



**Mashan Togzhan Turgalikyzy**  
Professor

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**Профессиональный опыт:**

2020 – present - professor of chemistry department, Faculty of Natural sciences «L.N. Gumilyov Eurasian National University» non-profit joint stock company.

2008 - 2020 — assistant professor of chemistry department, Faculty of Natural sciences L.N. Gumilyov Eurasian National University.

2002 - 2008 — Senior scientific researcher of chemical physics department of al-Farabi KazNU, from 2008 – Ph.D studies.

2001 – 2003 — Scientific secretary of Institute of burning problems.

1997 – 2001 — Senior teacher of chemical faculty of al-Farabi KazNU.

1992 – 1995 – Ph.D at al-Farabi KazNU

1990 - 1997 — engineer of LKP FXMI at al-Farabi KazNU

**Degree, science school:**

Candidate of chemical sciences (PhD)

1997 - Candidate of chemical sciences, 01.04.17 — chemical physics, including physics of burning and explosion. Institute of Combustion Problems, Almaty.

1990 – Chemical Faculty of the Al-Farabi Kazakh National University.

Assistant professor (2004).

**Research interests:**

Chemical physics

Chemistry and physics of burning and explosion

Nanochemistry and nanomaterials

**Research grants:**

1.1998-2000, Programs of fundamentals researches «Study of the formation of fullerenes during the combustion of rich propane-oxygen mixtures at a pressure of 20-80 torr»

2. 2000-2002, Programs of fundamentals researches «Experimental and theoretical investigations of cold carbon blacks flames of hydrocarbons»

3. 2002, INTAS grant. «Cryodetonational and pyrolytic recycling of used tires»

4. 2003-2006, Programs of fundamentals researches «Experimental and theoretical investigations of cold carbon blacks flames of hydrocarbons»

**Courses:**

Basics of crystal chemistry (B), Chemical physics (B), Fundamentals of chemistry of nanomaterials (B), Chemistry of solid state (B), Physical methods of research (B), Structure of material (B), Applied Aspects of Nanomaterial (M), Methodologies and methods of scientific research (M), Structure of nanosystems and photonics (M), Physico-chemical fundamentals of semiconductor (M).

**Publications (elected):**

1. Mansurov Z.A., Aldashev R.A., Mashan T.T., Vasyutinskaya A.G., Method for producing mesophase pitch. Copyright certificate No. 19851, 15.10.98.

2. Ongarbaev E.K., Mashan T.T., Mansurov Z.A. The Paramagnetism of Soot Particles in Propane - Oxygen Flames. J. Combustion and Flame, 118 1999, p.p.741-743.

3. Vasyutinskaya A.G., Mashan T.T. Possibility of obtaining mesophase pitch from extracts of low-temperature soot. KazSU Bulletin. Chemical series. No. 3. Almaty, 2000, p. 112-118.

4. Aldashev R.A., Vasyutinskaya A.G., Tutkabaeva T.T., Amerik Y.B., Mansurov Z.A. Thermopolycondensation of low-temperature carbon black extraction resin. Journal of Petrochemistry, Moscow, ISSN: 0028-2421 1995 vol. 35, no. 1, pp. 62-66.

5. Mansurov Z.A., Popov P.V., Tuleutaev B.K., Mashan T.T. The phenomenon of low-temperature cold-flame soot formation. Opening. Diploma No. 205, issued by the International Academy of Authors of Scientific Discoveries and Inventions.

6. Prikhodko N.G., Lesbaev B.T., Mashan T.T., Taitalieva R., Mansurov Z.A. Soot formation during combustion of a benzene-oxygen mixture in an electric field at a pressure of 40 Torr. J. "Combustion and Plasma Chemistry", Vol.2 No. 1, 2004. p.59-73.

7. Mansurov Z. A., Prikhodko N. G., Mashan T. T., Lesbaev B. T.. The study of influence of electric field on soot formation at low pressure. Ximicheskaya fizika 2006, t. 25, № 10, s. 18–22

8. Mansurov Z. A., Chenchik D., Tuleutaev B.K., Mashan T.T. Soot formation in diffusion flames of acetylene-alkane International Symposium on Combustion Abstracts of Works-in-Progress Posters, 2002

9. Lesbayev B. T., Nazhipkyzy M., Prikhodko N. G., Solovyova M. G., Smagulova G. T., Turesheva G. O., Auyelkhanqyzy M., Mashan T. T., Mansurov Z. A.. Hydrophobic Sand on the Basis of Superhydrophobic Soot Synthesized in the Flame. Journal of Materials Science and Chemical Engineering 2014, 2, 63-65 ISSN Print: 2327-6045

10. Mashan T.T., Shengene M.S. Munai kaldyktarynda n-parafindy komirsutegilerdin taraluyn anyktau. BULLETIN of the L.N. Gumilyov Eurasian National University. Chemistry. Geography. Ecology Series, №2 (93) 2013. p. 321-318. ISSN 1028-9364

11. Igimbaeva D.A., Nazhipkyzy M., Aliev E.T., Smagulova G., Mashan T.T. Modified iron-containing acrylonitrile butadiene styrene fibers obtained by pulsed electrospinning. Bulletin of the Eurasian National University. L.N.

Gumilyov. Series of natural and technical sciences (rus)., 2014 No. 4 (101), part 2, ISSN 1028-9364. P. 338-363

12. Mkilima T., Meiramkulova K., Nurbala U., Zandybay A., Khusainov M., Nurmukhanbetova N., Tastanova L., Mashan T., Meirbekov A. Investigating the influence of column depth on the treatment of textile wastewater using natural zeolite. *Molecules*. – UK, 2021, T. 26, 22. –P. 1-14.

**Tutorials and methodological developments:**

1. Mashan T.T., Mansurov Z.A. Tyzbekty reacsciyalar kineticasy, oku kuraly, 2002. 150 p.
2. Mashan T.T., Musienko G.N. Zhalyndy photometry. Methodical development for lab works by curs «Physical methods of research in chemistry». 2002, 25 p.
3. Tutkabaeva-Mashan T.T. Low-temperature soot formation under propane burning with benzene additives. Monography (rus). Edition «Kazak university», 2003 r, ISBN 9965-12-512-0, 68 p.
4. Mashan T.T. Kristaldar ximiyasynyn negizderi, oru kuraly, L.N.Gumilev at. EUU, ISBN 978-9965-31-987-7, 2018, 208 b.
5. Mashan T.T. Kristaldar ximiyasynyn negizderi, oku kuraly, (RUMS), Almaty: Epigraf, ISBN 978-9965-31-987-7, 2021. -224 b.