

Fuadati Nauratul Aqilah

Chemistry – Fresh Graduate

Gresik, Jawa Timur | +6282232268291 | fuadatinaqilah@gmail.com | www.linkedin.com/in/fuadatinauratulqilah

Bachelor of Chemistry graduate with academic and manufacturing industry laboratory experience in analytical testing and quality control of materials and products. Skilled in sample preparation, physicochemical testing, data processing and interpretation, and laboratory documentation in accordance with SOPs and quality standards. Experienced in using laboratory instruments such as UV-Vis and FTIR, with a solid understanding of HPLC and chromatography principles. Knowledgeable in and capable of applying Good Laboratory Practice (GLP) and ISO/IEC 17025 standards backed by relevant certifications, along with a foundational understanding of Good Manufacturing Practices (GMP). Recognized for being meticulous, possessing strong analytical thinking and attention to detail, and the ability to work systematically both independently and within a team.

SKILLS

Core Skills: Analytical testing and physical-chemical analysis | UV-Vis, FTIR, Polarimeter, Colorimeter, basic HPLC and chromatography | Sample preparation and testing of raw materials and products | Quality control based on SNI standards | Batch Verification and production data control | Laboratory Data Processing and Interpretation | GLP and ISO 17025.

Soft Skills: Analytical thinking | Problem solving | High accuracy | Time management | Communication and teamwork | Adaptability and quick learning of new instruments.

Software: Microsoft Office | ERP System | SPSS | SigmaPlot | Basic laboratory instrument software | Canva.

Work Experience

Weighing Admin – PT Delifru Utama Indonesia

Internship

December 2025 – June 2026

- Supported production operations by accurately weighing raw materials in accordance with Work Orders, SOPs, and manufacturing standards.
- Ensures accurate batch verification, material coding, and material labeling to maintain traceability and minimize the risk of material errors in the production process.
- Manages material data input and validation in the ERP system to support production control and inventory data accuracy.
- Handles the management of production scrap and monitors batch status according to quality control procedures and the company's food safety system.

Environmental Chemistry Research Assistant - Department of Chemistry

Brawijaya University Environmental Chemistry Laboratory

January – June 2025

- Contributed to research on the development of diffuser layers for Diffusive Gradients in Thin Films (DGT) devices through sample preparation, laboratory testing, and experimental data processing.
- Supported the implementation of diffusion tests to evaluate the effect of interfering ions on the performance and stability of the DGT system.
- Systematically documented and validated research data to ensure the accuracy of research results and the preparation of scientific reports.

Laboratory Assistant- Department of Chemistry Brawijaya University

Analytical, Physical, and Organic Chemistry Laboratory

September – December 2024

- Served as a laboratory assistant in three fields simultaneously (Analytical Chemistry, Physical Chemistry, and Organic Chemistry) during a single practicum period.
- Guided students in practical sulfate analysis by turbidimetry using a turbidimeter.
- Guided students in practical redox reaction kinetics to understand the effects of concentration, temperature, and catalyst on reaction rates.
- Provided instruction and guidance in the recrystallization, extraction, and synthesis of simple organic compounds such as dibenzal acetone and acetanilide.

Laboratory Analyst – Indonesian Sugar Plantation Research Center

Internship

July – Agustus 2024

- Analyze the quality of white crystal sugar based on SNI 3140-3:2020, including polarization analysis, conductivity ash, solution color, grain size distribution, water content, and sulfite content.
- Operate various laboratory instruments such as polarimeters, conductometers, colorimeters, and refractometers to support the sugar quality analysis process.

Science Tentor – SDN 2 Pelem, Bojonegoro

Community Service

July – Agustus 2023

- Develop and deliver science learning materials for elementary school students using interactive and easy-to-understand explanation methods.
- Develop simple practical activities so students can learn science concepts in a hands-on, enjoyable, and applicable way.

Project Experience

The Effect of Phosphate and Nitrate Solution Concentration on the Phosphate Diffusion Coefficient in Lactose/Methacrylate Anhydrous Gel

Thesis Research

January – June 2025

- Developed a lactose- and methacrylate-based diffusion gel for use as a diffusion layer in a Diffusive Gradients in Thin Films (DGT) device.
- Studied the effect of varying phosphate concentration and the presence of nitrate ions on the phosphate diffusion coefficient in the gel using a passive diffusion method.
- Conducted the diffusion process using a diffusion cell and analyzed the accumulated phosphate concentration using a UV-Vis instrument.
- Demonstrated that nitrate ions caused a decrease in the phosphate diffusion coefficient, indicating significant diffusion interference in the DGT system.

Making Bathbombs with Olive Oil (*Olea Europaea*) as the Active Ingredient

Chemistry Project

August - November 2024

- Conducted research on bath bomb formulations using olive oil (*Olea europaea*) as the active ingredient to improve product quality.
- Comparative testing of the final product with commercial products was carried out, including evaluation of foam, aroma, color, texture, and shelf life.
- Conducted a trial with respondents to obtain product assessments, and received positive feedback and was assessed as having high commercial potential.

EDUCATIONAL BACKGROUND

Brawijaya University – Malang, Indonesia

Bachelor of Science (S.Si) | Chemistry | 3,25/4,00

August 2021 – July 2025

Relevant Courses: Materials Chemistry, Taste Chemistry, Engineering Biochemistry, Electroanalytical Sensors, Instrumentation Chemical Analysis, Separation Techniques, and various laboratory practicals.

ORGANIZATIONAL EXPERIENCE

Chemistry Student Association – Brawijaya University

Expert Staff of the Organization's Quality Assurance Center

January – December 2023

- Involved in evaluating cross-division work programs to ensure alignment with the organization's vision and the effectiveness of activity implementation.
- Developed and implemented internal development programs specifically for members of the Chemistry Student Association, including routine quarterly upgrading activities.
- Successfully improved the organization's internal quality through mentoring and monitoring internal performance based on periodic evaluations.

Student Resource Development Staff

January – December 2022

- Initiate and implement soft skills development programs for all UB Chemistry students, such as TOEFL training, CV-building workshops, and introductions to the world of work.
- Involved in organizing career development and professional readiness activities, such as introductions to ISO and laboratory quality management.
- Contribute to the development of needs-based activity concepts to support student academic and non-academic readiness.

CERTIFICATION

GLP Certification – DDSAZ Lab Academy

August 2025

Grade : AB

Trained in the principles of Good Laboratory Practice (GLP), including sample management, recording and documentation, analytical procedures, data validation, and the implementation of safety and quality standards in laboratory activities.

SNI ISO 17025 : 2017 Certification – DDSAZ Lab Academy

September 2025

Trained in the general requirements for the competence of testing and calibration laboratories, including quality management, document control, internal audits, method validation, metrological traceability, and quality assurance of test and calibration results.

ACHIEVEMENT

Silver Medal – Indonesia International IoT Olympiad (I3O)

June 2024

Awarded Silver Medal for SMART-AQUA: an IoT-based system for sustainable aquaponics with real-time optimization.

Gold Medal – Indonesia International Applied Science Project Olympiad (I2ASPO) 2023

December 2023

Awarded Gold Medal for SaCA: an eco-friendly biosorbent from kepok banana peels and tea waste for remediating lead and phosphate-contaminated water.