



Agung Budiyo Wongso

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Kab. Batang, Jawa Tengah, 51263

SUMMARY

Results-driven Chemistry graduate with proven experience in quality control within high-volume solar manufacturing and advanced catalyst research. Expertise in precision instrument calibration, data-driven root cause analysis, and the implementation of ISO-based QMS and HSE systems. Passionate about leveraging analytical skills to drive process efficiency and ensure product excellence in rigorous manufacturing environments.

SKILL

- **Technical:** Laboratory operation, Quality inspection (EL & IV testers, micrometer, vernier caliper), Chemical analysis (GC-MS, XRD, FE-SEM, TPD), ISO-based QMS & HSE implementation.
- **Analytical:** Statistical data analysis, root cause identification, and process optimization.
- **Digital Tools:** Microsoft Office, Figma, Canva, and Origin.
- **Soft Skills:** Detail-oriented, teamwork, communication, leadership and time management.

WORKING EXPERIENCE

Quality Inspector | PT. SEG Solar Manufaktur Indonesia – Batang, Indonesia

Sept- Dec 2025

- Perform routine calibration and verification of precision instruments (EL Tester, IV Tester, micrometer, vernier caliper) ensuring measurement reliability.
- Analyzed IV curves and EL images to classify >50,000 solar modules daily into grades (A–D) according to technical standards.
- Documented and reported recurring production defects (cracks, delamination, ribbon failure), initiating root cause analysis and corrective actions with the production team.
- Coordinated with logistics and production teams to streamline product flow and maintain inspection traceability.
- Implemented and maintained ISO 9001:2015 quality management system.

Final Year Research Project | Badan Riset Inovasi Nasional (BRIN) – Serpong, Indonesia

Juli - Okt 2024

- **Topic:** Development of metal catalysts for waste to bio-fuel processing.
 - Investigated palm frond waste conversion into aromatic compounds and fuels using metal-based catalysts.
 - Utilized advanced characterization techniques (GC-MS, GC-FID, XRD, FE-SEM, NH₃-TPD, CO₂-TPD, SAA, H₂-TPR) to analyze catalyst properties and correlate them with catalytic performance.
 - Ensured strict compliance with laboratory safety and environmental standards (HSE).
 - Analyzed and interpreted data to assess catalytic activity and process optimization.

Internship Trinee (QC-QA & RnD) | PT. Bali Extract Utama (Indokemika Group) – Bali

Feb - Jun 2024

- Conducted quality testing of raw materials and final products according to industrial standards.
- Developed formulations for natural extract-based products and evaluated performance & stability.
- Supported ISO 9001 quality system and halal certification implementation.
- Collaborated with manufacturing teams to transition new products into production scale.

Research Intern | Badan Riset Inovasi Nasional (BRIN) – Serpong, Indonesia

Jul 2023

- **Topic:** "Catalytic Conversion of Ethylene Carbonate to Ethylene Glycol with Cu/SiO₂ Gel Catalyst: Effects of Reaction Condition Variation"
 - Conduct literature analysis and experimental design.
 - Collect, analyze experimental data using statistical techniques, and compile research reports.
 - Work collaboratively in teams to optimize experimental parameters and solve technical challenges.

EDUCATION

Universitas Jenderal Soedirman – B.Sc. in Chemistry | GPA: 3.8/4.00

2021–2025

Achievements:

- Funding for PKM-KC: "ECO-E: Inovasi Filtrasi dan Listrik Alternatif dengan Katoda Plasma" (2022).
- Funding for PKM-RE: "Degradasi Limbah Ciprofloxacin dengan Biochar-nZVI Graphene Nanosheet" (2023).

Achievements :

- 2nd Graphic Design : National Student Art Competition Festival (FLS2N), Batang (2018).

TRAINING

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| - FSSC 22000 V6.0, ISO 22000:2018, HACCP, GMP Makin Ahli | <i>Jun 2024</i> |
| - ISO 45001:2018, ISO 14001:2015, SMK3 PP No. 50/2012 Makin Ahli | <i>Jun 2024</i> |
| - Microsoft Excel, Excel Worksheet Analysis Udemey | <i>Jun 2024</i> |

PUBLICATION

- *Agung Budiyono Wongso, et al. "Design of biochar-nZVI/graphene nanosheet for ciprofloxacin degradation." 6th International Conference on Multidisciplinary Approaches for Sustainable Rural Development (ICMA-SURE), 2023*

ORGANIZATION

Academic Staff | Chemistry Student Association (HIMAKIM), UNSOED ***Feb – Dec 2022***

- Managed academic resources and laboratory data systems.
- Coordinated and facilitated course tutorial sessions based on student requests each semester to improve academic performance across year levels.
- Organized industrial visits to enhance students' industrial insights.

Staff Member | Student Legislative Council in Faculty, UNSOED

Feb – Dcs 2022

- Handling faculty issues through discussion and consensus.
 - Manage social media to publicize activities and establish communication between students.
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