

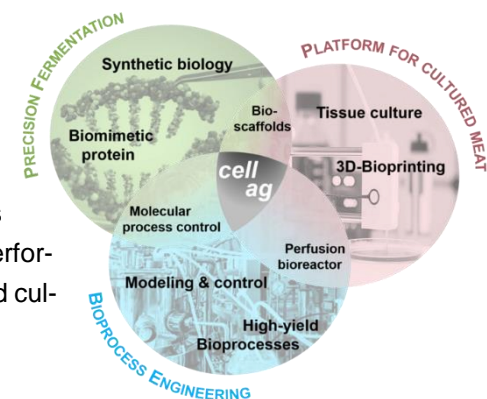
We are looking for a

Scientific Staff / PhD Student (m/f/d) in Mathematic Modeling/ Microfluidics and Perfusion Bioreactors for Cellular Agriculture

Start date: late 2023 – early 2024

About us

The Professorship for Cellular Agriculture (Prof. Dr.-Ing. Marius Henkel) was established in September 2022. Cellular agriculture is a multidisciplinary field that explores biotechnological solutions to the environmental, ethical, and sustainability challenges of conventional animal agriculture. Our research focus is the development of alternative proteins for food applications, through high-performance microbial bioprocesses (“precision fermentation”) and tissue-engineered cultured meat from animal cells.



Requirements

We are looking for applicants with a Master’s degree in biotechnology, bioengineering, biosystems engineering, chemical engineering, food science, or a comparable field of study, preferably with an affinity for technical tasks

- Basic knowledge of precision fermentation or cell culture
- Affinity towards technical tasks and bioprocess control
- Advantageous: Experience in mathematic modeling, programming, CAD, microfluidic or bioreactor systems
- Proficiency of the English language, both written and spoken
- Interest in and enjoyment of scientific research questions especially in the area of cellular agriculture

Tasks

Depending on suitability and personal profile, potential tasks include but are not limited to:

- Development of a recirculation system for culture medium in a perfusion bioreactor system
- Implementation of process control, soft sensor technology, and process optimization using mathematic modeling
- Evaluate modified growth factors under real conditions with medium recycling
- Independent work on research projects
- Close cooperation with project partners from academia and industry
- Publication of research results in leading journals
- Supervision of student projects as well as cooperation in lectures
- General lab management and operational responsibilities

What we offer

Compensation according to TVL-13 (65%), initially limited to 3 years. The possibility to do a PhD is given and desired. A very good working atmosphere in an interdisciplinary, international, open-minded and helpful team. The opportunity to actively participate in exciting topics and research projects in the area of cellular agriculture.

TUM prioritizes diversity, equity, and inclusion and does not discriminate on the basis of gender identity, country of origin, sexual expression, socioeconomic status, or disability. We encourage applications from underrepresented demographics who would bring additional diversity dimensions to the university. Preference will be given to equally qualified disabled candidates.

Application

We look forward to receiving your application documents. Please send them by e-mail to marius.henkel@tum.de

Data Protection Information:

When you apply for a position with the Technical University of Munich (TUM), you are submitting personal information. With regard to personal information, please note the Datenschutzhinweise gemäß Art. 13 Datenschutz-Grundverordnung (DSGVO) zur Erhebung und Verarbeitung von personenbezogenen Daten im Rahmen Ihrer Bewerbung. (data protection information on collecting and processing personal data contained in your application in accordance with Art. 13 of the General Data Protection Regulation (GDPR)). By submitting your application, you confirm that you have acknowledged the above data protection information of TUM.

Technical University of Munich

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