



№ 709
Алматы қаласы

№ _____
город Алматы

Ethical approval

1.	Full name of PhD student	Orynbasar Magzhan Nurlanuly
2.	Specialty of PhD Program	8D07106 - Thermal Power Engineering
3.	Time period of study at PhD Program	2020 - 2023
4.	Theme of the thesis, date of approval	Energy and ecological efficiency of plasma-coal burners: numerical simulation and experiment, 02.11.2020
5.	Information about scientific supervisor (-s) (Name, title, degree, work position and citizenship)	Messerle Vladimir Efremovich, Professor, Doctor of Technical Sciences, al-Farabi Kazakh National University, Almaty, Kazakhstan Slavinskaya Nadezhda Aleksandrovna, Senior Researcher, PhD, Technical University of Munich, Munich, Germany
6.	Objects of study	Plasma-coal burners
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	Not applicable
10.	Code of approval	IRB- A1644
11.	Date of study approval	04.11.2025
12.	Date of issuance	18.12.2025

Chair of LEC



[Signature]

G. Ussatayeva

Secretary of LEC

[Signature]

S. Madiyev