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Certificate

This is to certify that

Hanna Petrenko

from

Sumy National Agrarian University (Ukraine)

participated in the training at
University of Porto (Portugal)

within the framework of the
AFISHE

"Development of Aquaculture and Fisheries Education for Green Deal in Armenia and Ukraine: from education to ecology"

Erasmus+ CBHE project on 19.02.2024 – 01.03.2024.

The training is 90 hours and 3 credits.

**Professor Henrique José Cyrne de Castro
Machado Carvalho**

Director of Instituto
de Ciências Biomédicas Abel Salazar,
University of Porto, Portugal

Garegin Hambardzumyan

AFISHE project coordinator
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Topics of the training

Aquaculture processing technology

THEORETICAL TOPICS

- I - SCOPE OF THE FARMED FISH PROCESSING TECHNOLOGY AREA
- II - HISTORICAL PERSPECTIVE
- III - AQUATIC BEINGS AS RAW MATERIALS
- IV - SEAFOOD DEGRADATION
- V - SEAFOOD PRESERVATION
- VI - FISH PROCESSING AT FARMS
- VII - INDUSTRIAL PROCESSING TECHNOLOGIES
- VIII - AQUACULTURE PRODUCTS SALES
- IX - FROM BUYING TO CONSUMPTION
- X - AFTER CONSUMPTION: SEAFOOD EFFECTS ON HUMAN HEALTH
- XI - BY-PRODUCTS OF THE SEAFOOD INDUSTRY
- XII - NON-FOOD PRODUCTS
- XIII - SEAFOOD QUALITY
- XIV - SEAFOOD SAFETY

PRACTICAL CLASSES AND ACTIVITIES:

(Analysis of the learning objectives of the practical activities including laboratory experiments, demonstrations and workshops, visualization and comments of internet resources like videos, animations, etc.), and also visits to companies and entities related to the area)

- Laboratory classes: evaluation of fish freshness, definition of shelf-life, microbial analysis of water, farms and animal surfaces, fish canning, fish smoking, fish salting and drying, etc.
 - Demonstration of fish processing methods at pilot-scale level.
 - Videos about processing equipment at factory level.
- Visits to external entities (fishing harbors, fish farms, fish markets, fish stores, refrigeration and freezing industries, canning factories, distribution logistic centers, museums, public aquaria, ornamental fish stores).