

Faculty Details



Title	Dr.	First Name	Sanjeeta	Last Name	Rani	Photograph
Designation		Associate Professor				
Address		Acharya Narendra Dev College, Govindpuri, Kalkai, New Delhi, India				
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Educational Qualifications

Degree	Institution	Year
B.Sc.(Hons.)	Miranda House, University of Delhi, Delhi	1982
Physics		
M.Sc.Physics	University of Delhi, Delhi	1984
Ph.D Physics	Bundelkhand University, U.P.	2000

Career Profile

- Qualified NET 1985 (UGC) and awarded JRF and SRF.
- Joined Department of Physics, Acharya Narendra Dev College in September 1992 as faculty and continuing till
 present.
- Successfully completed a UGC sponsored refresher course, entitled 'Computer Awareness and Applications' conducted by Center for Professional Development in Higher Education (CPDHE), University of Delhi, India in 1995.
- Participated in a refresher course entitled 'Computer Applications in Physics' conducted by Center for Professional Development in Higher Education (CPDHE), University of Delhi in 1998.
- Session Chair/Co-Chair
 - o Introduction to Virtual Labs, ECOVILLE-2022, 27th Feb.2022.
 - Technical Session VII: International e-Conference on Mitigating Environmental Issues by Sustainable Approaches (ICMCESA), Acharya Narendra Dev College, University of Delhi, February 22-28, 2022.
 - Session Co-Chair International e-Conference on Mitigating Environmental Issues by Sustainable
 Approaches (ICMCESA), Acharya Narendra Dev College, University of Delhi, February 22-28, 2022.
 - Session-4, 3rd National Conference on Materials and Devices (3rd NCMD-2022), Nov. 10 11, 2022,
 Faculty of Engineering, Department of Physics, Teerthanker Mahaveer University, Moradabad, U.P
- Member of several selection committees for recruitment of various teaching and non-teaching staff.

Administrative Assignments

- 1. Vice-Principal 2012-14
- 2. Bursar 1995-2001
- 3. Member Governing Body 1995-96, 2004-05
- 4. Convenor College Development Committee 2012-14
- 5. Coordinator / Assistant Coordinator Acharya Narendra Dev College Study Centre-0715 (IGNOU) 1998-2000
- 6. Teacher In Charge Department of Physics 1994-1997
- 7. Teacher In Charge B.Sc. Physical Science (PMC & PMCS) 2010-12, 2017-19
- 8. Superintendent /Dy. Superintendent Examinations 1993-2001, 2015
- 9. Coordinator Timetable Committee 1993-2000, 2018-22
- 10. Convenor, Admission Committee 1995, 1999-2000, 2010, 2014-17
- 11. Convenor Assets Write-Off Committee 2007-2009
- 12. Transparency Officer 2012-14
- 13. Convenor Sashakt: Society for Women Empowerment 2014-16
- 14. Presiding Officer, Internal Complaints Committee (ICC): 2015
- 15. Coordinator of Four Year UnderGraduate Programme (FYUP) at ANDC 2013

- 16. Coordinator at ANDC for Antardhwani : Mega Festival for Best Practices 2013-15, wherein college won III, III and Ist Prize respectively.
- 17. Coordinator: Rajatotsav-1 year long Silver Jubilee Celebrations of College 2016-17
- 18. Member of Courses Committee for Honours and Postgraduate courses, Department of Physics and Astrophysics, University of Delhi from 1997 -1999
- 19. Member of Course Formulation Committee of the Department of Computer Science, University of Delhi for the paper BSC-205 on Electromagnetics for B.Sc.(Honours) Computer Science / Bachelor of Information Science in 1998.
- 20. Member Science Faculty, University of Delhi 1999-2002
- 21. Member Internal Quality Assurance Cell (IQAC), Acharya Narendra Dev College 2015-18
- 22. Member, Brochure Committee, Acharya Narendra Dev College, constituted to design the brochure of the College in 1992-93.
- 23. Member Assets Management Committee 2002-2004
- 24. Member of the Internal Assessment Committee 2006-2008
- 25. Member IT committee 2006-08
- 26. Member of Special Committee of Bursars for OBC Expansion 2007
- 27. Member Proctorial Committee 2016-18
- 28. Member, Paritantra, Environment Club 2020 2022
- 29. Member Mentoring Committee
- 30. Co-Convenor Time Table and Workload Committee 2022-till date

Areas of Interest / Specialization

Computational Physics, Low Temperature Physics, Solid State Physics, Condensed Matter Physics, Nanomaterials, Bio-Polymers, NMR Spectroscopy, High Vacuum Systems, Programming in various low level and high level programming languages like 8085/8086 Microprocessor assembly language, C++, Python, Scilab, Pascal, Basic, Cobol, Latex, Fortran, R Programming etc.

Subjects Taught

Undergraduate Courses

B.Sc.(hons.)Physics & B.Sc. Physical Science (Programme)

- 1. Electricity and Magnetism
- 2. Numerical Analysis
- 3. Electromagnetic Theory
- 4. Digital, Analog Electronics and Instrumentation
- 5. Elements of Modern Physics
- 6. Computer System Architecture and Microprocessor Programming

B.C.A. course conducted by Indira Gandhi National Open University at Acharya Narendra Dev College Study Centre-0715

- a. CS-611 Computer Fundamentals and PC Software
- b. CS-612 PC Software Applications Skills
- c. CC-09 Internet Awareness

Postgraduate Courses

M.C.A. course conducted by Indira Gandhi National Open University at Acharya Narendra Dev College Study Centre-0715

- a. CS-01 Computer Fundamentals
- b. CS-04 Data Structure through C & Pascal
- c. CS-03 File Structure and Programming in Cobol

Research Guidance

Publications Profile

- 1. Enhancement of Carrier Mobility and Bandgap in Plastically Deformed Bi Single Crystal. *J Low Temp Phys* 211, 138-155 (2023).
- Microhardness and X-ray studies of single crystals of Bi doped with group IV elements, Pb and Ge, IJEMS 10(2003), 59-64.
- 3. Microhardness studies on Bi-In single crystal, IJEMS 9(2002), 359-364.
- 4. Semimetal-semiconductor transition in Bi-In system, IJPAP 40(2002), 407-416.

Conference / Presentations / Workshops

- Workshop on Advance Statistical Data Analysis using SPSS, during May 21-27,2023, International Institute Special Education (IISE), Lucknow & Science Tech Institute, Lucknow, UP, May 21-27, 2023.
- Workshop on Statistical Data Analysis Using R, Science Tech Institute, Lucknow, UP, April 21-27, 2023.
- Oral Presentation (Abstract ID A54): Animated Monte Carlo Simulations of Pi on a Platonic Solid The Icosahedron,
 2nd International Conference on Advance Interdisciplinary Research (ICAIR-2023), Digvijay Nath Post Graduate
 College, Gorakhpur, UP & Science Tech Institute, Lucknow U.P, April 07-09, 2023.
- Oral Presentation (Abstract ID A201): Efficacy of Simulators in Sustained Science Education: Black Body Radiation, a Comparative Study, 2nd International Conference on Advance Interdisciplinary Research (ICAIR-2023), Digvijay Nath Post Graduate College, Gorakhpur, UP & Science Tech Institute, Lucknow U.P, April 07-09, 2023.
- Poster Presentation(PP02): Complex Dielectric Spectroscopic Studies of Modified GO Functionalized by Added Magnetite Nanoparticles, International Conference on Futuristic Materials (ICFM), Manav Rachna University, Faridabad, Haryana, Dec.8-9, 2022.
- Presentation (C169): International Conference on Nanotechnology: Opportunities & Challenges (ICNOC-2022),
 Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi,
 India, November 28-30, 2022.
- Poster Presentation: 7th International Conference on Ion Beams in Materials Engineering and Characterization (IBMEC-2022), Inter- University Accelerator Centre (IUAC), New Delhi, November 16-19, 2022.
- Poster Presentation: Impedance Studies In Ferrite Nanomaterial Doped Biopolymer, 3rd National Conference on Materials and Devices (3rd NCMD-2022), Nov. 10 – 11, 2022, Faculty of Engineering, Department of Physics, Teerthanker Mahaveer University, Moradabad, U.P.
- Oral Presentation: Gaussian Modelling of Solar Flares (Abstract ID A43), International Conference on Research Methodology (ICRM-2022), Dr Shakuntala Misra National Rehabilitation University, Lucknow, UP & Science Tech Institute, Lucknow, UP India, Oct 28-30, 2022.
- Poster Presentation (Paper ID: 031): SAW multi sensor array for the detection of different vapors by applying Artificial Neural Network (ANN), 8th International Conference on Sensors and Electronic Instrumentation Advances (SEIA' 2022), Corfu, Greece, September 21-23, 2022.
- Oral Presentation: Classification of the vapors of fuels, simulants of nerve agents, and VOCs by optimizing Artificial Neural Network, International e-Conference on Mitigating Environmental Issues by Sustainable Approaches (ICMCESA-2022), Acharya Narendra Dev College, University of Delhi, February 22-28, 2022.
- Attended IP Awareness/Training program under National Intellectual Property Awareness Mission (NIPAM), January 19, 2022
- Organized one-week online bootcamp on V-Lab Development under the aegis of DBT Star College Scheme, Acharya Narendra Dev College, University of Delhi, January 17-22, 2022.
- Attended Workshop on Foundation Course, FYUP : Science and Life, June 2013, University of Delhi
- Attended Training Programme on C++, June, 2010, Department of Physics and Astrophysics, University of Delhi.

Research Projects (Major Grants/Research Collaboration)

Awards and Distinctions

- Nishtha Service Award (Acharya Narendra Dev College) 2017.
- SRF(UGC) 1988-91.
- JRF(UGC) 1986-88

Association With Professional Bodies

Life Member of Indian Association of Physics Teachers

Other Activities

- Student Mentoring of Science Projects under the scheme : *ELITE*
- College Educational Excursion under the scheme : EXPLORE
- Physical Science Domain Incharge of <u>vlab@andc</u>
- Workshop, Virtual Lab Development 1.0, january 17-22, 2022
- Reviewed PhD/M.Phil Thesis at Dr. B R Ambedkar University Agra, U.P.
- Organized Science Quiz in the College in the year 1994-95.

S/d Dr. Sanjeeta Rani Signature of Faculty Member

 You are also requested to also give your complete resume as a DOC and PDF file to be attached as a link on your faculty page.