

Internship

Development of Analytical Method for Proteins

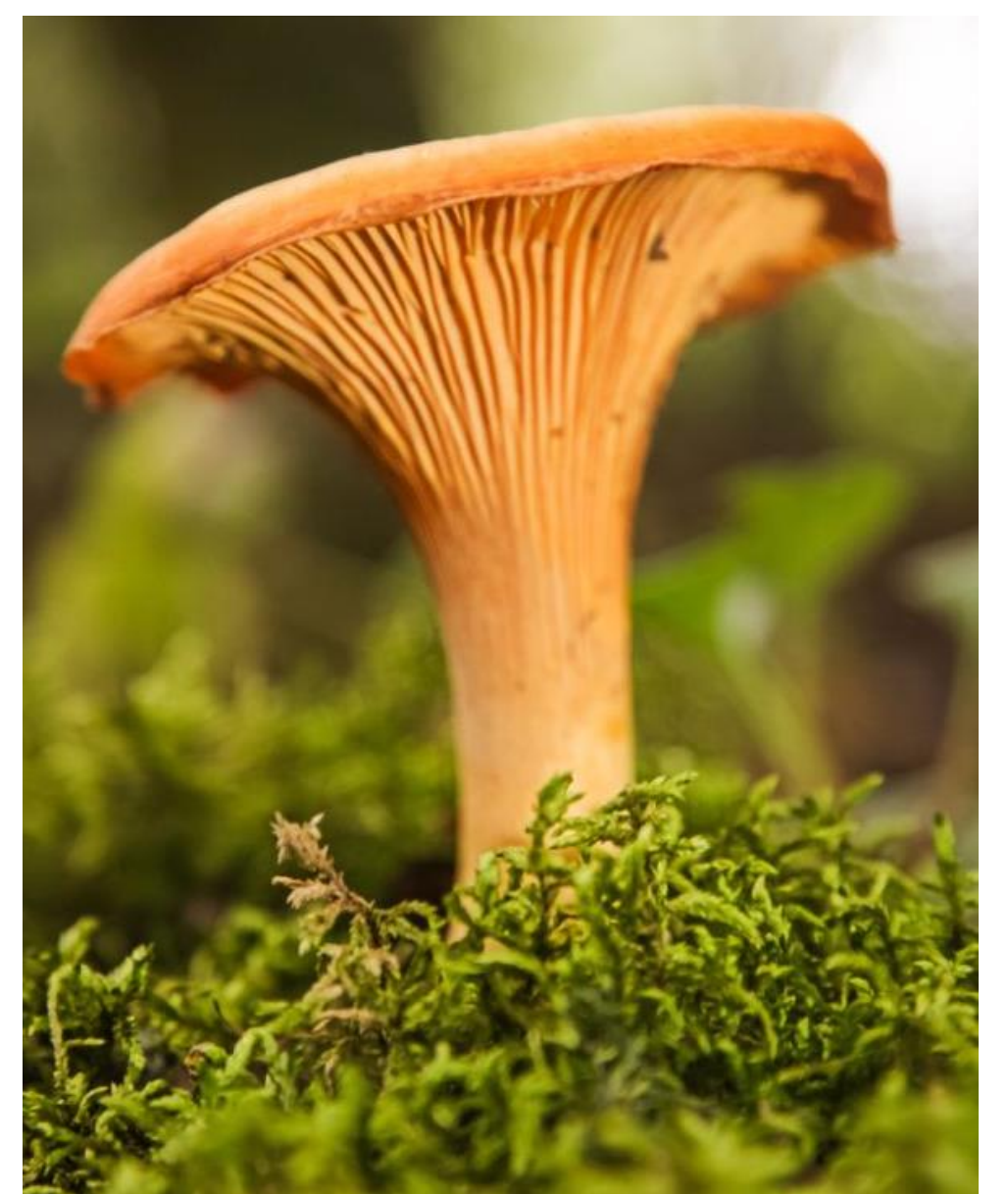
Keywords: Basidiomycetes fermentation | HPLC | GC | Proteins

Project Description

In recent years, there has been a significant global rise in the demand for dairy products such as cheese and curd. Similarly, the consumption of soy-based products like tofu has been on the rise worldwide. However, the production of these products leads to the generation of side streams, namely acid whey from curd/cheese production and soy whey from tofu production.

Acid and soy whey, despite their nutritional composition in terms of proteins, carbohydrates, fatty acids and other valuable components, are not accepted by consumers due to their sour taste. As a result, these side streams are usually cost-intensively disposed or added to animal feed.

The objective of this project is to utilize these valuable components present in the acid and soy whey after a fermentation process.



Tasks

1. Literature review
2. Development of different types of analytical methods for protein analysis for fermentation broth as well as mycelium broth
3. Development of an HPLC method for analyses of proteins and/or carbohydrates



Fermented samples used for DSP

Profile

- Structured and independent work
- Motivation to work as a team
- Master student in biotechnology (IBT), biochemistry, chemistry or similar
- **Start date:** as soon as possible
- Language: English

Sabrina Styblova | s.styblova@tum.de | Chair of Bioseparation Engineering | Room MW2437

Bhagyeshri Ulhas Mantri | b.mantri@tum.de | Chair of Bioseparation Engineering | Room MW2437