

## **Strategies for intelligent utilization of residual yeasts from winemaking to obtain new products**

**Ana CHIORU**

*Technical University of Moldova, Chisinau, Republic of Moldova*

### **Abstract**

Agriculture is one of the key sectors of the economy of the Republic of Moldova. According to the International Organization of Vine and Wine (OIVV), Moldova has a vineyard area of 140,000 ha of the country's total area, which represents 1.9% of the world's total vineyard area. In 2021, Moldova contributed 2 million hectoliters of wine to the world production. At the same time, as a result of the activity, 20 to 30% residual products resulting from winemaking are obtained (OIVV, 2021). On the one hand, the storage of these wastes creates environmental problems, such as the pollution of underground and surface water, and represents a risk of spreading diseases, leads to excessive consumption of oxygen in the soil and groundwater. The biodegradation of these co-products is slow due to the acidic pH and the presence of compounds with antibacterial properties, etc. On the other hand, these viticultural co-products contain significant amounts of molecules of interest that can be used as multifunctional agents in various fields aimed at the formulation of new products, both in the food industry and in other fields, such as the cosmetic industry. A big challenge for these two competitive poles is to be able to offer innovative technologies and new inexpensive multifunctional ingredients to be in tune with the problems and challenges of today's society. The targeted research refers to the possibility of capitalizing the residual yeasts obtained in winemaking with the aim of capitalizing on the physico-chemical qualities of their in the formulation of new products, both feeding and non-feeding.