

Private Company 

Non-plastic advanced materials for beverage containers

 MATERIALS

Background

Our organization, a global food & beverage company, is interested in identifying non-plastic advanced materials for liquid containers. Environmental concerns, consumer demand, government regulations and corporate sustainability goals are all drivers for organizations moving away from plastic. At the same time, new materials and technologies are evolving to replace traditional plastic packaging. To support this transition, our organization is seeking to understand the landscape of non-plastic liquid packaging from early-stage research to commercially available products.

What we're looking for

We are looking for liquid-packaging solutions to replace traditional plastic packaging, with a primary focus on the main body of the packaging. Technologies that enable non-plastic packaging, such as additives and coatings, are also in scope. While materials containing traces of plastics or bioplastics may be considered, they are a lower priority.

Solutions of interest include:

- Novel bottles, pouches, bag-in-box and others
- Packaging with traces of plastic or bioplastic
- Plastic-free single-use cups and lids

Our must-have requirements are:

- Be entirely plastic-free or use materials containing minimal traces of plastics or bioplastics
- Able to hold liquid

Our nice-to-have's are:

- 100% non-plastic packaging
- Materials with validated end-of-life claims
- Materials with water vapor transmission rate (WVTR) and/or oxygen transmission rate (OTR) data

Acceptable technology readiness levels (TRL): Levels 1-9

1. Basic principles observed
2. Concept development
3. Experimental proof of concept

4. Validated in lab conditions
5. Validated in relevant environment
6. Demonstrated in relevant environment
7. Regulatory approval
8. Product in production
9. Product in market

What we can offer you

Eligible partnership models:

Co-development

Material transfer

Benefits:

Sponsored Research

Funding is proposal-dependent, and typically ranges from \$25,000 to \$100,000.

Expertise

Work directly with our team of scientists and engineers with deep experience in packaging and bringing new products to market at a massive scale.

Tools and Technologies

Test under Non-Disclosure Agreement (NDA).

Please contact the University of South Florida Technology Transfer office representative for submission – Karla Schramm at kschramm@usf.edu