



# Kirori Mal College

(University of Delhi)

University of Delhi, Delhi-110007

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



Print Date : 25-06-2026

## 1. Personal Profile

Title: **Dr.** First Name: **SUNITA** Last Name: **SINGH**

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

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

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

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

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

Youtube: ----- Research Gate Link: -----

Google Scholar Link: -----

Address: -----

## 2. Educational Qualifications

Degree/ Certification	Institution	Year
PhD	University of Delhi	2015
M.Sc(Physics)	University of Delhi	2009
B.Sc(H) Physics	University of Delhi	2007

## 3. Career Profile & Administrative Assignments

Category	Role/ Designation	Department/ Committee	Date From - To	Remarks
CAREER PROFILE	ASSISTANT PROFESSOR	PHYSICS KIRORI MAL COLLEGE, DELHI	20.Oct.2022 - Till date	
CAREER PROFILE	ASSISTANT PROFESSOR	PHYSICS MIRANDA HOUSE, DELHI	20.Jul.2015 - 18.Oct.2022	
CAREER PROFILE	ASSISTANT PROFESSOR	PHYSICS ST. STEPHENS COLLEGE, DELHI	12.Jan.2013 - 22.May.2015	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	PROSPECTUS COMMITTEE KIRORI MAL COLLEGE, DELHI	18.Aug.2023 - 17.Aug.2024	Time Table Committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	SC/ST CELL Kirori Mal College	01.Jul.2023 - 30.Jun.2024	

ADMINISTRATIVE ASSIGNMENTS	MEMBER	TIME TABLE COMMITTEE Kirori Mal College	20.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	TIME TABLE COMMITTEE Physics Department, KMC	01.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	OTHERS Physics Department, KMC	01.Jul.2023 - 30.Jun.2024	The Astro Club, Physics Department
ADMINISTRATIVE ASSIGNMENTS	MEMBER	OTHERS Physics Department, KMC	01.Jul.2023 - 30.Jun.2024	Seminar Society, Physics Department
ADMINISTRATIVE ASSIGNMENTS	MEMBER	ROBOTICS Physics Department, KMC	01.Jul.2023 - 30.Jun.2024	

#### 4. Other Profiles

##### Other Profile Name/ Description

##### SUBJECTS TAUGHT

1. Mechanics
2. Thermal Physics
3. Waves and Optics
4. DSE: Numerical Analysis
5. Elements of Modern Physics
6. Solid State Physics
7. Nuclear & Particle Physics
8. Electricity & Magnetism
9. Atomic & Molecular Physics
10. Mathematical Physics-I

##### SUBJECTS TAUGHT

1. Mathematical Physics Lab-1
2. Mechanics Lab
3. Waves & Oscillations lab
4. Thermal Physics Lab
5. DSE- Numerical Analysis

#### 5. Research Guidance

Year	Guide For	Title of the Dissertation/ Thesis	Scholar Name	Status
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## 6. Research Projects

Year	Title of Project	Sponsorship Agency	Duration	Amount Sanctioned	Date of Sanction
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## 7. Publications

Category	Publication Name	Title	Name of Author	Reference Link/ DOI Link	Publication (Month-Year)
JOURNAL PAPER (International)	Non-perturbative quantum effects in stringy degenerate geometries: Vacuum created pair of (DD)3-brane by a two form	International Journal of Innovative research in Science, Engineering and Technology	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		June 2016
JOURNAL PAPER (International)	Gravity dual D3-braneworld and Open/Closed string duality	International Journal of Innovative research in Science, Engineering and Technology	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		November 2016
JOURNAL PAPER (International)	Quintessence and effective AdS brane geometries	International Journal of Modern Physics A	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		June 2015
JOURNAL PAPER (International)	Quantum Kerr(Newman) degenerate stringy vacua in 4D on a non-BPS brane	International Journal of Modern Physics A	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (First Author, Corresponding Author)		October 2014
JOURNAL PAPER (International)	Quantum Kerr tunneling vacua on a (DD)4-brane: An emergent Kerr black hole in five dimensions	Nuclear Physics B	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (First Author)		August 2014

JOURNAL PAPER (International)	Quintessence and effective RN de Sitter brane geometries	European Physical Journal C	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (First Author)		May 2014
JOURNAL PAPER (International)	Emergent Schwarzschild and Reissner-Nordstrom black holes in 4D: An effective curvature sourced by a B2-field on a D4-brane	Physical Review D	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		January 2013
JOURNAL PAPER (International)	Discrete torsion, de Sitter tunneling vacua and AdS brane: U(1) gauge theory on a D4 brane and an effective curvature	Journal of High Energy Physics	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		February 2013
JOURNAL PAPER (International)	Emergent Schwarzschild and Reissner-Nordstrom black holes in 4D: An effective curvature sourced by a B2-field on a D4-brane	Journal of Astrophysics and Aerospace Technology	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		March 2013
JOURNAL PAPER (International)	Reissner–Nordstrom spacetimes in torsion modified ? gravity: isometries and perihelion precession	General Relativity and Gravitation	Sunita Singh, Jitesh Kumar, Rohit Kumar Gupta, Supriya Kar, Nitish Rang (Joint Author)	<a href="https://doi.org/10.1007/s10714-024-03315-8">https://doi.org/10.1007/s10714-024-03315-8</a>	October 2024
CONFERENCE PAPER/ PROCEEDINGS (International)	Degenerate quantum vacua and family of Kerr black holes	Proceedings of European Physics Journal C,	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (First Author)		May 2018
CONFERENCE PAPER/ PROCEEDINGS (International)	Discretetorsion,(Anti)–deSitterD4-brane &tunneling	Proceedings of Nuclear Physics B	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)		February 2013

CONFERENCE PAPER/ PROCEEDINGS (International)	Curved D-Brane world Action in 4D and Black Holes	World Scientific	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)	December 2011
CONFERENCE PAPER/ PROCEEDINGS (International)	D-Brane world Black Hole	World Scientific	Sunita Singh, K. Priyabrat Pandey, Abhishek K. Singh and Supriya Kar (Joint Author)	December 2011

## 8. Books

Category	Book Name	Title	Name of Author	ISSN/ ISBN Number
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## 9. Faculty Achievements

Year	Category of Achievement	Role	National/ International etc.	Name	Date From-To
2023	FACULTY INDUCTION PROGRAM ATTENDED	ASSISTANT PROFESSOR	National	Faculty Induction Program	20.Dec.2022 - 18.Feb.2023
2022	REFRESHER COURSE ATTENDED	ASSISTANT PROFESSOR	National	Faculty Refresher Course	27.Oct.2022 - 11.Nov.2022
2021	FACULTY DEVELOPMENT PROGRAM ATTENDED	ASSISTANT PROFESSOR	National	Faculty Development Program	26.Jul.2021 - 31.Jul.2021
2018	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	ASSISTANT PROFESSOR	National	Science Conclave: Research on the frontier' Miranda House, University of Delhi, India	10.Jan.2018 - 12.Jan.2018
2017	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	MEMBER	College	Inspire Internship Program-2017	18.Dec.2017 - 22.Dec.2018
2016	INVITED LECTURES/ RESOURCE PERSON/ PAPER PRESENTATIONS ATTENDED	ASSISTANT PROFESSOR	International	DAE-BRNS High Energy Physics Symposium', University of Delhi, India	12.Dec.2016 - 16.Dec.2016
2013	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	ASSISTANT PROFESSOR	National	National String Meeting	22.Dec.2013 - 27.Dec.2013
2012	NATIONAL/ INTERNATIONAL FELLOWSHIPS (IOE, FRSC, etc.) ATTENDED	PARTICIPANT	International	Spring School on Superstring theory and related topics	19.Mar.2012 - 27.Mar.2012

2012	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	PARTICIPANT	International	1st Institute of Advanced Studies School on Particle Physics and Cosmology and its implication for technology supported by CERN	09.Jan.2012 - 31.Jan.2012
2012	SEMINAR ATTENDED	PARTICIPANT	International	International Conference on Light Cone Physics: Hadronic and Particle Physics	23.Nov.2012 - 26.Nov.2012
2011	WORKSHOP/ SEMINAR/ CONFERENCE ATTENDED	PARTICIPANT	National	'Science and Engineering Research Council(SERC) Mains School in Theoretical High Energy Physics	31.Jan.2011 - 20.Feb.2011

**Dr. SUNITA SINGH**