Large area deposition technologies of multifunctional antibacterial and antiviral nanocoatings

Project No: 1.1.1.1/21/A/050

Duration: 01.01.2022. – 30.11.2023.

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Project partners: Sidrabe Vacuum SIA, Dr.Phys. Andris Fedotovs
Latvian Biomedical Research and Study Centre (LBMC)

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About project implementation (01.07.2023 – 30.09.2023)

During the past research period of the project No.1.1.1.1/21/A/050 "Large area deposition technologies of multifunctional antibacterial and antiviral nanocoatings":

- The magnetron sputtering plant was optimized for operation with the yttrium target. Optimum gas flow rates and working voltages were determined to ensure yttrium oxyhydride (YHO) coatings were manufactured according to specifications.
- Three series of large-area YHO samples at different pressures have been made. Samples were handed over to project partners for analysis of physical and antimicrobial parameters.
- Separately fabricated YHO samples on clean, dried and ion-treated PET film and WO_3-coated PET film.