Senior Scientist- Biomaterials

Ecovative is a fast-paced, biotechnology company producing biomaterials that enable our partners and leading brands to offer better, more sustainable everyday products.

We have developed processes to grow mycelium in solid-state fermentation reactors for a multitude of applications. Our technology drives commercial-scale operations to harvest delicious bacon without the pig; biofabricate leather-like textiles without the cow; grow soft flexible foams from crop waste; produce home compostable packaging to replace plastics; and more applications are on the way. We are helping numerous companies develop new biomaterials that are positive for the planet.

Our Foundry Research group is seeking a highly motivated, creative, and collaborative Senior Scientist to join the dynamic team advancing biofabrication of mycelium biopolymers. The Senior Research Scientist, Biomaterials role will work closely with engineers and scientists to coordinate and execute experiments. This role will also work with other functional R&D and Commercial teams to translate research from the bench-top to process piloting, and commercial scale-up for product manufacturing. Candidates must also have a strong understanding of and experience with down-scaling fermentation processes.

The Senior Scientist- Biomaterials will:

- Coordinate and execute research to optimize fungal biopolymer
- Generate efficient experimental designs, perform hands-on experimentation, complete data analyses, author research reports, and present findings
- Contribute to overall project definition and objective setting as a project lead
- Suggest and evaluate experiment pipelines and strategy for continuous process improvement in the context of business and research strategy
- Collaborate with engineering teams to refine equipment specifications and bioreactor design
- Mentor, educate and train others to enable them to rise to R&D challenges
- Translate innovation and vision into clear and realistic research plans
Required Skills:

- Experience testing material performance using standardized methods
- Passion for biotechnology and familiarity with microbiological culture techniques
- Strong capabilities in design of experiment methodology and statistical analysis
- Strong technical ability to synthesize data into clear hypotheses
- Ability to screen a broad range of literature against research priorities
- Capable of coordinating projects across teams under aggressive timelines
- Able to make decisions efficiently to ensure project milestones remain on schedule
- Excellent communication skills, team mentality, and self-motivation
- Hands-on technical abilities to organize and guide the work of others
- Comfortable learning quickly when faced with unfamiliar tasks and new tools
- High level of data organization competency across multiple software platforms
- Expertise applying statistical methods, design of experiment, and data analysis/visualization programs (e.g., JMP)

Desired Skills:

- Experience with physical analyses (e.g., TGA, mechanical properties, morphometry)
- Deep knowledge of material science fundamentals and diverse biopolymer matrices
- Hands-on bioreactor/fermenter experience (i.e., cleaning, setup, operation, control)
- Highly collaborative and creative with a positive attitude toward mentorship
- Intellectual curiosity in improving biodesign paradigms and product performance
- Ability to take risks, experiment with the unknown, and embrace rapid advances
- Skilled in protocol development for mechanical performance testing of materials
- Experience with advanced machine learning methods, such as adaptive design, statistical learning (supervised/unsupervised), and dimension reduction

Qualifications:

- Master’s degree (thesis-based) in materials science or engineering, biology, biological or chemical engineering, or related discipline and 3 years work
experience in materials science, OR Bachelor’s degree in a related field with minimum 5 years of relevant work experience

- Must be highly flexible, results oriented, independent self-starter who enjoys working in a fast-paced environment

Ecovative’s research group leverages a multidisciplinary approach and 15 years of innovation and leadership in the mycelium material space. Ecovative’s commercial success has been featured in The New York Times, Fast Company, Wired, and Forbes and our research collaborations with MIT, Columbia, and other institutions have led to numerous peer-reviewed publications such as these recent examples in Nature Materials and Metabolic Engineering.

The company’s R&D headquarters in New York’s Capital Region is a world-class applied fungal research facility with core competencies in molecular genetics, structural biology, and industrial fermentation — ranging from bench-scale bioreactors to large-scale cultivation chambers. In addition to state-of-the-art laboratories, the facility features an array of controlled growth chambers for serial scale-up of experiments from lab- to pilot- and industrial-scale.

Ecovative is an Equal Opportunity Employer.
Please send your resume and cover letter to jobs@ecovativedesign.com