



№ 272
Алматы қаласы

№ _____
город Алматы

Ethical approval

1.	Full name of PhD student	Bekissanova Zhanar Bolatovna
2.	Specialty of PhD Program	6D072000-Chemical technology of inorganic substances
3.	Time period of study at PhD Program	2018-2021
4.	Theme of the thesis, date of approval	«Synthesis, characterization and antibacterial activity study of composites based on natural adsorbents and silver nanoparticles», 18.03.2021
5.	Information about scientific supervisor (-s) (Name, title, degree, work position and citizenship)	Ospanova Aliya Kapanovna Doctor of the chemical science, Professor, Department of Physical Chemistry, Catalysis and Petrochemistry Al-Farabi Kazakh National University Myroslav Sprynskyy, PhD, Doctor of Science, Professor, Department of Environmental Chemistry and Bioanalytics of the Faculty of Chemistry of the Nicolaus Copernicus University (UMK) in Torun, Poland
6.	Objects of study	Micro-nano structured composites with antibacterial properties: AgNPs/AgCINPs/diatomite, AgNPs/kaolinite, (AgCl,Ag)NPs/diatom biosilica
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	The object of study is not related to the presence of wildlife and habitat
10.	Code of approval	IRB- A666
11.	Date of study approval	10.10.2023

Chair of LEC

[Signature]

G. A. Issatayeva

Secretary of LEC

[Signature]

M. Shaikharova

