

Multanimal Modi College Modinagar-201204 (U.P.)

(Affiliated to Ch. Charan Singh University, Meerut)
(For Teaching Staff)

| Title Dr. | First Name Last Name Kumar | Photograph |
|---------------------|--|------------|
| Designation | Assistant Professor | |
| Department | Physics | |
| Address | Department of Physics | |
| (Campus/Department) | T/. Professors' Lodge | |
| (Residence) | 17, Professors' Lodge Modinagar Ghaziabad UP 201204 | |
| Mobile | 9258303162 | |
| Email | mkphysics@gmail.com | |

EDUCATIONAL QUALIFICATIONS

| Subject | Institution | Year | Details |
|---------|--|------|----------------------------|
| Ph.D. | IIT Roorkee | 2014 | Awarded |
| M.Phil. | C.C.S. University Campus Meerut UP 250004 | 2007 | Awarded |
| M.Sc. | C.C.S. University Campus Meerut UP 250004 | 2005 | Passed with First Division |
| B.Sc. | Meerut College Meerut | 2003 | Passed with First Division |

CAREER PROFILE

| Organisation / Institution | Designation | Duration | Role(s) |
|----------------------------|-------------|----------|---------|

| Multanimal Modi College Modinagar Professor | Till now | Associate NCC Officer (ANO) since 2017 Member, Admission Committee (2016-17, 2017-18, 2018-19. 2019-20, 2020-21) Deputy Coordinator, preparation for entry into services (UGC scheme) for the session 2015-16. Member of College council for the session 2014-15. Member of College NAAC/IQAC committee for 2013-14. Member of organizing committee for organizing international conference (RTISOC 2014). Coordinator, Departmental Council, Department of Physics (2013-2015) Member, SC/ST cell. |
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Research Interests / Specialization:

Material Science/Thin films

Teaching Experience (Subjects /Courses Taught): 10 years

10 years UG and PG teaching experience in M M College Modinagar.

UG Courses are:

- 1. Kinetic Theory and Thermodynamics
- 2. Elements of Quantum Mechanics, Atomic and Moleculars Spectra
- **3.** Solid State and Nuclear Physics

PG Courses are:

- 1. Quantum Mechanics I
- 2. Quantum Mechanics II
- 3. Condensed Matter Physics
- 4. Physics of Nanomaterials

Orientation Courses/Refresher Courses/FDP:

- 1. Orientation Course, Academic Staff College, Jawaharlal Nehru University, New Delhi, February 23 to March 20, 2015.
- 2. Refresher Course, UGC-Human Resource Development Centre, Kurukshetra University, Kurukshetra, December 10 to December 30, 2015.
- 3. Refresher Course, Academic Staff College, Jawaharlal Nehru University, New Delhi, August 27 TO September 20, 2018

Honors & Awards:

- ➤ Received financial support from "UGC international travel support scheme" for attending and present my research paper in "International conference on metallurgical coatings and thin films" at San Diego, California, USA, April 29, 2013 May 3, 2013.
- Awarded senior research fellowship (SRF) from UGC in Ph.D. programme (January 01, 2010 to December 31, 2010).
- Awarded junior research fellowship (JRF) from UGC in Ph.D. programme (January 01, 2008 to December 31, 2009).

- Awarded Rajiv Gandhi National Fellowship Scheme (RGNFS) from UGC in M.Phil. programme (November 2005 to December 2006).
- Qualified National Eligibility Test (NET) CSIR-UGC (JRF) in June 2007.
- Qualified National Eligibility Test (NET) CSIR-UGC (LS) in June 2006.

Publications (Last FIVE (05) Year Publications,

| Year of Publication | Title | Journal/Book(s) | Co-Author(s) |
|---------------------------|---|------------------|---|
| 2020 | Influence of SiC thin films thickness on the electrical properties of Pd/SiC thin films for hydrogen gas sensor | Vacuum | MukeshKumar, Ashwani Kumar, Yogendra K. Gautam, Ramesh Chandra, Manjeet S. Goyat, B. S. Tewari, Rajesh K. Tewari |
| 2015 | Structural and magnetic properties of pulsed laser deposited Fe-SiC thin films | Thin solid films | Mukesh Kumar, Ramesh Chandra, Manjeet S. Goyat, Raghwesh Mishra, Rajesh K. Tiwari and A. K. Saxena |

<u>Conference Presentations:</u> National / <u>International</u>

- 1. Mukesh Kumar under the title "Characterization of Silicon Carbide thin films deposited by physical vapor deposition" in International conference on Global Initiatives in applied Sciences and Green Technologies (GiAgT-2016) at SRM University Delhi-NCR Campus Modinagar, Ghaziabad UP India on September 09-11, 2016.
- Mukesh Kumar and Ramesh Chandra under the title "Effect of laser flux density on SiC thin films" in International Conference On Emerging Trends In Sciences And Technology (ICETST-2016), at K.N.G.D. Modi Engineering College Modinagar, Ghaziabad (UP) 201204, India, on April 08-09, 2016.
- 3. Mukesh Kumar and Ramesh Chandra under the title "Effect of laser flux density on SiC thin films" in International Conference On Recent Trends In Interdisciplinary Sciences: Opportunities And Challenges at Multanimal Modi College Modinagar, Ghaziabad (UP) 201204, India on February 28, 2014 March 01, 2014.
- 4. Mukesh Kumar, Ramesh Chandra, Raghwesh Mishra, Rajesh K. Tiwari and A. K. Saxena under the title "Pulsed laser deposition of Fe-SiC multilayers for spintronic applications" in *International conference on metallurgical coatings and thin films (ICMCTF-2013)*, San Diego, CA, USA, April 29, 2013 May 3, 2013.
- 5. Yogendra K. Gautam, *Mukesh Kumar*, Ramesh Chandra, "Hydrogen absorption and desorption properties of Pd/Mg/Pd tri-layers prepared by magnetron sputtering" in *International conference on metallurgical coatings and thin films (ICMCTF-2013)*, San Diego, CA, USA, April 29, 2013 May 3, 2013.
- 6. *Mukesh Kumar*, Rajan Walia and Ramesh Chandra under the title "Characterization of Silicon Carbide (SiC) Thin Films Deposited by Pulse Laser Deposition" in *DAE-BRNS 5th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials*, IIT Madras, Chennai, December 2-4, 2009.
- 7. Mukesh Kumar, Amit K. Chawla, Vipin Chawla, Yogendra K.Gautam, Rajan Walia, Sushant Rawal and Ramesh Chandra under the title "Synthesis and Characterization of Silicon Carbide (SiC) thin films". In International Workshop on nanotechnology and Advanced Functional Materials, NTAFM, NCL Pune, India, July 9th-11th, 2009, P-165.

8. Mukesh Kumar, Ramesh Chandra, Raghwesh Mishra, Rajesh K. Tiwari, and A. K. Saxena under the title "Effect of Sputtering Gas on Structural and Optical Properties of Sputtered SiC Thin Films" in Thin Films: Science & Technology (TFST) at BARC Mumbai, November 09-12, 2011.

Total Publication Profile: 07 Research paper published in international journals and 02 paper published in Proceedings.

Books 03 Books published.

Publications in Indexed/ Peer Reviewed Journals:

| Year of Publication | <u>Title</u> | <u>Journal</u> | <u>Author</u> |
|------------------------|---|--|---|
| 2020 | Influence of SiC thin films thickness on the electrical properties of Pd/SiC thin films for hydrogen gas sensor | Vacuum | MukeshKumar, Ashwani Kumar, Yogendra K. Gautam, Ramesh Chandra, Manjeet S. Goyat, B. S. Tewari, Rajesh K. Tewari |
| 2015 | Structural and magnetic properties of pulsed laser deposited Fe-SiC thin films | Thin solid films | Mukesh Kumar, Ramesh Chandra, Manjeet S. Goyat, Raghwesh Mishra, Rajesh K. Tiwari and A. K. Saxena |
| 2013 | Hydrogen absorption and desorption properties of Pd/Mg/Pd tri-layers prepared by magnetron sputtering | Surface & Coatings Technolo gy | Yogendra K. Gautam, <i>Mukesh Kumar</i> , Ramesh Chandra |
| 2013 | The dependence of structural and optical properties of PLD grown ZnO films on ablation parameters | Applied Surface Science | Arun Aravind, M. K. Jayaraj, <i>Mukesh Kumar</i> and Ramesh Chandra |
| 2013 | Optical and magnetic properties of Copper doped ZnO nanorods prepared by hydrothermal method | Journal of Materials Science: Materials in Electronics | Arun Aravind, M. K. Jayaraj, <i>Mukesh Kumar</i> and Ramesh Chandra |
| 2013 | Magnetic and Raman scattering studies of Co-doped ZnO thin films grown by pulsed laser deposition | Applied Physics A: Materials science and processing | Arun Aravind, K. Hasna, M. K. Jayaraj, Mukesh Kumar and Ramesh Chandra |
| 2012 | Structural, optical and magnetic properties of Mn doped ZnO thin films prepared by pulsed laser deposition | Materials Science and Engineering B | Arun Aravind, M. K. Jayaraj, Mukesh Kumar and Ramesh Chandra |
| 2012 | Effect of sputtering gas on structural and optical properties of sputtered SiC thin films | AIP Conf. proceeding | Mukesh Kumar, Ramesh Chandra, Raghwesh Mishra, Rajesh K. Tiwari and A. K. Saxena |

| 2012 | Properti Transition Doped Z | al, Optical and Magneti es of Highly Oriented on Metal (Mn/Co/Ni/Con on Thin Films Prepare | u) d | dings | Arun Aravind, M. K. Jayaraj, Mukesh Kumar and RameshChandra |
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| | | ty Service / Consulting | | | |
| Activity Professional Societies Memberships | | | | | |
| | | vsics Teachers (IAPT) | Life Membershi | p (Nur | mber 13251 |
| Proiec | ts (Major Grants / | | | | |
| Name(s) & Number(s) of PhD StudentsSupervised and Awarded | | | | | |
| S.No. | Name of Ph.D Scholar | Date of Registration | Date of | | Title of Thesis |
| 1. | Raiiv Kumar | 25/08/201 | Pursuing | | |
| 2. | Ankur Kumar | 30/11/201 | Pursuing | | |
| 3. | Manjee | 01/08/201 | Pursuing | | |
| 4. | Bharat Lal | 01/08/201 | Pursuing | | |

(Signature of Faculty Member)

(Signature & Stamp of Teacher In-Charge/Principal)