
SUMMARY

Chemistry graduate with a 3.92/4.00 GPA and hands-on experience in ASTM-based chemical analysis, material characterization, and analytical method development and validation using instruments such as FTIR, and UV-Vis Spectrophotometry. Skilled in titrimetric and gravimetric analysis and IFT testing, with a solid understanding of GMP principles and laboratory quality systems gained through internal audit training in ISO/IEC 17025:2017 and ISO 9001:2015, including document control, nonconformity handling, and PDCA-based corrective actions. Experienced in preparing technical documentation, evaluating product quality (moisture content, FFA, IFT) against standards such as SNI, and supporting research projects from experimental design through reporting. Highly detail-oriented and methodical, able to work both independently and collaboratively, quick to adapt, and ready to contribute to product development, analytical testing, and laboratory quality system maintenance within the pharmaceutical industry.

CORE QUALIFICATIONS

Analyst: Raw Material Selection, Dispersion/Surfactant Formulation, Emulsion & Dispersion Stability Principles (HLB/HLD), Interfacial Tension (IFT) Testing, ASTM-Standard Analysis, FTIR/UV-Vis/SEM Characterization, Data Analysis & Troubleshooting.

Technical skill: Titration, Preparation, Calibration, Testing Sample and Characterization (Acid number, FFA, pH, viscosity, density, moisture content, and stability)

Instrument: FTIR, UV-Vis spectrophotometer, AAS, pH meter, Shaker, microscope.

Reporting & Documentation: Technical Reporting, Standards-Based Documentation, Root-Cause Analysis (Fishbone, Pareto)

Tools & Software: Microsoft Excel, Word, PowerPoint, Canva, OriginPro, ChemDraw

Languages: Indonesian (native), English (professional — TOEFL Prediction 557/680)

CERTIFICATIONS & TRAINING

- **Kaizen & 7 QC Tools** — DDSAZ Academy (Sep 2026)
Hands-on use of Fishbone diagrams, Pareto charts, and Control charts in Excel for root-cause analysis and troubleshooting of quality/performance issues.
- **Water Treatment in Industry** — Society of Petroleum Engineers, SPE (May 2026)
Learned about emulsion stability/destabilization concepts (Winsor's R-ratio, HLB, HLD) and surfactant types, this directly applicable to dispersion stability behavior in coatings and ink formulation.
- **Internal Audit ISO 9001:2015** — Kelas.com (May 2026)
Studied the PDCA cycle and internal audit techniques, including corrective-action processes relevant to investigating and resolving product quality complaints.
- **Internal Audit ISO/IEC 17025:2017** — Sakura Learning & Consulting Centre (Aug 2026)
Learned about laboratory quality management, test-method reliability, and nonconformity handling — supports consistent, standards-based product testing.

PROJECT EXPERIENCE

Research Assistant — Dispersion & Surfactant Formulation for EOR Application *Feb – Jul 2025*
Badan Riset dan Inovasi Nasional (BRIN)

- Selected and processed raw materials (oleic acid, PEG/PPG) to synthesize a polyalkyl oleate sulfonate surfactant via esterification followed by sulfonation.
- Characterized raw materials, intermediates, and final product using ASTM methods (acid, ester, saponification, iodine number) and FTIR to verify formulation consistency.
- Evaluated dispersion/interfacial performance through IFT testing, achieving a reduction to 24.1 mN/m between crude oil and formation water — data used to assess formulation effectiveness against target specifications.

Undergraduate Thesis — Hydrogel Formulation and Performance Characterization *Feb – Jul 2026*
Universitas Brawijaya

- Optimized formulation through swelling-degree testing, FTIR, and SEM characterization to evaluate material structure and performance.
- Evaluated product performance by varying contact time, material type, and pH, analyzing results via UV-Vis spectrophotometry — achieving up to 90% target removal efficiency.

Project Researcher — Production of Virgin Coconut Oil (VCO) Using Bromelain Enzyme *Aug – Dec 2025*
Universitas Brawijaya

- Designed the experimental workflow and conducted a literature study to optimize enzymatic VCO production using bromelain extracted from pineapple.
- Evaluated product quality via moisture content and Free Fatty Acid (FFA) testing using manual titration per SNI 7381:2008.
- Produced 1 liter of VCO at 98% purity across two production batches, including project budgeting and material-requirement calculations.

PROFESSIONAL EXPERIENCE

Laboratory Assistant – Physical Chemistry *Aug – Dec 2025*
Universitas Brawijaya, Malang, Indonesia

- Guided students through distillation and refractive-index testing of methanol–ethanol mixtures, and processed data to construct liquid-phase equilibrium diagrams — reinforcing solvent-system analysis skills.

Laboratory Assistant – Identification of Chemical ReactionsAug – Dec 2025

Universitas Brawijaya, Malang, Indonesia

- Supported 42 students in identifying chemical reactions and evaluated laboratory reports for procedural and data accuracy.

EDUCATION

Universitas Brawijaya, Malang, IndonesiaAug 2022 – Jul 2026

Undergraduate Student in Chemistry | GPA: 3.92 / 4.00

- PT Adaro Scholarship awardee, two consecutive years (2024/2025 and 2025/2026) — recognized for academic excellence and leadership potential.
- Relevant course: Instrumental Analysis, Research Methodology, Statistics / Data Analysis, Organic Chemistry, and Physical Chemistry.

ORGANIZATIONAL EXPERIENCE

Coordinator of Public Relations and Funding — SULFAT, Himpunan Mahasiswa KimiaJul – Dec 2024

- Coordinated cross-stakeholder communication and produced promotional content reaching over 5 million viewers, demonstrating reporting and project-collaboration skills applicable to cross-functional technical support.

Staff of Kementerian Pemberdayaan Aparatur Organisasi — Eksekutif Mahasiswa UBFeb – Dec 2023

- Represented the Ministry of Women's Empowerment and Protection, developing and executing promotional materials for the Brawijaya Leadership Bootcamp (BLB) that reached over 1 million viewers and increased event attendance.
- As Vice Chairman II of the 2023 Open Recruitment, developed a streamlined recruitment process that successfully attracted over 500 applicants from Brawijaya University students.