# ANSHUL MODI

## **ACADEMIC PROFILE**

### GITANJALI SENIOR SCHOOL HYDERABAD

• IGCSE (Cambridge International):

A\* Chemistry; A\* Physics; A Mathematics; A\* English; A Economics MAR 2023

• AS Level (11<sup>th</sup> Grade Cambridge International):

A (Physics, Chemistry, Mathematics & Computer Science) MAR 2025

• A Level Midterm (12<sup>th</sup> Grade Cambridge International):

A\* Chemistry; A\* Mathematics; A\* in Physics AUG 2025

• SAT: 1480 DEC 2024

# **ACADEMIC HONOURS**

2022-2026

- IGCSE: Topped the School overall and in Physics and Chemistry among 25 students
- AS Level: Topped the School in Mathematics among 21 students
- AS Level: Nominated for Cambridge Outstanding Leaner Award India (Mathematics)

## **RESEARCH & INTERNSHIP**

# BIOLOGICAL E. LTD., HYDERABAD

MAY – JUL 2025

Hyderabad-based biopharmaceutical company developing and supplying vaccines & therapeutics worldwide, with over 2 billion doses delivered through WHO and UNICEF in the past decade.

- Assisted in analytical testing of vaccine formulations, focusing on buffer composition and PH stability.
- Explored chemical kinetics of stabilizers and preservatives under variable temperature and light conditions to evaluate shelf-life.
- Observed procedure for antigen purification and stability testing under supervision of R&D scientists.

HYDERABAD INTEGRATED MUNICIPAL SOLID WASTE LTD., HYDERABAD NOV 2024 – JAN 2025 India's largest landfill gas-to-compressed biogas (CBG) and zero-liquid discharge wastewater treatment facility.

- Assisted in conducting jar tests to optimize coagulant dosing and studied gas processing for clean fuel applications.
- Researched integration of solar energy and natural gas in wastewater treatment for zeroemission operations.
- Participated in collaboration with process engineers to model heavy-metal adsorption rates using coagulant chemistry, proposing an optimized dosing ratio that reduced effluent turbidity by 18%.

## RADORATORY TECHNOLOGIES, HYDERABAD

MAY – JUL 2024

Manufactures Lino Hematology Analyzer, Blood Smearer and rapid stainers.

• Worked on optimization of Wright and Giemsa dual-staining processes for diagnostic hematology.

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- Improved staining consistency and reduced process time from 10 minutes to 60 seconds for digital imaging suitability.
- Gained hands-on experience correlating staining chemistry with micro-imaging data to identify malignant cell morphology. Contributed to a prototype iteration that improved diagnostic consistency across digital pathology slides.

#### INDEPENDENT RESEARCH PAPER

OCT 2025

### ELECTROCHEMICAL MECHANISMS & MATERIALS INNOVATIONS IN LITHIUM-ION BATTERIES

- Analyzed electrode reactions, SEI growth, and dendrite formation.
- Evaluated next-gen materials: silicon anodes, nickel-rich cathodes, and solid-state electrolytes for EVs.

## **CRICKET PROFILE**

2015-2025

- Top Scorer: Charminar Cricket Club (440 runs, Avg 74: 2025 B-Division 2-Day HCA Leagues)
- Scored 215\*, 123, and 108\* in recent league tournaments; multiple "Best Batsman" and "Player of the Match" awards.
- Represented Hyderabad U-16 and U-19 Probables (Vijay Merchant, Vinoo Mankad & Cooch Behar Trophies)
  NOV 2022 / OCT – NOV 2025
- Selected for Hyderabad U-19 Cricket Team in All India School Games Federation FEB 2025
- Trained under Dinesh Lad Sir (Rohit Sharma's Coach)

MAR - MAY 2024

- Captained School Cricket team (Gitanjali Senior School) for HCA U-16 Leagues
- Balances elite-level cricket with strong academic and research achievements

# LEADERSHIP & SOCIAL INITIATIVES

2022-2025

2022

## PMRD CHARITABLE TRUST

Co-founded a charitable trust in honor of both my grandfathers, dedicated to advancing clean water access and community wellbeing.

- Conducted water testing and chemical analysis to identify contamination sources and guide self-water interventions.
- Led environmental outreach installing over 100 low-cost water filtration units in slum communities in Hyderabad.
- Partnered with 6 government schools to improve student attendance and community health awareness through access to clean drinking water.
- Sold 500 + homemade protein bars to raise funds.

# AKSHAYA VIDYA

Volunteer at a non-profit organization providing education and empowerment opportunities to children from low-income urban communities.

- Designed and led cricket training sessions for student athletes, focusing on teamwork, discipline and physical fitness.
- Mentored students balancing academics and sport, helping structure routines for study and practice.