# **CONTENTS**

# **Energy Engineering**

# 1 Dmytro Harasym, Volodymyr Labay

The Estimation of Exergy Efficiency and Exergy Losses in Air Conditioning Systems of Operating Cleanrooms by a Grassmann Diagram

9 Vasyl Zhelyh, Stepan Shapoval, Mykola Hensetskyy, Iryna Venhryn Heat Stability in Exterior Walls in the Summer

#### 13 Stepan Shapoval

The Energy Efficiency of the Solar Heating System with Combined Solar Collector

# 19 Stepan Mysak, Taras Voronchak

Investigation of Mill Balls Metal Deterioration in Mills KBM 370/850 (Sh-50A) when Fuel not Envisaged in the Mill Design is Used at Thermal Power Plants

25 Zhanna Petrova, Yuriy Snezhkin, Vadym Pazyuk, Kateryna Samoilenko Drying of Antioxidant Composite Materials based on Table Beet

# 29 Sergei Shvorov, Dmitry Komarchuk, Peter Ohrimenko, Dmitry Chyrchenko

Methodical Framework of the Support and Decision-making System for the Collection and Disposal of Organic Raw Materials

# **Control Systems**

# 35 Mykhailo Horbiychuk, Taras Humeniuk, Dmytro Povarchuk

Fuzzy Identification of Technological Objects

# 43 Roman Fedoryshyn, Fedir Matiko

Heat Exchange between Thermometer Well and Pipe Wall in Natural Gas Metering Systems

# 49 Volodymyr Moroz, Galina Sivyakova

High-Speed Computer Simulation of Electrical Circuits

# 57 Myroslav Tykhan, Orest Ivakhiv, Vasyl Teslyuk

The Method of Signal Processing when Measuring Non-stationary Values

#### 63 Fedir Matiko, Vitalii Roman, Roman Baitsar

Methodology for Improving Mathematical Model of Ultrasonic Flowmeter to Study Its Error at Distorted Flow Structure

# I Preparation of Papers for the Journal EECS

 Вимоги до оформлення статей для подання до друку в журнал EECS