

ABSTRACT

Master's thesis for master's degree in specialty 161 "Chemical technologies and engineering" on the topic: « **Optimization of processes of production of ceramic tiles using surface-active substances** » / Igor Sikorsky Kyiv Polytechnic Institute; Supervisor: *Pavlenko V.M.*; Student: *Vorobiova K.V.*, XM–61m group.

Explanatory note: 72 pages, 6 figures, 7 tables, 38 sources.

Graphic part: 15 slides.

Object of the research: the clay at Veselovsk deposit, which is used for making high quality ceramic tile.

Purpose of the work to define strength characteristics of gault clay dispersion with the addition of surface-active elements at Veselovsk deposit, to conduct the experimental study of the strength under compressing with simultaneous changeability of humidity and compacting pressure of mass output. To decrease dramatically the quantity of experiments and define optimal definitions of the main parameters.

Keywords:

Semi-dty molding, clay, structuring, planning and optimization of experiment, x-ray diffraction analysis, chemical analysis, mathematical model, surface active substances.