

# Improved Computer-oriented Method for Processing of Measurement Information on Greenhouse Microclimate

Ivan S. Laktionov 1\* , Oleksandr V. Vovna 1 , Yevhen O. Bashkov 2 ,  
Anatolii A. Zori 1 , Vladyslav A. Lebediev 1

*1 Department of Electronic Engineering  
State Higher Educational Establishment “Donetsk National Technical University”  
of the Ministry of Education and Science of Ukraine  
UA85300, Shybankova Sq., 2, Pokrovsk, Ukraine  
E-mails: ivan.laktionov@donntu.edu.ua, oleksandr.vovna@donntu.edu.ua,  
anatolii.zori@donntu.edu.ua, vladyslav.lebediev@donntu.edu.ua*

*2 Department of Applied Mathematics and Informatics  
State Higher Educational Establishment “Donetsk National Technical University”  
of the Ministry of Education and Science of Ukraine  
UA85300, Shybankova Sq., 2, Pokrovsk, Ukraine  
E-mail: yevhen.bashkov@donntu.edu.ua  
\* Corresponding author*

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**Abstract:** The article presents results of field testing and experimental studies on improvement of the computer-oriented method of aggregation and processing of measurement information on microclimate parameters of industrial greenhouses. The technology was developed and tested in the laboratory. It consists of a hardware component based on Arduino Mega 2560 & Ethernet Shield W5100 and modern sensor devices, a software module based on Simulink Support Package for Arduino Hardware ® and a remote database of monitoring results on the ThingSpeak ® server. The technology proposed in the article has a modular structure and is adaptive to types and periods of vegetation of cultivated crops. The obtained research results constitute scientific and practical basis for conducting further priority research on implementation of the developed technology into actual production conditions for growing protected crops.

**Keywords:** *Computerized technology, Greenhouse, Hardware and software implementation, Monitoring, Microclimate.*