Development of mechanoluminescent thin films for real time stress detectors



Project No: 1.1.1.1/20/A/138

Duration: 01.04.2021. - 13.10.2023.

Project Leader: Institute of Solid State Physics, University of Latvia, Dr. habil. Phys.

Donats Millers/ from 01.05.2022. Dr. Phys. Anatolijs Truhins.

Project partner: Sidrabe Vacuum Ltd, B.A.Sc. Matiss Piesins.

31.08.2023

About project implementation (01.08.2023 – 31.08.2023)

During the research period of Project No. 1.1.1.1/20/A/138 " Development of mechanoluminescent thin films for real-time stress detectors", the adaptation of laboratory equipment for a modified technological process was completed.

Modification of technological process and equipment to allow for sample handling under controlled levels of oxygen and water vapor has been completed.

Based on the feedback from the LU CFI on the parameters of the coated material, sample series of coated materials were prepared by processing under controlled levels of oxygen and water vapor, as well as by additional cleaning and heating of the substrate before the technological process. The prepared material sample series were submitted to LU CFI for material parameter data analysis.