



От 12.11.2025 № 679

На № \_\_\_\_\_ от \_\_\_\_\_

### Ethical approval

1.	Full name of PhD student	Tugelbay Saparbek
2.	Specialty of PhD Program	8D05301 – “Chemistry”
3.	Time period of study at PhD Program	2019-2022
4.	Theme of the thesis, date of approval	« Mechanochemical synthesis of silver phosphate nanocomposites and their photocatalytic and antibacterial properties », 17.10.2025 y. 5369-6/a
5.	Information about scientific supervisor (-s) (Name, title, degree, work position and citizenship)	Local supervisor: Tatykayev Batukhan Burkhanovich, PhD, Leading Researcher at the National Laboratory Astana (NLA), Astana, Kazakhstan Foreign supervisor: Mucsi Gábor, Professor, Dean of the Faculty of Earth, Environmental Sciences and Engineering, University of Miskolc, Miskolc, Hungary
6.	Objects of study	Silver phosphate ( $Ag_3PO_4$ ) and $Ag_3PO_4/AgCl$ hybrid nanocomposites synthesized by the mechanochemical method.
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	Research object is not a living nature object
10.	Code of approval	IRB- A1842
11.	Date of study approval	11.11.2025

Chair of LEC



G. Ussatayeva

Secretary of LEC

S. Madiyev