

Altium Packaging 🏶

Injection molding innovations for packaging components

Altium is seeking subject matter experts specializing in the injection molding of caps and closures, with direct experience in HDPE, PP, PCR, bio-resins and biodegradable resins.

Background

Altium is a leading manufacturer in the packaging industry, focusing on the production of bottles, caps, and closures. With the increasing demand for sustainable and efficient packaging, we are looking to innovate our injection molding processes. In addition to processing polypropylene (PP) for caps and closures, we aim to incorporate increased use of high-density polyethylene (HDPE), post-consumer recycled (PCR) materials, and possibly bio-based resins (made from plants) and biodegradable resins into our product lines. We are also exploring markets beyond those mentioned above, such as pails. Our goal is to enhance the quality, sustainability, and cost-efficiency of our products while meeting the evolving needs of our customers.

What we're looking for

We are looking for experts who can provide consultation and support in material selection, process optimization, and innovation in injection molding for caps, closures, and pails. Specifically, we seek guidance on the processing characteristics, environmental benefits, and potential challenges associated with the use of PP, HDPE, PCR, bio-resins and biodegradable resins. We are also interested in identifying new technologies and techniques, best practices, and innovative approaches that can enhance our manufacturing efficiency and product quality.

Topics of interest

- Innovative uses of HDPE in injection molding
- Processing techniques for PCR materials in injection molding
- Advancements in bio-resins for sustainable packaging
- Optimization of injection molding processes for caps, closures, and pails

Required qualifications

• Extensive experience in injection molding of PP, HDPE, or PCR

Nice-to-have

We're open to experts who have experience with:

- Post-consumer resins (PCR)
- HDPE flip-cap closures with living hinges
- Compression molding
- Pails production
- Co-injection technologies
- such as Mold-Masters eMulti
- Bio-resins (plant-derived)
- Biodegradable resins

What's out of scope

- Experts without experience in injection molding of caps or closures
- Experts focused solely on non-polymer materials

Expert location

• Accepting applications from experts based in all countries

What we can offer you

Compensation

Competitive hourly rates for a specified timeframe

Networking

Access to a network of subject matter experts (SMEs) within Altium

Facilities and Services

Opportunity for material trials on a variety of injection molding presses

Please contact the University of South Florida Technology Transfer office representative for submission – Roisin McNally at <u>rmcnally@usf.edu</u>