FacultyDetailsProformaForCollegeWeb-site

Title	Dr	First Name	Renu	Last Name		Photograph
Designation		**Assistant Professor (Physics)**				
Address		**Department of Physics, Daulat Ram College, 4, Patel Marg, Maurice Nagar, New Delhi, Delhi-110007**				
Phone No. Office						
Residence						
Mobile No.		**9034686308**				
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Educational Qualification

Degree	Institution	Year
B.Sc. (NM)	R.K.S.D.(PG) College, Kurukshetra University Kurukshetra	2014
M.Sc. (Physics)	Kurukshetra University Kurukshetra	2016
Ph.D. (Physics)	Kurukshetra University Kurukshetra	2022

Career Profile

- Assistant Professor (Permanent), Daulat Ram College, University of Delhi from 4th Oct., 2022 to till date.
- Senior Research Fellow, Kurukshetra University Kurukshetra from 1st Oct., 2020 to 2nd Dec., 2021.
- Junior Research Fellow, Kurukshetra University Kurukshetra from 20th Sept., 2018 to 30th Sept., 2020.
- Junior Research Fellow, DRDO, Ministry of Defence Govt. of India from 8th May, 2017 to 17th January, 2018.

Administrative Assignments

- Member, Time Table Committee (2022-2023), Physics Department, Daulat Ram College,University of Delhi.
- Member, Website Committee (2023), Daulat Ram College, University of Delhi.
- Member, Prize Committee (2023), Daulat Ram College, University of Delhi.
- Convenor, Student Grievance Committee (2023), Daulat Ram College, University of Delhi.
- Convenor, College Grievance Committee (2023), Daulat Ram College, University of Delhi.
- Member, Entrepreneurship and Innovation Cell (2023), Daulat Ram College, University of Delhi.
- Member, Students Amenities Committee (2023), Daulat Ram College, University of Delhi.

Areas of Interest / Specialization

Quantum Mechanics and Applications, Solid State Physics, Nuclear and Particle Physics, Light and Matter, Electricity and Magnetism, Mechanics, Statistical Mechanics, Mathematical Physics, Advance Mathematical Physics, Numerical Analysis, Waves and Oscillations,Thermal Physics, Analog Systems and Applications and Digital Electronics

Subjects Taught

Advance Mathematical Physics, Mathematical Physics-I, Mathematical Physics-III.

Research Guidance

Not Applicable

Publications Profile

- Renu Singla,Sarvesh Kumar, Timothy A. Hackett, Ali H. Reshak and Manish K. Kashyap, Genesis of magnetism in graphene/MoS_2 van der Waals heterostructures via interface engineering using Cr-adsorption, Journal of Alloys and Compounds, 859 (2021) 157776.
- Renu Singla,Timothy A. Hackett, Sarvesh Kumar, Jayotsna Sharma and Manish K.Kashyap, Curie temperature engineering in novel 2D analog of Iron ore (Hematene) via strain, Nanoscale Advances, 2(12), (2020) 5890-5896.
- Renu Singla, Jyoti Thakur, Priti Rani, Sarvesh Kumar, Timothy A. Hackett and Manish K. Kashyap, "Emergence of magnetic behavior in AB-stacked bilayer graphene via Fe-doping",Vacuum 182, (2020) 109685.
- Renu Singla and Manish K. Kashyap "Half metallicity and long range magnetic order in Graphene/Hematene van der Waals heterostructure" Indian Journal of Physics, 96(7), (2022) 1963-1968.
- Priti Rani, Manish K. Kashyap, Renu Singla, Jyoti Thakur, Ali H. Reshak, "Magnetism and magnetocrystalline anisotropy of tetragonally distorted L10-FeNi: N alloy" Journal of Alloys and Compounds, 835, (2020) 155325.
- Priti Rani**,** Renu Singla, Jyoti Thakur, Ali H Reshak, Manish K Kashyap, "Enhancement in magnetic parameters of L10-FeNi on Pd-substitution for permanent magnets" Indian Journal of Physics, (2021) 1-6.
- Renu Singla, Rahul Singla, Sarvesh Kumar, Timothy A Hackett, Manish K Kashyap, "Signature of magnetism in 2D-chromia: 2D analog of the natural α-Cr_2O_3 mineral and its heterostructure with graphene" Materials Advances (2023).

Book Chapters:

- Manish K Kashyap, Renu Singla (2021) Beyond 3D-traditional materials thermoelectric materials, Woodhead Publishing, 163-193, (2021) ISBN No.: 978-0-12-819984-8.
- Induced half metallic ferromagnetism in non-magnetic oxides, (2023) ISBN No.: B978-0-323-90907-5.00002-6

Conference Organization / Presentation (in the last three years)

- Paper presented in the Internation Conference "Recent Developments on Materials, Reliability, Safety and Environmental issues-2021" organised by Dr B R Ambedkar National Institute of Technology, Jalandhar during 25th-27th, June, 2021.
- Resource Person for the In-House Skill Development program "Enhancing Online Learning through ICT Tools " organized by Physics Department, Daulat Ram College, University of Delhi, online via Google-Meet from 26-27th November, 2022.

Research Projects (Major Grants/Research Collaboration)

- Research Project titled "Development of Computational Design of 2D van der Waals heterostructures for rechargeable batteries, electrolysis, magnetism and catalytic applications" funded by National PARAM Supercomputing Facility (CDAC-PUNE) provided free access of 1024 cores and 15 TB storage for periodof one year

Awards and Distinctions
• Awarded POSE Scholarship of Rs 6000/- per month for entire 2-year M.Sc. by DST Haryana Government for beingamong 1% toppers in Haryana starting from metric to graduation.
Association with Professional Bodies
Not Applicable
Other Activities
• Attended Faculty Induction Programme organized by Guru Angad Dev Teaching Learning Centre, A centreof Ministry of Education under (PMMMNMTT) from 25th Feb, 2023 to 27th March, 2023.