



## Process Engineer (Biobased Coatings)

 **Location:** Delft, Netherlands – Planet B.io

 **Position Type:** Full-Time

 **Function:** R&D Process Engineer – Biobased Material Scale-Up / Coatings & Adhesives

 **Application Deadline:** 31 July 2026

### About Carapace Biopolymers

Carapace Biopolymers is a rapidly growing innovative startup reinventing seed coatings for a climate-resilient future. Unlike microplastic-based coatings, our materials are made from natural biopolymers that break down into plant nutrition, helping build healthier soils and stronger plants. By combining advanced biopolymer science with scalable manufacturing, we help farmers and growers achieve higher yields without the environmental trade-offs. At Carapace, sustainability is not a compromise; it is our competitive advantage. We believe in growing more, while leaving less behind. In this role, you will have the opportunity to make a tangible impact on agriculture and climate resilience.

### About the Role

We are looking for a driven and hands-on R&D Process Engineer who is passionate about biobased material process design and scale-up.

You will lead the pilot scale-up of our biobased conversion technology, from initial process design through to the start of industrial operations (including storage, mixing, reaction conversions, waste streams, and quality assurance). Day-to-day responsibilities include applying Good Manufacturing Practices and safety protocols (e.g., dust and biosafety), conducting laboratory tests to validate industrial scale-up prerequisites, and expanding the capacity of seed coating trials (machinery operation, SOP development, and scale-up). A background in coating equipment parameters, drying control, and seed coating quality testing is a strong advantage.

### Key Responsibilities

This full-time R&D Process Engineer position requires a 40-hour weekly commitment. Flexible working arrangements are open to discussion.

- Design and lead the lab-to-pilot-scale biobased material development and scale-up roadmap, integrating this into the seed coatings end application.
- Design and commission pilot set-ups; carry out hands-on laboratory work.
- Scale up material production for pilot runs and tolling activities, culminating in a water-based seed coating slurry.
- Thrive in a dynamic environment as part of a fast-growing startup based in the Netherlands.
- Develop expertise across multiple disciplines relevant to the company's activities: biobased materials, agriculture (seed industry), and integrated biotechnology.

## Requirements and Qualifications

A relevant academic background and/or professional experience in one of the following fields: **Chemical Engineering, Process Engineering, Materials Science, Coatings and Adhesive Technology, Powder Technology, or the Seed Coatings industry**. Backgrounds in Food Engineering or Polymer Engineering are also considered.

- Minimum 5 years of hands-on work experience at medior level preferred; candidates with a strong academic background and high growth potential are also encouraged to apply.
- MSc level or equivalent experience.
- Experience with lab bench validation to pilot scale.
- Process design: Mass transfer and robust chemical engineering.
- Hands-on and proactive personality.
- Ability to work across multidisciplinary areas including biobased materials, powder technology, coating technology, microbiology, and biotech integration.
- Familiarity with mixing technology for liquids and powders.
- Ability to collaborate effectively within cross-functional teams and with external consultancy partners.
- Willingness to travel within the Netherlands as needed.
- Nice to have: experience with process flow diagrams and software, risk analysis, operational licensing, and regulatory pathways.
- VCA Basic certificate (or willingness to obtain one).
- Proficiency in English (written and spoken); Dutch is a plus.

## We offer

- Competitive salary.
- Collaborative and innovative team environment, with direct involvement in real-world experimentation and impact.
- Opportunities for professional development, with access to relevant training and conferences.
- Required training costs covered.
- Travel costs compensation.
- Flexible work arrangements available upon discussion.
- Company laptop provided.

## How to apply

Send your CV and motivation letter to [info@carapacebio.nl](mailto:info@carapacebio.nl) or use the contact form at [www.carapacebio.nl](http://www.carapacebio.nl). We look forward to hearing from you!