

The innovative proposition

to attract investors and buyers

1. Name of innovation

Determination of unconcern of food foods by biological methods

2. Intellectual Property

Select the appropriate position, put the mark «+». Write relevant information.

- Patented Innovation countries: Ukraine
- Filed for a patent countries: _____
- License agreement or Exclusive rights. Exclusive rights
- Other (specify) _____

3. Type of innovation

Select the icon by replacing from "-" to "+"

-	Product
-	Technology

+	Result of R&D
-	Other (discussed separately)

4. Areas of innovation

Select one or more applications innovation by replacing from "-" to "+" .

-	Automobiles, transport and logistics
+	Agriculture and food technology
-	Aerial and space technology
+	Biochemical technology
-	Building
-	Military Industrial and Safety
-	Energy and Energy Saving
-	IT-technology, ICT industry and services
-	Light industry
-	Marine industry and services
+	Environment
-	Nano- and Micro Technology
-	New materials
+	Medicine and Health
-	Creative industry
-	Tourism and cultural heritage
-	Other. (Please specify below the scope)

5. Novelty

What does innovation superior (in digits or qualitatively) already existing? (The answer should be clear and concise - three main arguments in support of the use of promising innovations in domestic and/or foreign markets)

A basic task to the project was creation of touch control and enough proof biosensory composition for detection of toxic substances of different chemical nature, that are traditional and emergent contaminants of food foods.

Ratbcellular structures (for example, chloroplasts) in polymeric composition on the basis of polyvinyl alcohol (PVOH), that provides absence of the toxic operating on biomaterial. Thus immobilization of natural components comes true, (fabrics and microorganisms) in polymeric tape. Studies undertaken a by us showed that it is possible to get, elastic, not water-soluble thin-films with microorganisms of immobilization or subcellular structures that can be used for realization of biosensory analysis on toxic substances ional is a receipt of touchcontrol by immobilization of microorganisms or su.

At preparation of touchcontrols with microorganisms of immobilization or natural components (by the elements of fabrics, for example, by chloroplasts) with the use of the composition worked out by us for the receipt of polymeric tape the protracted freezing is not needed, that allows to simplify procedure of immobilization and avoid the thermoanaesthesia of bioreceptor elements as a result of the ruinous operating of subzero temperature on natural components or actions of ultraviolet rays on microorganisms. Polymeric thin-films are got with the use of new compositions with microorganisms of immobilization or natural components use for determination of content of toxic substances in food foods by a biological method.

The worked out method of determination of prop-2-enamide (acrylamide) is in food foods, in that due to the use of day's culture of infusoria of *Stylonychia mytilus* or *Colpoda steinii* the receipt of unambiguous result is provided in relation to the degree of toxicness present in the standard of prop-2-enamide, realization of testing is accelerated, it is also simplified due to that a method does not require the use of the special difficult equipment and preparation of the special nourishing environments for the receipt of 3-th and 5-th daily allowance cultures.

The created compositions are for the receipt of polymeric tape for determination of content of toxic substances in food foods, in that by introduction of additional components and addition of modifier the sensitisation of method and authenticity of results and simplification of technology of preparation of composition is provided. As touchcontrol composition contains the ground up mass of green leaves, or extraction of chlorophyll, or subcellular structures - chloroplasts, as a polyol she contains glycerin, or xylitum, or glycutum, but as antioxidant - Ascorutinum, or Quercetinum, or ascorbic acid.

The new highly sensitive bioindicator of ecologically hazardous toxic substances (EHTS) is worked out by us on the basis of cages of bioluminescent photobacteria of *Photobacterium phosphoreum* (Cohn) of Ford, immobilization in gel of PVOH, allows to carry out the continuous of Ecological monitoring of presence of EHTS both in water and in food foods. At development of bioindicator the level of analytical signal of preparations of immobilization cages was estimated, by determination of size of their bioluminescence. There were the optimized terms of forming of bioindicator and his composition, shown possibility him the protracted storage without the loss of efficiency of action: for fabrics of plants. Composition for the receipt of polymeric tape for immobilization of microorganisms or subcellular structures consists of PVOH and additional components, here as additional components use polyols (glycerin, xylitum, sorbitum), antioxidants (quercetinum, ascorbic acid, Ascorutinum), components that assist the process of polymerization (peroxigen), or immobilization comes true without their participation, but as touchcontrols use the apt at fluorescence components of vegetable cages (chloroplasts, chlorophyll) or cage of microorganisms for mass part of PVOH from 5 to 16 % to mass of gel, additional components from 0,1 to 5,0 %%, touchcontrols from 0,1 to 20,0 %. Lower limit of concentration of biomass of strain of cages, that is recommended for the use, in composition a luminescent biocatalist it is determined by the necessary level of luminescence that provides the protracted use of biocatalist for determination of toxic substances.

The offered technical solutions allow quickly to educe dangerous objects potentially, that it is important at the biological monitoring of the ecological systems.

6. Stage of Innovation

What is innovation's stage of development? Select the icon by replacing from "-" to "+"

+	The concept, proof of concept
-	The prototype, which tested and available for demonstration
-	The technologies for small-scale production
-	The technology is ready for industrial application
-	Commercialized

7. The presentation innovations

Select one or more forms by replacing badge from «-» to «+»

-	The demonstration model
+	Multimedia presentation
-	Report

8. Information about the participants, which apply innovation

	<i>If innovation is filed away</i>
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