



Bachelor thesis –project work – master thesis – students assistant

Instrumental and sensory analysis of the aroma release from plant based milk product alternatives in comparison to conventional milk products

As part of this research project, the release of aroma compounds in plant-based milk alternatives is being investigated. The aim is to develop an understanding of the release of both desirable and undesirable aroma compounds in plant-based matrices.

A key focus lies on the instrumental analysis of aroma components as well as their sensory evaluation. For this purpose, plant-based milk alternative products with different compositions are analyzed using gas chromatography–mass spectrometry–olfactometry (GC-MS/O) and HPLC. Suitable methods for the extraction and quantification of volatile and non-volatile aroma compounds are developed. The resulting aroma profiles are evaluated and complemented by sensory testing with a trained panel. The collected data are incorporated into an aroma database and used to further optimize product quality in a targeted manner.

Within the framework of a bachelor's, master's, or project thesis, there is the opportunity—depending on individual interests—to focus on instrumental analytics, sensory training, or data-driven evaluation of aroma profiles and the development of the database.



Kontakt

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