Dr. Sunil Kumar Sharma

M.Sc. Physics (Specialization in electronics) (1984) Ist division Ph.d Physics (1990) {Prior high school and intermediate in Ist division and B.Sc. Ist division from Dehradun (1981)}

<u>**Title of the Ph.d thesis</u>** "MULTIELEMENT THIN FILM STUDIES" Institute of advance studies C.C.S. University Meerut U.P.</u>

Specialization area of research

Thin film technology, solar cell, polymers, carbon technology, xero radiography

Position held and experience

Presently associate professor and head P.G. Department of physics N.A.S. college Meerut

Ph.d thesis evaluated

- "Electronic and vibrational spectral studies of some substituted pyridines" H N B Garhwal University Srinagar (Garhwal) Uttaranchal. Candidate name:- Manoj kumar sharma
- "Studies on Elastic properties of pure and mixed ionic crystals" Dr. B.R. Ambedkar University Agra Candidate name :- Sarvind kumar singh
- "Study of geometrical, electronic structure, spectral and NLO properties of some phnthalonitrile dye sensitizers for salar cells Periyar University salem, Tamil Nadu India Candidate name:- K. Vasudevan

Research

Research guidance

Following research scholars got their Ph.d degree

- 1. Ishwar Dayal Sharma (30/11/2013) Topic- "Electrical and optical.....substances".
- Vivek Yadav (24/04/2013) Topic- "Optical structural..... for device application".

- 3. Jitendra Singh (19/11/2012) Topic- "Study of conducting.....thin films".
- 4. Pushpendra singh (26/07/2012) Tppic- "Effect of dopants on....polyaniline".
- 5. Nempal Singh (25/05/2012) Topic- "Characterization of

semiconductor....application".

6. Nirdesh Kumar Singh (25/05/2012) Topic- "optical structural and

thermal.....In2Se3xTe3(1-x)".

7. Hariom Dwivedi (27/07/2002) Topic- "Studies on the role of…carbon-carbon composites".

Other achievements

Research experience

- 1986 up to date (31 Years)
- 1988 (joined) present & working as Associate Professor and Head P.G. Department of Physics N.A.S. College Meerut.

Awards

1984-85 Teacher's National Scholarship Awardee

1984-85 M.Phil Scholarship Awardee

1985-1988 Research Scholar Deptt. of Physics (Institute of Advance Studies. CCS University Meerut JRF, SRF Awardee

Membership professional bodies

- Life member Indian association of physics teachers
- Patorn Raman Sociaty department of physics N.A.S. College Meerut

Honors Awards

• Vigyan Sancharak Award-2001 by District Magistrate Meerut

- Secretary ICAM-2000 (International conference on advance materials) Dec.26-28
- Member (Nirnayak Mandal Meerut) National children's conference (NCSE) U.P.

Extra curricular activity

- General science quiz conducted at CCS University Meerut 1998.
- NCC Officer (C/T) 71-U.P. Batalian NCC N.A.S. College Meerut 1997-2000.
- NSS Officer N.A.S. College Meerut (July 2005 to July 2008).
- Manager Table Tenis team CCS Univ. Meerut held at Nauni-solan H.P. 1995-96.
- Manager Hockey (women) team CCS Univ. Meerut held at G.N.D. University Amritsar 2009-10.
- Secretary Teacher's Association N.A.S. College Meerut.
- District representative, Joint Secretary, Special invity CCS University Teacher's Association MUTA Meerut.
- Member Innovation Monitering Committee Meerut U.P. as appointed by District Magistrate Meerut 2017.
- Working as a Chief Proctor N.A.S. College Meerut 2017-18

PUBLICATIONS

- 1. "Study of Cu doping on PbS Thin Films" Modern Physics Letters B.Vol.3 No.11 (1989) 825-828.
- 2. "Optical properties of Indium Selenide Films" Indian Journal of Pure and Applied Physics Vol.28, Aug,1990, pp. 486-489.
- **3. "Photo conduction in amorphous selenium alloy films"** Indian journal of technology Vol.28, May (1990) pp. 205-207.
- **4. "On the validity of Vegard's Law in selenium tellurium films"** Physics of semiconductor devices Krishan Lal (Ed.) copy right (1993) Narosa Publishing House, New Delhi pp. 505-507.

- **5.** "Electrical Switching and structural analysis of alloy thin films" Indian journal of Pure and Appl. Physics Vol.35, Aug. 1997 pp. 508-513.
- 6. "Characterization of PANI/CdS/Glass Multilayer system" Electroactive Polymers, Materials and devices S.A. Hashmi Vol.3 (2009), pp. 281-286.
- 7. "Characterization of PANI/ZnS/Glass Multilayer system" International journal of physics and research (IJPR) ISSN 2250-0030 Vol.2 issue 4 Dec. 2012 pp. 9-13 @ TJPRC Pvt. Ltd.
- 8. "Synthesis of nanostructured polyanilline for opto electric devices and gas sensing applications"

AIP conf. Proc 1536, 745 (2013) doi 10.1063/1.4810442 published by American Institute of Physics.

9. "Synthesis and Characterization of Dodecyl benzensulfonic acid doped polyaniline"

International journal of Appllied Engineering Research ISSN 0973-4562 Volume 9, Number 1 (2014) pp. 29-34.

10."Photoelectrical behavior of spray of deposited CdxS1-x Thin Films"

Presented at National Conference on POSAD held at B.H.U. Varanasi India (1985).

11. "Heavy doping effect on PbS films"

Presented at 7th International conference on Thin Films at New Delhi Dec. (1987).

12."Selenide Thin Films"

Presented at International Conference and Intensive tutorial course on semiconductor materials at New Delhi, Dec. 1988.

13."Optical properties of selenium tellurium compounds"

Presented at International Conference and Intensive tutorial course on semiconductor materials at New Delhi, Dec. (1988).

14. "Compositional analysis of CdxZn1-xS Thin films by Vegard's Law."

Presented at National Conference on "Recent Developments in Solid state materials related to devices, March 3-5 1994 held at Roorkee.

- 15."Band gap measurement of sintered CdxSe1-x films from reflectance measurement Sachin Kumar Sharma, Vipin Kumar, Sanjeev Kumar Kaushish, T.P. Sharma and S.K. Sharma" Presented 3rd International Conference and Intensive tutorial course on Semiconducter materials and technology (ICSMT'96) held on December 16-21, 1996, University of Delhi, New Delhi, India. The conference Abstracts published in the proceeding.
- 16."Role of Different types of Carbon Fibers in the development of Hybrid C/C Composites"

Proc. Indo. German Workshop on high temperature fiber composite materials pp. 97-104, Banaras Hindu University, Varanasi-221005 (India) 11-15 September, (2000).

17. "Structure-Property Relationship in PANEX Based carbon Fibers"

Presented at International conference on Advance Materials held at C.C.S. University, Meerut, Dec. 26-28, 2000.

- 18. "Structural Property of Composite SeAs-SeTe Alloy films" Presented at International Conference on Advanced Materials held at C.C.S. University, Meerut, Dec. 26-28, 2000.
- **19."II-VI Alloy thin films for solid state devices application"** Presented at International Conference on Advance Materials held at C.C.S. University, Meerut Dec. 26-28 2000.
- 20. "Influence of Pyro Carbon Coating of H.M. Carbon fibres on the mechanical properties of C/C composites prepared there form" Presented at National Conference on Lasers and Spectroscopy (Dec. 28-31, 2000) at N.A.S. College, Meerut (C.C.S. University, Meerut).
- 21."Tandom Solar Cells"

On future source of energy published in proceeding of the National Seminar held at yamunagar India (1988).

22."Some aspects on non-conventional energy sources" Published in proceeding of the National Seminar on future sources of energy held at Yamunagar India (1988). 23. "Study of ZnS/Glass and PANI/ZnS/Glass Hetro Structure for Photovoltaic application"

Training Programme on..... Photovoltaic International conference on spectro physics post graduate research department department of Physics Pachai Yappeis, College Chennai Feb, 9-12, 2005.

24. "Measurement of Thermal Conductivity and Thermal diffusivity of Poly crystalline INDIUM CHALCOGENIDE In2Se3xTe3(1-x) (X=0, .2, .4, .6 and .8) at room temperature"

Published in the proceeding of National Conference on 'New Approach in chemical sciences & Advancement In Renewable Energy' department of Chemistry SRM University Delhi NCR Campus pp.63-66, 4-5 April,2014.