



# FAHDIRA LAELIZA BACHTIAR

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Fresh graduate of Chemistry from Universitas Negeri Semarang with hands-on laboratory research experience and GLP training. Adaptable and detail-oriented, with a solid foundation in analytical methods, documentation, and scientific reporting. Eager to apply strong problem-solving skills to a Quality Control role, with growing interest in quality systems and laboratory compliance.

## Working Experiences

### Badan Riset dan Inovasi Nasional (BRIN) - Serpong, Indonesia

Feb 2025 - Jul 2025

#### Research Intern

The National Research and Innovation Agency (BRIN) is Indonesia's government institution responsible for conducting research, developing innovation, and advancing science and technology across various disciplines.

- Performed sample preparation, extraction, and solvent partitioning on marine sponge and plant-based natural product samples, following standardized laboratory procedures.
- Conducted chromatographic separation (TLC, Gravity Column Chromatography) for compound purification across 10+ fraction.
- Carried out antioxidant assays (DPPH, ABTS, FRAP) as core focus, plus BSLT toxicity, TPC/TFC, and antibacterial testing (MIC/MBC/disc diffusion) on 10+ samples total.
- Prepared and distilled laboratory solvents to support chromatography experiments and routine laboratory operations.
- Maintained laboratory documentation and experimental records in compliance with Good Laboratory Practices (GLP), ensuring data traceability.

### Badan Riset dan Inovasi Nasional (BRIN) - Serpong, Indonesia

Sep 2025 - Mar 2026

#### Final Research

The National Research and Innovation Agency (BRIN) is Indonesia's government institution responsible for conducting research, developing innovation, and advancing science and technology across various disciplines.

- Led an independent research project on isolation, characterization, and bioactivity evaluation of *Horsfieldia parviflora* leaves.
- Performed antioxidant (DPPH, ABTS) and toxicity (BSLT) assays and analyzed experimental data to evaluate the biological activity of isolated compounds.
- Operated UV-Vis spectrophotometer and interpreted FTIR, LC-MS/MS, and NMR analytical data to support compound identification and structural elucidation.
- Analyzed chromatography and bioactivity results and transformed experimental data into structured scientific findings for research documentation.
- Prepared scientific reports, research documentation, and an undergraduate thesis while presenting analytical data accurately and systematically.

## Education Level

### SMAN 3 KOTA CIREBON - Cirebon, Indonesia

Jul 2019 - May 2022

Senior High School, Science

### Universitas Negeri Semarang - Semarang, Indonesia

Aug 2022 - Jun 2026

Bachelor of Chemistry, 3.78/4.00

## Organizational Experience

### Kelompok Ilmiah Kimia UNNES - Semarang, Indonesia

Feb 2023 - Feb 2024

#### Secretary of the Networking and Communications Division

Chemistry Scientific Group (KIK) is a semi-autonomous student scientific organization under the Chemistry Student Association of Semarang State University, dedicated to developing students' research skills, scientific writing, and academic competencies through various scientific and organizational activities.

- Maintained administrative records, meeting minutes, and official documentation for the division.
- Managed internal communication and coordinated division activities on a rotational basis.
- Designed social media content for organizational branding, rotated among division members every 3 months.
- Cross-collaborated as event committee member for divisions outside own scope, drafting event rundown for program execution.
- Demonstrated mini chemistry experiments as a practicum presenter during student orientation events.

## Skills, Achievements, & Other Experience

- Laboratory & Analytical Techniques:** Compound Isolation & Purification, Chromatographic Separation (TLC, Gravity Column Chromatography), Sample Preparation & Extraction, Solvent Distillation.

- **Bioactivity Assay:** Antioxidant Activity (DPPH, ABTS, FRAP), Toxicity (BSLT), Total Phenolic & Flavonoid Content (TPC, TFC), Antibacterial Activity (MIC, MBC, Disc Diffusion), Antidiabetic Activity ( $\alpha$ -glucosidase Inhibition).
- **Instrumental Analysis:** Operated UV-Vis spectrophotometry for direct sample analysis, and interpreted spectroscopic data from FTIR, LC-MS/MS, and NMR for compound identification and structural elucidation.
- **Achievements** 🏆 (2024): 2nd Place – National Biology Infographic Competition (Team Award).
- **Software & Tools:** Microsoft Office, Google Workspace, Canva, ChemDraw, MestReNova.
- **Certificate** 📜: GLP Training, NMR Spectroscopy Workshop, BRIN Internship.