



# Kirori Mal College

(University of Delhi)

University of Delhi, Delhi-110007

(Phone No. - 011-7121 9084 : Email - principal@kmc.du.ac.in)



Print Date : 02-06-2026

## 1. Personal Profile

Title: **Dr.** First Name: **ARTI** Last Name: .

Designation: **ASSISTANT PROFESSOR** Mobile No. -----

Phone No. (Office) ----- Phone No. (Residence): -----

Email: **physicsarti@kmc.du.ac.in** Webpage: -----



Facebook: ----- Twitter: -----

LinkedIn: ----- Instagram: -----

Youtube: ----- Research Gate Link: <https://www.researchgate.net/profile/Arti-Chauhan-2>

Google Scholar Link: <https://scholar.google.com/citations?user=-3omIYMAAAAJ&hl=en>

Address: -----

## 2. Educational Qualifications

| Degree/ Certification | Institution  | Year |
|-----------------------|--|------|
| M.Sc (Physics)        | Guru Nanak Dev University Amritsar                         | 2011 |
| B.Sc (H) Physics      | Guru Nanak Dev University Amritsar                         | 2009 |
| M.Sc PHYSICS          | GNDU AMRITSAR  | 2011 |
| B.Sc (Hons.) Physics  | GNDU AMRITSAR  | 2009 |
| Ph.d                  | Deaprtment of Physics and Astrophysics University of Delhi | 2024 |

## 3. Career Profile & Administrative Assignments

| Category                   | Role/ Designation   | Department/ Committee                          | Date From - To            | Remarks  |
|----------------------------|---------------------|--|---------------------------|--|
| CAREER PROFILE             | ASSISTANT PROFESSOR | PHYSICS Kirori Mal College University of Delhi | 23.Jul.2012 - Till date   |  |
| ADMINISTRATIVE ASSIGNMENTS | CONVENER            | OTHERS Kirori Mal College University of Delhi  | 01.Jan.2021 - 18.May.2023 | Convenor of Physics Seminar committee (Tachyons) |

|                            |                     |  |                           |  |
|----------------------------|---------------------|--|---------------------------|--|
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | THE PLAYERS – THE THEATRE SOCIETY Kirori Mal College University of Delhi | 01.Jul.2023 - 30.Jun.2024 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | FOREIGN STUDENTS' COMMITTEE Kirori Mal College University of Delhi       | 01.Jul.2023 - 30.Jun.2024 |  |
| CAREER PROFILE             | ASSISTANT PROFESSOR | PHYSICS Kiirori Mal College  | 23.Jul.2012 - Till date   |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | FEE CONCESSION COMMITTEE Kiirori Mal College                             | 01.Jul.2023 - 30.Jun.2024 |  |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | PHYSICS Kiirori Mal College  | 01.Jul.2023 - 30.Jun.2024 | Time Table Committee in Physics Department |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | PHYSICS Kiirori Mal College  | 01.Jul.2023 - 30.Jun.2024 | Physics Seminar Society                    |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | PHYSICS Kiirori Mal College  | 01.Jul.2023 - 30.Jun.2024 | Physics Robotics Club                      |
| ADMINISTRATIVE ASSIGNMENTS | MEMBER              | ROBOTICS Kiirori Mal College   | 01.Jun.2023 - 30.Jun.2024 |  |

#### 4. Other Profiles

##### Other Profile Name/ Description

##### SUBJECTS TAUGHT

**1. Mechanics**

**2. Thermal Physics**

**3. Waves and Optics**

**4. Mathematical Physics**

**5. Electricity and Magnetism**

**6. Elements of Modern Physics**

**7. Solid state Physics**

**8. Vedic Maths**

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##### AREAS OF INTEREST/ SPECIALIZATION

Experimental Condensed matter Physics (Material Science)

1. Photovoltaic applications and
2. Photocatalytic applications

## FIELD TRIPS ORGANIZED

Field trip to

1. Manali (2018)
2. Nainital (2019)
3. Rishikesh (2022)

## 5. Research Guidance

| Year | Guide For | Title of the Dissertation/ Thesis | Scholar Name | Status |
|------|-----------|-----------------------------------|--------------|--------|
|------|-----------|-----------------------------------|--------------|--------|

## 6. Research Projects

| Year | Title of Project | Sponsorship Agency | Duration | Amount Sanctioned | Date of Sanction |
|------|------------------|--------------------|----------|-------------------|------------------|
|------|------------------|--------------------|----------|-------------------|------------------|

## 7. Publications

| Category                      | Publication Name   | Title   | Name of Author  | Reference Link/ DOI Link  | Publi (Month Year) |
|-------------------------------|--|---|---|---|--------------------|
| JOURNAL PAPER (International) | Improved ferroelectric, magnetic and photovoltaic properties of Pr doped multiferroic bismuth ferrites for photovoltaic application. | Results in Physics(Elsevier)                                      | Arti, Sumit Kumar, Parveen Kumar, Rajan Walia and Vivek Verma (First Author)        | <a href="https://doi.org/10.1016/j.rinp.2019.102403">https://doi.org/10.1016/j.rinp.2019.102403</a>       | May 2019           |
| JOURNAL PAPER (International) | Improvement in photovoltaic response of bismuth ferrite by tuning its ferroelectric and band-gap properties.                         | Journal of Materials Science: Materials in Electronics (Springer) | Arti, Reema Gupta, Renuka Bakolia and Vivek Verma (First Author)                    | <a href="https://doi.org/10.1007/s10854-020-04925-z">https://doi.org/10.1007/s10854-020-04925-z</a>       | Novem 2020         |
| JOURNAL PAPER (International) | Modification in photovoltaic and photocatalytic properties of bismuth ferrites by tailoring band-gap and ferroelectric properties.   | Journal of Alloys and Compounds                                   | Arti, Reema Gupta, S.P. Singh, Rajan Walia, Vinod Kumar, Vivek Verma (First Author) | <a href="https://doi.org/10.1016/j.jallcom.2022.164602">https://doi.org/10.1016/j.jallcom.2022.164602</a> | March 2022         |

|                               |   |  |   |   |               |
|-------------------------------|---|--|---|---|---------------|
| JOURNAL PAPER (International) | Alkali (Na, K) doped SnO <sub>2</sub> : An investigation on the role of microstructure on electricity generation of oxide based ceramic hydroelectric cells | Inorganic Chemistry Communications               | Kumar, Parveen & Kumar, Sumit & Chauhan, Arti & Singh, Adarsh & Singh, Neelam & Verma, Vivek. (Joint Author)  | <a href="http://dx.doi.org/10.1016/j.inoche.2022.110115">http://dx.doi.org/10.1016/j.inoche.2022.110115</a> | November 2023 |
| JOURNAL PAPER (International) | Modified Magnetic and Electrical Properties of Perovskite-Spinel Multiferroic Composites  | Journal of Superconductivity and Novel Magnetism | Jarnail S. Bangruwa, Sumit Kumar, Arti Chauhan, Parveen Kumar, Vivek Verma (Joint Author)   | <a href="https://doi.org/10.1007/s10948-018-4986-z">https://doi.org/10.1007/s10948-018-4986-z</a>           | November 2018 |
| JOURNAL PAPER (International) | Ferrites: magnetic materials as an alternate source of green electrical energy  | Heliyon 5 (2019) e01151                          | Pranati Kharbanda , Tushar Madaan , Isha Sharma , Shruti Vashishtha , Parveen Kumar , Arti Chauhan, Sumit Mittal, Jarnail S. Bangruwa, Vivek Verma (Joint Author) | <a href="https://doi.org/10.1016/j.heliyon.2019. e01151">doi: 10.1016/j.heliyon.2019. e01151</a>            | January 2019  |
| JOURNAL PAPER (International) | Steady microwave absorption behavior of two-dimensional metal carbide MXene and Polyaniline composite in X-band   | Journal of Magnetism and Magnetic Materials      | Sumit Kumar, Arti, Parveen Kumar, Nidhi Singh, Vivek Verma. (Joint Author)  | <a href="https://doi.org/10.1016/j.jmmm.2019.165364">https://doi.org/10.1016/j.jmmm.2019.165364</a>         | May 2019      |
| JOURNAL PAPER (International) | Enhanced photovoltaic and sunlight-driven photocatalysis for water purification study of rare earth and transition element doped bismuth ferrites           | Applied Physics A                                | Arti, Reema Gupta, Neelam Singh, Manish Kumar Kansal, Vivek Verma (First Author)  | <a href="https://doi.org/10.1007/s00339-023-06928-z">https://doi.org/10.1007/s00339-023-06928-z</a>         | July 2023     |

|   |   |   |   |   |            |
|---|---|---|---|---|------------|
| CONFERENCE PAPER/ PROCEEDINGS (International) | Structural, Magnetic and Optical Study of Transition Element Doped Bismuth Ferrite                  | Proceedings of the International Conference on Atomic, Molecular, Optical & Nano Physics with Applications, Springer Proceedings in Physics 271 | Arti, Anahat, Sumit Kumar, P. Kumar, and Vivek Verma (First Author) | <a href="https://doi.org/10.1007/978-981-16-7691-8_24">https://doi.org/10.1007/978-981-16-7691-8_24</a> | March 2022 |
| CONFERENCE PAPER/ PROCEEDINGS (International) | Safe, Efficient and Portable Power Generation in Oxide Based Hydroelectric Cells by Water Splitting | Springer Nature Singapore Pte Ltd. 2022   | Parveen Kumar, Sumit Kumar, Arti, and Vivek Verma (Joint Author)    | <a href="https://doi.org/10.1007/978-981-16-7691-8_40">https://doi.org/10.1007/978-981-16-7691-8_40</a> | March 2022 |

## 8. Books

| Category | Book Name | Title | Name of Author | ISSN/ ISBN Number |
|----------|-----------|-------|----------------|-------------------|
|----------|-----------|-------|----------------|-------------------|

## 9. Faculty Achievements

| Year | Category of Achievement              | Role        | National/ International etc. | Name   | Date From-To              |
|------|--------------------------------------|-------------|------------------------------|--|---------------------------|
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED | PARTICIPANT | National                     | "Open-Source Tools for Research" from June 08 - June 14, 2020 conducted by Ramanujan college university of Delhi                       | 08.Jun.2020 - 14.Jun.2020 |
| 2020 | FACULTY DEVELOPMENT PROGRAM ATTENDED | PARTICIPANT | National                     | 2. Two Weeks Faculty Development Programme on "ADVANCED CONCEPTS FOR DEVELOPING MOOCS"   | 02.Aug.2020 - 17.Jul.2020 |
| 2021 | FACULTY DEVELOPMENT PROGRAM ATTENDED | PARTICIPANT | National                     | 3. One Week (Online) International Faculty Development programme on "Materials Characterization: Experimental and Theoretical Aspects" | 20.Sep.2021 - 24.Sep.2021 |
| 2021 | FACULTY DEVELOPMENT PROGRAM ATTENDED | PARTICIPANT | National                     | 4. 5-day Online Faculty Development Program on "PROGRAMMING IN PYTHON"   | 06.Jan.2022 - 10.Dec.2021 |
| 2021 | REFRESHER COURSE ATTENDED            | PARTICIPANT | National                     | 5. Online Two-week Refresher Programme in Physics  | 27.Oct.2021 - 10.Nov.2021 |
| 2022 | REFRESHER COURSE ATTENDED            | PARTICIPANT | National                     | Two-Week Refresher Course On "Managing Online Classes & Co- creating MOOCS 21.0"   | 07.Dec.2022 - 21.Dec.2022 |

|      |   |                 |               |   |                              |
|------|---|-----------------|---------------|---|------------------------------|
| 2018 | WORKSHOP/<br>SEMINAR/<br>CONFERENCE<br>ATTENDED | PARTICIPANT     | International | Paper presented (Oral) entitled "Improved ferroelectric, magnetic and photovoltaic properties of Pr doped multiferroic bismuth ferrites for photovoltaic application" at International Conference | 17.Dec.2018 -<br>20.Dec.2018 |
| 2019 | WORKSHOP/<br>SEMINAR/<br>CONFERENCE<br>ATTENDED | PARTICIPANT     | National      | International Conference on Atomic, Molecular, Optical and Nano-Physics with Applications   | 18.Dec.2019 -<br>20.Dec.2019 |
| 2017 | WORKSHOP/<br>SEMINAR/<br>CONFERENCE<br>ATTENDED | PARTICIPANT     | National      | National workshop on nanotechnology : Emerging frontiers and applications.  | 30.Jan.2017 -<br>31.Jan.2017 |
| 2020 | WORKSHOP/<br>SEMINAR/<br>CONFERENCE<br>ATTENDED | PARTICIPANT     | International | Conference Entitled " Empowering Methodologies in Indian Management Research  | 16.Dec.2019 -<br>17.Dec.2019 |
| 2024 | FACULTY<br>DEVELOPMENT<br>PROGRAM<br>ATTENDED   | CO-<br>CONVENER | University    | 3. One Week (Online) International Faculty Development programme on "Materials Characterization: Experimental and Theoretical Aspects"  | 07.May.2024 -<br>16.May.2024 |

**Dr. ARTI .**