

Technology Commercialization: Lessons Learned

Dave Meyer[†]
LanzaTech
(1234@1234.com[†])

LanzaTech and its partners have developed and commercialized a novel gas fermentation technology to convert waste gas streams into fuels and chemicals, economically capturing carbon and utilizing it in value-added products. This position is based on data collected at laboratory, pilot, and demonstration scales, utilizing real-world gases at all stages. To date LanzaTech has over 70,000 hours of on-stream time utilizing a wide range of gas streams, from CO-rich to high-hydrogen, with multiple runs exceeding 2,000 hours. This extensive process development work combined with LanzaTech's biology expertise enables a large product portfolio, starting with ethanol and expanding to including longer-chain alcohols, diols, and organic acids. Additional downstream products are the result of LanzaTech's work in conversion processes, especially its alcohol-to-jet technology. LanzaTech is currently designing multiple alcohol-to-jet production facilities capable of producing millions of gallons of sustainable aviation fuel, enabling the airline industry to meet its aggressive carbon-reduction commitments.