

Bioprocess Engineer

Company: Modern Synthesis Ltd. (London)

<https://modern-synthesis.com/>

<https://www.linkedin.com/company/mod-synth>

Job Title: Bioprocess Engineer

Manager: CTO

Salary: £30-50k, depending on experience + stock options

Desired start date: August/September 2022

ABOUT US

We're a biomaterial innovation company connecting the dots between biology and material science to develop radical + regenerative materials for the fashion industry. We're growing our team to focus on the development of our biomaterial technology: microbial weaving, a biofabrication process that grows customizable composites from bacteria. Our goal is to provide truly sustainable + inspiring cellulose-based materials to reduce the industry's dependence on petrochemicals — without sacrificing performance or creativity.

Benefits

- Brand new South London office, lab and pilot facility
- Pension plan and stock options
- Interdisciplinary team with opportunities for learning and growth
- Support from leading experts and advisors
- Real world, positive impact

ABOUT THE ROLE

Are you excited to grow new, high performance materials with bacteria? We're looking for a bioprocess/fermentation engineer to design, prototype and operate novel bioreactors and bioprocesses at lab and pilot scale.

You'll be designing and building new reactors and processes as well as optimising conditions to increase capacity, efficiency and improve product quality. You'll also support cutting edge R&D and academic collaborations to develop the future of biomaterial technologies as well as working with the design team to produce innovative materials for projects with global fashion brands.

JOB RESPONSIBILITIES

Pilot Production

- Develop and improve fermentation processes. Includes: static and stirred tank bacterial cultures, sterilisation, inoculation and material handling.
- Prototype lab and pilot scale bioreactors - collaborating with industrial manufacturers

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and external experts.

- Apply knowledge of available off-the-shelf equipment, and troubleshoot, adapt and hack equipment for non standard culture conditions & processes.
- Develop and optimise downstream processing

R&D

- Research new technologies to improve process efficiency and product quality.
- Collect, assess and interpret experimental data
- Assist with company's IP strategy and planning

Team

- Build relationships and collaborate with advisory board leading bioprocess and scale up experts from industry and academia
- Work with suppliers and manufacturers to source feedstocks and equipment

QUALIFICATIONS

Required qualifications and skills

- *Either* Masters degree (or equivalent) in bioprocess, fermentation, chemical, process or biochemical engineering or similar
- *Or* PhD in bioprocess engineering or any related field
- A proven ability to solve issues with growing biological systems
- Comfortable operating and optimising lab scale bioreactors
- Excellent communication skills (verbal, written and within digital meeting settings)
- Self-motivated with a learning and growth mindset
- Experience scaling up and transferring processes from lab to pilot scale
- Experience or willingness to collaborate with and manage an interdisciplinary team
- Passion for sustainability and impact

Beneficial experience:

- Use of a range of bioreactor platforms and control systems
- Assessment of pilot plant suppliers and equipment options
- Multifactorial experimental methods
- Culturing / fermentations with non-model organisms
- Biomaterial or biopolymer production
- Start-up or spin-out experience

HOW TO APPLY [DO NOT EDIT]

Apply via LinkedIn or send CV and cover letter (with the position you are applying for in the subject line) to people@mod-synth.com