Organisation Faculty of Food Science and Engineering

Dunarea de Jos University
Str. Domneasca 47, 800008 Galati, Romania

Phone: +40336 130 177
Email: Daniela.Borda@ugal.ro
Domneasca Street, no. 111, Galati, Romania

Expression of interest

of Dunarea de Jos University of Galati, Romania to join a Consortium on HORIZON EUROPE call

HORIZON-CL6-2024-FARM2FORK-01-8, Preventing and reducing food waste to reduce environmental impacts and to help reach 2030 climate targets

Organization details:
Country: **Romania**
Name of the organization: Faculty of Food Science and Engineering, Dunarea de Jos University of Galati, Romania
Contact person short description and contact details:
Daniela BORDA, email: Daniela.Borda@ugal.ro

Daniela Borda (DB) graduated as an engineer in food technology (1993) and obtain her PhD degree in Engineering Sciences (2005). DB is currently habil. professor at the Faculty of Food Science and Engineering (FFSE) from UGAL, Romania, PhD coordinator and has research expertise in food packaging, food safety, dairy science and high pressure processing. She was member of the SafeConsume Romanian (https://cordis.europa.eu/project/id/727580/results), and SafeFood ERANET project (https://www.safefood.ugal.ro/) and FoodSeg network (http://www.foodseg.net/team) and was involved in numerous national and international projects.

ORCID ID: https://orcid.org/0000-0002-5354-0196

www.brainmap.ro: (UEF-ID): U-1700-034W-6644

Short description of the organization

Dunarea de Jos University of Galati (UGAL) is ranked the most important institution for higher education in the South-East of Romania and has been nationally and internationally acknowledged since its foundation, in 1948 (https://www.ugal.ro/).

With a strong food engineering core and a long- standing tradition in food research, the **Faculty of Food Science and Engineering (FFSE)** dates from UGAL`s early beginnings, and it has been educated students for more than 70 years (http://www.sia.ugal.ro/).

Research infrastructure of BioalimentTehnIA Research Centre (https://eeris.eu/ERIF-2000-000T-0571, https://www.unicer.ugal.ro/index.php/en/about-tehnia) from FFSE could be employed together with the one from Faculty of Engineering, Center of Excellence Polymer Processing (CEPP) (www.//erris.gov.ro/CE-PP) to develop innovative food products and packaging solutions.

The research group coordinated by Prof. Daniela BORDA (DB) cooperated with the following entities in different research projects and/ project proposals: Norwegian food research institute NOFIMA, Norway; Warsaw University of Life Sciences, Poland; Ljubljana University, Slovenia; University of Hohenheim, Germany.

Possible main contributions of organization to the project proposal
Research Whey- based food and packaging solutions
Competences in designing new biodegradable composite food packaging and edible coatings with bioactive components, testing their compatibility with different agro-food matrices complemented by consumer studies on acceptability of the proposed innovative solutions.
Contribution to strategy Optimization of side-streams in small and medium dairy plants by designing new food products and biodegradable packaging

Infrastructure available: The two research centers which will be involved in the project activities have the adequate infrastructure for reaching the proposed research objectives, **Bioaliment-TehnIA and CE-PP** (https://www.unicer.ugal.ro/index.php/en/about-tehnia, www.//erris.gov.ro/CE-PP). **Electrospinning** and **food 3D-printing** can represent successful advantages.
Other key equipment:

- Dairy processing pilot plant of 600 l processing capacity/batch for fermented milks, cheese, butter and cream (https://eeris.eu/ERIF-2000-000T-0571)
- High pressure processing unit (4 vessels of 30 mL each)- Roden, Resato, The Netherlands (https://eeris.eu/ERIF-2000-000T-0571)

Publications:

Lanciu Dorofte, A.; Dima, C.; Ceoromila, A.; Botezatu, A.; Dinica, R.; Bleoanca, I.; **Borda, D.** *Controlled Release of β-CD-Encapsulated Thyme Essential Oil from Whey Protein Edible Packaging. Coatings* 2023, 13, 508. DOI 10.3390/coatings13030508

Bleoanca, I.; Lanciu, A.; Patrascu, L.; Ceoromila, A.; **Borda, D.** *Efficacy of Two Stabilizers in Nanoemulsions with Whey Proteins and Thyme Essential Oil as Edible Coatings for Zucchini*. Membranes 2022, 12, 326. DOI 10.3390/membranes12030326

Bleoanca, I.; Enachi, I.**; Borda, D.** *Thyme Antimicrobial Effect in Edible Films with High Pressure Thermally Treated Whey Protein Concentrate*. Foods 2020, 9, 7, 855. DOI:10.3390/foods9070855

Borda, D., Mihalache, A.O., Dumitrașcu, L., Gafițianu, D., Nicolau, A.I., 2021, *Romanian consumers' food safety knowledge, awareness on certified labelled food and trust in information sources*, Food Control, 120,107544, ISSN 0956-7135, DOI: 10.1016/j.foodcont.2020.10754.

Patents: **Borda D.,** Bleoanca I., Popa A., Chirila A., Popa C., 2018, Technological process for obtaining ice-cream from concentrated whey and fruits, Derwent no. 2020-492795, patent request BOPI 5/2020

Projects:

FFSE was partner in SafeConsume consortium- Safer food through changed consumer behaviour consortium, 2017-2022, Horizon 2020 project, grant agreement 727580 (https://cordis.europa.eu/project/id/727580/results), centered on consumers food safety practices and they have significantly contributed to project' success.
Partners in SafeFood Project, ERANET, Development of a novel industrial process for safe, sustainable and higher quality foods, using biotechnology and cybernetic approach (https://www.safefood.ugal.ro/)

Please contact: Daniela BORDA Daniela.Borda@ugal.ro.