Table of Contents

SECTION «ENGINEERING SCIENCES»

CHAPTER
INVESTIGATION OF THE THERMODYNAMICS
OF ALLOY PHASE TRANSFORMATION
DURING THE FORMATION OF SHRINKAGE CAVITIES IN CASTINGS
(Mykola Bosyi) 1

CHAPTER
MODELING OF PROCESSES AND HARDWARE-SOFTWARE INTERACTION
IN MODERN OPERATING SYSTEMS
AND 3D VISUALIZATION SYSTEMS
(Petro Humennyy) 34

CHAPTER
TOWARDS AUTOMATIC VERIFICATION
OF SEMANTIC BUSINESS PROCESS
MODEL CONSISTENCY: LITERATURE REVIEW
AND HYBRID NEURO-SYMBOLIC APPROACH
(Oleksandr Rudskyi) 62

SECTION «AGRICULTURAL SCIENCES»

CHAPTER
IMPACT OF CLIMATE CHANGE
ON DEGRADATION PROCESSES IN SOILS
AND WAYS OF THEIR ADAPTATI
(Olha Dorosh) 94

CHAPTER
COMPREHENSIVE EVALUATION OF COCKTAIL-TYPE TOMATO HYBRIDS
UNDER EXTENDED-CYCLE CULTIVATION
IN “RICHEL” PLASTIC GREENHOUSES
BASED ON BIOMETRIC TRAITS, YIELD, AND ECONOMIC EFFICIENCY
(Vitaliy Karachun, Andrii Halaguria, Ivan Lebedynskyi) 121

CHAPTER
EFFECT OF LED LIGHT INCIDENCE ANGLE
ON MORPHOMETRIC TRAITS AND PRODUCTIVITY
OF HOT PEPPER ‘HUNGARIAN YELLOW’
IN AN EBB-AND-FLOW SYSTEM
(Mykola Kovalov) 140

SECTION «PHYSICAL AND MATHEMATICAL SCIENCES»

CHAPTER
PHYSICAL AND MATHEMATICAL FOUNDATIONS
OF HEAT-TRANSFER MODELING IN MULTILAYER SYSTEMS
WITH THERMAL CONTACT RESISTANCE
(Natalia Ichanska, Dmytro Usenko, Iryna Usenko) 181

CHAPTER
MATHEMATICAL MODELLING AND NUMERICAL ANALYSIS
OF WAVE PROCESSES IN ELASTIC SHELLS
(Yuliia Meish, Halyna Isaienko) 217

CHAPTER
APPROXIMATIVE CHARACTERISTICS
OF CLASSES OF PERIODIC FUNCTIONS
(Viktoriia Shkapa, Maryna Belova) 245

SECTION «GEOGRAPHICAL SCIENCES»

CHAPTER
THE TRANSFORMATION OF THE SOCIO-ECONOMIC SPACE
OF THE WORLD'S REGIONS AMID GLOBAL CRISES
AND GEOPOLITICAL INSTABILITY
(Oksana Braslavska) 268

SECTION «BIOLOGICAL SCIENCES»

CHAPTER
CIRCULAR BIOTECHNOLOGIES
FOR THE TREATMENT OF INDUSTRIAL EFFLUENT
(Yukhym Kaliuzhnyi) 306

SECTION «MEDICAL SCIENCES»

CHAPTER
HOMOCYSTEINE AND 137CS DECORPORATION IN CHILDREN LIVING
NEAR THE CHORNOBYL EXCLUSION ZONE
(Yuri Bandazheuski, Nataliia Dubovaya) 328