

Materials and additives used in beverages (MASTER - TECHNOLOGY AND QUALITY CONTROL OF BEVERAGES, 2ND YEAR OF STUDY, 3RD SEMESTER)

Credit value (ECTS): 6

Course category: optional

Course holder: Asist. dr. Ștefan Tudose-Sandu-Ville

Discipline objectives (course and practical works)

The aim is to make available to the students the latest theoretical and practical knowledge in the field of materials and additives used in the beverage industry.

Theoretical knowledge will be deepened at the laboratory by using practical applications in the field of instrumental analysis of additives and materials used in the beverage industry.

The principles of the most used chemical and instrumental analyzes will be presented.

Contents (syllabus)

Course (chapters/subchapters)
1. Food additives and their purpose <ul style="list-style-type: none">AntioxidantsSweetenersDyesFlavor compoundsOther additivesAdditive safety
Methods of analysis of food additives <ul style="list-style-type: none">Analytical methods: selection and quality controlNew methods for identifying additivesSpecific additives<ul style="list-style-type: none">DyesSweetenersFlavour compoundsAntioxidantsOther additives
Materials used in the beverage industry <ul style="list-style-type: none">BentoniteGelatinePVPPActive charcoalKieselgur

Labeling of drinks
European legislation
Other legislation
Codex Alimentarius
Practical works
Safety precautions in the lab
Use of bentonite
Use of yeast and enzyme preparations
Use of antifoam materials
Detection of Sorbic Acid (E200-3)
Detection of Benzoic Acid (E210-13)
Sulfite Detection (E220-8)
Detection of Tartaric Acid (E334-7, E354)
Detection of adipic acid (E355-7, E359)
Detection of Propylene Glycol (E405, E477)
Detection of Ammonia Phosphatides (E442)
Detection of Izobutyrate acetate for sucrose (E444)
Detection of saccharin (E954)
Test

Bibliography

1. ***, 2019, Recueil des méthodes internationales d'analyse des vins et des moûts, Organisation International de la Vigne et du Vin.
2. ***, 2019, Recueil des méthodes internationales d'analyse des boissons spiritueuses, des alcools et de la fraction aromatique des boissons, Organisation International de la Vigne et du Vin.
3. ***, 2019, Codex œnologique international, Organisation International de la Vigne et du Vin.
4. ***, 2019, Code International des Pratiques Œnologiques, Organisation International de la Vigne et du Vin.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Course	Exam	70%
	presence	
Practical works	Test	30%

Contact

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