

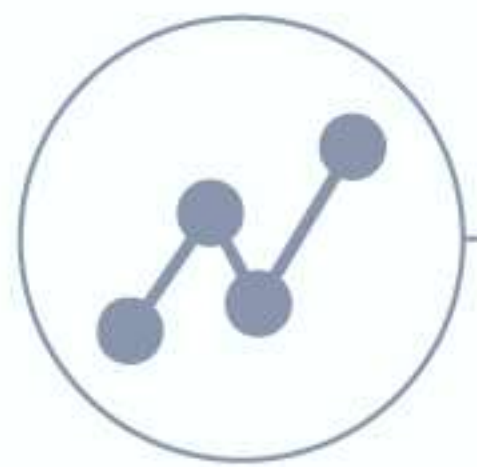


Where Science
Meets Sustainability

www.altx.bio



At **altX**, we turn ideas into impact. With deep expertise in biomass, materials science, and sustainable systems, we help companies and researchers develop real-world solutions - whether you're testing a concept or building it from the ground up. From bio-based innovations to process breakthroughs, we bring clarity, insight, and science to every stage of your journey.



ANALYTICAL SERVICES

Quantify your impact. Validate your innovation.

If you're building value from biomass - whether through energy, advanced materials, or breakthrough biotech - we provide the analytical backbone to support your innovation. Our state-of-the-art lab specializes in the characterization of biomass, hydrolysates, fermentation broths, and biopolymers.

We don't just test - we translate data into insight.

We offer detailed analyses across the biomass value chain:

A. Raw Biomass | Name of Test/Analysis

- Total Solids (TDS) and Total Volatile Solids (TVS)
- Ash & Silica Content
- Water & Ethanol Extractives
- Glucan Polymer (Cellulose)
- Hemicellulose Component:
 - Xylan, Arabinan, Mannan, Galactan Polymer
 - Acetyl and Uronyl Content
- Acid Soluble Lignin (ASL) & Acid In-Soluble Lignin (AIL)
- Total Protein (Kjeldahl N-factor Based)
- Starch Content

B. Pretreated Biomass, Enzyme-Treated Biomass & Fermentation Broths | Name of Test/Analysis

- Monomeric Sugars Profile (Glucose/Xylose/Arabinose/Mannose /Galactose etc.)
 - Disaccharides and Oligosaccharides (Cellobiose and its Oligosaccharides)
 - Total Reducing Sugars
 - Total Phenolic Content
 - Organic acids profile (Formic acid, Acetic acid, Levulinic acid)
 - Furan compounds (Furfural, HMF and its Derivatives) **(for Pretreated Biomass)**
 - Bio-fuel Analysis (For Fermentation Broths)
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C. Biogas Fermentation Profile | Name of Test/Analysis

- Acetic, Lactic, Propionic Acid
 - Butyric acid & iso-butyric acid
 - Valeric acid & iso-valeric acid
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D. Cellulose Characterization | Name of Test/Analysis

- Molecular weight analysis (Mp, Mw, Mn & PDI)
 - Alpha, Beta and Gamma Cellulose Content
 - Degree of polymerization (DP) analysis
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FULL LIST OF TESTS AVAILABLE ON REQUEST.



CUSTOM SOLUTIONS

From Problem to Prototype: Let's Create Together

Some problems don't have an off-the-shelf answer, and that's where we come in. Whether you're developing new biomaterials, troubleshooting a biorefinery process, or pioneering a product from plant-based feedstocks, we co-create tailored solutions grounded in science and guided by purpose that matter.



We work across:

- Organic and sustainable materials
- Bioenergy and biorefinery optimization
- Analytical diagnostics and R&D support

Bring your question, and we'll build the answer.

WHY altX?

We don't just analyse data, we decode value

As part of the **altM** family, altX is built on deep domain expertise in agri-residue valorization, circular design, and sustainable innovation. We think like scientists, act like partners, and build like problem-solvers. Whether you're in the lab, on the field, or scaling up to industry, we're here to help you go further.

LET'S
BUILD
SOMETHING
BETTER.
TOGETHER.

Contact us:

✉ hello@altx.bio 🌐 www.altx.bio

