Food Analysis

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1. Course Description

The aim of this course is to help students acquire an understanding of the fundamental principles of mass spectrometry for food analysis.

2. Course Objectives

The goals of this course are to obtain knowledge about the food analysis by mass spectrometry.

3. Grading Policy

Your final grade will be calculated according to the following ratio: Usual performance score 50%, Reports 50%.

4. Textbook and Reference

Textbook
Reference：Mass Spectrometry: A Textbook - Gross, Jurgen H, Springer
ImagingMass Spectrometry: Protocols for Mass Microscopy - Setou, M, Springer

5. Requirements(Assignments)

6. Note

7. Schedule

[1]   Introduction
[2]   Mass spectrometry (MS)
[3]   Ionization
[4]   MS instruments
[5]   Mass specta data
[6]   GC-MS
[7]   LC-MS
[8]   Imaging MS
[9]   Protein analyses
[10]   Lipid analyses
[11]   Carbohydrate analyses
[12]   Vitamin analyses
[13]   Mineral analyses
[14]   Analyses of functional food ingredient from animal
[15]   Analyses of functional food ingredient from plant