



Dr. Omwati Rana
(2020-2023)



Title	Dr.	First Name	Omwati	Last Name	Rana	Photograph
Designation		Assistant Professor				
Address		H.No. 67, Jindpur, P.O Mukhmelpur, Delhi-110036				
Office		Department of Physics , Daulat Ram College, University of Delhi				
Residence		-				
Mobile No.		9891514815				
Email - ID		omwatirana@dr.du.ac.in				
Web Page		-				
Educational Qualification						
Degree		Institution			Year	
Ph.D (Physics)		Jointly CSIR-National Physical Laboratory, Delhi. Jamia Millia Islamia Central University , Delhi, India			2014	
Masters of Science (Physics)		University of Delhi			2007	
Bachelor of Science (H) Physics		University of Delhi			2004	
Career Profile						
1.Assistant Professor (Permanent),Daulat Ram College, University of Delhi, from 03.10.2022 till date. 2.Assistant Professor (Adhoc),Daulat Ram College, University of Delhi, from 26.08.2013-02.10.2022 (9Years) 3.Senior Research Fellow(SRF), CSIR-National Physical Laboratory Delhi, from 27.06. 2011-26.06. 2013 4.Junior Research Fellow(JRF),CSIR-National Physical Laboratory Delhi, from 26.06.2008-26.06. 2011						
Administrative Assignments						
Member of various committees: Admission Committee(2020-2023),Teaching Program Committee (2021-2022),Physics Association Incharge(2022-2023),Library committee(2022-2023), Students Amenities Committee(2020-2023), Admission grievance committee (2021-2023), Hostel Committee(2021-2023)						
Areas of Interest / Specialization						
Charge transport in Organic Semiconductors: Small molecules and Polymers (OLEDs)/Solid State Physics						

Solid State Physics, Digital, Analog and Instruments, Embedded Systems: Introduction to Microcontrollers, DSC-Communication System, Electromagnetic Theory, Quantum Mechanics and its application, SEC-Basics Instrumentation skill, SEC-Programming with Python

Research Guidance

NA

Publications Profile (in last three years)

1. "Fourier Coefficients and Analysis of Generation of Square wave function, Triangle Wave Function & Sawtooth wave function generation using Scilab" **Wisdom of Scientific Research, International Book of Multidisciplinary Studies** by Rubicon Publication, Edition 1(2021) ISBN: 978-93-91479-24-4, Paperback ISBN: 978-1-913482-29-9.(Book Chapter)
2. "Generating Multiple waves and addition of Multiple waves using SCILAB XCOS" chapter published in peer reviewed edited book entitled "**Research Trends in multidisciplinary Subjects: Volume 4**" published by Red Shine Publication in edited book(2021) ISBN: 978-93-91479-24-4, ISBN-10: 9-39-147924-3
3. "Comparison Of The Results Of Differential Equations By Ordinary Method And Euler's Method Using Scilab" Vidyabharati International Interdisciplinary Research Journal (Special Issue) ISSN 2319-4979, special Issue, 2021, pp126-128
4. "The Matrix Formulations And Algebraic Equations Using Scilab". **Journal: National Journal of Environment and Scientific Research**, 2021, ISSN-2582-5836

Conference Organization / Presentation / Attended (in the last three years)

- Organising team Member in 4-Week Faculty Induction Programme(FIP) Jointly Daulat Ram College and Guru Angad Dev Teaching learning Centre, SGTB Khalsa College under PMMMNMTT of Ministry of Education (Online Mode) from 25 Feb-27 March, 2023
- Attended "Two- Week Refresher Course in 'Physics' from Ramanujan College, DU and PMMMNMT of Ministry Education(Online mode) from 27 Feb.-13 March, 2023
- "4-Week Faculty Induction Programme " FIP from Ramanujan College, DU and PMMMNMT of Ministry of Education(Online mode) (Online Mode) from 20 Jan-18 Feb, 2023.
- One week Online National FDP "Python: Essentials, Programming and Analytics" University of Delhi and Guru Angad Dev Teaching learning Centre, SGTB Khalsa College and PMMMNMTT of Ministry of Education, (Online Mode) from 27 Oct-03 Nov 2022.
- Attended and Organising member, Online lecture series on " Understanding Physics: Basics and Beyond"(Online Mode) from 12th and 19th Jan, 2022.
- Resource person and Member of organizing committee, in Workshop on "Enhancing Programming Skills With Python and XCOS" (Online Mode) 13th-14th Jan 2022.
- Co-ordinator of Two Days SDP " Two Days In-House Skill Development Program (E-SDP) On Enhancing Online Learning Through ICT Tools"(Online Mode) Physics Department, Daulat Ram College, 26-27 Nov, 2022
- Member of Organizing Committee, Webinar on "Photonics for Energy, conversion and conservation" 13th Sep 2021(Online Mode)
- 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 (Online Mode) from 21-23 July, 2020.
- Member of Organizing team, "Webinar on Art and Science of Mentoring" Physics Department, Daulat Ram College, University of Delhi, Delhi, June 1, 2020.(Online Mode)

Association with Professional Bodies

Life Member, Indian Association of Physics Teachers (IAPT).

Other Activities

Evaluator, NAEST-2021 and NAEST-2022, National Anveshika Experimental Skill Test (2021,2022)
Evaluator, Vidyarthi Vigyan Manthan and Daulat Ram College(08.01.23),
Organise Educational Trips to CSIR-National Physical Laboratory , New Delhi for Students