



От 15.01.2026 № 724

На № \_\_\_\_\_ от \_\_\_\_\_

### Ethical approval

1.	Full name of PhD student	Arshyn Zhengis
2.	Specialty of PhD Program	Educational program "8D05301-Chemistry"
3.	Time period of study at PhD Program	2022-2025
4.	Theme of the thesis, date of approval	Preparation of a Novel Multifunctional Zwitterionic Polymeric Membrane (26.03.2025)
5.	Information about scientific supervisor (-s) (Name, title, degree, work position and citizenship)	Munziya Abutalip, PhD., associate professor, National Laboratory Astana, Nazarbayev University. Citizenship: Kazakhstani Nurxat Nuraje, Professor, Head of RE Lab, Director of PhD Program in Chemical Engineering, Department of Chemical and Materials Engineering, School of Engineering & Digital Science, Nazarbayev University. Citizenship: United States of America Ramazan Asmatulu, PhD., professor, Wichita State University, USA Citizenship: United States of America
6.	Objects of study	Hybrid composite materials based on zwitterionic polymers, zwitterionic and functionalized monomers (and their corresponding polymers), and zeolitic imidazolate framework-8 (ZIF-8), incorporated into apolyacrylonitrile-polyvinylpyrrolidone (PAN-PVP) matrix.
7.	Planning, sampling and conducting of study	Violations are not revealed
8.	Dissemination of results or practical implementation	Violations are not revealed
9.	Protection of rights, safety and welfare of research objects	According to the principles of bioethics
10.	Code of approval	IRB – A1874
11.	Date of study approval	08.01.2026

Chair of LEC



G. Ussatayeva

Secretary of LEC

S. Madiyev