

## **Full Cycle Bioplastics Job Description Form**

### **Lead R&D Associate**

*1st March 2019 - Richmond, California, USA*

Full Cycle Bioplastics is a mission-driven startup company. We make biodegradable, compostable plastic alternatives using organic waste. We're scaling our solution now to contribute significantly to solving the global issues of plastics waste and greenhouse gas emissions.

We are seeking candidates for the critical role of Lead R&D Associate to support our rapid growth. Our team comes first, so we're looking candidates who share our values of teamwork, humility and empathy, clear communication, respect for the individual, urgency without frenzy, and personal accountability.

The Lead R&D Associate is responsible for leading a research team to accomplish the goals set by the Chief Technology Officer. This role will be heavily involved in the scale-up of system processes and development and optimization of extraction techniques.

We highly value experience in the following areas: wild-type bacteria fermentation, bioreactor operation, extraction, technology scale-up, bioplastics (polyhydroxyalkanoates in particular), and green chemistry. Since the Full Cycle process does not use Genetically Modified Organisms, we do not consider experience with gene editing/CRISPR9/etc. to be necessary for success in the role.

Please note that this is a pre-PhD level position.

Duties and responsibilities may include, but are not limited to:

#### Ensure Safe and Efficient Lab Operations

- Ensure safe operating practice within the laboratory according to Full Cycle and related third-party safety protocols
- Lead the basic organization and maintenance of laboratory areas, equipment, and reporting
- Manage inventory of chemicals and other consumable materials
- Ensure laboratory supplies are stocked, refilled, and re-ordered as needed
- Prepare and maintain laboratory reagents and stock solutions

#### Support Company Research & Development Activities

- Support the CTO with planning of experiments and execution of research projects related to various aspects of biotechnological manufacturing systems
- Support the CTO with the scale-up of technology from lab to demonstration to commercial production levels
- Support material, process and product development efforts as needed
- Support generation of intellectual property for the Company

### Lead Research Efforts

- Supervise junior Laboratory Technician staff
- Conduct bench-scale experiments as directed
- Maintain bioreactor and other laboratory equipment through startup/shutdown cycles and perform regular maintenance
- Identify technical problems related to experiments and seek appropriate advice to solve them
- Collect sample material as necessary in the lab and in the field

### Test, Collect, Analyze, Validate, and Report Results

- Perform analytical testing
- Perform and optimize material characterization and stability assays
- Validate the precision and accuracy of various product characterization methods
- Collect and analyze data as required
- Assist with the analysis, interpretation, and reporting of results in an accurate and timely manner
- Conduct analysis of polymer composition and material properties
- Record detailed observations of experiments in a laboratory notebook and generate weekly and other summaries of development progress as requested

### Maintain knowledge and stay current with industry trends

- Review relevant training materials and pertinent scientific resource materials, as a source of information and guidance, when conducting research and laboratory tasks

### WORK EXPERIENCE REQUIREMENTS

- 5 or more years of experience in a chemical or biochemical laboratory setting
- Experience with: technology scale-up, fermentation, extraction of products from biomass, analytical chemistry, biological systems, water quality testing, bioreactors, automated systems, material properties testing, and polymer formulation.
- Willingness to work a flexible schedule as needed

### EDUCATION REQUIREMENTS

- Master's degree preferred in Biochemistry, Chemistry, Biotechnology, Molecular Biology, Chemical Engineering, Civil Engineering (wastewater), Environmental Engineering, or related.

### COMPENSATION

Competitive pay will be offered commensurate with qualifications.

Equal Employment Opportunity Employer: Full Cycle Bioplastics is committed to creating a diverse environment and is proud to be an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, age, or veteran status.

---

Contact:  
Ian DeWeerd | CFO  
**Full Cycle Bioplastics**  
ian+hiring@fullcyclebioplastics.com