Project brief: Chemical engineering internship with Biotech

Subject discipline: Chemical Engineering, Carleton University, Canada

Organization background: Biotech was first established in 2013 under Yayasan Lengis Hijau, Bali’s first non-profit organization to recycle UCO (Used Cooking Oil) waste into a sustainable energy source. The nonprofit’s goal is to empower people to reduce their reliance on fossil fuels, as well as provide a smart solution for Bali’s critical Used Cooking Oil (UCO) waste problem.

Over the years, it has grown to become Bali’s leading commercial-scale biodiesel producer, providing innovative, high-value products and partnering up with many renowned companies and organizations in Indonesia.

Biotech wants to contribute significantly, in an environmentally, socially, and economically sustainable manner to a more responsible economic growth in Bali and to increase the share of biofuels and inspire the uses of renewable energy across different industries on the island.

Key internship activities:

- Understand process by which biofuel is made from used cooking oil
- Understand the byproducts made by the fuel manufacturing process.
- Identify new products that can be made from byproducts of manufacturing biofuels.
- Assess feasibility and marketability of the different new product ideas factoring in the market opportunities and production costs.
- Generate recommendations and present them to the management team.