

Author's information



1. Surname, first name:

Medvedkov Evgeny.

2. Position, academic degree, title:

dean of the faculty of Distance learning, doctor of technical sciences, professor.

3. Education:

- Ural polytechnic institute named after S.M. Kirov, Sverdlovsk;
- doctor of technical sciences, specialty 27.00.12 – "Processes and devices of food production";
- professor in the specialty "Food technology".

4. Area and directions of research, including participation in scientific projects with a brief description of the results of the study:

Area and directions of research:

- development of technologies and devices for processing raw materials of food production to produce food products, including products made from flour and melons, research in the use of innovative educational technologies.

Participation in scientific projects:

- 2013-2015, responsible executor, research on the topic №6-2013 "Production of environmentally safe food additives and targeted products from agricultural raw materials" according to the international scientific and technical program of the Ministry of Education and Science of the Republic of Kazakhstan 055 "Scientific and scientific and technical activities", subprogram 100 "Program-targeted financing", priority direction "Deep processing of raw materials and products" (STP "International scientific and technical programs and projects").

Results:

a resource-saving technology has been developed based on the optimization of methods for processing animal and oilseed raw materials, which made it possible to obtain safe food additives based on flax, black cumin and sesame oils, as well as ready-made environmentally safe meat

products using these additives. A monograph has been published, 10 articles in scientific journals, 4 of them abroad, received 2 patents.

- 2015-2017, scientific supervisor of research on the topic № 1-5-2015 "Development of highly efficient technology for complex melon processing with the production of functional products", carried out under the program of the Ministry of Education and Science of the Republic of Kazakhstan 055 "Scientific and scientific-technical activities", subprogram 101 "Grant financing", priority direction "Rational use of natural resources, processing of raw materials and products".

Results:

the technology of complex melon processing with the production of oil, pectin, blended juices, jam and jams, including with pectin, has been developed. A prototype installation for removing the peel and grinding the pulp of melon has been developed and made. The development of a pilot batch of products was carried out at the fruit cannery of "SD & Co" LLP in the village of Zarechny, Almaty region. A monograph, recommendations have been published, 4 patents have been obtained, 26 articles have been published in scientific journals and conference proceedings in Kazakhstan and abroad, including one article in a journal included in the Scopus database.

- 2012-2014, research contractor on the topic № 4-2-2014 "Development and implementation of nanotechnology for processing, storage and processing of grain in the field of electromagnetic cavitation at grain elevators and grain processing enterprises" under the budget program 055 "Scientific and/or scientific and technical activities", subprogram 101 "Grant financing of scientific research" on priority: "Deep processing of raw materials and products".

Results:

studies have been carried out on the processing of grain with an ion-ozone mixture in the air created using an installation created by JSC "ATU" scientists. The results are published in scientific articles and collections of materials of scientific conferences.

- 2018-2022, project executor under the Erasmus+ program "Modernization of higher education in Central Asia through new technologies".

Results:

the possession of digital and online competencies by teachers of more than 20 universities of Kazakhstan has been studied, competencies requiring development have been identified. A Manual and a web course have been created to train teachers in innovative educational technologies. The Center for Innovative Educational Technologies has been opened in JSC "ATU", an academic network of 15 universities in Central Asia and a training platform with 75 web courses of these universities have been created. More than 200 teachers of JSC "ATU" and other universities have been trained in digital educational technologies, which are successfully introduced into the educational process every year.

5 reports were made at scientific conferences in Kazakhstan and abroad, including online in the Pacific region, 2 articles were published in scientific journals.

5. List of the most significant publications (monographs, patents, developed standards):

1. Tlevlessova, D., Medvedkov, Y., Kairbayeva, A., Nazymbekova, A. Mechanisation of the

primary processing of watermelons without destroying the rind. Food Science and Technology (Brazil), 2023, 43, e86622. citation index 3.2, Q2, percentile on CiteScore in base Scopus 56 (fifth line). DOI: <https://doi.org/10.1590/fst.86622>;

2. Yerenova, B., Tlevlessova, D., Kairbayeva, A., Nabiyeva, Z., Almagambetova, A., Sakyp, N. (2022). Influence of the pressing technique and parameters on the yield of oil from melon seeds. Eastern-European Journal of Enterprise Technologies, 5 (11 (119)), 38-47. index citation 2.0, 3 (tretium) quartile, percentile on CiteScore in base Scopus 46. DOI: <https://doi.org/10.15587/1729-4061.2022.265672>;

3. Kairbayeva, A., Tlevlessova, D., Imanbayev, A., Mukhamadiyeva, K., & Mateyev, Y. (2022). Determining optimal technological modes for pressing oil from melon seeds to justify rational engineering and structural solutions. Eastern-European Journal of Enterprise Technologies, 2(11 (116)), 12-22. quoting Index 2.0, Q3 (tretium) quartile, percentile on CiteScore in base Scopus 46 (Sorok shest). DOI: <https://doi.org/10.15587/1729-4061.2022.255731>;

4. Medvedkov, Y., Nazymbekova, A., Tlevlessova, D., Shaprov, M., Kairbayeva, A. (2021). Development of the juice extraction equipment: physico-mathematical model of the processes. Eastern-European Journal of Enterprise Technologies, 1 (11 (109)), 14-24. quoting Index 2.0, Q3 (tretium) quartile, percentile on CiteScore in base Scopus 46 (Sorok shest). DOI: <https://doi.org/10.15587/1729-4061.2021.224986>;

5. Ye. Medvedkov, B.Yerenova, Yu. Pronina, N. Penov, O. Belozertseva, N. Kondratiuk. (2021). Extraction and characteristics of pectins from melon peel: experimental review. Journal of Chemistry and Technologies, 29 (4), 650-659. quoting index 0.5, Q4 (fourth) quartile, percentile to CiteScore in base Scopus 12 (double). DOI: <https://doi.org/10.15421/jchemtech.v29i4.252250>;

6. Yerenova, B., Medvedkov, Y., Tlevlessova, D., Kairbayeva, A. (2022). Resource-saving melon processing technology. EUREKA: Life Sciences, 4, 54-75. DOI: <https://doi.org/10.21303/2504-5695.2022.002636>;

7. Nazimbekova A.E., Tlevlessova D.A., Kayrbaeva A.E. Physical and mathematical model of the processes of a device for processing watermelons. The Journal of Almaty Technological University. 2022;(1):71-80. <https://doi.org/10.48184/2304-568X-2022-1-71-80>;

8. Kairbayeva A.E., Tlevlessova D.A. Determination of the rational parameters of pressing pumpkin seeds by methods of experiment planning. Bulletin of Shakarim University. Technical Sciences. 2020;(3):129-133. <https://tech.vestnik.shakarim.kz/jour/article/view/36>;

9. Nazymbekova A. E., Medvedkov E. B., Tlevlessova D. A., Kairbaeva A. E. Issledovanie myakoti arbuza. Vestnik University Shakarima. Series of technical sciences. 2020;(4):25-28. <https://tech.vestnik.shakarim.kz/jour/article/view/101>;

10. Medvedkov E. B., Nazymbekova A. E., Tlevlessova D. A., Kairbaeva A. E., Shambulov E. D. installation for processing watermelons. Vestnik Kaznitu, No. 6 (142), 2020, p. 146-149;

11. Kulazhanov, T., Baibolova, L., Shaprov, M., Tlevlessova, D., Admaeva, A., Kairbayeva, A. et. al. (2021). Means of mechanization and technologies for melons processing. Kharkiv: PC TECHNOLOGY CENTER, 188. DOI: <https://doi.org/10.15587/978-617-7319-39-8>;

12. Current trends in the development of equipment for processing melons (mainly melons): monograph / E.B. Medvedkov, A.A.Shevtsov, M.E.Kizatova, S.A.Nazarov, D.A.Tlevlessova. –

LAP LAMBERT Academic Publishing RU, 2020. – 148 p. <https://glavkniga.su/book/540443?ysclid=lanum6kbrg387776803>;

13. RK patent 4970. Method of preparation of melon-based blended / Yerenova B.E., Pronina Yu.G., Medvedkov E.B.; applicant and patent holder Yerenova B.E., Pronina Yu.G., Medvedkov E.B. – 2020/0411.2; application. 29.01.2019; publ. 22.05.2020, Bul. № 20. - 4 p.;

14. RK patent № 45621. A device for cleaning watermelon fruits from the peel and extracting a homogeneous mass of pulp / Kairbaeva A.E., Medvedkov E.B., Tlevlesova D.A., Nazymbekova A.E., Shambulov E.D., Akishev N.K.; applicant and patent holder Kairbaeva A.E., Medvedkov E.B., Tlevlesova D.A., Nazymbekova A.E., Shambulov E.D., Akishev N.K. – 2020/0814.2; application 03.09.2020; publ. 04.12.2020, Bul. № 48. - 4 p.;

15. Eurasian Patent for invention No. 041582 / Abdugulomovich N. I., Amonzada I.T., Gafarov A.A. (Taj.), Tlevlesova D. A., Medvedkov E.B. (Kazakhstan), Eurasian Patent Office, November 09, 2022.

6. Scientific internships:

- St. Petersburg national research university of information technologies, mechanics and optics, St. Petersburg, Russia, 2016;
- Research institute of Biotechnology and certification of food products at Kuban state university, Krasnodar, 2017;
- Research institute of chemical technology at the Kyrgyz state technical university named after I. Razzakov, 2016.

7. Achievements in research and teaching activities (awards):

- Breastplate "For merits in the development of science of the Republic of Kazakhstan", 2007;
- Grant of the MES of the RK "The best university teacher" 2015;
- Breastplate "Honorary worker of education of the Republic of Kazakhstan", 2017.

8. E-mail address, contact details (tel.: work (ext.), cell.):

E-mail: e.medvedkov@atu.edu.kz

Cell. tel.: 8-777-244-38-40.