

FOOD INDUSTRY GROUP

Contact details

Name	Food Industry Group
Acronym	GCDIA
Logo	-
Site	-
Address	76, Victoriei Str., 430122, Baia Mare, Romania
Faculty Department	Faculty of Sciences, Department of Chemistry and Biology
Telephone	+40 262 276059
Fax	+40 262 275368
Director	Assist. Prof. Dr. Liviu Giurgiulescu
e-mail	giurgiulescu@gmail.com , +40 740 310674

Areas of expertise

Food Engineering

Fermentation technology, biotechnology, extractive technology.

Dairy industry:

- milk-processing in order to obtain consumption milk and other dairy products;
- laboratory tests to check the conformity of raw materials and finished products.

Food quality control:

- features that different foods must meet to fit existing standards,
- quality control of the process streams to obtain food,
- laboratory tests to verify compliance with various control parameters.

Microbiology of food

Hygiene of food companies

Team and key skills

Assist. Prof. Dr. Liviu GIURGIULESCU - research group leader,
Professional Experience and Education: 2007-present, Lecturer Dr. in UNBM, current CUNBM, UTCN; doctor from 2005, in the field of food biotechnology, with a research internship at the University of Bourgogne, France - Institute of Vine and Wine "Joule Guyot"; Lawyer Law degree obtained in 2002 in the legal field.

Assist. Prof. Dr. Anca Dumuța, email: codre_anca@yahoo.com,

Professional Experience and Education: October 2012 - present, Lecturer Dr. in CUNBM, UTCN; doctor from 07.12.2011, in the Veterinary Medicine field ;Thesis Title: Effects of high frequency electromagnetic radiation (microwaves) in the conditioning of the consumption milk.

Assist. Zorica Voșgan Marcela, email: zori_v13@yahoo.com

Work experience: February, March 2009-present Assistant Professor. and PhD student in CUNBM, UTCN.

Thesis title: Research on soil-plant- goat milk traceability, under ecopedological of the Gutai Mountains, Maramures County.

Infrastructure

Fermentation technology Line
LactoStar-milk analyzer for rapid determination of milk constituents
photometer PhotoLab
Velp Scientific distillation unit
Mineralization system TurboTerm
Furnace
2 ovens
Thermostat

Development strategy

GCDI research group aims to develop researches in the field of food safety, food traceability, identify contaminants that may occur in the food chain, to improve the processes of the dairy, meat, wine, vinegar, beer, alcohol, oil and sugar

industries.

Representative projects

Science without borders - Bridge between Central Europe and Balkan,
http://www.ceepus.info/public/network/network_detail.aspx

Significant results

1. L. Giurgiulescu, P. Săvescu, A. Codre, Research regarding the influence of biotechnological factors involved in obtaining of red wine from Oltenia Hill, "Agricultural and food sciences, processes and technologies", *Jubilee Conference with international participation*, 26-27 Aprilie, Sibiu 2007.
2. L. Giurgiulescu, P. Săvescu, Research regarding the action of selected yeasts (L.S.A.), of temperatures and fermentation length on contents of some red wines constituents, Simpozionul Științe, Procese și Tehnologii Agroalimentare, New trends in food safety and processing, Facultatea de Tehnologia Produselor Agroalimentare, USAMV a Banatului, 17-18 Mai, Timișoara 2007.
3. A. Dumuța, Z. Voșgan, L. Mihălescu, O. Roșca, F. Boltea, Study concerning the influence of microwave treatment on raw milk freezing point, *Journal of Agroalimentary Processes and Technologies*, 2012, 18(3), pp. 191-194, ISSN (online): 2068-9551.
4. A. Dumuța, Z. Voșgan, L. Mihălescu, O. Roșca, F. Boltea, Microwave effects on milk investigated by the bacterioscopic analysis, *Journal of Agroalimentary Processes and Technologies*, 2012, 18(2), pp. 155-160, ISSN (online): 2068-9551.
5. A. Dumuța, L. Giurgiulescu, L. Mihaly-Cozmuta, Z. Vosgan, Physical and Chemical Characteristics of Milk. Variation due to Microwave Radiation, *Croatica Chemica Acta*, 2011, [Vol.84 \(3\)](#), pp. 429-433, ISSN 0011-1643.
6. A. Dumuța-Codre, O. Rotaru, L. Giurgiulescu, F. Boltea, L. Crisan, B. Neghelea, Preliminary researches regarding the microwaves influence on the milk microflora, *Analele Universitatii din Oradea-Fascicula Biologie*, TOM XVII (1)/2010, pp. 103-107, ISSN 1224-5119.
7. Z. Voșgan, R. Vidican, S. Jelea, M. Marian, L. Mihalescu, O. Mare Rosca, Characterization of a Typical Districambosol Soil from the Gutai Mountains – North of Romania, *Bulletin UASVM Agriculture*, 68(1)/2011, pp. 384-387, Print ISSN 1843-5246.
8. Z. Voșgan, R. Vidican, A. Dumuța, Preliminary Study Regarding the Quality Status of Soil Resources in a Rural Environment, *ProEnvironment* 5(11) /2012, pp.149-152, pISSN: 1844 – 6698.
9. Z. Voșgan, R. Vidican, M. Marian, L. Mihalescu, O. Mare Rosca, A. Dumuța, Research Regarding Vegetal Associations Specific To Mountain Meadow, *Bulletin UASVM Agriculture*, 69(1)/2012, pp. 201-206, Print ISSN 1843-5246.
10. Z. Voșgan, R. Vidican, M. Marian, L. Mihalescu, O. Mare Roșca, The impact of grazing on the grasslands of Gutai, Northern branch of the Carpathians, *21st Workshop of European Vegetation Survey*, Vienna (Austria), 24–27 May 2012.

The offer addressed to the economic environment

Research & development in core areas	Research and development in food industry and quality control and food safety
Research & development in applied fields	Dairy industry: - Researching the possibility of replacing the classical method of pasteurization with unconventional methods, like microwave technology, microfiltration technique or the use of high pressure. Food biotechnology - Possibility of using biotechnology to obtain food supply with low levels of contaminants, additives and high safety feeders.
Consulting	Implementation of quality management systems in enterprises of food industry
Applied engineering services	Working with the business field to improve technology flows
Training	Education and training in the ISO 22000/9001 and HACCP



Fig. 1. Velp Scientific distillation unit

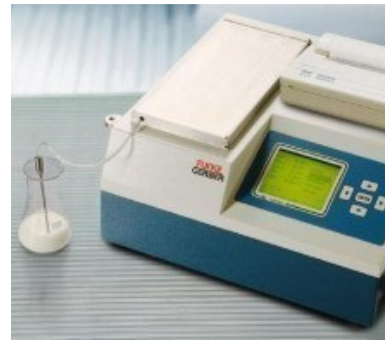


Fig. 2. LactoStar-milk analyzer

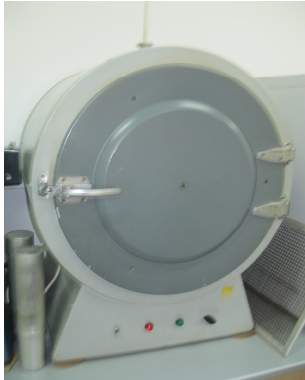


Fig. 3. Thermostat