## SUMMARY

Modernization of vacuum VU-1A (Rus. - BY-1A) type machine to get optical coatings with multi-layer periodic structure. (In Georgian)

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## Annotation

The paper is dedicated to the construction-modernization of the vacuum VU-1A type machine and the creation of a modern experimental-technological coating machine. As part of the work, two sets of planar magnetic emission devices were installed under the cover of the vacuum unit; An RGA200 quadrupole mass spectrometer was attached to the top of the vacuum unit cover; Gas system was planned, manufactured and installed; DC and Impulse power supply blocks were fabricated and connected to magnetron emission devices using a high voltage switch (RFDC "PlasmaSwitch"); The geometric layout obtained by 3D construction of details of submerged devices is characterized by compactness and allows the formation of high-quality reflection layers on optical lenses in a single technological cycle with high productivity. The upgraded VU-1A type vacuum machine is equipped with the optimal technology for obtaining coverage layers on optical details for their research, production of industrial samples and, in the future, for small-scale production.