Biosafety devices and technologies for protection against pathogenic viruses

Summary

Profile type
Technology offer

Company's country
Ukraine

POD reference
TOUA20220629012

Profile status
PUBLISHED

Type of partnership
Research and development cooperation agreement
Investment agreement

Targeted countries
• World

Contact Person
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Term of validity
29/06/2022
29/06/2023

Last update
29/06/2022

General Information

Short summary

A Ukrainian University offers biosafety devices and technologies to protect humans, animals, plants and food from pathogenic viruses, microorganisms and fungi, and is looking for partners in biology and medicine for joint research and implementation of their research products. The desired types of cooperation are research cooperation agreement and/or financial agreement.

Full description

The Ukrainian university is actively involved in the development and implementation of biosafety devices and technologies for the protection of humans, animals, plants and food from pathogenic viruses, microorganisms and fungi.

In the fight against infectious diseases, there are three areas: 1) elimination of pathogens in the environment, 2) protection against pathogens and their effects on a healthy person, and 3) treatment of patients. The situation with the coronavirus shows that the first direction should be the main preventive measure, and at the same time, it is given the least attention. This technology is designed to neutralize pathogenic viruses and microorganisms and is based on the use of portable and stationary ozone generators, generators of silver ions, and copper both separately and in combination, as well as in combination with known disinfectants and probiotics.

The set of devices of their development includes:
- Adjustable ozone generators for disinfection from air viruses with both centralized and autonomous power supply.

- Electrochemical generators of silver, copper and zinc ions for disinfection of water intended for various types of human consumption, as well as for the production of solutions that neutralize microorganisms, including fungi on various plants and other objects.
- systems of spraying probiotics in the air to protect people in crowded places.
Technologies allow:
- Determine the types of equipment and individual modes of its operation depending on the parameters of objects and other conditions.
- Comprehensive application of disinfection methods.
- Neutralize viruses of various kinds with 100% results.

The University is looking for partners to conduct joint research including within the framework of European programs, as well as partners for the implementation of their developments under a financial agreement.

Advantages and innovations

- The effect of ozone and metal ions on humans has been thoroughly clarified by world science, and the relevant maximum concentration limits have been established, which allows the creation of technologies of wide applications safe for humans;
- During the operation of this equipment (except for the probiotic nebulizer) there is no need to replenish consumables: ozone is generated from the air, and metal electrodes for ions are enough for a long time;
- In terms of material costs, the proposed devices and technologies give the least costly result of the known;
- These technologies can be quickly and easily disseminated, including in remote areas.

Stage of development

Available for demonstration

Sustainable Development goals

- **Goal 3: Good Health and Well-being**

IPR Status

IPR granted

Partner Sought

Expected role of the partner

The University is looking for partners in biology and medicine to conduct joint research including within the framework of European programs.
The University is also looking for partners, which will be interested in using and implementing the devices and technologies under a financial agreement.

Type of partnership

Research and development cooperation agreement

Investment agreement

Type and size of the partner

- **SME 11-49**
- **Big company**
- **R&D Institution**
- **SME 50 - 249**
- **University**
- **SME <=10**

Dissemination

Technology keywords

- **06001018 - Virus, Virology/Antibiotics/Bacteriology**
- **06001008 - Environmental Medicine, Social Medicine, Sports Medicine**
- **06001015 - Pharmaceutical Products / Drugs**

Market keywords

- **05007007 - Other medical/health related (not elsewhere classified)**
- **05007002 - Pharmaceuticals/fine chemicals**
- **05009003 - Animal health**
- **05009004 - Plant health**

Targeted countries

- **World**

Sector groups involved