



# RANA FRETYANA EKAPUTRI

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Depok, West Java

Master's graduate in Chemistry with strong laboratory and data analysis background. Experienced in analytical testing, environmental-related research activities, and laboratory documentation. Familiar with physicochemical analysis, data validation, and SOP-based laboratory work. Strong research background with demonstrated skills in data analysis, problem-solving, and laboratory management. Collaborative team player with experience in academic research, internships, and professional organizations. Eager to apply technical knowledge in innovative environments. Highly motivated to apply scientific knowledge in industrial, quality, or technical commercial roles.

## Work Experiences

### Low Dimension Materials Lab at University of Indonesia

Jul 2023 - Aug 2024

#### Research Student

- Successfully conducted laboratory research on low-dimensional materials, including material synthesis, modification, and physicochemical characterization.
- Designed and executed experimental procedures that generated reliable structural and physicochemical data for material evaluation.
- Contributed to collaborative research projects by supporting literature reviews, experimental design, and method development with research supervisors and team members.
- Maintained 100% compliance with laboratory safety procedures, SOPs, and Good Laboratory Practices (GLP) throughout research activities.

### Bimbel GSmart

Sep 2024 - Sep 2025

#### Administrative & Academic Support - Freelance

- Managed academic and administrative documentation, including scheduling, reporting, and data organization.
- Analyzed student performance data to adjust learning strategies and improve outcomes
- Communicated and coordinated with students and parents to ensure program effectiveness.

### Universitas Islam Indonesia - Yogyakarta, Indonesia

Mar 2020 - Jan 2021

#### Laboratory Assistant At Fundamental Physics Lab - Contract

- Evaluated student laboratory performance and provided feedback to improve accuracy in experimental work and data recording.
- Assisted laboratory experiments and calibration checks, ensuring consistent and reliable experimental results.
- Guided students in data interpretation and scientific reporting, improving their technical communication and analytical skills.
- Maintained laboratory equipment readiness and organization to support safe and efficient laboratory operations.

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

Jan 2020 - Feb 2020

#### Student Research Assistant - Internship

- Conducted laboratory experiments involving material synthesis and physicochemical characterization as part of research projects.
- Performed sample preparation, testing, and result validation, ensuring data accuracy and reproducibility.
- Analyzed experimental data and prepared structured technical reports to support research evaluation.
- Supported experimental optimization and troubleshooting to improve research trial outcomes.

## Education Level

### Universitas Indonesia - Depok, Indonesia

Aug 2022 - Jul 2024

#### Masters Chemistry, 3.79/4.00

- Beasiswa Unggulan Scholarship Awardee by Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi - 2023

### Universitas Islam Indonesia - Yogyakarta, Indonesia

Sep 2017 - Jun 2021

#### Undergraduate Chemistry, 3.88/4.00

- Favorite Champion at PIMNAS 33 as a Leader -2020
- Finalist of International Biotechnology Competition & Exhibition (IBCEX), Malaysia - 2019
- Peningkatan Prestasi Akademik (PPA) Scholarship Awardee - 2019
- Top 10 at Southeast Asia Global Innovation Challenge (SEAGIC), Malaysia - 2018
- 3rd Place at the Scientific Writing Competition of Al-Qur'an Universitas Diponegoro - 2017

## Organisational Experience

### Faculty Da'wah Institute - Yogyakarta, Indonesia

Dec 2017 - Feb 2019

#### Staff

- Successfully recruited 60 - 70 students in the faculty of mathematics and natural sciences

#### Chemistry Student Competition Center (CSCC) - Yogyakarta, Indonesia

Jan 2018 - Feb 2019

#### Staff

- Impacting 100+ Students in chemistry to join the National (PKM) and International (Seagic Malaysia) competitions
- Help them to prepare all the things needed and organize all of the supporting stuff.

### Skills, Achievements & Other Experience

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- **Training** (2022): Basic understanding of quality management, auditing, and documentation systems (ISO 9001, ISO 19011), supporting planning, monitoring, and reporting activities.
- **Hard Skills:** • Microsoft Office; daily use of Microsoft Word (thesis and publications), PowerPoint (conference presentations), Excel, Origin and Chemdraw (data analysis)
- **Soft Skills:** •Teamwork • Research and Analysis •Organized •Analytical Thinking • Action-oriented • Time Management
- **Technical & R&D Skills:** Material characterization and physicochemical analysis Laboratory testing, sample preparation, and data validation Experimental trial execution and result analysis SOP-based laboratory work and documentation
- **Interpretation of instrument data:** TEM, SEM, Gas Chromatography, XRD, FTIR, and Raman spectroscopy
- **Language:** Indonesia (Fluent) and English (Reading, Writing, and Speaking)
- **Publication:** Physicochemical and Photocatalytic Activity of Hematite/Biochar Nanocomposite Prepared From Salacca Skin Waste - <https://doi.org/10.1016/j.scp.2020.100261> |An enhanced palm oil pyrolysis to bio-oil using dolomite-derived ZnO/CaO composite - <https://doi.org/10.1080/15435075.2024.2439917>