

AAYUSH JAYANTKUMAR PRAJAPATI

Environmental Science Postgraduate | Environmental Treatment & EHS

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PROFESSIONAL PROFILE

Environmental Science postgraduate with a B.Sc. in Botany and practical exposure to industrial wastewater treatment, reverse osmosis (RO) systems, environmental laboratory analysis and analytical instrumentation. Internship experience with IOCL Gujarat Refinery and Green Circle Inc. includes exposure to RO treatment, ETP operations, water-quality monitoring, membrane processes and laboratory testing. Currently pursuing a PG Diploma in Environmental and Occupational Health, with professional interests in Environmental Management, EHS, wastewater treatment and environmental compliance.

EDUCATION

M.Sc. Environmental Science — The Maharaja Sayajirao University of Baroda, Vadodara	2025–2027
PG Diploma in Environmental and Occupational Health (PGDENOH) — IGNOU	Jan 2026–Jun 2027
B.Sc. Botany — The Maharaja Sayajirao University of Baroda, Vadodara	2021–2025

PROFESSIONAL EXPERIENCE

- Indian Oil Corporation Limited (IOCL), Gujarat Refinery** | *Environmental / RO Treatment Intern* | 18 May 2025 – 18 June 2025
- Studied the industrial wastewater treatment and RO-based water-reuse system used for treating water from the CETP/ACF outlet for downstream utility applications.
 - Gained practical exposure to pretreatment stages including clarification, HRSCC, guard pot, PSF, ACF, UF, cartridge filtration and RO feed preparation.
 - Observed RO system configuration, flow distribution, permeate/reject streams, antiscalant dosing and sodium bisulfite dosing for membrane protection.
 - Worked on RO permeate flushing observations and reviewed parameters including TSS, conductivity, pH and flow rate.
 - Studied RO reject characteristics and treatment considerations, including conductivity, TDS, silica, hardness, chloride, alkalinity and oil.
 - Reviewed CIP observations for RO membranes to understand inorganic scaling and organic fouling.
- Green Circle Inc.** | *ETP Laboratory Intern* | 2025
- Gained hands-on exposure to primary, secondary and tertiary effluent treatment operations.
 - Assisted with laboratory analysis and monitoring of treated wastewater samples.
 - Developed practical understanding of industrial wastewater treatment and environmental quality monitoring.
- The Maharaja Sayajirao University of Baroda** | *Chromatography & Herbal Extraction Intern* | 2023
- Trained in chromatography, oil extraction and herbal compound analysis.
 - Gained practical exposure to HPLC, GC and spectrophotometric analysis.
 - Worked on extraction and identification of natural products and bioactive compounds.

ACADEMIC & RESEARCH EXPERIENCE

- Natural Disaster Management Study (MSU, 2025): Studied flood types, management strategies, prevention of associated diseases, disaster impacts and environmental mitigation measures.
- Environmental research interests include wastewater quality assessment, ecological impacts, environmental monitoring, EIA, GIS, sustainability and industrial environmental management.

TECHNICAL SKILLS

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| • Industrial wastewater treatment: ETP / primary, secondary & tertiary treatment | • Laboratory instrumentation: HPLC, GC, UV-Vis / spectrophotometer |
| • RO treatment & membrane-process fundamentals | • Herbal extraction & chromatography techniques |
| • Water-quality analysis: COD, BOD and routine physicochemical parameters | • MS Office: Word, Excel, PowerPoint |
| • Environmental monitoring & assessment | |

CORE COMPETENCIES

Environmental monitoring • Wastewater treatment • Laboratory analysis • Research & data interpretation • Technical reporting • Teamwork & coordination • Communication & presentation • Problem solving

CAREER INTERESTS

Environmental Officer • EHS Officer • ETP / Wastewater Treatment • Environmental Laboratory • Environmental Compliance • Sustainability