



## National Laboratory Validates High Yield, Titer and Productivity of Microvi MNE Technology

Bioethanol is the most commonly produced biofuel in the world. It can be produced using a variety of feedstocks including starch, sugarcane, and cellulose.

Microvi's biocatalytic technology, based on its [MicroNiche Engineering \(MNE™\)](#) platform, significantly improves the fermentation process to produce ethanol. Microvi's technology alleviates toxicity, induces higher feedstock conversion yields and efficiencies, and enables robust and repeatable continuous fermentation.

As part of a third-party validation Microvi's ethanol technology was compared with a conventional yeast ethanol production system at the Advanced Biofuels Production Demonstration Unit at [Lawrence Berkeley National Lab](#). The investigation showed that Microvi MNE achieved higher performance, doubling the productivity, achieving max theoretical yields, and achieving high titers.

A preliminary techno-economic evaluation showed significant cost savings for producers.

## Project Details

**Partners:** Lawrence Berkeley National Laboratory

**Issue:** Economical and efficient production of bio-ethanol

**Solution:** Microvi MNE™

### Key Results:

- Bio-ethanol productivity doubled (8.15 g L<sup>-1</sup> h<sup>-1</sup> vs. 3.95 g L<sup>-1</sup> h<sup>-1</sup>)
- Feedstock conversion yields approached theoretical max (99.8% vs. 77.4%)
- Achievement of higher titer (24.05% vs 18.39% ethanol v/v)
- Minimal production of acetic acid

CONTACT US TO LEARN MORE →

26229 Eden Landing Rd., Hayward, CA 94545  
Tel: (+1) 510.344.0668 Email: [info@microvi.com](mailto:info@microvi.com)

[www.microvi.com](http://www.microvi.com)