



ADIESTY PUTRI HANDAYANI

Quality Control | Laboratory Analyst

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Bandung, West Java

PROFILE SUMMARY

A Bachelor of Chemistry graduate with **experience in quality control at BPOM and PDAM**, as well as **research on the synthesis of organic compounds** for perfume raw materials. **Experience in cosmetic samples, traditional medicines and health supplements (OTSK) sample preparation** for HPLC, AAS, and GC-MS analysis, as well as conducting **qualitative analysis of OTSK samples using Thin-Layer Chromatography (TLC)** in accordance with Farmakope testing guidelines and BPOM RI regulations. Experienced in **water quality monitoring** for clean water, drinking water, wastewater, and river water, handling up to 20 samples per day. Conducted **nitrite analysis using UV-Vis spectrophotometry** in accordance with SNI 06-6989.9-2004 and prepared **standard curves for nitrite and ammonia analysis** in accordance with SNI 06-6989.30-2005. **Successfully produced** 8 batches of caryophyllene oxide as a fragrance raw material and contributed directly to the development and optimization of a systematic method for synthesizing its derivatives. Involved in **compound characterization and structural confirmation using GC-FID, GC-MS, and FTIR**. Knowledgeable in the principles of **Good Laboratory Practice (GLP), Good Manufacturing Practice (GMP), and Hazard Analysis and Critical Control Points (HACCP)**. **Certified in Occupational Safety and Health (K3) by BNSP**, with the ability to consistently apply safety procedures when handling chemicals and laboratory equipment. Interested in developing a career in **Quality Control and Research & Development (R&D)** within the **food, pharmaceutical, cosmetic, fragrance, and environmental testing industries**.

EDUCATION

Bachelor of Chemistry - Indonesian University of Education

September 2022 – August 2026

Final Project: Optimization of Reaction Conditions and Characterization of Caryophyllene Oxide Derivative Products Using Acids and Bases

Activities: Member of Kelompok Studi Ilmiah, Himpunan Mahasiswa Kimia (HMK)

EXPERIENCE

Research Assistant

September 2025 – August 2026

Universitas Pendidikan Indonesia

- Synthesis of caryophyllene oxide as a precursor for perfume raw materials, including production scale-up of 8 batches to a volume of 2.5 liters per batch.
- Optimized the reaction conditions for the synthesis of caryophyllene oxide derivatives through reflux techniques, testing 5 data points on each optimization variable to obtain the most optimal reaction conditions.
- Refined the separation and purification process of synthesized compounds through liquid-liquid extraction techniques to produce high-purity products that can be used in the structural characterization stage.
- Elucidated the structure and composition of the synthesized compounds using GC-FID, FTIR, and GC-MS instruments to ensure the suitability of the synthesis results with the target compounds.

Biochemistry Lab Assistant

September 2025 – December 2025

Universitas Pendidikan Indonesia

- Mentored up to 15 students per biochemistry practicum session held weekly.
- Prepared practicum solutions and reagents in accordance with standard guidelines for organic chemistry and biochemistry laboratories to support the accuracy of practicum results.
- Evaluated student practicum reports and journals against the applicable assessment criteria.

Intern

June 2025 – July 2025

Perusahaan Daerah Air Minum (PDAM)

- Managed the preparation and testing of up to 20 water samples per day including clean water, drinking water, wastewater, and river water to support the smooth running of daily water quality testing at PDAM.

- Analyzed nitrite levels and developed the nitrite standard curve (SNI 06-6989.9-2004) using a UV-Vis spectrophotometer to ensure accurate test results.
- Developed the ammonia standard curve in accordance with SNI 06-6989.30-2005 using a UV-Vis spectrophotometer as the basis for accurately calculating sample concentration

Intern

February 2025 – June 2025

Balai Besar Pengujian Obat dan Makanan (BBPOM)

- Prepared cosmetic and OTSK samples, including weighing, dissolving via vortex or sonication, and wet digestion to ensure samples were ready for analysis according to procedure.
- Conducted OTSK quality testing using Thin Layer Chromatography (TLC), one of BPOM's official testing stages used to determine product compliance with quality standards for further regulatory follow-up.
- Prepared mobile phases for HPLC analysis and studied the working principles and operation of AAS, GC-MS, and HPLC instruments to strengthen understanding of instrumental analysis.
- Studied and applied BPOM regulations and guidelines including Good Manufacturing Practices for Drugs (CPOB), Good Manufacturing Practices for Traditional Medicines (CPOTB), and Good Manufacturing Practices for Cosmetics (CPKB) as references for product quality control.

CERTIFICATION

- Occupational Safety and Health (K3) Officer Competency Certification - National Professional Certification Agency (BNSP)
- IC3 Digital Literacy Certification GS6 Level 1 - Certiport / American Council on Education (ACE);

TRAINING & COURSES

- Food Safety: Good Manufacturing Practice (GMP), HACCP, ISO 22000:2018, and FSSC 22000 Version 7.0 – Makin Ahli
- Good Manufacturing Practices (GMP) – Makin Ahli

SKILLS

Languages: Indonesian, English (PTESOL Score 503)

Technical:

- Operated a UV-Vis spectrophotometer and developed calibration standard curves — PDAM.
- Performed OTSK sample testing using Thin Layer Chromatography (TLC) — BBPOM.
- Prepared OTSK, cosmetic, water, and organic compound samples (weighing, dissolving, vortexing, sonication, dilution) — BBPOM, PDAM, and organic synthesis research.
- Applied liquid-liquid extraction techniques for compound separation and purification — Research Assistant.
- Elucidated organic compound structures using GC-FID, FTIR, and NMR — Research Assistant.
- Understood the working principles of HPLC, AAS, GC-MS, GC-FID, FTIR, and UV-Vis spectrophotometer instruments — BBPOM and PDAM.

Personal:

- Leadership & criteria-based evaluation — mentored students during biochemistry practicum sessions and evaluated the conformity of practicum reports and journals against established assessment criteria.
- Workplace adaptability — accustomed to adjusting to different SOPs and work cultures (BBPOM, PDAM, research laboratory, and biochemistry practicum).
- Time management & work resilience — able to prioritize testing tasks amid fluctuating workloads, including periods of increased sample volume.
- Teamwork & communication — actively collaborated within a team as an HMK member and consistently communicated opinions or test results clearly and systematically to colleagues and during the research assistantship