awards and Recognitions:

1. Grabbed BEST PAPER AWARD in MRSI 2015 held at Jaipur on 11 Feb 2015
2. Stood first at college level in B.Sc. (H) Physics in 2005
3. Received Departmental meritorious fellowship from Oct 2008 to Oct 2013
4. Worked as a project fellow in a UGC sponsored major project from June 2008 to Sept 2008

DETAILS OF PUBLICATIONS

- **Impact of interfacial interactions on optical and ammonia sensing in Zinc Oxide/Polyaniline structures**
  Mansi Dhingra, Lalit Kumar, Sadhna Shrivastava, P. Senthil Kumar, S. Annapoorni
  Bulletin of Material Science 36 (2013) 647

- **Worm like zinc oxide nanostructures as efficient LPG sensor**
  Mansi Dhingra, N. K. Singh, Sadhna Shrivastava, P. Senthil Kumar, S. Annapoorni
  Sensors and Actuators A 190 (2013) 168

- **Polyaniline mediated enhancement in bandgap emission of Zinc Oxide**
  Mansi Dhingra, Sadhna Shrivastava, P. Senthil Kumar, S.Annapoorni
  Journal of Composites B 45 (2013) 033901

- **ZnO/PPy hybrid htererojunction as an Ultraviolet Photosensor**
  Mansi Dhingra, Sadhna Shrivastava, P. Senthil Kumar, S.Annapoorni
  Journal of Electronic Materials 42(2013) 1235

- **An electrical coupling between Organic/Inorganic semiconductor interfaces: A comparative study**
  Mansi Dhingra, Sadhna Shrivastava, P. Senthil Kumar, S.Annapoorni
  Advanced Materials Research 974 (2014) 21

- **Temperature controlled junction behavior of Polyaniline/ZnO heterostructures**
  Mansi Dhingra, Sadhna Shrivastava, K. Asokan, S.Annapoorni
  AIP Conference Proceedings 1731 (2016) 140038

- **Defect Induced Ferromagnetism in Zn/ZnO Interfaces**
  Mansi Dhingra, Rekha Gupta, and S. Annapoorni
  Cryst. Res. Technol. (2018) 1700293

- **Synthesis of Iron Oxide Nanoparticles and its Application for Oil-Water Separation**
  Mansi Dhingra , Parul Yadav, Savvi Mishra, Vishakha Dwivedi, Komal, Anupriya and Sonam
  Vantage: Journal of Thematic Analysis, 2020; 1(1) ISSN: 2582-7391

DETAILS OF BOOK AUTHORED AND e-LECTURES

- **Programming in Scilab**
  Rajan Goyal, Mansi Dhingra
  Narosa Publications (2018) ISBN: 9781783324019
- **Nanotechnology: From Lab to Fab**
  Mansi Dhingra, CEC Gurukul Live
  https://www.youtube.com/watch?v=7Yo9IWgiusQ
- **Investigating Nanomaterials using X-Rays**
  Mansi Dhingra, CEC Gurukul Live
  https://www.youtube.com/watch?v=H8-FeZxhRyg
- **Nanoscale effects in Magnetic materials**
  Mansi Dhingra, CEC Gurukul Live
  https://www.youtube.com/watch?v=rihNlPTivOM
- **Interaction of light with nanomaterials**
  Mansi Dhingra, CEC Gurukul Live
- **Electronics at Nanodimensions**
  Mansi Dhingra, CEC Gurukul Live

- **NANOTECHNOLOGY-Challenges of Teaching Physics Laboratory Courses in Online Mode**
  Mansi Dhingra, NASI Delhi Chapter
  https://youtu.be/0Wjjpq7YSsU

(DETAILS OF PROJECTS MENTORED AT COLLEGE LEVEL)

Year	Title	No. of Students involved	Mentors	Prize
2018	Study of Optical Absorbance of ZnO nanoparticles and verification of Beer Lambert's Law	2	Dr Mansi Dhingra, Dr Parul Yadav	First
2019	Study of Electrical and Optical Behavior of Metal and Metal Oxide Nanostructures	5	Dr Mansi Dhingra, Dr Parul Yadav	Second

2019	Synthesis of Iron Oxide Nanoparticles and its Application for Oil-Water Separation	5	Dr Mansi Dhingra, Dr Parul Yadav	Third, Published in Vantage: Journal of Thematic Analysis
2020	Quantum computing for fast diagnosis and cure of COVID-19 and other diseases	4	Dr Mansi Dhingra, Dr Parul Yadav	
2021	Design of Hydroponics system using Arduino to monitor physical parameters required for plants growth	4	Dr Mansi Dhingra, Dr Parul Yadav	Second
2022	Quantum Computing : Introduction, fundamentals and understanding of Deutsch Jozsa Algorithm	5	Dr Mansi Dhingra, Dr Parul Yadav Dr Shalini Lumb Talwar	Second
2022	Designing, Monitoring and Optimization of solar energy for maximum power	5	Dr Mansi Dhingra, Dr Parul Yadav	First

Additional Skills

- Ability to present and organize large amount of information in a clear manner
- Analysis of complex data and presentation of emerging conclusion and concepts
- Problem solving skills
- Ability to communicate effectively to a range of audiences
- Event planning skills
- Ability to interact with colleagues from diverse professional backgrounds to successfully work towards common goals
- Initiative and self-reliance
- Involved in giving lectures on Nanotechnology at CEC (Doordarshan)
- Experience in synthesis of thin films with the help of RF and DC magnetron sputtering.
- Hands on Experience in UV-Vis, Photoluminescence and Raman
- spectroscopy, TEM (Transmission Electron Microscopy)
- Electrical characterisation by Keithley source meter and multimeter and electrical sensing for toxic gases.
- Study of surface morphology by SEM (Scanning Electron Microscopy) and AFM
- (Atomic Force Microscopy)
- Simulation studies using IBM software for Quantum Computing
- Experience in interfacing software with hardware using Arduino
- Expertise in software like Python, C++ and Scilab