images that will select the object, which appeared on the scene and is not associated with changes in the conditions of observation.

The method of morphology is a unified approach to the description, development and use of image analysis algorithms, based on the brightness and geometric characteristics of the image. It leads to the distinguishing basic distinction between simple correlation coefficient assessment and morphological one. The first compares images as brightness functions, but morphological correlation coefficient characterizes correlation between brightness of the first image and geometrical form of second image.

Therefore, advantage of morphological method is associated with the possibility of improving the integration of image registration conditions. Introduced by morphological analysis the notion of «form» significantly enriches the radiometric properties of reference image, making possible to build a more robust detection algorithms.

Scientific supervisor: Kharytska S.V., PhD, Assistant Professor

UDC 697.329 (043.2)

Kopanev V.O.

National Aviation University, Kyiv

AUTOMATED CONTROL SYSTEM OF ENERGY SUPPLYING IN INDUSTRIAL BUILDINGS ON THE BASE OF SOLAR PANEL

The alternative energy producing and supplying are deeply studied by scientists and researches of many countries. A solar panel offers one of a benefit solution to the energy savings. The solar panel can be defined as a set of solar photovoltaic modules electrically connected and mounted on a special supporting basement. Each photovoltaic module is a packaged, connected assembly of solar cells. The solar panel can be used as a component of larger photovoltaic systems. The goal of the latter is to provide various consumers as municipal, commercial and residential facilities with ecologically generated and economically delivered friendly electricity.

It is know these solar assembles are rated with direct current output power according to standard conditions and ranged from 100 to 320 watts. Such solar cells can be packaged on one base and include solar cells assembling. The efficiency of a module determines the area of a module given the same rated output – an 8% efficient 230 watt module will have twice the area of a 16% efficient 230 watt module. A single solar module can produce only a limited amount of power; most installations contain multiple modules. The typical assembly of a photovoltaic