A LARGE CAPACITY AIR PURIFIER FROM PATHOGENS IN AEROSOLS

INNOVATIVE TECHNOLOGY

A new method of air sterilization and a device that will allow to easily and reliably destroy or deactivate pathogens contained in the air in a large volume, without any unwanted effects on the environment with the presence of people and animals.

AREA OF APPLICATION

Wide use in many areas **where prevention of aerosol infection is necessary** - in hospitals, schools, cinemas and theaters, gymnasiums, congress halls, and restaurants, but also in closed production areas with a significant movement of personnel or in transport (trains, planes, buses), etc.

STAGE OF PROTECTION AND DEVELOPMENT

- **prototype** ready for demonstration
- **functionality verified** in laboratory conditions
- **utility model** application (PUV 50008-2022)

COMPETITIVE ADVANTAGE

- high flow capacity of the device with minimal energy requirements;
- no need for an operator, it can work autonomously and continuously;
- low noise level (below 40dB);
- low requirements for regular operation maintenance;
- without any filters or components with a limited lifespan, compared to purifiers using UV radiation or ozone;
- does not cause overheating of the surrounding air, nor does it dry it out;
- suitable for decontamination of premises from human coronaviruses (e. g. SARS-CoV-2).

SCIENTIFIC TEAM

The following partners were involved in the development of the technology: Institute of Materials and Machine Mechanics SAS and Biomedical research center SAS.

The development of the purifier was financed from the project APVV COVID PP-20-0098. The company Aplik, s. r. o. took part in its construction.

WE ARE LOOKING FOR A PARTNER FOR LICENSING OR SELLING THE TECHNOLOGY

For more information please contact:

Ing. Anton Bittner, PhD., MBA
+421 0903 203 930
bittner@up.upsav.sk

Technology Transfer Office
Slovak Academy of Sciences