

Talitha Aliya Putri Herdi

Bogor, Indonesia | +6282112542684 | aliyaherdi@gmail.com | www.linkedin.com/in/talitha-aliya

A Chemistry fresh graduate from Universitas Indonesia with practical experience in laboratory operations and research and development through internships at Biofarmaka IPB and PT Mowilex Indonesia. Experienced in conducting laboratory testing, analyzing experimental data, and preparing technical documentation to support product quality evaluation in accordance with established testing procedures. Demonstrates strong analytical, problem-solving, and detail-oriented skills, along with initiative, adaptability, and the ability to collaborate effectively with cross-functional teams. Eager to contribute to quality functions by leveraging a solid foundation in laboratory practices, chemical science, and analytical problem-solving to support process consistency, product quality, and continuous improvement. Committed to continuously expanding her knowledge of quality system while growing professionally in dynamic manufacturing environments.

EDUCATION

University of Indonesia

Depok, Indonesia

Bachelor of Science in Chemistry (GPA: 3.52/4.00)

2022–2026

Thesis Research:

“Synthesis and Characterization of $\text{TiO}_2/\text{CuWO}_4$ Nano-Heterostructure Photocatalysts for Malachite Green Degradation under Visible Light”

- Analyzed 20+ FTIR, UV-Vis DRS, XRD, TEM, photoluminescence, and zeta potential characterizations data using Origin, X’Pert High Score Plus, and ImageJ to evaluate the structural, optical, morphological, and surface properties of synthesized materials.
- Conducted 30+ photocatalytic degradation experiments using UV-Vis spectrophotometry and evaluated the relationship between material properties and material degradation efficiency.

Relevant Coursework:

- Biochemistry Laboratory, Sampling and Preparation, Analytical Chemistry, Spectrometric Analytical Chemistry, Instrumental Chemistry Laboratory.

Achievement:

- Jabar Future Leaders Scholarship Awardee

PROFESSIONAL EXPERIENCES

Universitas Indonesia

Jakarta, Indonesia

Laboratory Assistant

Sept 2025 – Jan 2026

- Delivered pre-laboratory briefings for 48 undergraduate students on polarimetry principles, experimental procedures, and laboratory best practice to ensure accurate and safe experiment execution.
- Guided and supervised undergraduate students during laboratory experiments, ensuring adherence to laboratory safety guidelines and experimental procedures while providing technical assistance.
- Evaluated and reviewed pre-tests, laboratory journals, reports, and experimental data to ensure accuracy, completeness, and consistency with theoretical principles.

PT Mowilex Indonesia

Jakarta, Indonesia

Research and Development Intern

March 2025 – August 2025

- Executed 3 independent projects and contributed to 4 additional product development projects during a five-month internship.
- Conducted 30+ paint batching, formulation trials, followed by physicochemical (pH, viscosity, density, dry film and durability) testing in accordance with established laboratory procedures to evaluate product quality and formulation performance.
- Monitored product quality and consistency through 3-months stability testing under room-temperature and elevated-temperature conditions by evaluating key quality parameters.
- Evaluated 5 binder variants through comparative laboratory testing, identifying the most suitable raw material for formulation that met product quality standards.

- Analyzed and documented laboratory test results in technical reports, providing reliable experimental data to support product quality evaluation and product development decision.

Pusat Studi Biofarmaka Tropika (TropBRC)

Bogor, Indonesia

Laboratory Intern

July 2024 – August 2024

- Conducted antioxidant activity testing using the DPPH method and analyzed IC50 result to evaluate sample bioactivity.
- Conducted toxicity testing of dragon fruit and berenuk fruit extracts using the Brine Shrimp Lethality Test (BSLT) to evaluate the preliminary toxicity of natural products extracts.
- Evaluated and selected a suitable microplastic analysis method, assisting in the identification and quantification of microplastics in 10 seawater samples using microscopy.
- Assisted with laboratory preparation and analytical testing using FTIR, AAS, HPLC, and TLC instruments in accordance with laboratory procedures.
- Assisted in water and ash content analysis using gravimetric methods.

ORGANIZATION & LEADERSHIP EXPERIENCES

Himpunan Mahasiswa Departemen Kimia UI

Depok, Indonesia

Internal Deputy of Department Social and Environment

March 2024 – Feb 2025

- Monitored project timelines and coordinated progress, problem, and plan (3P) tracking across 4 work programs, achieving 100% program completion within the designated period.
- Supervised and monitored 8 staff members through continuous feedback and performance evaluation to maintain alignment with work-program objectives
- Managed communication with internal and external stakeholders to support program planning and execution.

Kimia Tanggap Lingkungan Sekitar (KATALIS)

Depok, Indonesia

Head of Main Event Katalis 2024

June 2023 – Feb 2024

- Designed an environmental education program through benchmarking, assessing community needs, and evaluating site conditions to develop relevant activity concepts.
- Led end-to-end program planning and execution by coordinating cross-functional teams and overseeing task delegation.
- Improved participants' environmental awareness by approximately 80% as measured through pre-test and post-test evaluations.

CERTIFICATIONS

- | | |
|---|----------|
| • ISO 9001:2015 Quality Management Systems | Nov 2024 |
| • ISO 14001:2015 Environmental Management Systems | Nov 2024 |
| • ISO 45001: 2018 Occupational Health and Safety Management Systems | Nov 2024 |

SKILLS

- **Technical skills:** Laboratory practices, sample handling and preparation, laboratory testing, product quality evaluation, experimental data analysis, stability testing, laboratory documentation, technical report writing, and instrument operation (FTIR, UV-Vis Spectroscopy.).
 - **Soft skills:** Analytical thinking, problem solving, detail-oriented, team collaboration, communication, time management.
- Toolset:** Microsoft Office Suite (Word, Excel, PowerPoint), Google Workspace (Docs, Sheets, Slides, Forms), Canva.