MACROCYCLE
CIRCULAR PLASTICS, ZERO CARBON

**Position Overview:**

We are seeking an experienced **Senior/Principal Process Chemical Engineer** with over 15 years of industry expertise to lead the design, development, and implementation of MacroCycle's cutting-edge recycling technology. This role requires a strong background in process design, process modeling, and chemical engineering development, with a focus on scaling up industrial processes from pilot to full-scale production. The ideal candidate will have hands-on experience interfacing with EPC (Engineering, Procurement, and Construction) firms, managing procurement, and working across the manufacturing spectrum.

**Key Responsibilities:**

- Lead the design, optimization, and scale-up of MacroCycle's Solvogenesis$^{tm}$ process for plastic & polyester waste from pilot to commercial scale.
- Develop process flow diagrams, utility flow diagrams, P&IDs (including controls strategies), heat and mass balances, and process simulation models using industry-standard software tools (such as Aspen Plus, HYSYS, or PRO II).
- Analyze data from pilot plants and laboratory experiments to validate unit operations and key process parameters.
- Collaborate with EPC contractors to execute engineering development, process design packages, and procurement strategies for new facility.
- Oversee the interface between engineering teams and the manufacturing floor to ensure successful process implementation and commissioning of recycling units.
- Identify and implement process design improvements to enhance performance, reduce emissions, and optimize energy usage.
- Ensure compliance with industry regulations and environmental standards throughout all stages of process design and execution.
- Work cross-functionally with R&D, operations, and business development teams to align technological solutions with business goals.

**Qualifications:**

- Bachelor's or Master's degree in Chemical Engineering or a related field.

- 15+ years of experience in chemical process design, modeling, and engineering development, with a focus on large-scale industrial processes.
- Proven experience working with EPC contractors and leading projects from conceptual design to full-scale production.
- Expertise in process simulation tools (e.g., Aspen Plus, HYSYS, or similar) and experience optimizing chemical manufacturing processes.
- Risk assessment and HAZOP experience
- Strong knowledge of procurement, equipment specification, and working with manufacturing teams.
- Experience in sustainability, recycling, or the plastics industry is highly desirable.
- Excellent project management, leadership, and communication skills.

**What we offer:**

- 40 h/week mission-driven and collaborative work
- 3 + 1 week vacation policy
- Competitive and experience-guided compensation including options
- Shape a fast-growing startup company out of MIT with significant traction
- Relocation bonus >100 miles
- Energizing and refreshing work environment! Regular free team lunches.
- Access to a innovation and networking events in the vibrant Harvard/MIT area
- Premier medical and dental health Insurance