



# 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: **SHYAM** Last Name: .

Designation: **ASSISTANT PROFESSOR** Mobile No. **9557428127**

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

Email: **shyam.15a@kmc.du.ac.in** Webpage: -----



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

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

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

Google Scholar Link: <https://scholar.google.com/citations?user=JaO5FdsAAAAJ&hl=en>

Address: -----

## 2. Educational Qualifications

Degree/ Certification	Institution	Year
Ph.D.	Indian Institute of Technology Delhi	2017
M. Tech.	Indian Institute of Technology Kharagpur	2008
M. Sc.	University of Allahabad	2005
B. Sc.	University of Allahabad	2003

## 3. Career Profile & Administrative Assignments

Category	Role/ Designation	Department/ Committee	Date From - To	Remarks
CAREER PROFILE	ASSISTANT PROFESSOR	PHYSICS KIRORI MAL COLLEGE, DELHI	14.Jan.2019 - Till date	
CAREER PROFILE	POST DOCTORATE	PHYSICS LOCIE UMR CNRS 5271, University Savoie Mont Blanc, France	13.Feb.2017 - 30.Jun.2018	

ADMINISTRATIVE ASSIGNMENTS	MEMBER	STANDING COMMITTEE FOR MONITORING ADMISSIONS KIRORI MAL COLLEGE, DELHI	20.Jul.2022 - 30.Jun.2023	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	OTHERS KIRORI MAL COLLEGE, DELHI	01.Jul.2022 - 30.Jun.2023	Member in committee for NAAC criterion 1
ADMINISTRATIVE ASSIGNMENTS	MEMBER	STANDING COMMITTEE FOR MONITORING ADMISSIONS KIRORI MAL COLLEGE, DELHI	01.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	SPACE INFRASTRUCTURE COMMITTEE KIRORI MAL COLLEGE, DELHI	01.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	LA-VOICE KIRORI MAL COLLEGE, DELHI	01.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	IQAC Kirori Mal College, University of Delhi	01.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	MASTER PLAN FOR INFRASTRUCTURE PROJECTS Kirori Mal College, University of Delhi	18.Jan.2024 - 30.Jun.2024	
CAREER PROFILE	ASSISTANT PROFESSOR	PHYSICS GS Mandals Marathwada Institute of Technology, Bulandshahr, Dr. A.P.J. Abdul Kalam Technical University Lucknow	23.Aug.2008 - 17.Oct.2012	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	HEFA COMMITTEE Kirori Mal College, University of Delhi	07.Feb.2024 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	PHYSICS Kirori Mal College	01.Jul.2023 - 30.Jun.2024	Physics Department Workload Committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	ROVER CLUB Kirori Mal College	01.Jul.2023 - 30.Jun.2024	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	PHYSICS Kirori Mal College	01.Jul.2023 - 30.Jun.2024	Physics Department - Computer Maintenance Committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	IQAC Kirori Mal College, University of Delhi	01.Jul.2024 - 30.Jun.2025	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	PHYSICS Kirori Mal College, University of Delhi	08.Aug.2024 - Till date	Committe for add on course on Design Thinking
ADMINISTRATIVE ASSIGNMENTS	MEMBER	STANDING COMMITTEE FOR MONITORING ADMISSIONS Kirori Mal College, University of Delhi	01.Jul.2024 - 30.Jun.2025	

#### 4. Other Profiles

Other Profile Name/ Description

## UG/ PG RESEARCH PROJECTS/ INTERNSHIPS

**Institute:** Dublin Energy Lab, Dublin Institute of Technology, Dublin, Ireland

**Duration:** March 15 to September 15, 2016 (Six months)

**Project:** Thermal modeling of direct absorber solar collectors with nanofluids

**Supervisor:** Prof. Brian Norton

## AREAS OF INTEREST/ SPECIALIZATION

Renewable Energy

Photovoltaic thermal (PVT) systems

Energy and Exergy analysis of PVT

Exergo-economic and enviro-economic analysis

## SUBJECTS TAUGHT

1. Statistical Mechanics (Core)
2. Mechanics (Core)
3. Elements of Modern Physics (DSE)
4. Renewable Energy and Energy Harvesting (SEC)
5. Basic Instrumentation Skills (SEC)
6. Electrical Circuit and Network Skill (SEC)
7. Computational Physics Skills (SEC)
8. Waves and Optics (GE)

## AWARDS AND DISTINCTIONS

1. DIT Fiosraigh International Scholarship funded by Government of Ireland for six months internship at Dublin Energy Lab, Dublin Institute of Technology, Dublin, Ireland (16-03-2016 to 15.09.2016)
2. First prize in poster presentation in *National Meet on Modernization of Jaggery Industry in India*, organized by Indian Institute of Sugarcane Research Nov. 02, 2014.

## OTHERS

Reviewer in following Journals

1. Solar Energy (Elsevier)
2. Applied Energy (Elsevier)
3. Journal of Cleaner Production (Elsevier)
4. Materials Today: Proceedings (Elsevier)

## OTHERS

Educational visit with students to Inter-University Accelerator Centre (IUAC) New Delhi, to participate in one day workshop on National Science day held on 28 February 2020.

## OTHERS

Educational visit with students to National Physical Laboratory New Delhi, to participate in one day workshop on National Science day held on 28 February 2019.

## 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)	Modeling of Silicon Solar Cell with Anti-Reflecting Coating	International Journal of Chemical and Materials Engineering	Ankita Gaur, Mouli Karmakar, Shyam (Joint Author)	<a href="https://publications.waset.org/vol/183">https://publications.waset.org/vol/183</a>	March 2022

JOURNAL PAPER (International)	Modeling of an ammonia–water falling-film generator	JP Journal of Heat and Mass Transfer	Ankita Gaur, Benoit Stutz, Shyam, François Boudéhenn (Joint Author)	<a href="https://doi.org/10.17654/0973576322002">https://doi.org/10.17654/0973576322002</a>	January 2022
JOURNAL PAPER (International)	A thermal model for N-series connected glass/cell/polymer sheet and glass/cell/glass crystalline silicon photovoltaic modules with hot solar cells connected in series and its thermal losses in real outdoor condition	Renewable Energy, Elsevier	Pramod Rajput, Shyam, Vivek Tomar, G.N. Tiwari, O.S. Sastry, T.S. Bhatti (Joint Author)	<a href="https://doi.org/10.1016/j.renene.2018.03.040">https://doi.org/10.1016/j.renene.2018.03.040</a>	March 2018
JOURNAL PAPER (International)	Energy matrices, enviroeconomic and exergoeconomic analysis of passive double slope solar still with water based nanofluids	Desalination, Elsevier	Lovedeep Sahota, Shyam, G. N. Tiwari (Joint Author)	<a href="https://doi.org/10.1016/j.desal.2017.01.012">https://doi.org/10.1016/j.desal.2017.01.012</a>	May 2017
JOURNAL PAPER (International)	Analytical characteristic equation of nanofluid loaded active double slope solar still coupled with helically coiled heat exchanger	Energy Conversion and Management, Elsevier	Lovedeep Sahota, Shyam, G. N. Tiwari (Joint Author)	<a href="https://doi.org/10.1016/j.enconman.2016.12.078">https://doi.org/10.1016/j.enconman.2016.12.078</a>	March 2017
JOURNAL PAPER (International)	Annual Energy Analysis of a Building Integrated Semi-Transparent Photovoltaic Thermal Facade	Journal of Solar Energy Engineering, The American Society of Mechanical Engineers	Puja Hazarika, Shyam, Pankaj Kalita, Ankita Gaur (Joint Author)	<a href="https://doi.org/10.1115/1.4067371">https://doi.org/10.1115/1.4067371</a>	January 2025

JOURNAL PAPER (International)	Analysis of series connected photovoltaic thermal air collectors partially covered by semitransparent photovoltaic module	Solar Energy, Elsevier	Shyam, G.N. Tiwari (First Author)	<a href="https://doi.org/10.1016/j.solener.2016.08.052">https://doi.org/10.1016/j.solener.2016.08.052</a>	November 2016
JOURNAL PAPER (International)	Performance evaluation of N - PVT water collectors partially covered by photovoltaic module connected in series: An experimental study	Solar Energy, Elsevier	Shyam, G.N. Tiwari, Olivier Fischer, R. K. Mishra, I. M. Al-Helal (First Author)	<a href="https://doi.org/10.1016/j.solener.2016.05.013">https://doi.org/10.1016/j.solener.2016.05.013</a>	September 2016
JOURNAL PAPER (International)	Performance evaluation of PVT greenhouse dryer and development of characteristic curve	Journal of Renewable and Sustainable Energy, AIP Publishing	Shyam, I. M. Al-Helal, Anil Kumar Singh, G. N. Tiwari (First Author)	<a href="https://doi.org/10.1063/1.4921408">https://doi.org/10.1063/1.4921408</a>	May 2015
JOURNAL PAPER (International)	Analytical expression of temperature dependent electrical efficiency of N-PVT water collectors connected in series	Solar Energy, Elsevier	Shyam, G.N. Tiwari, I. M. Al-Helal (First Author)	<a href="https://doi.org/10.1016/j.solener.2015.01.026">https://doi.org/10.1016/j.solener.2015.01.026</a>	April 2015
JOURNAL PAPER (International)	Design of an Earth Air Heat Exchanger (EAHE) for Climatic Condition of Chennai, India	Open Environmental Sciences, Bentham Open	G. N. Tiwari, Vikram Singh, Poonam Joshi, Shyam, Arjun Deo, Prabhakant and Agam Gupta (Joint Author)	10.2174/1876325101408010024	November 2014

JOURNAL PAPER (International)	Performance evaluation of PVT mixed mode dryer with load condition	Journal of Fundamentals of Renewable Energy and Application	Shyam, G.N. Tiwari (First Author)	10.4172/2090-4541.1000141	October 2014
CONFERENCE PAPER/ PROCEEDINGS (International)	Conductivity and Photoluminescent Studies of Some PPVs (Conducting Polymers) for its Use in Organic Solar Cells	Conference Proceeding (SOLARIS 2012)	Neha Verma, A.K. Sharma., Shyam and Anil Govindan (Joint Author)		February 2012
CONFERENCE PAPER/ PROCEEDINGS (International)	Exergy analysis of photovoltaic thermal (PVT) water collectors partially covered by photovoltaic module connected in series	International Conference Green Energy and Technology (ICGET)	Shyam, G.N. Tiwari (First Author)	10.1109/ICGET.2014.6966662	September 2014
CONFERENCE PAPER/ PROCEEDINGS (International)	Exergy assessment of a semi-transparent building integrated photovoltaic facade for mild weather conditions of Srinagar	IOP Publishing	Puja Hazarika, Shyam, Ankita Gaur (Joint Author)	10.1088/1755-1315/1372/1/012087	June 2024
CHAPTER (National)	Solar and Hydropower Energy, Energy Resources, Sustainable Natural Resource Management	IGNOU New Delhi	Sanjay Agrawal, Shyam (Joint Author)		June 2022

## 8. Books

Category	Book Name	Title	Name of Author	ISSN/ ISBN Number
BOOK (International)	Handbook of Solar Energy: Theory, Analysis and Applications	G. N. Tiwari, Arvind Tiwari, Shyam (Joint Author)	Springer nature 2016, Springer Science + Business media Singapore Private Limited	978-981-10-0807-8

## 9. Faculty Achievements

Year	Category of Achievement	Role	National/ International etc.	Name	Date From- To
2023	REFRESHER COURSE ATTENDED	PARTICIPANT	National	Advanced Research Methodology	22.Aug.2023 - 05.Sep.2023
2022	FACULTY INDUCTION PROGRAM ATTENDED	PARTICIPANT	National	4-Week Faculty Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education"	20.Oct.2022 - 18.Nov.2022
2021	FACULTY DEVELOPMENT PROGRAM ATTENDED	PARTICIPANT	National	five-day Online Faculty Development Programme on Programming in Python	06.Dec.2021 - 10.Dec.2021
2021	REFRESHER COURSE ATTENDED	PARTICIPANT	National	TWO - WEEK REFRESHER COURSE IN "PHYSICS"	27.Oct.2021 - 10.Nov.2021
2020	FACULTY DEVELOPMENT PROGRAM ATTENDED	PARTICIPANT	National	ICT: Instructional Design Development and Learning Analytics	24.Jul.2020 - 30.Jul.2020
2020	ONLINE CERTIFICATE COURSE/ TRAINING PROGRAMS ATTENDED	PARTICIPANT	National	Bio-Energy: Technologies & Transitions	18.May.2020 - 22.May.2020
2024	FACULTY DEVELOPMENT PROGRAM ATTENDED	PARTICIPANT	National	NEP 2020 Orientation & Sensitization Programme	07.May.2024 - 16.May.2024
2025	FACULTY DEVELOPMENT PROGRAM ATTENDED	PARTICIPANT	National	Advances in Solar Collector Technologies (Global Initiative of Academic Networks (GIAN) Course)	03.Mar.2025 - 07.Mar.2025

**Dr. SHYAM .**