



Improving the sustainability of the textile dyeing industry

Job Description – Protein Scientist

Company:

[Colorifix](#) is a biotechnology company that aims to bring a novel, sustainable and environmentally friendly process to the textile dyeing industry by eliminating the use of hazardous chemicals as well as allowing for large savings in water and energy use. Colorifix has been recognised by winning awards in both synthetic biology and fashion, with full information available on our [website](#). Our investors include H&M, Bombyx Capital, Regeneration VC, University of Cambridge, MV Capital AG whose collective backing is funding our expansion.

We promote and adhere to our company values of Trust, Sustainability, Respect, Inclusivity and Social Conscience

Role description:

We seek to hire a highly motivated Protein Scientist to join the Microbial Engineering Division at Colorifix. The successful candidate will be a pivotal member of a multidisciplinary, creative, and dedicated team focused on the development of heterologous natural pigment pathways in industrially relevant microorganisms for application at scale in the textile industry. You will bring your knowledge and experience in protein biology to strengthen the colour development pipeline. The Microbial Engineering team is looking for a candidate who enjoys multi-disciplinary teamwork, taking on challenges, shows creativity, flexibility, enthusiasm, and excellent communication skills.

Key Duties and Responsibilities:

- Bring extensive protein engineering experience to the optimisation of the catalytic activity and/or protein solubility or stability of key rate-limiting enzymes in natural pigment pathways
- Apply rational and directed enzyme evolution processes to enhance TYR (titer, yield, rate) in production microbial chassis
- Lead the design, production and testing of complex proteins including multi-domains and fusion proteins
- Implement combinatorial approaches to protein engineering to diversify the biosynthesis of natural pigments
- Collaborate both within the team and with other Divisions to ensure continuity in the development, characterisation, and optimisation of rate-limiting enzymes
- Report accurately experimental results and communicate them effectively, both in written and verbal form

Role Requirements:

- MSc, PhD or equivalent recognized degree with a minimum of 5 years of relevant lab experience in protein engineering, structural biology or relevant field
- Great understanding of protein structure biology and its application in protein engineering of biocatalysts
- Knowledge or hands-on experience with enzymology and development of protein screening assays
- Extensive experience in leading and troubleshooting recombinant protein delivery
- Computational protein structure analysis - Visualisation platforms such as Molstar, PDB or related
- Computational enzyme design - molecular docking, molecular dynamics simulation
- Proven record of rational or directed evolution for improved TYR, protein solubility or stability
- Strong attention to detail and good problem-solving skills
- Strong interpersonal and communication skills and a high level of organisation
- A strong desire to learn and build on the role.

Desirable skills

- Knowledge or hands-on experience with natural products (CYP450s)
- Knowledge or hands-on experience with bacterial and fungal microorganisms
- Computational approaches based on machine learning
- Knowledge of mass spectrometry and other relevant protein characterisation techniques
- Experience in chemical engineering or microbial fermentation

Title: Protein Scientist

Reports to: Head of Microbial Engineering

Location: Norwich Research Park, Norwich, NR4 7GJ

Remuneration: £37,000-41,000

Holidays: 25 + BH + Birthday

Benefits: Pension scheme, EMI share options, mental health support and employee wellbeing budget, company social events and annual retreat

Local Amenities: On-site cafes, on-site nursery, parking

Apply: Please submit your CV and cover letter to recruitment@colorifix.com stating the role that you are applying for in the subject line. **Applications without a cover letter will not be considered.**

The closing date for applications is 31st January 2023

Colorifix is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.