

Adnan Ur Rehman

Physics Postgraduate — Research Enthusiast — Tutor

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LinkedIn Profile

Career Objective

Dedicated and motivated Physics postgraduate specializing in Laser Physics and Spectroscopy with hands-on experience in material synthesis, spectroscopy techniques, and structural characterization of nanomaterials. Seeking a research position to contribute experimental, analytical, and problem-solving skills in materials science, optics, and condensed matter research.

Education

M.Sc. Physics (Laser & Spectroscopy Specialization) 2024–2026

Jamia Millia Islamia, New Delhi

CGPA : 8.32

B.Sc. Physics (Hons.) 2021–2024

Cluster University of Jammu

Percentage: 76.8%

Senior Secondary (12th) 2020

FMHSS Doda, Jammu & Kashmir

Marks: 91%

Research Experience

Hydrothermal Synthesis and Optical & Structural Characterization of Pristine CdS and Ba-Doped CdS Nanostructures 2025–2026

- Synthesized pristine CdS and Ba-doped CdS nanostructures using the hydrothermal synthesis technique.
- Performed structural characterization using X-ray Diffraction (XRD) analysis to study crystal structure, phase formation, and crystallite size.
- Conducted optical characterization using UV–Vis spectroscopy to investigate absorption properties and optical band gap.
- Acquired practical experience in sample preparation, thin film fabrication, spectroscopy techniques, and nanomaterial characterization.

Duffing Oscillator and Nonlinear Dynamics 2025

- Analyzed nonlinear dynamical systems and chaotic behavior using numerical methods.
- Developed analytical and computational problem-solving skills.

Optical Properties of Single Crystals 2023–2024

- Investigated thermal and optical characteristics of synthesized materials.
- Applied UV–Vis spectroscopy and experimental data analysis techniques.

Teaching & Mentoring Experience

Teaching Experience

Feb-2026 - Present

Physics Faculty — Meer Sir Academy, Batla House, New Delhi

- Taught Physics to Class XI XII (CBSE) students.
- Coached students for the Jamia Millia Islamia Entrance Examination.
- Delivered concept-based lectures, problem-solving sessions, and regular assessments.
- Mentored students to strengthen conceptual understanding and exam performance.

Founder & Mentor

2020–Present

Student's Guide Organisation for Educational Advancement

- Provide academic mentorship and guidance to students from remote areas of Jammu & Kashmir.
- Teach Physics and Mathematics to school and undergraduate students.
- Conduct career counseling and exam preparation sessions.
- Help students build conceptual clarity and effective study strategies.

Publications & Writing

Columnist and Opinion Writer

Ongoing

- Write opinion articles on education, youth issues, and society in various news portals and magazines.
- Present scientific and social concepts in clear and accessible language.
- Promote awareness regarding academic opportunities and student development.

Core Subjects

Laser Physics, Spectroscopy, Quantum Mechanics, Electromagnetism, Condensed Matter Physics, Quantum Optics, Mathematical Physics, Classical Mechanics

Technical Skills

Programming: C++, Fortran 90, Scilab

Software & Tools: LaTeX, Origin, Gnuplot, MS Office

Characterization Techniques: UV–Vis Spectroscopy, XRD Analysis, Photoluminescence, Z-Scan Technique

Experimental Skills: Hydrothermal Synthesis, Thin Film Fabrication, Sample Preparation, Laser Handling

Strengths

- Strong conceptual understanding of Physics and Mathematics
- Ability to explain complex concepts clearly and effectively
- Good analytical and experimental problem-solving skills
- Adaptable, patient, and research-oriented approach

Certifications

Diploma in Computer Application

2016–2017

Chenab Institute of Information and Technology, Doda

Academic Engagements

- Participated in seminars, workshops, and academic discussions related to physics and material science.
- Exposure to spectroscopy, nanomaterials research, nonlinear optics, and numerical modeling.

Leadership & Outreach

Founder & Executive Member

2020–Present

Student's Guide Organisation for Educational Advancement

- Lead a volunteer-driven initiative supporting students from remote regions of Jammu & Kashmir.
- Organized mentorship programs, career counseling, and scholarship awareness campaigns.
- Registered with Government of Jammu & Kashmir and NGO Darpan (NITI Aayog), 2025.