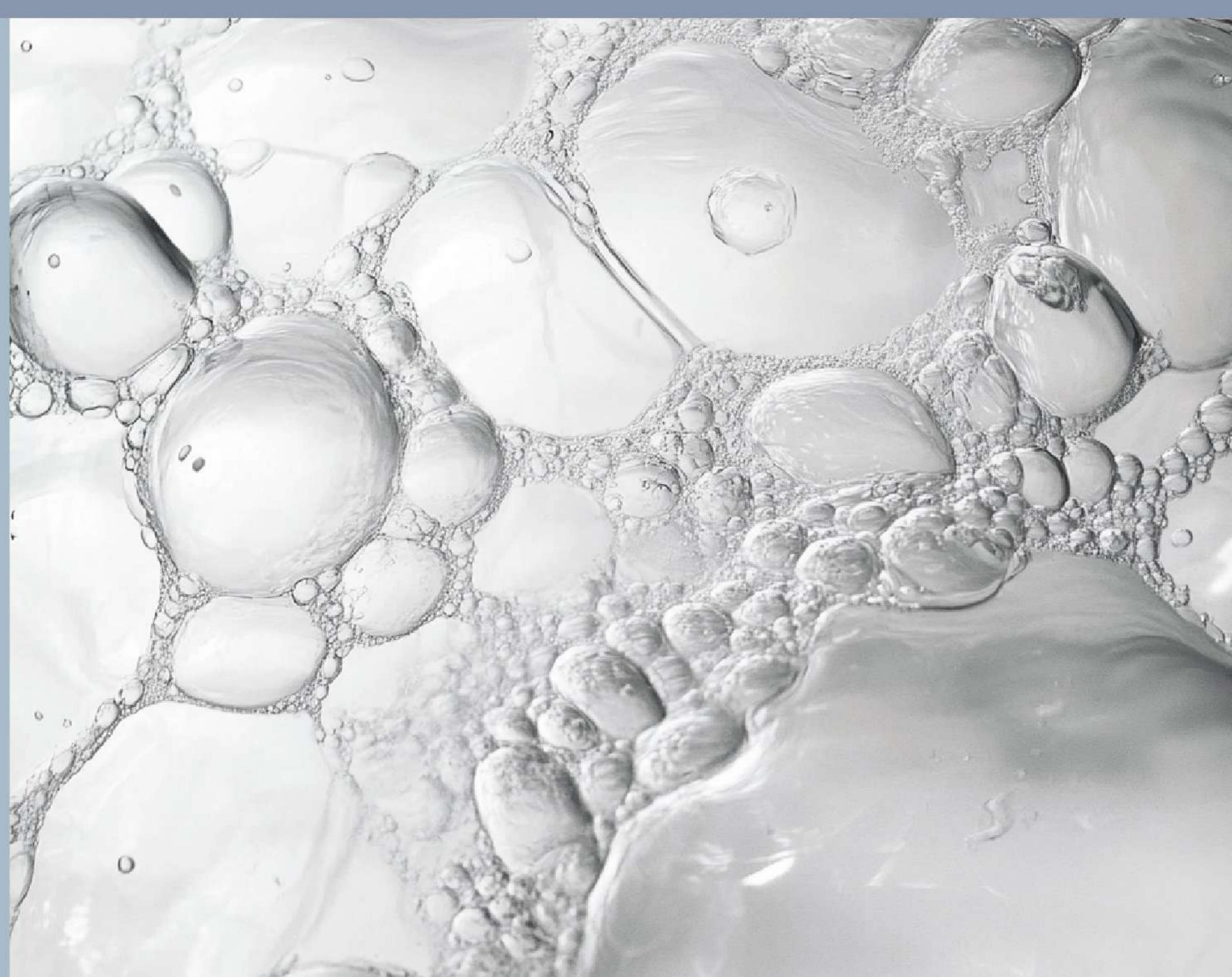


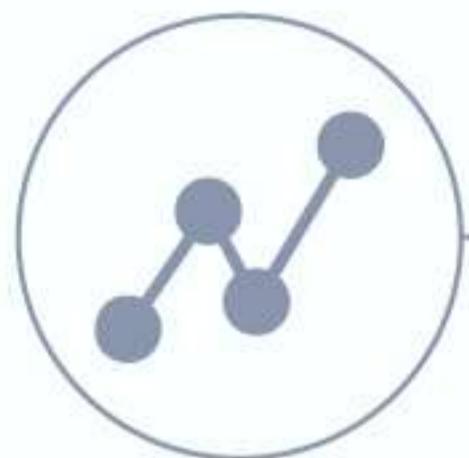


Where Science  
**Meets Sustainability**

[www.altx.bio](http://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

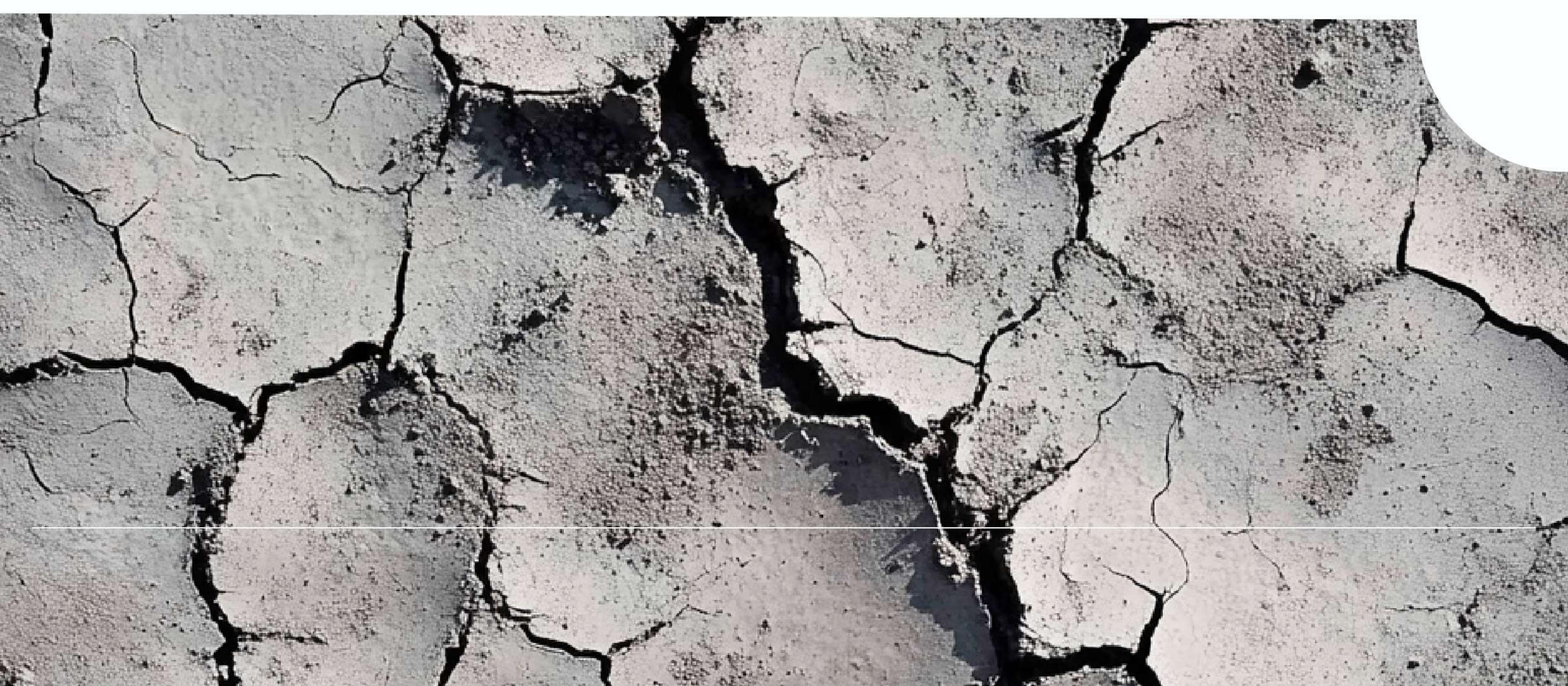
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## **D. Cellulose Characterization | Name of Test/Analysis**

- 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](http://www.altx.bio)

