

NHAYLA NUR SANTIKA

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Tasikmalaya, Indonesia

Fresh graduate in Chemistry from Diponegoro University, recipient of the Dean's Award 2025 for academic excellence, with internship experience at National Research and Innovation Agency (BRIN). Skilled in laboratory techniques, data analysis, and scientific research, with strong critical thinking, problem-solving, and teamwork abilities. Highly motivated to contribute to R&D, QC, and QA fields with a commitment to accuracy and continuous learning.

EDUCATION LEVEL

Diponegoro University - Semarang

Aug 2021 - Jun 2025

Bachelor of Science in Chemistry, 3.92/4.00

- Thesis Title: Synthesis, Characterization, and Effectiveness Test of Phosphorus, Nitrogen-Carbon Quantum Dots (P,N-CQDs) by Oil Bath Method as an Additive Fertilizer in Bok Choy

WORK EXPERIENCES

Physical Chemistry Laboratory, Diponegoro University - Semarang

Feb 2025 - Jun 2025

Laboratory Assistant

- Supervised physical chemistry laboratory operations, encompassing precise reagent preparation and calibration of advanced analytical instruments.
- Provided guidance and mentorship to students in advanced experimental methodologies.
- Ensured accurate and reliable experimental outcomes by enforcing strict quality control measures, safety standards, and data validation procedures.

Basic Chemistry Laboratory, Diponegoro University - Semarang

Feb 2024 - Jun 2024

Laboratory Assistant

- Prepared experimental materials for basic chemistry laboratory sessions for undergraduate Physics students.
- Supervised laboratory procedures to ensure accuracy and adherence to protocols.
- Enforced safety regulations to maintain a secure working environment.
- Provided technical guidance to enhance students' understanding and learning outcomes.

National Research and Innovation Agency (BRIN) - South Tangerang

Jan 2024 - Feb 2024

Research Intern

BRIN is the Indonesian government institution responsible for conducting research, development, and innovation in various fields of science and technology to support national growth and competitiveness.

- Conducted laboratory experiments, sample preparation, and data analysis for materials characterization.
- Operated various laboratory instruments for materials synthesis and characterization.
- Assisted in research on enhancing lithium-ion battery performance through nickel (Ni) doping in LFP cathode active materials.
- Collaborated with researchers to prepare and write a scientific paper.

ORGANISATIONAL EXPERIENCE

Himpunan Mahasiswa Kimia (HMK) - Semarang

Jan 2022 - Dec 2023

Staff

- Participated in organizational meetings and student activities.
- Helped organize academic and social events for chemistry students.
- Worked with fellow members to support the association's programs.

Diponegoro Chemistry Fair (DCF) - Semarang

May 2022 - Oct 2022

Material Field Coordinator

- Coordinated national-level seminars and academic competitions, including guest speaker arrangements and judge recruitment.
- Developed challenging examination materials and engaging social media content on chemistry topics.
- Secured sponsorships and partnerships with educational institutions to support chemistry events.

SKILLS, ACHIEVEMENTS, AND OTHER EXPERIENCE

- **Achievements** (2025): Recipient of the Dean's Award 2025 for academic excellence – Faculty of Science and Mathematic (FSM), Diponegoro University

- **Achievements** (2025): Selected to showcase an innovative Carbon Quantum Dots (CQDs)–based fertilizer at AGRIMAT 2025, a provincial innovation and agricultural exhibition in Central Java.
- **Achievements** (2025): Awarded a competitive grant of Rp 2,000,000 from FSM UNDIP for a research-based community development project on "Community Service: Empowering Research Potential of SMA Negeri 9 Semarang Students through Bath Bomb Making Workshop as a Promotion Tool for FSM Diponegoro University".
- **Achievements** (2024): Awarded research funding of Rp 5,000,000 from FSM UNDIP for the project "Synthesis and Characterization of Carbon Quantum Dots from Sawdust via Hydrothermal Method".
- **Committee Member – World Class University Seminar** (2024): Contributed to organizing the WCU seminar with guest speakers from BRIN, handling event logistics, participant coordination, and speaker assistance.
- **Professional Skills**: Problem solving (able to identify problems, find root causes, and propose effective solutions efficiently), critical thinking (capable of analyzing data and situations objectively to support well-informed decisions), teamwork (work effectively with diverse individuals to achieve common goals), adaptability (quick to adjust to new environments, tools, and challenges), time management (able to prioritize tasks and meet deadlines effectively), presentation and public speaking (confidently deliver clear and engaging presentations to both technical and non-technical audiences)..
- **Language**: English (intermediate proficiency (TOEFL score: 461), effective in verbal and written communication) and Indonesian (native proficiency, fluent in both formal and informal contexts).
- **Technical Skills**: Microsoft Office, Origin, Chemdraw, Notepad++, Canva.