

## TECHNOLOGY FOR COMPREHENSIVE PROCESSING OF BIOLOGICAL RAW MATERIALS USING CRYOGENIC MOLECULAR FRACTIONATION



Products of cryogenic molecular fractionation

### Advantages

Integrated waste-free processing of biological raw materials in a consequent process cycle, selective separation of raw materials into biologically active molecular fractions with predetermined composition. The proposed technology has no counterparts in the world

### Areas of Application

The technology is designed to obtain from natural plant and animal raw materials the molecular fractions that entirely preserve the native structure of original biological material and can be ingredients for designing new vitamin-rich food, agrotechnical preparations, food additives, and natural dyes, as well as used in pharmaceutical and cosmetic industry

### Specification

The main technology stages involve the use of low temperatures: cryogenic grinding (-120...-100 °C), cryosublimation fractionation (-25°C), and extraction with liquefied gases (-25...-30 °C)

### Stage of Development. Suggestions for Commercialization

IRL7, TRL7

The process regulations and equipment for biological material molecular fractionation are supplied upon request

### IPR Protection

IPR1, IPR3

### Contact Information

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