

# Internship Opportunity

# **New Zealand**



New Zealand-based climatetech company, Cetogenix, is developing Ceto-Boost™, a platform that unlocks the hidden potential of organic waste as a renewable carbon source.

Here's your chance to join our team as a NZ graduate intern!

We are looking for graduate students to join our 6-month Intern Program starting in September/October 2024.

We are particularly interested in Chemical, Mechanical, Process or Environmental Engineers – but others with interests in climate-tech are welcome to apply.

Please submit a cover letter, CV and transcript ready to <a href="mailto:info@cetogenix.co.nz">info@cetogenix.co.nz</a> by 31 July 2024.

#### What we do

Globally, billions of tonnes of organic waste from numerous municipal, industrial, and agricultural sources are emitting significant volumes of GHG's when left unmanaged.

Cetogenix is targeting the significant challenge of processing these wet organic waste streams to maximise their resource recovery, whilst lowering GHG emissions.

We break down organic solids into simple compounds and nutrients that are then available for processing into renewable products, such as biogas, biopolymers, and fertilisers.

We are currently scaling up the technology and engaging with the international waste-to-renewables market. This is an opportune time to join us as an intern and gain direct experience in climate-tech development and deployment.

## Why this matters

Current biowaste management solutions represent a significant proportion of the water and agricultural sectors GHG emissions through several vectors, such as fugitive methane, processing energy (thermal drying), transport, and emissions and chemical use.

Our hydrothermal oxidation system represents a compelling Advanced Thermal Conversion opportunity to eliminate the need for land disposal, leverage existing anaerobic digestion infrastructure, and enable multiple integration pathways for optimisation of energy, nutrient capture, and GHG emissions.

This not only reduces emissions associated with current management practices, but also lowers fossil emissions through their displacement with renewable alternatives.

#### What we can offer

This is an opportunity to leverage your academic training into helping drive forward innovation and scale-up of a world-leading technology.

You will be working with an energised team of technical experts and will have the opportunity to engage with external research institutes, commercial clients and academic partners.

Potential projects will be handson and targeting real-world challenges of applied technology development. Interns will have a great deal of autonomy to help shape and deliver on their project.

Cetogenix is based in Rotorua, New Zealand – one of the country's leading tourist centres – which offers excellent opportunities for outdoor recreation and exploration.

## **Project examples**

- Operate and optimise the HTO plant in terms of future design or process changes.
- Examine chemical behaviour of multi-phase flow, including energy balances, oxygen demand for exothermal reaction etc.
- Optimize thermodynamics/ energy efficiency across the whole processing system
- Investigate multi-phase separation options under given processing conditions.
- Design, prototype and test components of our modular systems.









