



DESKA RIZKI PRATAMA

Medan, North Sumatera

(+62) 813-7056-2128

deskriz26@gmail.com

linkedin.com/in/deskriz

Chemical Engineering graduate from Universitas Sumatera Utara with internship experience in industrial process analysis. Possesses strong organizational skills gained from role as a Laboratory Coordinator, focusing on team coordination and safety compliance. Disciplined, adaptable, and eager to launch a career in Production, Process Engineering, or Quality Control.

Education

Universitas Sumatera Utara - Medan, Indonesia

Aug 2020 - Dec 2025

Bachelor of Engineering in Chemical Engineering (GPA 3.38/4.00)

- Actively participated in national-scale collaborative research projects.
- Served as a Bioprocess Laboratory Assistant to support academic activities.
- Contributed to university and faculty-level student organizations.

Universitas Sumatera Utara - Medan, Indonesia

Final Year Project (Plant Design) Preliminary Plant Design of Methyl Methacrylate (50,000 Tons/Year)

- Designed a chemical plant to produce Methyl Methacrylate via Direct Oxidative Esterification process using $\text{Au}_{25}/\text{Zn}_{241}\text{-400}$ catalyst.
- Performed Mass & Energy Balance calculations and equipment sizing for key equipment (Reactors, Distillation Columns) using Aspen HYSYS.
- Conducted economic feasibility analysis (IRR, ROI, BEP) to ensure project profitability.

Work Experience

Part-time Staff | Waste Management

Feb 2025 – May 2025

USU Circularity Center, Universitas Sumatera Utara

- Managed waste sorting and processing at the waste treatment unit, including processing plastic waste for pyrolysis and organic waste for composting.
- Processed food waste into maggot feed and participated in maggot cultivation to support sustainable organic waste reduction programs.

Laboratory Assistant Coordinator

Mar 2023 – Mar 2025

Bioprocess Laboratory, FT-Universitas Sumatera Utara

- Guided and directed students in conducting bioprocess practicums systematically.
- Developed and evaluated practicum modules to improve understanding of bioprocess science concepts.

Volunteer Mentor PKM

Feb 2024

Direktorat Prestasi Mahasiswa dan Hubungan Kealumnian USU

- Provided technical guidance and strategies to students in drafting Student Creativity Program (PKM) proposals.
- Assessed and provided constructive feedback to improve the quality of student proposals.

Polling Station Officer (KPPS)

Jan 2024 – Feb 2024

Komisi Pemilihan Umum (KPU), Langkat

- Organized the voting process, from preparation to results reporting.
- Ensured election procedures were carried out according to standards with high accuracy.

Process Engineering Intern

Dec 2023 – Jan 2024

PT. Pacific Medan Industri, Deli Serdang

- Conducted analysis on live steam requirements for the Deodorizer unit.
- Calculated fuel consumption requirements for the High-Pressure Boiler (HPB) at the Refinery Plant..

Organizational Experience

Fundraising Division Member

Aug 2022 – Aug 2023

Covalent Study Group (CSG FT-USU)

- Designed and executed fundraising strategies to support organizational activities.
- Managed resources and financial administration with high accountability.

Head of Religion and Education Department

Jul 2022 – Jul 2023

Himpunan Mahasiswa Langkat (HIMALA USU)

- Initiated educational coaching and spiritual development programs for organization members.
- Acted as a liaison between the organization and local educational communities.

Publications

- Pratama, D. R., Berutu, A. S., Husin, F., & Panjaitan, M. Y. (2025). Innovation of Edible Coating of Mango Fruit Based on Shrimp Shell Chitosan with Tamarind Leaf Extract Additive as Antimicrobial. *Jurnal Teknik Kimia USU*, 14(1), 53-61. <https://doi.org/10.32734/jtk.v14i1.19093>

Skills & Achievements

• Skills

- *Technical* : Microsoft Office, Canva, Adobe Illustrator, Google Workspace, Research Data Management, Scientific Writing.
- *Interpersonal*: Effective Communication, Team Leadership, Cross-Division Collaboration.

• Achievements

- PKM-RE Funding Awardee (2024)
Student Creativity Program in Exact Research by the Ministry of Education, Culture, Research, and Technology.
- PKM-AI Incentive Awardee (2024)
Student Creativity Program in Exact Research by the Ministry of Education, Culture, Research, and Technology.
- PKM-RE Funding Awardee (2023)
Student Creativity Program in Exact Research by the Ministry of Education, Culture, Research, and Technology.

Hobbies & Interests

Sports (Badminton, Jogging), Reading Self-Development Books, and Graphic Design Exploration.