CONTENTS

Section 1. NEW TECHNOLOGIES OF FOOD PRODUCTS

Cherevko O., Krutovyi G., Zaparenko G., Borysova A. The problems of creating therapeutic nutrition systems of second generation .......... 7
Pavlyuk R., Pogarskaya V., Matsipura T., Kys V. Studying the processes of cryogenic mechanical chemistry of high- and low-molecular nano complexes in champignons during their cryo processing with the use of liquid nitrogen ................................................. 17
Pavlyuk R., Pogarskaya V., Radchenko L., Sokolova L., Yurieva O., Berestovaya A. Studying content of biologically active supplements in natural herbal spices – additives for healthful products .................. 27
Pavlyuk R., Pogarskaya V., Abramova T., Berestovaya A., Toporkova N. Technology tonic nanodrinks based of milk whey enriched by vegetable cryogenic paste and phytoextracts ....................................................... 37
Kondratjuk N., Bolshakova V., Pyvovarov Y., Pyvovarov P. Analysis approach to modeling stable food systems with lactobacillus acidophilus .......................... 50
Yancheva M. Innovations in the technologies of meet frozen semi-products .......................................................... 58
Botshtein B., Chernaya N. Improvement of the technology of mixedspirit-containing beverages with the use of structuring agent .... 69
Dukareva G., Sokolovska O. Technological parameters of the developed pastille products ............................................. 79
Stepankova G. Technologies of wheat bread with the use of oat and maize germ products ........................................ 89

Section 2. EQUIPMENT OF FOOD PRODUCTION ENTERPRISES AND IMPROVEMENT OF PROCESSES AND APPARATUSES OF FOOD PRODUCTION ENTERPRISES

Cherevko A., Mykhailov V., Mayak O., Sardarov A. The effect of vibration on the process of vacuum drying of vegetable raw materials 100
Cherevko A., Skrypnyk V., Fariseev A. Heat transfer in the surface layer of the meat products at bilateral frying under conditions of compression 107
Deinichenko G., Mazniak Z., Guzenko V. Analytical characteristics of membrane treatment of liquid high molecular systems .............. 120
Deinichenko G., Tereshkin O., Gorelkov D., Shevchenko I. Investigation of the processes of a combined method of cleaning pumpkin fruits ..................................................... 131
Pogozhikh M., Chekanov M., Pak A. Improving energy efficiency concept in food production process ........................................... 139

Yakovlev O., Postnov G., Potapov V. Effect of ultrasonic waves to change mass transfer coefficients at salted fish .............. 147

Potapov V., Yakushenko E. Effect of design of internal heater on the drying kinetics of grape pomace in mass transfer module ...... 155

Tormosov Y., Saenko S. Simulation of the propagation of heat rays of segment reflector ......................................................... 163

Zakharenko V., Sorokina S. To the calculation of energetic luminosity of food products at IR-heating .................................. 172

Tereshkin O., Gorelov D., Afukova N., Melnik K. Development of resource saving method of cleaning garlic and promising ways of developing its hardware design ..................................... 180

Savchenko-Pererva M., Yakuba A. Calculation of velocity field in cylindrical device with a counter-swirling flows based on experiments .................................................................................. 188

Tokolov Y., Gurskiy P., Bogomolov O., Domnich M. Research of the dependence of flour extraction on frequency of working organs rotation in grinding down module ................................................................ 197

Postnov G., Tereshkin O., Dmitrevskyi D., Vasylets I. Research of the influence of thermal steaming on the surface layer of onion .... 205

Section 3. IMPROVEMENT OF FOOD PRODUCTS QUALITY

Shidakova-Kamenyuka E., Golovko N., Rogoviy I., Rogovaya A. The use of qualimetry principles for the evaluation of the quality of biscuits with the addition of semi-finished nutritive bone product ..... 213

Golovko M., Primenko V., Golovko T. Determination of the acute toxicity parameters of biologically active additive «Sivoselen Plus». 222

Krutovyi G., Zaparenko G., Zakharenko V., Borysova A. Analysis of the biological value of unconventional floury products ........ 231

Odarchenko A., Gasay Ye., Karpenko Z. Prospects for enrichment of kefir with wheat germ .......................................................... 241

Yastreba Y., Pasichniy V. Improvement of the technology of meat minced products using hydrocolloids .................................. 250

Samokhvalova O., Kasabova K. The use microbial polysaccharide xampan for raising muffins quality on the grounds of wheat germ extraction ................................................................. 257

Odarchenko M., Karpenko Z., Sergienko A., Bobyreva A. Muchka in fermented beverages ...................................................... 267
Kucheruk Z., Postnova O., Galych G. Investigation of properties of defatted heat-treated flour of amaranth.............................................275
Kolesnyk T., Kolesnyk A. Biological value of boiled sausage with blood colouring agent.................................................................283
Pekhina N., Tatar I. The relevance of the use of vegetable raw materials for the production of low-alcoholic beverages .........................291
Atanasova V. Technology of puree-based dishes from lentils.................299
Kalakura M., Schyrska O. Prospects for enhancing biological value of new products...........................................................................308
Kondratjuk N. System analysis in the solution of issues concerning quality of desserts with encapsulated probiotic microorganisms......314
Stepanova T. Substantiation of the role of «NEApectin-Ca^{2+}» system in assortment of low calorie culinary products..........................325
Dudkina O., Gubenko S., Gavrysh A., Nemirich O. Justification of recipe special – purpose fondans.......................................................331
Omelchenko S., Horalchuk A., Grinchenko O. Determination of the impact of food ingredients on quality aerated semi-finishing ...343

Section 4. CHEMICAL, PHYSICAL, MATHEMATICAL METHODS OF RESEARCH OF FOOD PRODUCTS QUALITY

Tsykhanovska I., Barsova Z., Demidov I., Pavlotskaya L.
Investigation of the oxidative and thermal transformations processes in the system «oil – lipids-magnetite suspension» ..........................353
Orlova N., Dyakova Yu., Romanenko R. Structural-mechanical properties of aubergine snacks .............................................................363
Kuzmin O., Topol’nik V., Mironchuk V., Sujkov S. Stabilization of aqueous-alcoholic mixtures under the process of electrochemical activation of drinking water ..................................................................374
Demidova A., Aksenova O., Demidov I. Determination of the sunflower oil storage period by the accelerated method................................386
Kravchenko M., Yaroshenko N. Technology of gingerbread products fortified with sesame the cedar schrot ...................................392
Tokar A., Myroniuk S. Preservation of eggplant fruit at their treatment with antimicrobial effect substances ..................400
Sukmanov V., Petrov Y., Zaharevich V., Marinin A. Subcritical water as extractant in the process of extraction of biologically active substances from plant material .............................................................410
Obozna M., Lyubenko G., Pertsevoy F. Investigation of fatty acid composition of thermoduric milk-containing filling with sesame seeds concentrate..................................................................................429
Iukuridze E. Current methods of study and identification of origin wines … 441
Ditrich I., Marchenko Y. Quality evaluation of new fish preserves in «Neptune Cherry» sauce …………………………………………………. 450
Kushnir N. Determination of the balance of amino acid structure of collagenic preparation …………………………………………………… 458
Kostenko E., Maksimenko E., Butenko E. Determination of microelement food additive «Hibiscus» using methods of solid spectrophotometry ……………………………………………………. 468

Section 5. COMMODITY RESEARCH AND EXPERTISE OF NON-FOOD PRODUCTS

Zakharenko V., Diakov A., Vorontsova Zh. Renewal of pores distribution in leather products ………………………………… 479
Letuta T., Gasanova A., Grygorets D. The influence of aesthetic properties of product packaging on consumers, preferences ……… 487
Golovko T., Bakirov M. Jewels in the mineral resources Ukraine ……… 495

Section 6. INFORMATION TECHNOLOGIES IN SCIENCE AND EDUCATIONAL PROCESS

Gubsky S., Vinnikova V., Kobrin V. Organization of network interaction in educational process …………………….. 503
Chagovets V. The problem of forming information-learning environment of the university ………………………………………….. 513
Girinova L., Sybiryakova I. Using cloud service IBM ARCA for scientific research in universities …………………………………………. 520

Alphabetical index ……………………………………………………………………………………. 530