

PARINAAZ ANSARI

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PROFESSIONAL SUMMARY

Chemistry postgraduate with active research experience at Defence Research and Development Organization, Defence Laboratory Jodhpur (DRDO, DLJ), performed and excelled at laboratory experiments, materials characterisation and analytical testing under expert scientific mentorship.

WORK EXPERIENCE

Paid Intern – Countermeasure Laser Coatings and Technology (DRDO, DLJ)

(Feb'26 – Aug'26)

- **Optimised 12+ optical coating systems** from concept to characterisation, **increasing formulation efficiency by 15%** for laser countermeasure applications.
- **Extended coating lifespans by 20%** by evaluating film formation and stress behaviour across **epoxy, phenolic, PU, alkyd and allyl PU systems**.
- **Mapped polymer thermal stability and degradation pathways** by performing **TGA and DSC analysis** to evaluate T_g and cross-linking kinetics.
- **Reduced chemical concentration variance to <0.5%** by executing **40+ high-precision titration tests** to validate formulation reproducibility.
- **Cut R&D timelines** by auditing **25+ scientific papers** to integrate novel active compound research into ongoing projects.
- **Eliminated compliance risks** by managing laboratory logs and quality data under strict GLP standards.

TGT Science Teacher (A.C. Academy)

(July'24 – June'25)

- **Managed holistic evaluations for 200+ students (Grades 5-8)** across academic curriculum and extracurricular metrics using robust organisational, management and multitasking skills.
- **Accelerated lesson delivery timeline** by coordinating with senior faculty to integrate digital visual aids and structured laboratory safety modules into core science syllabus.

Teacher Trainee (Mahatma Gandhi Govt. Senior Secondary School, Jodhpur)

(Dec'23 – Apr'24)

- **Boosted student's scientific comprehension 30%** across **4 classes** by translating complex data into structured lesson plans.
- **Tracked academic progress for 120+ students** by designing an analytical feedback system and maintaining precise records.

RESEARCH PROJECT

Resin curing and their Thermogravimetric analysis (TGA) at DRDO, DLJ

- Studied and compared curing behavior and thermal degradation of different resin systems.
- Found that Phenolic resin showed the best thermal stability among the resin systems studied.

TECHNICAL AND CORE SKILLS

- **Analytical instrumentation:** Thermogravimetric analysis (**TGA**), Differential Scanning Calorimetry (**DSC**).
- **Wet chemistry and synthesis:** Complex solution titration, Formulation optimisation, Kinetic analysis, Quality Control Testing.
- **Polymer & resin systems:** Epoxies, Phenolics, Polyurethanes, Alkyd systems, Uralkyd systems, thin film systems.
- **Compliance & Data integrity:** GLP standards, High-precision laboratory logging, technical report writing and safety protocols.
- **Pedagogy & Communication:** STEM curriculum design, Inquiry-based learning, Classroom management, Complex data translation.

EDUCATION

M.Sc Chemistry (Maulana Azad University, Jodhpur) (2024-2026) (9.1 CGPA)

- **Relevant coursework:** Organic and Physical Chemistry, Analytical Chemistry, Research Methodology, Spectroscopy, Green and Quantum Chemistry.
- **Project:** Resin curing and their thermogravimetric analysis at DRDO, DLJ under the expert mentorship of Dr. Anju Nirwan (Scientist E)

Integrated B.Sc B.Ed. (Maulana Azad University, Jodhpur) (2020-2024) (74.54%)

Higher Secondary (Central Academy, CHB, Jodhpur) (2020) (78.2%)

Secondary (Central Academy, CHB, Jodhpur) (2018) (87.8%)

ACHIEVEMENTS & AWARDS

- **Top 5%** - M.Sc Chemistry, Maulana Azad University, Jodhpur
- **Top 20%** - Integrated B.Sc B.Ed., Maulana Azad University, Jodhpur

LANGUAGES

- **English – Native and Bilingual**
- **Hindi – Native and Bilingual**

ACADEMIC INTERESTS

- Applied Chemistry & Materials Science
- Data Analytics
- Green Chemistry
- Volunteering
- Learning new Languages

HOBBIES

- Reading
- Travelling