




University of Delhi



Faculty Detail Performa (2017-21)

Dr. Omwati Rana

Name	Dr. Omwati Rana	
Designation	Assistant Professor	
Department	Physics	
Email	omkhtr@gmail.com	

Educational Qualification

Degree	Institution	Year
Ph.D: Physics	National Physical Laboratory, Delhi. Jamia Millia Islamia Central University , Delhi, India	2014
Bachelor of Education	G.G.S Inderprastha University, Delhi, India	2008
Masters of Science(Physics)	University of Delhi	2007
Bachelor of Science (H) Physics	University of Delhi	2004

Full Time Research Experience: Nil

Designation	Institute	Time period	Nature of Appointment

Full time Teaching Experience

S.No	Designation	Institution	Time Period	Nature of Appointment
1.	Assistant Professor	Daulat Ram College , University of Delhi	August 2013-Till date	Adhoc

Administrative Assignments

Name of Institute	Designation	Status	Time period	Experience
Daulat Ram college	.Teacher In Charge(Physics Department)	Completed	2017-18	1 year

Daulat Ram college	Admission Committee member	Ongoing	2017-18, 2018-19, 2019-20, 2020-21, 2020-22	4 years
Daulat Ram college	Teaching Program Committee Member	Ongoing	2017-19, 2021-2022	3 years
Daulat Ram college	Fine Art Committee member	completed	2017-18	1 year
Daulat Ram college	Physics Association Incharge	completed	2017-18	1 year
Daulat Ram college	Prize Committee member	Completed	2017-18	1 year
Daulat Ram college	Discipline Committee member	completed	2017-18	1 year
Department of Physics & Astrophysics, University of Delhi	Mechanics (Hons. Core, Prog.) Subject groups member, LOCF (CBCS) Undergraduate Physics courses revision 2019	Completed	2017-18	1 year
Daulat Ram college	Library committee member	completed	2017-19	2 years
Daulat Ram college	Member of Fresher sport meet	completed	2018-19	1 year
Daulat Ram college	Member of Music and Dance society	completed	2018-19	1 year
Daulat Ram college	Member of NSS	completed	2019-21	2 years
Daulat Ram college	Member of Students Amenities Committee	Ongoing	2020-2021, 2021-2022	1 Year

Areas of Interest in Teaching:

Solid State Physics, Mechanics, Electronics, Digital Systems and Applications , Microcontroller, Mathematical Physics, Communication System and Electromagnetic Theory	
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Subjects Taught

S.No	Course	Subject Taught	Semester	Year
1.	B.Sc (H) Physics	Electromagnetic Theory	VI	2020
2.	B.Sc (H) Physics	Solid State Physics	V	2020,2019

3.	B.Sc (H) Physics	Electricity and Magnetism	II	2019, 2018, 2017
4.	B.Sc. (H) Chemistry/Maths	Embedded Systems: Introduction to Microcontrollers	II	2020,2019, 2018, 2017
5.	B.Sc (H) Physics	Mathematical Physics I	I	2019
6.	B.Sc (H) Physics	Mechanics	I	2018, 2017
7.	B.Sc. (H) Chemistry/Maths	Digital,Analog and Instruments	I	2020, 2018, 2017
8.	Science, Commerce and Humanities course	Environmental Science	I, II	2018,2017

Research Guidance: Nil

Name of student	Gender	Degree for which guidance given	Date of Registration	Supervisor/ Co-supervisor	University	Title of Thesis	Date of submission of thesis	Date of Award of Degree

Research Projects ongoing 2018-21 (Nil)

S.No	Name of Research Project	Funding Agency	National/International	Duration (Start date and end date)	Amount Sanctioned	Amount Received

Research projects Completed 2018-21 (Nil)

S.No	Name of Research Project	Funding Agency	National/International	Duration (Start date to end date)	Amount Sanctioned	Amount Received

Publications:

Books

S.No	Book Details (Authors,	Publisher	Date of publishing	Authored/Edited	ISBN No
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	Book title, Year)		(DDMMYY)		
Nil	Nil				

Book Chapters/Articles

S.No	Details (Authors, Book title, Article title, Year, page range of article)	Publisher	Date of Publication (DDMMYY)	Authored/Edited	ISBN No
Nil	Nil				

E- Modules

S.No	Details (Authors, Title, Year, URL)	Publisher	Date of Publication (DDMMYY)	Authored/Edited	Link
Nil	Nil				

Research Publications:

International

S.No	Publication details (Authors, Title of article, Journal, Volume, Issue, Year, Page range of article, URL/DOI)	Date of Publication	Impact Factor	UGC Care List Journal Yes/No	Scopus Indexed Journal Yes/No	ISSN No
1.	Authors: R. Singh, A. K. Shukla, S. S. Gaur, P. Verma, P. Biswas and O. Rana Title: Comparison Of The Results Of Differential Equation By Ordinary Method And Euler's Method Using Scilab. Journal: Vidyabharati International Interdisciplinary Research Journal (Special Issue) ISSN 2319-4979, special Issue,2021,pp126-128	August 2021	-	Yes	-	2319-4979
2.	Authors: Omwati Rana, Ritu Srivastava, M.N. Kamalasanan, M.Husain and M. Zulfequar Title: Interface modification for enhancing the conduction mechanisms in 2,2',7,7'-tetrakis(N,N-diphenylamine)-9,9'-spirobifluorene (Spiro-TAD) Nano layers for optoelectronic applications Journal: International Journal of Recent Technology and Engineering	March 2019	5.11	Yes	Elsevier Scopus	ISSN: 2277-3878

	(IJRTE) ISSN: 2277-3878, Volume-7, Issue-6S					
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S.No	Publication details (Authors, Title of article, Journal, Volume, Issue, Year, Page range of article, URL/DOI)	Date of Publication	Impact Factor	UGC Care List Journal Yes/No	Scopus Indexed Journal Yes/No	ISSN No
1.	Authors: Dr. Ravindra Singh, Dr. Ashok Kumar Shukla, Dr. Shiv Shankar Gaur, Dr. Priyanka Verma ¹ , Polly Biswas, Dr.Omwati Rana Title: The Matrix Formulations And Algebraic Equations Using Scilab. Journal: National Journal of Environment and Scientific Research NJESR/July 2021/ Vol-2/Issue-7 DOI - 10.53571/NJESR.2021.2.7.56-71 E-ISSN-2582-5836	July 2021	0.24	-	-	ISSN-2582-5836

Conference Proceedings publication

S.No	Details (Authors, Book title, Article title, Year, page range of article)	Date of Publication (DDMMYY)	Name of conference	Venue of conference	ISBN No
Nil	Nil				

Conference Attended and Paper presentation

S. No	Type of Event	Name of Event	Venue of conference	Date of conference(Start date – End Date)	Attended	paper presented	No of papers presented
1	Webinar	“Basics of Income Tax & E-Filing of ITR for Salaried Individuals for FY 2020-21”	Organised by Department of Commerce, Daulat Ram College, DU via Zoom platform	1 st September, 2021	Yes	No	NA
2	National Webinar Series(Lecture-1)	Footprints of Indian Women in Science	Department of Chemistry, Daulat Ram College, DU via	25 th August 2021	Yes	No	NA

			online mode				
3	Webinar	Decoding NEP: Redefining Goals and Pedagogies of Today's Education for the world of Tomorrow	Department of Mathematics, Daulat Ram College, DU via online mode	24 th August 2021	Yes	No	NA
4	Online Lecture	Online Lecture: The mass of small things	Organized by Indian Association of Physics Teachers (IAPT), Regional Council (Delhi & Haryana) forum via Zoom platform.	24 th July 2021	Yes	No	NA
5	Online Lecture	Online Lecture: Revisiting the Laws of Thermodynamics	Organized by Indian Association of Physics Teachers (IAPT), Regional Council (Delhi & Haryana) forum via Zoom platform	3 rd July 2021	Yes	No	NA
6	Webinar	Webinar: Energy Efficient Innovations and Applications'	Organized by Department of Physics, Maitreyi College, University of Delhi Via Zoom Platform	30 th June 2021	Yes	No	NA
7	Webinar	Webinar "New Age Semiconductor devices and Their Applications".	Organised by Department of Physics and Electronics, Rajdhani College, University of Delhi Via Zoom Platform	29 th June 2021	Yes	No	NA
8	3-Days Online National Workshop	Challenges of Teaching Physics Laboratory Courses in Online Mode	Organised by Department of Physics, Kalindi College in association with Department of Physics and Astrophysics, DU	23-25 January 2021	Yes	No	NA
9	International Webinar	International Webinar Series	Organised by Women's Development Cell, DRC, DU via online	7 th -8 th January 2021	Yes	No	NA

	Series		Mode				
10	Webinar	Surprises in elementary Physics: From Mechanics, Optics and Thermodynamics	Organized by Indian Association of Physics Teachers (IAPT), Regional Council (Delhi & Haryana) and Delhi state science teachers' forum via Zoom platform.	6 th August 2020	Yes	No	NA
11	Webinar	Magnetism and Matter	Organized by Indian Association of Physics Teachers (IAPT), Regional Council (Delhi & Haryana) and Delhi state science teachers' forum via Zoom platform.	1 st August 2020	Yes	No	NA
12	Webinar	Electrostatics-II	Organized by Indian Association of Physics Teachers (IAPT), Regional Council (Delhi & Haryana) via Zoom platform.	25 th July 2020	Yes	No	NA
13	E-FDP	Empowering Teaching Learning Process using Google Classroom and other ICT Tools: A Comprehensive Practical Approach	Organized by Commerce Department, Daulat Ram College, University of Delhi, Delhi, India via Google meet platform.	21-23 July 2020	Yes	No	NA
14	Webinar	Are we there yet? How do cell find their way?	Organized by the National Academy of Sciences India (NASI)- Delhi Chapter & MHRD-Institution Innovation Council (IIC), Deen Dayal Upadhyaya College Chapter via Cisco Webex platform	11 th July 2020	Yes	No	NA
15	Webinar	Can future energy need be	Organized by the National Academy of	10 th July	Yes	No	NA

		met sustainability?	Sciences India (NASI)- Delhi Chapter & MHRD-Institution Innovation Council (IIC), Deen Dayal Upadhyaya College Chapter via Cisco Webex platform	2020			
16.	Webinar	Flow inside Sun	Organized by the National Academy of Sciences India (NASI)- Delhi Chapter & MHRD-Institution Innovation Council (IIC), Deen Dayal Upadhyaya College Chapter via Cisco Webex platform	9 th July 2020	Yes	No	NA
17.	webinar	"Mentoring Teachers for Effective Online Teaching"	Organized by the Department of Commerce of Daulat Ram College.	4 th July 2020	Yes	No	NA
18.	Webinar	New chemistry and physics in magnetic oxide	Organized by the National Academy of Sciences India (NASI)- Delhi Chapter & MHRD-Institution Innovation Council (IIC), Deen Dayal Upadhyaya College Chapter via Cisco Webex platform	3 rd July 2020	Yes	No	NA
19.	Webinar	Art and Science of Mentoring	Organized by Physics Department, Daulat Ram College via Google meet platform	1 st June, 2020	Yes	No	NA
20.	Work-shop	Research Based Pedagogical Tools Workshop for Science	Daulat Ram College, University of Delhi	25-27 March, 2019	Yes	No	NA

		Teachers,					
21.	Work-shop	Yoga and Meditation for the Holistic Well Being	Daulat Ram College, University of Delhi	7 th March, 2019	Yes	No	NA
22.	Inter - national Conference	4 th International conference on Nanotechnology and Nanomaterial's (Nanotek Summit 2k18)	Flora Creek Deluxe Hotel Apartments, Dubai, U.A.E.	21-22 September, 2018	Yes	Yes	1

Faculty Development Program/ Refresher Course/ Orientation Course

S.No	FDP/Refresher Course/ orientation course	Title	Organizers	Venue	How many days (Start date-end Date)
1.	E-FDP	Empowering Teaching Learning Process using Google Classroom and other ICT Tools: A Comprehensive Practical Approach	Commerce department, Daulat Ram College, University of Delhi, Delhi, India	Google meet platform	21-23 July 2020

Resource Person (Conference/seminar/ workshop/training programme/ educational trips)

S. No	Type of Event	Name of Event	Venue	Date of Event (Start Date-End Date)	State your role: Convener/Mem ber organizing committee/ Speaker/ Coordinator	Duration of Activity	No of participant in the programme
1.	Training Programme	Inspire Science Camp	Daulat Ram College, University of Delhi	Dec 17-21, 2018	Resource person and Member of organizing committee	5 days	Approx. 250

2.	Training Programme	In-House Skill Development Program on “Basic Electronic Skills and Applications”	Department of Physics, Daulat Ram College, University of Delhi	Dec 24-31, 2018	Resource Person and Coordinator	7 days	21
3.	Workshop	National Symposium/Workshop on Yoga and Meditation for the Holistic Well Being	Daulat Ram College, University of Delhi, Delhi	March 7, 2019	Member of organizing committee	1 day	~ 150
4.	Training Programme	In-House Skill Development Program on “Latex and its Applications”	Department of Physics, Daulat Ram College, University of Delhi	July 12-19, 2019	Resource person	7 days	26
5.	Workshop	Skill Enhancement Workshop for Non-Teaching Staff	Daulat Ram College, University of Delhi, Delhi	July 2019	Resource Person	4 days	30
6.	Workshop	Workshop on Quantum Mechanics and its Applications	Physics Department , Daulat Ram College, University of Delhi, Delhi	September 24, 2019	Member of Organizing team	1 day	200
7.	Seminar	Webinar on Art and Science of Mentoring	Physics Department , Daulat Ram College, University of Delhi, Delhi	June 1, 2020	Member of Organizing team	1 hour	200

8.	SDP	SDP-ICT	Physics Department , Daulat Ram College, University of Delhi, Delhi	17-19 December, 2020	Member of Organizing team and Resource Person	3- Day	~ 40
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Awards Won

S.No	Name of Award	Awarding Agency	Government/ NGO/ International/Private	Recognition area	Date of award (DDMMYY)	Type of Honor received
Nil	Nil					

Extension Activity (Community related program)

S.No	Type of Activity	Centre and Venue	Title of Event	Role in the event	Date/period of Event (DDMMYY)	No of members of the community/students /Faculty benefitted
NIL	NIL					

Membership of Professional Bodies

S.No	Type of Membership	Organisation	Year of Membership(Start Date)
Nil	Nil		