



**Company:** Kula Bio

**Location:** Natick MA

**Position title:** MSAT Fermentation Engineer/Scientist

**Schedule:** Full Time

**Employee status:** Regular

**Organization:**

Kula Bio is a leader in sustainable nitrogen solutions, helping farmers improve crop yield and reduce environmental impact. We make a cost-competitive biofertilizer that boosts a naturally occurring process to deposit meaningful amounts of nitrogen in the soil.

We are looking for a MSAT Fermentation Scientist/Engineer that has experience in fermentation process development including process optimization and scale-up with specific knowledge of bench as well as large scale bioreactors. The ideal candidate will have experience working with aerobic and anaerobic bacteria. The individual should be goal-oriented, forward-thinking and self-motivated with a strong ability to work both independently and collaboratively with MSAT, production, QC and R & D teams.

**Primary Job Responsibilities/Duties**

- 1) Develop new or improve existing fermentation process by employing knowledge of bioreactor design or other related strategies.
- 2) Perform small scale (microtiter plate, tube and shake flask) studies to screen for different process parameters and media components.
- 3) Setup, operate and monitor fermentation processes ranging from 1 to 50 L and also operate associated sensors and lab equipment.
- 4) Develop strategies to improve the overall reliability and productivity of fermentation processes.
- 5) Collaborate with R&D, QC and production teams for day-to-day operations and product needs.
- 6) Independently selects techniques and procedures to solve problems within area of responsibility.
- 7) Develop, evaluate and implement detailed experimental projects within area of responsibility.
- 8) Draw conclusions, present project results and make technical recommendations to the team
- 9) Handle and protect confidential and sensitive data with integrity.
- 10) Perform related work and other duties, as assigned.

**Required Skills:**

- 1) Hands-on experience with benchtop bioreactors operation, maintenance, and related control software such as Eppendorf, Sartorius, Applikon or similar systems is a must.
- 2) Highly knowledgeable and hands-on experience with fermentation designs, concepts, principles, and operations including DOE for process development and optimization.
- 3) Experience in developing fermentation processes including batch, fed batch and continuous fermentation and knowledge in high-throughput fermentation screening
- 4) Proven experience independently designing and troubleshooting fermentation experiments.
- 5) Experience with aerobic as well as anaerobic bacteria and standard microbiology techniques and principals.
- 6) Proficient in aseptic techniques (BSL1 and BSL2) for microbial growth as well as testing
- 7) Experience with process scale up is a must.
- 8) Expert in standard microbiological methods including media and plating, serial dilution, viable cell counting, microbial screening, microbial enumeration, staining etc
- 9) Effective organization, communication, and leadership skills
- 10) Ability to adjust to dynamic environment of startups and willingness to assist other departments.

**Good to have Skills:**

- 1) Previous experience working in a startup, agricultural business is a plus but not required.
- 2) Experience with working with soil microbes-based process development
- 3) Extensive experience in molecular biological techniques including quantitative PCR is a plus

**Educational qualification:**

B.S. in Chemical Engineering, Biochemical Engineering, Bioengineering or in Microbiology, Bioprocess development, Biotechnology or related field, with 5+ years or M.S with 3+ years or Ph.D. with 0-2 years of relevant industrial hands-on experience

At Kula Bio, we work and live by our shared values of Innovation, Intellectual Honesty, Balance and Integrity. Our values are guiding principles to developing best in class biological products which enable farmers a cost-effective technology. For more details, please visit our company site [www.kulabio.com](http://www.kulabio.com).

*If you are interested in this job, please email your resume and cover letter with file name format of "job title\_candidate name\_date" to [admin@kulabio.com](mailto:admin@kulabio.com).*