



# Kirori Mal College

(University of Delhi)

University of Delhi, Delhi-110007

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



Print Date : 15-02-2026

## 1. Personal Profile

Title: Dr. First Name: **AJAY** Last Name: **PRATAP SINGH**

Designation: **ASSISTANT PROFESSOR** Mobile No. **9718213799**

Phone No. (Office) **011-71219084** Phone No. (Residence): -----

Email: **ajaypratap@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	Department of Chemistry, University of Delhi	2021
M.Sc. (Spl. Physical Chemistry)	Department of Chemistry, St. John's College Agra, Dr. Bhim Rao Ambedkar University Agra	2011
B.Sc.	Krishn College of Science & Technology Bamrauli Katara Agra, Dr. Bhim Rao Ambedkar University Agra	2009
12	U.P. Board	2006
10	U.P. Board	2004

## 3. Career Profile & Administrative Assignments

Category	Role/ Designation	Department/ Committee	Date From - To	Remarks
CAREER PROFILE	ASSISTANT PROFESSOR	CHEMISTRY KIRORI MAL COLLEGE, DELHI	13.Oct.2022 - Till date	Working as an assistant professor in permanent capacity.

ADMINISTRATIVE ASSIGNMENTS	MEMBER	CHEMISTRY Kirori Mal College	01.Jul.2024 - 30.Jun.2025	Library committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	CHEMISTRY Kirori Mal College	01.Jul.2024 - 30.Jun.2025	Discipline Committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	CHEMISTRY Kirori Mal College	01.Jul.2024 - 30.Jun.2025	Committee for catering Students Diversity
ADMINISTRATIVE ASSIGNMENTS	MEMBER	STANDING COMMITTEE FOR MONITORING ADMISSIONS Kirori Mal College	01.Jul.2024 - 30.Jun.2025	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	AUDIO-VISUAL FACILITIES AND EQUIPMENT MAINTENANCE COMMITTEE Kirori Mal College	01.Jul.2024 - 30.Jun.2025	

#### 4. Other Profiles

##### Other Profile Name/ Description

##### AREAS OF INTEREST/ SPECIALIZATION

- Novel core/shell nano-heterostructures.
- Metal and metal-oxide nanomaterials, and nanocomposite.
- Photoelectrochemical water splitting, electrocatalysis, CO<sub>2</sub> reduction.
- Catalytic and photocatalytic degradation of organic pollutants.
- Selective photocatalytic oxidation of alcohols into corresponding aldehydes by molecular oxygen under visible light.

##### SUBJECTS TAUGHT

- Physical Chemistry
- Analytical Chemistry

##### MOOCS/ SWAYAM-NPTEL/ OTHER ONLINE COURSES COMPLETED WITH CERTIFICATION

Successfully completed a 4-Week Faculty Induction/Orientation Programme, Under the aegis of MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING from 20 January – 18 February, 2023 and obtained Grade A+.

##### OUTREACH PROGRAM ORGANIZED

Shyam Lal College, University of Delhi and Kalahandi University, organized an outreach programme on virtual workshop on laboratory set-up under the aegis of Vidya Vistar project and DBT star college scheme, 7th Dec-2022 (Worked as an organizing team member)

##### AWARDS AND DISTINCTIONS

Qualified joint CSIR-UGC test for junior research fellowship (JRF) and national eligibility for lectureship (NET) in Chemical Sciences with AIR-52, June-2012

#### 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	Publication (Month-Year)
JOURNAL PAPER (International)	"Fabrication of AgNi Nano Alloy Decorated ZnO Nanocomposite as an Efficient and Novel Hybrid Catalyst to Degrade Noxious Organic Pollutants"	ACS Omega	Sachi, Ajay Pratap Singh and Meganathan Thirumal (Joint Author)	<a href="https://doi.org/10.1021/acsomega.1c05266">https://doi.org/10.1021/acsomega.1c05266</a>	December 2021
JOURNAL PAPER (International)	"Efficient charge transfer in heterostructures of CdS/NaTaO <sub>3</sub> with improved visible-light-driven photocatalytic activity"	ACS Omega	Ajay Pratap Singh and Meganathan Thirumal (First Author)	<a href="https://doi.org/10.1021/acsomega.9b01133">https://doi.org/10.1021/acsomega.9b01133</a>	July 2019
JOURNAL PAPER (International)	Eco-friendly, cost effective, auto-sterilization of isolation gown: recent and forthcoming aspect	Int. J. of Adv. Res.	Yogita Bisht, Ajay Pratap Singh (Joint Author)	<a href="http://dx.doi.org/10.21474/IJAR01/12641">http://dx.doi.org/10.21474/IJAR01/12641</a>	March 2021

## 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
2021	WEBINAR ATTENDED	GUEST LECTURER	National	Best Oral Presentation in "National Conference on "Covid-19 and its psychological effects"	30.Apr.2021 - 30.Apr.2021
2019	SEMINAR ATTENDED	GUEST LECTURER	National	Best Oral Presentation in "Technology for Environmental Sustainability, Socio-Economic Responsibilities and Associated Entrepreneurial opportunities of 21st century"	08.Mar.2019 - 09.Mar.2019
2018	SEMINAR ATTENDED	GUEST LECTURER	International	Best oral presentation in "Indo-US colloquium on recent developments in interdisciplinary research"	02.Jul.2018 - 02.Jul.2018
2015	SEMINAR ATTENDED	GUEST LECTURER	International	Best Poster award in "Science, Environment and Education "	18.May.2015 - 18.May.2015

2023	REFRESHER COURSE ATTENDED	ASSISTANT PROFESSOR	National	Successfully completed online TWO - WEEK Refresher Course in "CHEMISTRY"	29.Nov.2022 - 13.Dec.2022
2020	FACULTY DEVELOPMENT PROGRAM ATTENDED	GUEST LECTURER	National	Two Weeks Online Faculty Development Programme (FDP) on "MANAGING ONLINE CLASSES and CO-CREATING MOOCs: 2.0"	18.May.2020 - 03.Jun.2020
2020	FACULTY DEVELOPMENT PROGRAM ATTENDED	ASSISTANT PROFESSOR	National	One Week Online Faculty Development Programme (FDP) on "Development of Career in Higher Education in India in the 21st Century"	23.Jun.2020 - 27.Jun.2020
2020	FACULTY DEVELOPMENT PROGRAM ATTENDED	ASSISTANT PROFESSOR	National	One Week Online Faculty Development Programme (FDP) on "Intellectual Property Rights (IPR)"	30.Jun.2020 - 07.Jul.2020
2023	FACULTY DEVELOPMENT PROGRAM ATTENDED	ASSISTANT PROFESSOR	National	One week Faculty Development Program	10.Oct.2023 - 16.Oct.2023
2024	ONLINE CERTIFICATE COURSE/ TRAINING PROGRAMS ATTENDED	ASSISTANT PROFESSOR	National	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC)	07.May.2024 - 16.May.2024

**Dr. AJAY PRATAP SINGH**