

ABDUL AZIZ KHOIRUDIN

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Bachelor of Science in Chemistry with hands-on experience in quality control and instrumental analysis. Skilled in quantitative chemical analysis using UV-Vis and AAS, complemented by the ability to interpret FTIR and GC-MS data for chemical analysis. Eager to contribute as a Analyst in the pharmaceutical industry by leveraging expertise in chemical and instrumental analysis to support analytical testing process, product development, evaluate analytical results, and ensure compliance with company procedure.

EXPERIENCE

Department of Environment

Sep 2025 – Nov 2025

Laboratory Analyst

- Conducted quantitative analysis of iron (Fe) and manganese (Mn) in 36 groundwater samples using Atomic Absorption Spectroscopy (AAS), including instrument operation and analytical results evaluation to ensure compliance with quality standards.
- Determined the concentration of nitrate (NO_3^-), and nitrite (NO_2^-) in 36 water samples using UV-Visible Spectrophotometry (UV-Vis), including sample preparation and instrument operation.
- Performed analysis of ammonia (NH_3) in 20 wastewater samples using UV-Visible Spectrophotometry (UV-Vis), revealing that 95% of the samples were non-compliant with quality standards.

Yogyakarta State University

Chemical Instrument Laboratory Assistant

Feb 2025 – Jun 2025

- Supervised and provided technical instruction to 43 students during potentiometric titration laboratory sessions, ensuring compliance with laboratory protocols, safety regulations, and proper experimental procedures.
- Reviewed 43 students' laboratory reports by assessing calculation accuracy, scientific discussions, and conclusions, providing constructive feedback to strengthen students' scientific writing and analytical reasoning.

PT. Toyota Boshoku Indonesia

Oct 2020 – Aug 2021

Production Operator of Headrest Department

- Performed visual quality inspection on over 100 headrests per shift by identifying surface defects and ensuring compliance with established quality standards.
- Conducted monthly inventory audits to ensure accurate headrest inventory records and prevent stock shortages.
- Operated production machinery to produce 100+ headrests per day and performed preventive maintenance twice per shift to ensure equipment reliability and minimize downtime.

Quality Control of Chemical Laboratory

- Performed wastewater quality analysis at the Wastewater Treatment Plant (WWTP) by testing Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), ammonia (NH₃), and pH to monitor treatment efficiency and ensure compliance with environmental quality standards.
- Conducted water quality analysis at the Water Treatment Plant (WTP) by analyzing total hardness, silica (SiO₂), and pH to support early detection of water quality deviations and minimize scaling and corrosion risks.
- Conducted incoming material inspection of Polyethylene Terephthalate (PET) and Recycled PET chips by measuring melting point to verify compliance with material quality specifications prior to production.

EDUCATION**Yogyakarta State University**

Aug 2022 – Jul 2026

Bachelor of Science in Chemistry | GPA: 3.68/4.00

Projects:

Hydrogen gas production through water electrolysis using ketapang leaf (*Terminalia catappa*) medium with stainless steel and stainless steel/Fe-Co-Ni electrodes.

- Characterized electrode materials using XRD and SEM-EDX by evaluating crystal structure, surface morphology, and elemental composition to assess the influence of material characteristics on hydrogen production performance during the electrolysis process.
- Designed and optimized an electrochemical hydrogen production system through systematic evaluation of operating parameters, resulting in improved hydrogen production efficiency.

SKILLS

- **Hard Skills** : Microsoft Office (Word, Excel, Power Point), Chemical Data Analysis Software (ChemDraw, Origin, Match!), Laboratory Skills (Quantitative Chemical Analysis, Instrumental Analysis, Laboratory Analysis)
- **Language** : Indonesian (Fluent) English (Basic)
- **Certification** : VAPRO/BEPRO Certification Operator, Certificate of Completion in English Communication

ORGANIZATION**Chemistry Student Association**

Head of National Chemistry Fair 2024

Nov 2023 – Mar 2024

- Led a team of 100+ committee members in organizing a national academic event with over 400 participants from schools and universities across Indonesia by planning activities, monitoring event progress, and coordinating across multiple divisions.
- Addressed event funding challenges in collaboration with the Sponsorship Division by developing sponsorship proposals, negotiating with potential sponsors, and building strategic partnerships with external stakeholders, securing IDR 10 million in sponsorship support for the successful event.