

## Information about the author



### 1. Surname, name:

Uzakov Yassin.

### 2. Position, academic degree, title:

professor of the department of "Food technology", doctor of technical sciences, academician and professor of the Russian Federation and the Republic of Kazakhstan. Honored inventor and rationalizer of the USSR (1986).

### 3. Education and career:

- after graduating from KazChTI with a degree in automation and complex mechanization of technological processes in 1973, he was sent to the Almaty Meat Canning Plant, in 1980 he graduated from the Technological Institute of Meat and Dairy Industry with a degree in meat and meat products technology;
- from August 1973 to April 1978 he worked as a foreman, senior technologist, head of the workshop;
- from April 1978 to April 1980 he worked as the Chief Technologist of the Ministry of Meat and Dairy Industry of the Kazakh SSR;
- from April 1980 to 1985 he worked as the Director of the meat canning plant of the Almaty Production Association of the Meat Industry;
- in 1986 he was awarded the title of Honored Inventor and Rationalizer of the USSR;
- from November 1985 to January 1994 he worked as the Director of the meat processing plant of the Almaty Production Association of the Meat Industry;
- from February 2, 1994 to 1997, he worked as Chief Engineer - First Vice-President of the Almaty Production Association of the Meat Industry;
- from 1997 to 2002 he worked as the President of "Almaty-et" (Almaty meat-canning combinat);

- in 2002, he was awarded the academic title of Professor of Almaty technological University;
- from April 2002 to August 2006 he worked as the General Director of "AF Kainar" LLP (meat processing plant);
- in 2006 he defended his thesis for the degree of Doctor of Technical Sciences by the decision of the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation (Moscow) dated December 1, 2006 № 47d/41;
- from April 2002 to the present time he is a professor of the Department of "Food Technology" of Almaty Technological University<sup>6</sup> his total experience of scientific and pedagogical work is 30 years.

Currently, Uzakov Ya.M. is an international expert of the International Technical Committee TKM-226 "Meat and Meat Products" (Moscow) and an expert of the Interstate Technical Committee TK-040 "Technology of Organic Production", is a member of the editorial board of the scientific and production journal "Meat Industry" (Moscow), "Energy and practice of meat processing" (Moscow), and is also a member of the editorial board of the scientific and production journal "Food Industry" (Russia).

Supervises bachelors, undergraduates, PhD doctoral students in educational programs 5B072700 - "Technology of food products", 6M072700 - "Technology of food products", 6D072700 - "Technology of food products".

He was included in the list of scientists of Kazakhstan with high publication activity for 2008-2012 (11th place out of 140) in the Kazakhstan citation database conducted by JSC "National Center for Scientific and Technical Information".

He prepared: 2 doctors of technical sciences of the Russian Federation, 7 doctors of PhD, 45 candidates of technical sciences and masters of technical sciences.

#### **4. Field and areas of research, including participation in scientific projects with a brief description of the results of the study:**

*Area and directions of research:*

- development of functional meat products using protein additives from local raw materials;
- improvement of combined meat products based on meat and vegetable raw materials;
- forecasting the development of the meat industry of the Republic of Kazakhstan;
- study, system analysis, classification and practical use of information on the food and technological adequacy of meat raw materials;
- problems of formation, forecasting and management of the quality and safety characteristics of meat products in the process of their manufacture and storage, design of new types of meat products, depending on their functional orientation;
- study of methods and ways of intravital formation of the quality and functional properties of raw meat;
- development of a methodology for a safe product of guaranteed quality, by organizing and structuring an integrated system of quality control and safety of meat products, based on systematized data on the definition of risks and the identification of control critical points;
- fundamental and applied research related to the complex processing of raw meat;

- scientific substantiation of the modes of technological processes of processing of raw meat, incl. using physical processing methods that ensure the production of high-quality meat products for general, special and therapeutic and prophylactic purposes and guarantee their safety for consumers.

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

He is the author of more than 860 scientific works, including: monographs - 18, textbooks and manuals - 22 and 58 patents of the Republic of Kazakhstan and the Kyrgyz Republic.

Uzakov Ya.M., Tokysheva G.M., Taeva A.M., Makangali K.K. Study of the effect of sea buckthorn seed powder on the quality of boiled-smoked meat products from camel and beef. Vestnik KazNTU. – Almaty, 2019. – No3. – p.408-416;

Uzakov Ya.M., Taeva A.M., Tokysheva G.A., Makangali K.Q. Development of a technology for the production of canned meat - "meat stewed from camel". Vestnik KazNTU. - Almaty, 2019. - № 3. - p.416-421;

Uzakov Ya.M., Moldagalieva D.Zh., Sarsembaeva N.B., Lozovitska B. "Chemical composition and nutritional value of fish grown in the conditions of a natural hot spring of the Almaty region" (article) Printed "Bulletin" of shakarim University, No 1 (85) 2019. -p. 252-256;

Uzakov Ya.M., Moldagalieva D. G., Sarsembayeva N. B., Lozovitskaya B. Effects of new mixed feed based on nontraditional feed additives on fatty acid profile of tilapia (*oreochromis niloticus*) International Journal of Recent Technology and Engineering (ISSN22773878-india-Scopus);

Uzakov Ya.M., Kaldarbekova M.A., Sabraly S. Development of technology of piece salted products from pork. Vestnik KazNRTU, - Almaty, 2019. - № 4. p. 220-224;

Uzakov Ya.M., Kaldarbekova M.A., Sabraly S. Development of innovative technology of meat products from pork. Vestnik KazNRTU, - Almaty, 2019. - № 4. p. 225-229;

Uzakov Ya.M., Kaldarbekova M. A., Chernukha I. A. Research of structural and mechanical properties of national restructured meat products. Vestnik ATU, - Almaty, 2019. - № 4. p. 54-61;

Uzakov Ya.M., Kaldarbekova M.A., Akilova F.E. Improving the quality of the national meat product of the new generation (article) Printed Vestnik ATU, - Almaty, 2019. - № 4. p. 61-65;

Uzakov Ya.M., Kaldarbekova M.A., Akilova F.E., Kuzembaeva G.K. Study of the morphological composition of individual parts of lamb (article) Printed Vestnik ATU, - Almaty, 2019. - № 4. p. 66-70;

Uzakov Ya.M., Kaldarbekova M. A. Influence of salting methods on the change of bio-physical-technological properties of horse meat in the process of maturation. Danish scientific journal. № 21/2019, Copenhagen, Denmark, p. 62-65;

Uzakov Ya.M., Sarsembayeva, N.B., Moldagaliyeva, D.Z., Uzakov, Y.M., Abdigaliyeva, T.B., Biltebay, A.N. Effects of new mixed feed based on nontraditional feed additives on fatty acid profile of tilapia (*Oreochromis niloticus*) (2019) International Journal of Recent Technology and Engineering, 8 (2), p. 3790-3794;

Uzakov Ya.M., Kaldarbekova M., Chernukha I., Kuznecova O. Research of technology of restructured combined meat products using a multicomponent brine. *EurAsian Journal of BioSciences*, 2019 - Volume 13 Issue 2, p. 1625-1632;

Uzakov Ya.M., Kaldarbekova M., Uzakov Y., Chernukha I., Kurmanbekova, A., Jetpisbayeva B. Studying the effect of multicomponent pickle on the quality of cooked and smoked horse meat product. *Periodico Tche Quimica*, 2019 – Volume 16, № 33, p. 259-265;

Uzakov Ya.M., Shingisov A.U., Taspoltaeva A.R., Mamaeva L.A. Study of the qualitative composition of restructured boiled-smoked sausage from beef and turkey meat and. "Research, results - Scientific journal "Research, results". - Almaty, 2019. - №3. - p.85-90;

Uzakov Ya.M., Ussembaeva Zh., Syzdykdva L., Kaimbayeva L., Kozhakhiev M., Kenenbay Sh. Effects of multicomponent brine on functional and technological properties of camel meat raw materials and finished products. *Food Science and Technology*. ISSN 0101-2061 (Print) ISSN 1678-457X (Online). *Food Sci. Technol, Campinas*, 39 (Suppl. 2): 697-702, Dec. 2019;

Uzakov Ya.M., Altaiuli S., Bakytbek A. Improving the technology of preparation of national meat products using plant components (article). *Printed Mechanics and Technology Scientific Journal* № 2, 2020, p. 143-146;

Uzakov Ya.M., Zheleuvova Zh.S., Erkebaeva S.U., A.T. Insurance of natural anti-organisms and their use in the production of cooking and compromising tobacco. *Vestnik SemSU* N2, 2020, 166-174 p.;

Uzakov Ya.M., Sarsembekova A.T., Korzheniovskaya M., Želeuova J.S. Evaluation of the effect of plant material on the quality of cooked sausages. *ATU Bulletin* № 4, 2020, 21-26 p.;

Uzakov Ya.M., Koshoeva T.R., Kaimbaeva L.A., Kuznetsova O.N. Meat productivity and morphological composition of the carcass of Kyrgyz yaks. *Magazine All about meat* No4 2020, Moscow, 55-57 p.;

Uzakov Ya.M., Koshoeva T. A., Kaimbaeva L. A. Study of the nutritional value of the meat of the Kyrgyz yak. *Meat Industry*, № 8, 2020 Moscow. -p.36-38;

Uzakov Ya.M., Kaldarbekova M., Kuznetsova O. Improved technology for new-generation Kazakh national meat products. *Foods and Raw Materials*, 2020, 1– Volume 8, № 1, p. 77-84;

Uzakov Ya.M., Shingisov A.U., Krieger O.V., Berdembetova A.T. Substantiation of the composition of meat raw materials and study of its nutritional value. "Mechanics and Technology" magazines - Taraz, 2020. - № 2. - p.164-172;

Uzakov Ya.M., Koshoeva T.R., Kaimbaeva L.A., Kuznetsova O.N., Abdykalykova S.S. Influence of highlands and autolysis of yak meat. *Meat Industry*. -Moscow, 2020. No10. -p.16-18;

Uzakov Ya.M., Koshoeva T.R., Kaimbaeva L.A., Admaeva A.M., Abdykalymova S.S., Temerbaeva M.V. Technology of production of restructured delicacy products from non-traditional types of meat. *Meat Industry*. -Moscow, 2020. № 12. -p.32-35;

Uzakov Ya.M., Kudryashov L.S., Tikhonov S.L., Tikhonova N.V., Diachkova A.V. Microencapsulation of proteolytic enzymes for industrial application. *News of the National*

Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences.  
- 2020. - 3(441), p. 161-169;

Uzakov Ya.M., Koshoeva T.R., Kaimbaeva L.A., Kuznetsova O.N., Kenenbai Sh.Y. ,  
Esengazieva A.N. The use of a functional component in the production of boiled and smoked  
sausage. Meat Industry. Moscow. 2021. - № 04. p. 49-52;

Uzakov Ya.M., Kenenbai Sh.Y., Yesenkulova Zh.Zh., Esengazieva A.N., Nurylda A., Koshoeva  
T.R. Study of the histology of meat of non-traditional species of animals. Meat industry.  
Moscow. 2021. - № 05. p. 43-45;

Uzakov Ya.M., Zheleuova Zh.S., Shingisov A.U., Alibekov R.S., Khamitova B.M. Development  
of halal cooked smoked beef and turkey sausage using a combined plant extract. Journal of Food  
Processing and Preservation. – 2021. – Vol. 45, Iss. 1. – Article number e15028;

Uzakov Ya.M., Nikitina M.A., Chernukha I.M., Nurmukhanbetova D.E. Cluster analysis for  
databases typologization characteristics. News of the National Academy of Sciences of the  
Republic of Kazakhstan, Series of Geology and Technical Sciences. – 2021. - 2(446), p. 114-121;

Uzakov Ya.M., Nikitina M.A., Chernukha I.M. Cluster analysis for databases typologization  
characteristics. News of the academy of sciences of the Republic of Kazakhstan. Series of  
geology and technical sciences. 2021, 2 (446), p. 114-121;

Uzakov Ya.M., Kaimbayeva L.A., Dikhanbayeva F.T., Koshoeva T.R., Smailova Z.Zh.  
Physicochemical Parameters of Yak Meat during Massaging and Salt Pickling. Journal of AOAC  
International, 2021, 105(3), p. 822-826;

Uzakov Ya.M., Kaldarbekova M.A., Kozhahieva M.O., Chernukha I.M., Dauletkhankyzy A.,  
Dossymbekov T.D. Technology of Kazakh national meat products from mutton. Meat industry, -  
Moscow. 2021. - №10. p. 32-34;

Uzakov Ya.M., Akhmetova V., Balji Y., Kandalina Y., Issayeva, K., Zamaratskaia G.  
Self-reported consumption frequency of meat and fish products among young adults in  
Kazakhstan. Nutrition and Health, 2022, p. 1-10;

Uzakov Ya.M., Tokysheva G., Makangali K., Baiysbayeva M., Mashanova N. The potential of  
goat meat as a nutrition source for schoolchildren. Potravinarstvo Slovak Journal of Food  
Sciences, 2022, 16, p. 398-410;

Uzakov Ya.M., Kaldarbekova M.A., Esengazieva A.A., Kaymbaeva L.A., Chernukha I. A.,  
Kozhahieva M.A. The effect of hydrolysis of the enzyme pepsin on the pH and  
moisture-binding ability of second-rate beef. Bulletin of ATU, - Almaty, 2022. - No 2. p.  
97-101. <https://doi.org/10.48184/2304-568X-2022-1-97-101>.

## **6. Scientific internships:**

- 2015, Plovdiv technologic university, Plovdiv, Bulgaria;
- 2017, Research Institute of Butter and Cheese Industry, Barnaul, Russia;
- 2018, Kemerovo State University, Kemerovo, Russia;

- 2019-2020, in the Seven-Russian research institute of meat industry named after V.A. Gorbatov, Moscow, Russia.

#### **7. Achievements in research, pedagogical activities (awards):**

- Uzakov Ya.M. an outstanding specialist of the meat industry, for great merits in the development of the meat industry was awarded 6 Honorary Diplomas of the Ministry of Meat and Salt Industry of the USSR and 10 Honorary Diplomas of the Ministry of Meat and Milk Industry of the Kazakh SSR, gold medals at the Exhibition of Economic Achievements of the USSR. Author of more than 140 rationalization proposals and inventions introduced into production;

- in 1995 IFFA-1995 for the excellent quality of sausages Uzakov Ya.M. received a crystal cup at the world exhibition in Frankfurt (Germany);

- Uzakov Ya.M. was awarded a gold medal of the quality competition of the world exhibition IFFA-2016 Frankfurt (Germany) For the development of innovative technology of boiled and smoked whole-muscle meat product "Ulytau";

- Uzakov Ya.M. became the owner of the State scholarship for outstanding scientists, who made an outstanding contribution to the development of science and technology in the Republic of Kazakhstan, for 2010-2012.

#### *In international forums and exhibitions:*

- in the period 2008-2019 Uzakov Ya.M. together with students, undergraduates and doctoral students takes an active part in the annual Russian agro-industrial exhibition "Golden Autumn" in Moscow, Russia. For the meat products presented at the exhibition using innovative technologies, he was awarded 21 gold medals and 2 silver medals;

- from 2009-2017 Uzakov Ya.M. together with students, undergraduates and doctoral students takes an active part in the annual international forum "Meat Industry", held in Moscow, Russia. For the meat products presented at the exhibition using innovative technologies, he was awarded 20 gold medals and 3 silver medals;

- 2012-2019 - Uzakov Ya.M. together with students, undergraduates, doctoral students took part in the international exhibition "Agroprodmas" and was awarded 9 gold medals, 3 silver medals and 6 honorary diplomas;

- professor Uzakov Ya.M. - was the project manager (grant): "Study of functional and biocorrective characteristics of protein plant-animal complexes and development on their basis of the technology of national meat products of a new generation using local raw materials" (2015-2017);

- in 2016 and 2017, he made a report on the state of livestock and meat processing industry of the Republic of Kazakhstan for 2015, 2016, 2018 at the above forum;

- Uzakov Ya.M. seven-time winner of the "Meat Oscar" (2014, 2015, 2016, 2017, 2018, 2019 and 2021) of the International Food Quality Competition "Quality Art 2021" Moscow;

- for the successes achieved in the field of science of the Republic of Kazakhstan, Ya.M. Uzakov was awarded the well-deserved sign "Merits in the development of science of the Republic of Kazakhstan".

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

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