



DESIANA INAYAH

Karawang Green Village 2, Telukjambe Timur, Karawang, West Java
desianainayah20@gmail.com | +62 859-2066-3199 | www.linkedin.com/in/desianainayah

SUMMARY

Bachelor of Applied Science Industrial Chemical Engineering Technology (GPA 3.70) with hands-on experience in process engineering, production engineering, quality control and assurance, laboratory analysis, and research & development. Skilled in operating Gas Systems, Boilers, Vacuum Systems, Reflux Units, Evaporators, Dehydrators, and Supercritical Fluid Extraction (SCFE), as well as analytical instruments including HPLC, GC-MS, UV-Vis Spectrophotometer, pH meter, TDS meter, and Turbidity meter. Experienced in implementing GMP, GLP, HACCP, ISO, and Occupational Health and Safety (K3) standards.

EDUCATION

Diponegoro University

August 2021 - September 2025

Applied Bachelor of Science in Industrial Chemical Engineering Technology, Vocational School (GPA: 3.70/4.00).

INTERNSHIP EXPERIENCE

PT Pupuk Kujang Cikampek

September 2024 - November 2024

Process Engineer Intern

- Monitored the urea production process from NH_3 and CO_2 , including process control systems, DCS, interlocks, and plant operations.
- Performed process analysis using log sheets, PFD, P&ID, and conducted mass balance, heat balance, and reactor efficiency calculations.
- Analyzed process samples (Benfield, Cosorb, and AMDEA) using AAS, UV-Vis Spectrophotometer, ICP, GC, and Nitrogen Analyzer to support process monitoring and quality control.
- Conducted field observations and Turn Around (TA) investigations for process troubleshooting.
- Applied HSE practices, including hazard observation, HIRADC, and ISO 45001 implementation.

Laboratory Assistant at Diponegoro University

February 2025 - May 2025

- Performed quantitative gravimetric analysis through precipitation, filtration, drying, and weighing techniques while preparing reagents and operating laboratory equipment in accordance with SOPs.
- Mentored 141 undergraduate students during Gravimetric Analysis laboratory sessions, enabling 95% of students to achieve analytical results within the acceptable experimental tolerance range.
- Applied Good Laboratory Practice (GLP) by maintaining laboratory safety, ensuring accurate analytical documentation, and supporting 100% incident-free laboratory sessions.

Tutor at Genius Private

November 2024 - April 2025

- Tutored Mathematics, Physics, and Chemistry for elementary to high school students using personalized learning approaches.
- Designed structured learning plans and supported students in achieving their academic goals and examination readiness.

Diponegoro University Teaching Factory

July 2025 - October 2025

Production & Quality Control Intern

- Produced bottled drinking water by operating water treatment systems, including sand filters, carbon filters, UF/RO, UV disinfection, and ozone generators.
- Performed water quality testing using pH meter, TDS meter, and turbidity meter, supporting the production of 2,000 bottles/day and 50,000 bottles for Universitas Diponegoro's Graduation Ceremony and Dies Natalis events.
- Operated washing, filling, capping, sealing, labeling, inkjet coding machines, and conducted leak testing to ensure product quality and traceability.
- Supported SJPH certification documentation and reduced packaging bottle rejection by 95% through quality control and process improvement initiatives.

Production & Product Research Development Intern

- Conduct research and development (R&D) activities for extraction mitragynine and essential oil products, including extraction processes, the operation of gas systems, boilers, reflux units, evaporators, dehydrators, and SCFE equipment.
- Record, analyze production, and formulation data to support product development and process optimization.
- Conduct quality testing using HPLC, GC-MS, and UV-Vis Spectrophotometer, including compound identification, chromatogram interpretation, and determination of %ABS and %REL.
- Develop Work Instructions (WI) and Standard Operating Procedures (SOP) for equipment operation and production processes.
- Implement Occupational Health and Safety (OHS) principles through safe chemical handling, PPE compliance, and adherence to safety procedures.

ORGANIZATIONAL EXPERIENCE

- Five Education Festival 2022
- Chemical Series Art-C 2022
- Chemical Series C-Talk 2022
- LKMMPD 2022
- Vocational Champion Vocational School Undip 2023
- Undip Vocational School Leadership Training 2023
- Undip Vocational School Creation 2023
- GoRe Undip Vocational School 2023
- ICEN-C Undip 2023

TRAINING AND CERTIFICATION**Internationally Certified Training Institute**

- Internal Auditor ISO 45001:2018 2025
- Internal Auditor ISO 14001:2015 2025
- Internal Auditor ISO 9001:2015 2025
- Awareness ISO 45001:2018 2025
- Awareness ISO 14001:2015 2025
- Awareness ISO 9001:2015 2025
- Awareness ISO 22000:2018 2025
- Awareness ISO/IEC 17025:2017 2025
- FSSC 22000 Version 6.0 2025
- Chemical and Petrochemical Occupational Safety (K3) 2025
- Permit to Work (LOTO, Equipment, and Power Isolation) 2025
- Hazard Identification Risk Assessment and Determining Control (HIRADC) 2025
- Job Safety Analysis (JSA) 2025
- Environmental Risk and Waste Management 2026
- Good Manufacturing Practices (GMP) 2025
- Good Laboratory Practice (GLP) 2025
- Quality Assurance and Quality Control (QA/QC) 2025
- Hazard Analysis and Critical Control Point (HACCP) 2025
- Halal Product Assurance System 2025
- Lean Six Sigma Green Belt Training 2026
- Research and Development (R&D) 2025
- Analysis of Active Substances and Contaminants Using HPLC/UHPLC 2026
- Optimizing Labs to Become Income Generators in Chemical & Pharmaceutical Laboratories 2026
- HOT JOB 2025

ADDITIONAL INFORMATION

- Hard Skills: Analytics (Aspen HYSYS, MATLAB, Origin, Statistica, Microsoft Visio, AutoCAD) | Microsoft Office (Microsoft Word, Microsoft Excel, Microsoft Power Point) | Design (Adobe Illustrator, Adobe Photoshop, Canva, CapCut)
- Soft Skills: Communication | Analytical Thinking | Critical Thinking | Problem Solving | Leadership | Teamwork
- Language Skills: Indonesian (Native) | English (Native)
- Interest: Process Engineering | Production | Process Improvement | Research and Development (R&D) | Quality Assurance (QA) | Quality Control (QC) | Laboratory Analyst | Health, Safety, and Environment (HSE) | Regulatory Compliance | Project Management