

CURRICULUM VITAE

Lyapunov Mykola

Doctor of Sciences (Pharm.), professor

PERSONAL INFORMATION

Born: 19 вересня 1950 року
E-mail: lyapunov.na@gmail.com
Phone numbers: +38 (057) 341-01-09

SCIENTIFIC WORK EXPERIENCE

Current position:

01.2024 – until now Leading Researcher of the Laboratory of Technology and Analysis of Medicines, Institute of Functional Materials Chemistry, State Scientific Institution «Institute for Single Crystals» of the National Academy of Sciences of Ukraine (SSI «Institute for Single Crystal» NAS of Ukraine), Kharkiv

Professional career:

1972 – 1975 Senior Laboratory Assistant at the Medical Aerosols Laboratory of Kharkiv Research Institute of Chemical and Pharmaceutical Sciences, Ukraine

1975 – 1979 Junior Researcher of Kharkiv Research Institute of Chemical and Pharmaceutical Sciences, Ukraine

1979 – 1989 Senior Researcher of Kharkiv Research Institute of Chemical and Pharmaceutical Sciences, Ukraine

1989 – 1992 Leading Researcher of All-Union Research Institute of Chemistry and Technology of Medicines, Kharkiv, Ukraine

1992 – 1993 Head of Division of colloid chemistry of dispersed dosage forms; Chief Research Scientist, State Scientific Centre of Medicinal Products, Kharkiv

1993 – 2001 Head of Laboratory of colloid chemistry of dispersed dosage forms; Chief Research Scientist, State Scientific Centre of Medicinal Products, Kharkiv

2001 – 2008 Head of Laboratory of liquid and semi-solid preparations, State Scientific Centre of Medicinal Products, Kharkiv

2008 – 2010 Head of Laboratory of Liquid And Semi-Solid Preparations and Aerosols, State Scientific Centre of Medicinal Products, Kharkiv

01.2010 – 10.2010 Head of Laboratory Liquid and Semi-Solid Preparations and Aerosols; Chief Research Scientist, State Scientific Centre of Medicinal Products, Kharkiv

01.2011 – 01.2014 Chief Research Scientist, State Scientific Centre of Medicinal Products, Kharkiv

02.2014 – 03.2015 Leading Researcher of the Department of Optically Active Organic Compounds, SSI «Institute for Single Crystal» NAS of Ukraine), Kharkiv

03.2019 – 12.2023 Leading Researcher of the Department of Organic and Bioorganic Chemistry, SSI «Institute for Single Crystal» NAS of Ukraine), Kharkiv

EDUCATION, ACADEMIC STATUS

Student at Kharkiv Pharmaceutical Institute from 08.1967 to 02.1972.
(Diploma with honor Ч № 592565)

Candidate of Sciences (PhD, Pharm) – drug technology and pharmaceutical organisation
(Diploma ФІІ № 000187; 31.10.1979)

CURRICULUM VITAE

Lyapunov Mykola

Doctor of Sciences (Pharm.), professor

Senior Researcher – drug technology and pharmaceutical organisation
(Certificate CH № 031773; 04.05.1983)

Doctor of Sciences – drug technology and pharmaceutical organisation
(Diploma ФЦ № 000143; 20.08.1990)

Professor – drug technology and pharmaceutical organisation
(Certificate ІР № 000969; 29.04.1993)

TRAINING

Certificate of the seminar organised by the Ukrainian Association of Quality in Austria and Switzerland (24 May – 2 June 1998).

Certificate of competence in theoretical training on GMP/GDP and training in audit methods and organisation of the educational process, obtained within the framework of the TACIS process «State Pharmaceutical Inspection» (October 2001 - May 2002).

SCIENTIFIC PUBLICATIONS AND OTHER DOCUMENTS

<https://orcid.org/0000-0002-5036-8255>

The total number of publications is 527, including 170 articles in national databases and 34 articles in international databases, 3 monographs, 9 books, 55 author's certificates and patents for inventions, 30 current regulatory documents (guidelines) of the Ministry of Health of Ukraine.

SELECTED PUBLICATIONS

1. **Ляпунов М.О.**, Безугла О.П., Иванов Л.В., Жданов Р.І., Цимбал Л.В. Дослідження агрегатів поверхнево-активних речовин (ПАР) методом спінових зондів // *Фармац. журн.*, 1992, № 5, с. 40–45. [in Ukrainian]
2. **Ляпунов М.О.**, Безугла О.П., Куліковський В.Ф. та ін. Антибактеріальний засіб для місцевого застосування // Патент 13954 А. Україна, А61К9/08, 9/12. – № 96062332; заявл. 13.06.96; опубл. 25.04.97 // Бюл. № 2. – С. 1-10. [in Ukrainian]
3. Надлежащая производственная практика лекарственных средств / Под ред. **Н.А. Ляпунова**, В.А. Загория, В.П. Георгиевского, Е.П. Безуглой. – К.: Изд-во «МОРИОН», 1999, 896 с. [in Russian]
4. Безуглая Е.П., **Ляпунов Н.А.**, Бовтенко В.А. Методологический подход к фармацевтической разработке лекарственных препаратов и его стандартизация // *Фармаком*, 2008, № 4, с. 75–82. [in Russian]
5. **Ляпунов М.О.**, Зупанець І.А., Столпер Ю.М., Шебеко С.К. Фармацевтична композиція, яка містить налбуфіну гідрохлорид, її застосування для лікування больового синдрому середньої і високої інтенсивності та спосіб одержання фармацевтичної композиції (варіанти) // Патент на винахід № 108307 Україна, МПК⁵¹ А61К 9/02, А61К 31/485, А61Р 29/00. – № а 2013 13546; заявл. 21.11.2013; опубл. 10.04.2015. Бюл. № 7. [in Ukrainian]
6. **Ляпунов Н.А.**, Зинченко И.А., Безуглая Е.П. Оценка однородности распределения лекарственных и вспомогательных веществ в мягких лекарственных средствах // *Фармаком*, 2015, № 2, с. 33-40. [in Russian]
7. Настанова СТ-Н МОЗУ 42-4.9:2020. Лікарські засоби. Належна виробнича практика / **Ляпунов М.**, Безугла О., Тахтаулова Н., Підпружников Ю., Загорій В. // Стандартизація фармацевтичної продукції, – Т. 3. – К.: МОЗ України, вид-во «МОРИОН», 2021. – С. 37-332. [in Ukrainian]
8. Bezuglaya E., Zinchenko I, **Lyapunov N**, Vlasenko H., Musatov V. Substantiation of an approach to determination of ketoprofen and macrogol 400 esters // *ScienceRise: Pharmaceutical Science*, 2021, 3 (31), 51-63.

CURRICULUM VITAE

Lyapunov Mykola

Doctor of Sciences (Pharm.), professor

9. Bezuglaya E., **Lyapunov N.**, Bovtenko V., Zinchenko I., Stolper Y. Study of pressurized metered dose inhalers for the purpose of standardization of quality attributes characterizing uniformity of dosing // *ScienceRise: Pharmaceutical Science*, 2021, 4 (32), 11-23.
10. Bezuglaya E., **Lyapunov N.**, Chebanov V., Liapunov O. Study of the formation of micelles and their structure by the spin probe method // *ScienceRise: Pharmaceutical Science*, 2022, 4 (38), 4-18.
11. Bezugla O.P., **Lyapunov M.O.**, Zinchenko I.O., Lisokobilka O.A., Liapunova A.M. Modeling of processes of solvent diffusion from ointment bases using *in vitro* experiments // *Functional materials*, **29**, 4, 2022, 553-558.
12. Bezugla O., Liapunova A., Zinchenko I., Liapunov O., **Lyapunov N.**, Stolper Y. Study of factors affecting the *in vitro* release of ketoprofen from carbomers-based gels // *ScienceRise: Pharmaceutical Science*, 2022, № 6(40), 4-20.
13. Bezugla O., Krasnopyorova A., Liapunova A., Zinchenko I., **Lyapunov N.**, Sytnik O. Influence of physicochemical properties and structure of mixed solvents propylene glycol – macrogol 400 on their *in vitro* release // *ScienceRise: Pharmaceutical Science*, 2023, № 1(44), 4-13.
14. Bezugla O., Liapunova A., Zinchenko I., **Lyapunov N.** Study of factors affecting the *in vitro* release of dexpantenol from solutions and topical semi-solid preparations // *ScienceRise: Pharmaceutical Science*, 2023, № 3(43), 4-15.
15. **Lyapunov N.**, Bezugla O., Liapunov O., Lysokobylka O. Study of aqueous solutions of poloxamers by rotational viscometry and spin probe method // *ScienceRise: Pharmaceutical Science*, 2023, № 4(44), 4-18.
16. Bezugla O.P., Krasnopyorova A. P., Liapunova A.M., Yukhno G.D., **Lyapunov M.O.** Study of viscosity and quasi-thermodynamic activation parameters for viscous flow in the system water – (propylene glycol – macrogol 400) // *Functional materials*, 30(1), 2023, 60–64.
17. Bezugla O., Stolper Y., **Lyapunov N.**, Zinchenko I., Liapunov O. Study of factors affecting some properties of hydrophilic suppository bases // *ScienceRise: Pharmaceutical Science*, 2023, № 5 (45), 4-15.
18. Kutasevych Y., **Lyapunov M.**, Ziuban I., Mashtakova I. Characteristics of morphological changes in the skin of patients with allergodermatoses during long-term external application of fluorine steroids // *Mold. J. Health Sci.*, 2023, 10(2), 25-31.
19. Кутасевич Я.Ф., Джораєва С.К., **Ляпунов М.О.**, Хорошун Е.М., Гончаренко В.В., Негодуйко В.В., Кондакова Г.К. Дослідження мікробіологічної активності топічних антибактеріальних засобів для лікування бойових ушкоджень // *Український журнал дерматології, венерології, косметології*, № 2(93), 2024, 4-9.
20. Liapunov O., Bezugla O., **Lyapunov N.**, Lysokobylka O. Study of the effect of propylene glycol on the properties of poloxamer 338 solutions // *ScienceRise: Pharmaceutical Science*, 2024, № 5 (51), 15-27.

CONGRESSES, CONFERENCES AND WORKSHOPS

The V, VI, VII and VIII National Congresses of Pharmacists of Ukraine were attended in person and a series of presentations were made. In addition, a number of presentations were made at numerous conferences, congresses and workshops in Ukraine and abroad. The subject matter of these presentations encompassed a wide range of topics, including the pharmaceutical development of medicines in various dosage forms, packaging materials for medicines, the results of studies of various dispersed systems, surfactants, problems of wound treatment and wound infection, issues of good manufacturing practice (GMP), equipment for pharmaceutical production, quality assurance in pharmacy, etc.

CURRICULUM VITAE

Lyapunov Mykola

Doctor of Sciences (Pharm.), professor

SCIENTIFIC PROJECTS

2023 – 2024 «Development of components of antimicrobial drugs to increase the effectiveness of their action and prevent resistance of microorganisms» (2022.01/0087; Science for the recovery of Ukraine in the War and Post-War Periods; National Research Foundation of Ukraine) (*Executor*)

AWARDS

State Prize of Ukraine in Science and Technology (2019 p.)

Diploma of M.O. Valyashko Scholarship in Science (Pharmacy) of the Kharkiv Regional State Administration

Numerous certificates of honour of the Ministry of Health of Ukraine, the Pharmaceutical Association of Ukraine, the Association of Employers of the Medical and Microbiological Industry of Ukraine, and the Kharkiv Regional State Administration

Silver and bronze medals at Exhibition centre of economic achievements (VDNH) of the USSR.

Top Award of Scientific Society of Pharmacists of the USSR (Baku, 1984)

Honorary Title «Inventor of USSR»

EDUCATION ACTIVITIES

Adviser of 3 Doctor of Sciences Theses

Supervisor of 23 Candidates of Sciences (PhD) Theses

PROFESSIONAL AND EXPERT ACTIVITY

Under the leadership of M.O. Lyapunov, more than 100 medicines (innovative and generic) have been developed in the form of ointments, creams, gels, suppositories, pressurized metered dose inhalers, sprays, pressurized foams, solutions and emulsions for topical use, syrups, which have been registered and commercialised. Some medicines were developed under the plan of the Union Problem Committee «Wounds and Wound Infections» and are mass-produced by Ukrainian companies.

From 1990 to 1995 – Chairman of the Technological Commission of the State Scientific Centre of Medicinal Products, an authority responsible for expertise of technological and design documentation in the USSR and later in Ukraine.

From 1992 to 1999 – Member of the Presidium of the Pharmacological and Pharmacopoeia Committees of the Ministry of Health of Ukraine; Chairman of the Finished Medicinal Products Division of the Scientific and Technical Council of the State Committee of Medical and Biological Industry; Member of the devisor team for the State Programme for the Development and Introduction of Medicinal Products in accordance with the Resolution of the Cabinet of Ministers of Ukraine No. 573 and the Curator of Division 6 «Finished Medicinal Products».

By the decision of the Interstate Commission on Standardisation, Registration and Quality Control of Medicines for Cooperation in the Field of Healthcare of the CIS, Lyapunov M.O. led the development of guidelines for the pharmaceutical industries of Community of Independent States on good manufacturing practice of medicines and other aspects of quality assurance. The book «Good Manufacturing Practice of Medicinal Products» (Kyiv: MORION, 1999, 896 p.), edited by M.O. Lyapunov, V.A. Zagoriy, V.P. Georgievsky and O.P. Bezugla, was recommended as tutorial by the Council for Cooperation in Health Care of the CIS. M.O. M.O. Lyapunov's contributions in the domain of standardisation and certification have been instrumental in the restructuring of Ukraine's pharmaceutical sector and the harmonisation of the regulatory framework of the Ministry of Health of Ukraine with the regulatory documents of the European Union, PIC/S and ICH.

CURRICULUM VITAE

Lyapunov Mykola

Doctor of Sciences (Pharm.), professor

Lyapunov M.O. was a member of the Dissertation Council D 64.817.01 at the State Scientific Centre of Medicinal Products for the defence of candidate and doctoral theses in the speciality 15.00.03 – standardisation and organisation of drug production, as well as a member of the Dissertation Council D.64.605.03 at the National University of Pharmacy for the defence of candidate and doctoral thesis in the speciality 14.03.05 – pharmacology. Lyapunov M.O. was a member of the Expert Council on Pharmaceutical Sciences of the Higher Attestation Commission of Ukraine.