



# Shivaji College Faculty Details Proforma

Title	Mr.	First Name	PARATH KUMAR	Last Name	KASANA	Photograph .	
Designation		Assistant Professor					
Address		87 LIG flate Paschim Puri, New Delhi					
Office Phone No.							
Residence							
Mobile		9785292038					
Email		parthkasana08@gmail.com					
We	eb-Page						
Educational Qualifications		M.Sc Physics					
Degree		University/Institute				Year	
Ph.D.							
M.Phil./M.Tech.							
PG		University of Rajasthan				2014	
UG		University of Rajasthan				2012	
Any Other Qualification							
Career Profile							

**Teaching experience**: 1. Work as an Assistant Professor From Nov. 2019 to Nov. 2023, at the Government Post Graduate College Rampura distt. Neemuch( M. P.), Department of Higher Education Madhyapardesh.

2. Working as an Assistant Professor From Nov. 2023 to present at Shivaji College, University of Delhi

#### Administrative Assignments

➢ Co-ordinator of the Swami Vivekanand Career Guidance Cell and Training and Placement Officer at the Government P. G. College Rampura (M. P.).

- Member of core NAAC committee at the Government P. G. College Rampura (M. P.).
- > University examination superintendent for the August 2022 UG and PG examinations.
- > Member of purchasing committee in 2021-22.
- > Member of ADD on course committee from 2024 at Shivaji College, New Delhi.
- Member of Centre for Environmenment & disaster Management committee from 2024 at Shivaji College, New Delhi.
- Member of Media cell(Print, electronic and Social Platforms) committee from 2024 at Shivaji College, New Delhi.

#### Areas of Interest/Specialisation

Ion beam remixing of transition metal dichalcogenides (TMDCs) heterostructures for optoelectronic applications,

Study of modification of optical properties of Graphene and other 2D Nanomaterials like MoS<sub>2</sub> and WS<sub>2</sub> via. Ion beam irradiation.

#### Subjects Taught

- B.Sc. I, II- & III-year Physics, and, M.Sc. Physics previous and final year courses theory and practical classes as per MP higher education syllabus.
- Statistical Mechanics SEM VI (2023-24) As per DU Syllabus.

Innovation Project/Research Projects (Major Grants/Research Collaboration)

### Publications Profile (Research Papers/Books)

 Work Function Modulation of Few-Layer Graphene by Swift Heavy Ion Irradiation Kasana P K, Shakya J, Mohanty T Journal of Nanoscience and Nanotechnology, 2021 vol: 21 pp: 18.doi:10.1166/jnn.2021.19470.

 Investigation of Swift Heavy Ion Irradiated Reduced Graphene Oxide (rGO)/Molybdenum Disulfide (MoS2) Nanocomposite Using Raman Spectroscopy Shakya J, Kasana P K, Mohanty T Journal of Nanoscience and Nanotechnology, 2020 vol: 20 pp: 1-8. doi:10.1166/jnn.2020.17400.

## Conference/Seminar/Faculty Development Programme/Workshop

 Fermi level shifting of tungsten disulfide (WS2) nanosheets by swift heavy ion irradiation Kasana P K, Mahanta T, Mohanty T AIP Conference Proceedings 2265, 030184 (2020); https://doi.org/10.1063/5.0017535.
 DAE Solid State Physics Symposium 2019.

Surface potential mapping of chemically synthesized boron nitride nanosheets Mahanta T, Kasana P K, Mohanty T AIP Conference Proceedings 2265, 030080 (2020); https://doi.org/10.1063/5.0017315. DAE Solid State Physics Symposium 2019

## FACULTY DEVELOPMENT PROGRAMS & e-CONTENT DEVELOPMENT:

 Attended a 4-week Induction Programme for "Faculty in Universities/Colleges/Institutes of Higher Education"

June 26-July 24, 2020, organized by the TLC, Ramanujan College University of Delhi, under the aegis of MHRD-PMMMNMTT.

Attended a 2-week REFRESHER COURSE In physics from 27 february – 13 march 2023 organized by the TLC, Ramanujan College University of Delhi, under the aegis of MHRD-PMMMNMTT

Attended FDP on "Best Practices in the Development of e-Content (PowerPoint Based Video Lectures)" June 21st - June 26th, 2021, organized by the Dept. of Higher Education, Madhya Pradesh.

Developed e-Content Module for B.Sc. I Year, Physics Core course, topic entitled "Surface Tension and Surface Energy on The Basis of Intermolecular Forces (3.2)" in session 2021-22;

B.Sc. II Year, Physics Minor, "Calculation of Magnetic Intensity for Anchor Ring (2.2)"; in session 2022-23 for the Dept. of Higher Education, Madhya Pradesh.

Research Guidance (Supervision of Doctoral Thesis/Dissertations)

Awards and Distinctions						
Memberships						
Other Academic Activities						
Suchified the CEIP NET IDE lune 2015 (Dept. 117)						
<ul> <li>Qualified the CSIR-NET-JRF June 2015 (Rank -117)</li> <li>Selected as CSIR Junior Research Fellow (2015-2017) and CSIR Senior Research Fellow</li> </ul>						
(2017-2019)						
<ul> <li>Qualified Joint Entrance Screening Test (JEST)-2015</li> </ul>						
Qualified State Eligibility Test for Lectureship (SET- Rajasthan)-2013						
<ul> <li>Qualified GATE 2014, 2015, 2017</li> </ul>						
Cultural/Extracurricular Activities						
NCC "B" and "C" Certificate						

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Signature of Faculty Member

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