



LATVIJAS  
UNIVERSITĀTE

NACIONĀLAIS  
ATTĪSTĪBAS  
PLĀNS 2020



EIROPAS SAVIENĪBA  
Eiropas Reģionālās  
attīstības fonds

ĪEGULDĪJUMS TAVĀ NĀKOTNĒ

**Project name:** Decision tool for optimal design of smart polymer nanocomposite structures produced by 3D printing

**Project contract number:** 1.1.1.1/19/A/031

---

PROJECT IMPLEMENTATION FOR THE REPORTING PERIOD  
from 01.12.2022 until 28.02.2023.

Company ZRF RITEC SIA

During the reporting period, the following actions were implemented:

1. Preparation of materials and submission of the thesis "PARTS FOR GAMMA RADIATION DETECTORS MADE OF ELECTRICALLY CONDUCTIVE THERMOPLASTIC FILAMENTS BY ADDITIVE 3D PRINTING" for presentation at the Eleventh International Conference on Radiation, Natural Sciences, Medicine, Engineering, Technology and Ecology, Herceg Novi, Montenegro, from June 19 to June 23, 2023.
2. Searched for new components to improve 3D print quality, make an order and paid for their delivery.
3. The 3D printer is equipped with new components that allow changing the temperature of the heating head in real time, which is important for the correct selection of the printing mode.
4. The 3D printer was equipped with a system that allows adjustment the height of the nozzle above the surface, which allows the use of various surfaces to find the best material adhesion.
5. New prospective electroconductive filaments were found and ordered: *conductive filament FilaFlex* un *3DK conductive filament*.

Prepared and submitted materials for the joint report "ELECTRICAL CONDUCTIVITY OF NANOMODIFIED POLYMER BASED 3D PRINTED STRUCTURES", for the LU 81st conference, which will be held on February 16.

The information was prepared by: Viktors Ivanovs

Date of information preparation: 28.02.2023.