

Organisation



University
Dunarea de Jos University

Organisation Full Name
Dunarea de Jos University of Galati, Romania

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Expression of interest

of Dunarea de Jos University of Galati, Faculty of Food Science and Engineering to join a Consortium on HORIZON EUROPE calls

HORIZON-CL6-2024-FARM2FORK-01-7: Impact of the development of novel foods based on alternative sources of proteins

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:

Iuliana APRODU, PhD, is a Professor at Faculty of Food Science and Engineering of Dunarea de Jos University of Galati. Her teaching activities are in the field of Food Science and Biotechnology. Her research focuses on intermolecular interactions in complex systems, combining experimental and molecular modeling approach for investigating proteins' structure-function relationships, increasing quality of proteins and sustainability of their processing, as well as on developing new functional products. Details on publication list: <http://www.researcherid.com/rid/B-3535-2011>

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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 (FSE)** dates from UGAL` s early beginnings, and it has been

educated students for more than 70 years (<http://www.sia.ugal.ro/>). FSE has all necessary resources (modern infrastructure and specialized human resources) to support cutting edge research food science and innovation in food industry.

Possible main contributions of organization to the project proposal

➤ Task leader

Research on the influence of different conventional and non-conventional processing techniques on technological functionality of the protein derivatives from alternative sources.

Research on the interactions between the proteins from alternative sources and main food components upon treatment through different conventional and non-conventional processing techniques.

Elaboration of protocols for improving the functionality of the protein derivatives from alternative sources, such as to facilitate their integrations into different food matrices.

Analysis of the effect of exogenous enzyme assisted hydrolysis on the biological activity and functional properties of the protein derivatives from alternative sources.

Knowledge based elaboration of various functional food formulations

Assessment of the consumer acceptance of the novel foods based on alternative sources of proteins

Specific expertise relevant to the call topic

UGAL team expertise

Dumitrascu L., Lanciu Dorofte A., Grigore-Gurgu L., Aprodu I. 2023. *Proteases as tools for modulating the antioxidant activity and functionality of the spent brewer's yeast proteins. Molecules*, 28(9), 3763.

Banu I., Patrascu L., Vasilean I., Dumitrascu L., Aprodu I. 2023. *Influence of the protein-based emulsions on the rheological, thermo-mechanical and baking performance of muffin formulations. Applied Sciences*, 13(5), 3316.

Dumitrașcu, L., Lanciu, A., & Aprodu, I. (2022). A preliminary study on using ultrasounds for the valorization of spent brewer's yeast. *The Annals of the University Dunarea de Jos of Galati. Fascicle VI-Food Technology*, 46(2), 141-153.

Grigore-Gurgu, L., Crăciunescu, O., Aprodu, I., Bolea, C. A., Iosăgeanu, A., Petre, B. A., Bahrim G.E., Oancea A., & Stănciuc, N. (2020). Tailoring the health-promoting potential of protein hydrolysate derived from fish wastes and flavonoids from yellow onion skins: From binding mechanisms to microencapsulated functional ingredients. *Biomolecules*, 10(10), 1416.

Patrașcu, L., & Aprodu, I. (2017). Processing of low-value fish, coproducts, and by-catch. *Trends in Fish Processing Technologies*, 101-120.

Webpages:

<https://en.ugal.ro/index.php>

<https://www.unicer.ugal.ro/index.php/en/about-tehnia>

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