

MITA FARCHATIN NAZIDAH

LABORATORY ANALYST | ANALYTICAL CHEMISTRY | QUALITY CONTROL | QA/QC
Gresik, Jawa Timur | +6287873363777 | mitanazidah@gmail.com | www.linkedin.com/in/mitanzd

Chemistry undergraduate at Institut Teknologi Sepuluh Nopember (ITS) with hands-on experience in laboratory analysis, catalyst research, fuel and lubricant testing, and coal quality analysis. Proficient in operating laboratory instrumentation for both analytical testing (AAS, automatic potentiometric titrator) and material characterization (XRD, FTIR, UV-Vis), with experience in sample preparation, material synthesis, instrument calibration, data validation, and technical reporting. Familiar with ASTM/ISO standards, QA/QC procedures, and laboratory safety (K3) requirements. Detail-oriented and analytical, with a strong record of maintaining data accuracy, traceability, and laboratory compliance across both industrial and academic research settings.

WORK EXPERIENCE

LEMIGAS - Cipulir, Kebayoran Lama, Jakarta Selatan | Internship

Jan 2025 - Feb 2025

Laboratory Analyst (Fuel & Lubricant Analysis)

- Performed lubricant oil quality testing for metal content, sulphated ash, and Total Base Number (TBN) using ASTM D4628, ASTM D874, and ASTM D2896 methods.
- Operated AAS and automatic potentiometric titrators for lubricant metal-content and TBN testing, supporting calibration and maintenance to improve result reliability under ASTM-based laboratory procedures.
- Applied ASTM test methods, laboratory SOPs, and QA/QC protocols to maintain testing accuracy and compliance.
- Interpreted analytical results against specification limits to assess lubricant quality and performance, then compiled, verified, and documented the findings in traceable technical reports.

PT ANINDYA WIRAPUTRA KONSULT - Margomulyo, Surabaya | Internship

Jul 2025 - Aug 2025

Laboratory Analyst (Coal Analysis)

- Performed proximate coal analysis (moisture, ash content, volatile matter, sulphur, GCV) per ASTM/ISO standards.
- Prepared coal samples according to laboratory SOPs to ensure consistency and repeatability of analytical results.
- Validated analytical data prior to reporting for accuracy and reliability.
- Compiled and verified coal-analysis results into structured technical reports, enabling quality control decisions based on moisture, ash content, volatile matter, sulphur, and GCV data.

Institut Teknologi Sepuluh Nopember (ITS) - Material Chemistry and Energy Laboratory Sept 2025 - Feb 2026

Researcher

- Synthesized (0.1 mol) Zn-doped MgF_2 (MZF) and (0.1 mol) Sn-doped MgF_2 (MSF) catalysts using sol-gel method for p-nitrophenol reduction.
- Characterized MZF and MSF catalysts using XRD, FTIR, pyridine-FTIR, and N_2 adsorption-desorption analysis.
- Evaluated catalytic performance in reducing p-nitrophenol (PNP) to p-aminophenol (PAP) using NaBH_4 as the reducing agent.
- Investigated PNP activation mechanisms to understand reaction pathways and catalytic behavior.
- Optimized catalyst synthesis and reaction conditions to enhance reduction efficiency and selectivity.

Institut Teknologi Sepuluh Nopember (ITS) – Chemistry Fundamental Laboratory

Apr 2026 - Jun 2026

Laboratory Assistant, Inorganic Chemistry

- Prepared laboratory reagents, chemicals, and equipment for practical sessions involving 40+ students per session.
- Enforced laboratory safety and K3 procedures, maintaining a zero-incident record across supervised sessions.
- Guided students through the synthesis and characterization of cobalt coordination complexes using various ligands.
- Demonstrated the working principle and operation of UV-Vis spectrophotometry for coordination-complex characterization and experimental analysis.

EDUCATION

Institut Teknologi Sepuluh Nopember – Surabaya

2022 - 2026

Bachelor of Chemistry, Faculty of Science and Data Analytics (GPA : 3.35 / 4.00)

Undergraduate Thesis : “Synthesis and Characterization of Zinc-Doped Magnesium Fluoride Catalysts (MZF) and Optimization of Reductant Mass and Activation Methods for the Reduction of p-Nitrophenol to p-Aminophenol.”

ACHIEVEMENTS

- Awardee, Student Creativity Program in Entrepreneurship (PKM-K), National Funding Award, 2023. Proposal: "JELITA - Antibacterial Hydrogel Shoe Freshener from Lime Peel (*Citrus aurantiifolia*) and Snake Plant (*Sansevieria trifasciata*)."

LEADERSHIP & ACTIVITIES

- Head, Medical & Consumption Division – FSAD Fair | 2024
- Expert Staff of Creative Design – Chemistry Week-16 ITS | 2024
- Creative Staff – Election Committee of HIMKA | 2024
- Mentoring Analyst – Aksi Nirwasita 4.0 Faculty Orientation Program | 2023
- Committee Staff – Chemistry Youth Entrepreneur Class (CYEC) 3.0 | 2023
- Creative Staff – Election Committee of FSAD | 2023

PROJECTS

- Cow dung biobriquettes as an alternative renewable energy source, focusing on waste-to-energy conversion and environmental sustainability in Sanan Village (2024)
- Synthesis of $\text{Fe}_3\text{O}_4/\text{AC}/\text{CaO}$ Composite as a Magnetic Heterogeneous Catalyst for Biodiesel Production from Palm Oil (2025)

SKILLS & INTERESTS

Interest	Analytical Chemistry, Quality Control (QC), Quality Assurance (QA), Chemical Analysis, and Research & Development (R&D)
Instrumentation Skills	AAS, UV-Vis, Material Characterization (FTIR, XRD)
Quality	ASTM & ISO Standards, SOP, QA/QC, Equipment Calibration
Data & Reporting Skills	Experimental Data Analysis, Result Validation, Technical Report Preparation, Data Processing, and Documentation
Hard Skills	Microsoft Office (Excel, Word, PowerPoint), OriginPro, MATLAB, Canva
Soft Skills	Attention to detail, Analytical Thinking, Problem Solving, Communication, Team Collaboration, Adaptability, and Time Management

LANGUAGES

- **Bahasa Indonesia:** Native
- **English:** Intermediate [TOEFL Score : 490]