List of research projects of KazNU al-Farabi for 2023

№ п/п	Name of the project, IRN, full name of the head	Deadlines	Funding organization	Type of financing, priority areas
1	2	3	4	5
Faculty of Biology and Biotechnology, Research Institute of Problems of Biology and Biotechnology				
1.	IRN AP09259735 "Development and evaluation of chimeric bacteriophage endolysins to combat multidrug-resistant gram-negative sturgeon pathogens" Head: Bisenbaev A.K.	2021–2023 (36 months)	MES RK,	Grant funding, Life Science and Health
2.	IRN AP09260785 "Development of biohydrogen production technology based on promising strains of cyanobacteria for biofuel production" Head: Bolatkhan K.	2021–2023 (36 months)	MES RK	Grant funding, Geology
3.	IRN AP09259457 "Introduction of perennial wheat into crop farming to preserve biodiversity and soil fertility in the south and southeast of Kazakhstan" Head: Kurmanbayeva M.S.	2021–2023 (36 months)	MES RK	Grant funding, Life Science and Health
4.	IRN AP09261262 "Biotechnology for creating compositions of microorganisms to stimulate growth and increase the adaptive potential of agricultural plants" Head: Omirbekova A.A.	2021–2023 (36 months)	MES RK	Grant funding, Life Science and Health
5.	IRN AP09259491 "Biotechnologies for the use of a polysaccharide matrix with probiotic biofilms for the creation of combined dairy products" Head: Savitskaya I.S.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
6.	IRN AP09259754 "Molecular characterization of the TORC1 signaling pathway of Triticum aestivum and their significance in the control of wheat grain germination" Head: Smekenov I.T.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
7.	IRN AP09258679 "Molecular and biochemical characterization of the created mutant germplasm of spring wheat, resistance to leaf and yellow rust, morphometry and grain quality" Head: Kenzhebaeva S.S.	2021–2023 (36 months)	MES RK	Grant funding, Life Science and Health
8.	IRN AP13067924 "Comprehensive studies of some promising medicinal plant species from the Asteraceae family for industrial development." Head: Ydyrys alibek	2022–2024	MES RK	Grant funding, Scientific research in the field of natural sciences

9.	IRN AP13067762 "Investigation of the initiated mismatch-specific thymine-DNA-glycosylase aberrant pathway of excisional repair of complex DNA damage in vitro and in vivo" Head: Taipakova S.M.	2022–2024	MES RK	Grant funding, Scientific research in the field of natural sciences
10.	IRN AR13068051 "Development of technology for obtaining biological products based on strains of microalgae and cyanobacteria to increase the yield of agricultural plants" Head: Sarsekeeva F.K.	2022–2024	MES RK	Grant funding, Sustainable development of the agro-industrial complex and safety of agricultural products
11.	IRN AR14869740 "Biotesting of water and bottom sediments of the Ile River and the Kapshagay reservoir, forecasting the environmental risk for the biodiversity of the studied ecosystems" Head: Shalakhmetova T.M.	2022–2024 (30 months)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
12.	IRN AP14871683 "Biotechnology for the processing of keratin by-products using immobilized thermophilic bacteria" Head: Kistaubayeva A.S.	2022–2024 (30 months)	MES RK	Grant funding, Geology
13.	IRN AP14871512 "Microbial multifunctional exopolysaccharides: biochemical characteristics, production methods and prospects for application in the oil industry" Head: Mukasheva T.D.	2022–2024 (30 months)	MES RK	Grant funding, Geology
14.	IRN AP14870171 "Creation of new domestic biological products based on biologically active substances of phototrophic microorganisms" Project leader: Zayadan B.K.	2022–2024 (30 months)	MES RK	Grant funding, Geology
15.	IRN AP14869934 "Development of a new technology for composite compost using cattle manure and low-grade coal for sustainable soil fertility" Head: Zhubanova A.A.	2022–2024 (30 months)	MES RK	Grant funding, Geology
16.	IRN AP14870201 "Search and study of new secondary metabolites of cyanobacteria promising for use in agricultural biotechnology" Project leader: Akmukhanova N.R.	2022–2024 (30 months)	MES RK	Grant funding, Life Science and Health
17.	IRN AP14871628 "Isolation, genomic analysis and study of the nematophagous activity of predatory fungi of South Kazakhstan in order to identify and select promising strains for the creation of bionematocides." Head: Boguspaev K.K.	2022–2024 (30 months)	MES RK	Grant funding, Life Science and Health
18.	IRN AP14870256 "Development of new nanobodies for effective neutralization and use as a specific and sensitive reagent for the rapid detection of rabies virus."	2022–2024 (30 months)		Grant funding, Life Science and Health

	Head: Bisenbaev A.K.			
19.	IRN AP13268305 "Development of an ameliorant based on low-grade coal and coal solubilizing bacteria to improve the efficiency of saline soil reclamation" Head: Tagaev K.T.	2022–2024 Zhas galym	MES RK	Grant funding, Sustainable development of the agro-industrial complex and safety of agricultural products
20.	IRN AP14972916 "Creation and research of an active consortium of microalgae and PGP-bacteria as an alternative to chemical fertilizers." Head: Bauenova M.O.	2022–2024 Zhas galym	MES RK	Grant funding, Sustainable development of the agro-industrial complex and safety of agricultural products
21.	IRN AP15473108 "Study of the state of populations and intraspecific phenotypic variability of rare species of medicinal plants from the genus Adonis L. in Northern Kazakhstan." Head: Zhumagul M.Zh.	2022–2024 Zhas galym	MSHE RK	Grant funding, Life Science and Health
22.	IRN AP15473383 "Study the possibility of synergy with the combined use of mycorrhizal and predatory fungi in ensuring the resistance of tomatoes under the action of phytoparasitic nematodes" Head: Kanalbek G.K.	2022–2024 Zhas galym	MSHE RK	Grant funding, Life Science and Health
23.	IRN AP15473136 "Multi-vector study of the rare relict species Rheum compactum L. - a scientific approach to the conservation of species of the Red Book of Kazakhstan" Head: Sumbembaev A.A.	2022–2024 Zhas galym	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
24.	IRN AP14973042 "Development of technology for creating biochar from the biomass of bioenergy plants" Head: Mamirova A.A.	2022–2024 Zhas galym	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
25.	IRN AP19577160 "Study of microorganisms producing biosurfactants and their applicability for enhanced oil recovery" Head: Ernazarova A.K.	2023–2025	MSHE RK	Grant funding, Life Science and Health
26.	IRN AR19676645 "Biotechnology for obtaining biologically active peptides from whey proteins of mare's milk" Head: Narmuratova M.Kh.	2023–2025 35 months	MSHE RK	Grant funding, Geology

27.	IRN AR19677705 "Creation of environmentally and economically viable biofossil fuel based on efficient co-combustion of coal residues and microalgae biomass" Head: Akimbekov N.Sh.	2023–2025 35 months	MSHE RK	Grant funding, Energy and mechanical engineering
28.	IRN AR19679444 "Development of a long-acting biological product based on a polymer matrix with effective microorganisms to stimulate the growth of agricultural crops" Head: Ignatova L.V.	2023–2025 35 months	MSHE RK	Grant funding, Life Science and Health
29.	IRN AP19680470 "Participation of phosphoinositol diphosphate (PIP2) and potassium channels Kv7 in the regulation of hyperexcitation in a model of epileptic activity" Head: Abdrasulova Zh.T.	2023–2025 35 months	MSHE RK	Grant funding, Life Science and Health
30.	IRN AR19880563 "Development of a biological product to increase the yield of grapes" Head: Egemova S.S.	2023–2025 35 months	MSHE RK	Grant funding, Life Science and Health
31.	IRN AR19674623 "Innovative multispatial integrated approach to biomonitoring of saline ecosystems of Lake Alakol" Head: Inelova Z.A.	2023–2025 35 months	MSHE RK	Grant funding, Life Science and Health
32.	IRN AR19680131 "Optimization of the method for obtaining an active complex and the development of new drugs from plants of the haze family and legumes" Head: Eskalieva B.K.	2023–2025 35 months	MSHE RK	Grant funding, Life Science and Health
33.	IRN AR19680351 ""Study of the biological consequences of the impact of technogenic pollutants on biota, public health and the natural environment" Zhetekshisi: Bigaliev A.B.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
34.	IRN AR19678607 "Hyper cozu kezindegi mi neurondarynyn yrgaktaryn baskarudyn calcium tauelddi mechanismderi" Zhetekshisi: Toleukhanov Sultan	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
Research Institute of Ecology Problems, Faculty of Geography and Nature Management				
1.	IRN AP09057876 "Study of Kazakh low-grade coals for their potential for biogenic conversion into methane." Head: Akimbekov N.Sh.	2021–2023	MES RK	Grant funding, ЭиМ
2.	IRN AP09258285 "Production of bioethanol by continuous fermentation of whey using immobilized yeast cells" Head: Zhubanova A.A.	2021–2023 (36 months)	MES RK	Grant funding, Energy and mechanical engineering

3.	IRN AP09260077 "Study of the biotechnological potential of the domestic collection of microalgae for the production of liquid fuel - biobutanol" Head: Sadvakasova A.K.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
4.	IRN APO9259811 "Development of a quantitative methodology for identifying population groups ready to support the introduction of drug insurance and assessing the financial sustainability of this type of insurance in Kazakhstan" Head: Spankulova L.S.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences
5.	IRN AR1471372 "Geospatial approach to assessing the risks of climate disasters (drought and erosion) and their impact on agriculture in the Western region of Kazakhstan" Head: Tokbergenova A.A.	2022–2024 (30 months)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
6.	IRN AP14869863 "Development of a methodology for assessing the impact of income inequality on the level of use of medical services" Head: Spankulova L.S.	2022–2024 (30 months)	MES RK	Grant funding, Research in the social and human sciences
7.	IRN AP154731166 "Assessment of the impact of climate change on the water resources of the Ile-Balkhash basin" Head: Bisenbayeva S.B.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
8.	IRN AP14971828 "Agroecological zoning and assessment of the current state of pastures in Central Kazakhstan using GIS and remote sensing data" Head: Shokparova D.K.	2022–2024 Zhas galym	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
9.	IRN BR18574227 "Scientific and applied substantiation of the management of the teaching staff to prevent desertification processes in the southern regions of Kazakhstan, to ensure the sustainable development of rural areas" Head: Bisenbayeva S.B.	2023–2025	MSHE RK	Targeted financing, Grant funding, Rrational use of water resources, flora and fauna, ecology
11.	IRN AR19579264 "Territorial analysis of the Semipalatinsk test site for the creation of an adaptive-landscape system of agriculture" Head: Asylbekova A.A.	2023–2025	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
12.	IRN AR19680487 "Monitoring and management of rangelands of the sandy massif Moyinkum in the context of climate change using remote sensing data" Head: Bisenbayeva S.B.	2023–2025 35 months	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology

13.	IRN AP19677682 "Comprehensive geographical assessment of sustainable development of large cities of the Republic of Kazakhstan" Head: Nyusupova G.N.	2023–2025 35 months	MSHE RK	Grant funding, Research in the social and human sciences
Research Institute of Mathematics and Mechanics				
1.	IRN AP09057950 "Inverse problems for linear and nonlinear equations of non-Newtonian viscoelastic incompressible Kelvin-Voigt fluid". Leader: Khompysh H.	2021–2023	MES RK	Grant funding, Scientific research in the field of natural sciences
2.	IRN AP09058406 "Modeling of floods, breakthrough waves and mud and stone impurities in normal and abnormal dam breakthrough in a complex system of rivers and canals." Head: Isakhov A.A.	2021–2023	MES RK	Grant funding, Scientific research in the field of natural sciences
3.	IRN AP09058430 "Development of numerical methods for solving the Navier-Stokes equations combining fictitious domains and adjoint equations." Head: Temirbekov A.N.	2021–2023	MES RK	Grant funding, Scientific research in the field of natural sciences
4.	IRN AP09058457 "Development of methods for studying and solving boundary value problems for loaded hyperbolic equations and their numerical implementation." Head: Kabdrakhova S.S.	2021–2023	MES RK	Grant funding, Scientific research in the field of natural sciences
5.	IRN AP09259208 "Creation of a scalable fault-tolerant information system for enterprise digitalization using Big Data technologies". Head: Balakaeva G.T.	2021–2023 (36 months)	MES RK	Grant funding, Information, communication and space technologies
6.	IRN AR09261344 "Development of methods for automatic extraction of geospatial objects from heterogeneous sources for information support of geographic information systems" Head: Mansurova M.E.	2021–2023 (36 months)	MES RK	Grant funding, Information, communication and space technologies
7.	IRN AP09259370 "Development of a technological platform for virtual learning based on artificial intelligence approaches" Head: Kerimbaev N.N.	2021–2023 (36 months)	MES RK	Grant funding, Research in education and science
8.	IRN AR09260469 "Development of a control system for maintaining the configuration of a constellation of spacecraft, taking into account uncertainties" Head: Rakisheva Z.B.	2021–2023 (36 months)	MES RK	Grant funding, Information, communication and space technologies

9.	IRN AR09260767 "Development of an intelligent information and analytical system for assessing the health status of students in Kazakhstan" Head: Tyulepberdinova G.A.	2021–2023 (36 months)	MES RK	Grant funding, Information, communication and space technologies
10.	IRN AP09261135 "Development of non-linear mathematical models and software modules for solving problems of drilling wells in the mining industry" Head: Kudaibergenov A.K.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
11.	IRN AP09260317 "Development of an intelligent system for assessing the development of epidemics of COVID-19 and other infections in Kazakhstan" Head: Mutanov G.M.	2021–2023 (36 months)	MES RK	Grant funding, Information, communication and space technologies
12.	IRN AP13068289 "Application of machine learning methods for early diagnosis of pathologies of the cardiovascular system" Head: Omarov B.S.	2022–2024 (КМУ3)	MES RK	Grant funding, Information, communication and space technologies
13.	IRN AP14872287 "Investigation of the efficiency of cascade storage of solar thermal energy using materials with a phase change in continental climatic conditions" Head: Belyaev E.K.	2022–2024 (30 months)	MES RK	Grant funding, Energy and mechanical engineering
14.	IRN AP14872197 "Investigation of the wave climate of water bodies of Kazakhstan using satellite altimetry data" Head: Rakisheva Z.B.	2022–2024 (30 months)	MES RK	Grant funding, Information, communication and space technologies
15.	IRN AR14872115 "Development and research of new parallel manipulators of the tripod type with six degrees of freedom" Head: Baigunchekov Zh.Zh.	2022–2024 (30 months)	MES RK	Grant funding, Information, communication and space technologies
16.	IRN AR14869472 "Investigation of secular disturbances in multi-planetary systems with spherical bodies of variable mass" Head: Minglibaev M.D.	2022–2024 (30 months)	MES RK	Grant funding, Research in education and science
17.	IRN "Massalary anisotroptes ozgermeli үsh dene maselesin analyticalық esepteu tasilderin paydalanyp zertteu". Head: Imanova Zh.U.	2022–2024 Zhas galym	MES RK	Grant funding, Research in education and science

18.	IRN AR14972710 "Development of computational parallel algorithms for numerical simulation of the spread of impurities in order to predict the environmental situation in residential areas" Head: Omarova P.T.	2022–2024 Zhas galym	MSHE RK	Grant funding, Information, communication and space technologies
19.	IRN AR15473412 "Creation of a method for identifying nodes for the dissemination of criminal information in social networks" Head: Bayspai G.B.	2022–2024 Zhas galym	MSHE RK	Grant funding, Information, communication and space technologies
20.	IRN AR15473408 "Aleumettik zhelilerdegi extremist mazmundy anyktau modelderin zhane adisterin kүrastyru" Head: Bagitova K.B.	2022–2024 Zhas galym	MSHE RK	Grant funding, Homeland security and defense
21.	IRN AR19579325 "Development and research of modern numerical methods for solving inverse and ill-posed problems for the equation of acoustics" Head: Kasenov S.E.	2023-2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
22.	IRN AR19576868 "Development of models and methods for identifying youth extremism and ensuring the safety of youth in the modern information space" Head: Bolatbek M.A.	2023-2025 35 months	MSHE RK	Grant funding, Homeland security and defense
23.	IRN AR19175674 "Development of a system for detecting and alerting dangerous events based on the analysis of audio streams and machine learning" Head: Altaeva A.B.	2023–2025 Zhas galym	MSHE RK	Grant funding, Information, communication and space technologies
24.	IRN AR19174716 "Development of a decision support system based on Bayesian networks to improve the efficiency of detecting intrusions into computer systems" Head: Ydyryshbayeva M.K.	2023–2025 Zhas galym	MSHE RK	Grant funding, Information, communication and space technologies
25.	IRN AR19677384 "Development and study of the dynamics of a gas centrifuge on magnetic bearings with non-linear characteristics and a control system" Head: Kydyrbekuly A.B.	2023-2025 35 months	MSHE RK	Grant funding Energy and mechanical engineering
26.	IRN AR19676624 "Navier-Stokes-Voigt models describing the motion of homogeneous and inhomogeneous non-Newtonian fluids" Leader: Khompysh H.	2023-2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
27.	IRN AP19678998 "Neural computer vision of a smart traffic light of the megacities of the country" Head: Belgibaev B.A.	2023-2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies

28.	IRN AR19678157 "Development of a hardware-software complex for monitoring the state of the reservoir occupancy level" Head: Ziyatbekova G.Z.	2023-2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
29.	IRN AR19676342 "Multiclassification of the ideological directions of cyber extremism in the Kazakh language by artificial intelligence methods" Head: Musiralieva Sh.Zh.	2023-2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
30.	IRN AR19677835 "Research of models and development of an intelligent question-answer system based on semantic approaches for the state language in the field of legislation of the Republic of Kazakhstan" Head: Rakhimova D.R.	2023-2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
31.	IRN AP19679142 "Search for optimal solutions in Bayesian networks in models with linear functionals. Development of algorithms» Head: Shayakhmetova A.S.	2023-2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
32.	IRN AP19676457 "Modeling and feedback control in educational telematics" Head: Nurasyl Nurymyly Kerimbaev	2023-2025 35 months	MSHE RK	Grant funding Research in education and science
33.	IRN AP19679514 "Research of the conceptual apparatus of the "Blockchain" domain using intellectual analysis of texts and analysis of formal concepts: focus on teaching methodology" Head: Mansurova Madina Esimkhanovna	2023-2025 35 months	MSHE RK	Grant funding Research in education and science
34.	IRN AR19678207 "Research and development of software and methodological support for the course "Digital Literacy" in the elementary school of inclusive education using augmented reality" Head: Rakhimzhanova Lyazzat Boltabaevna	2023-2025 35 months	MSHE RK	Grant funding Research in education and science
Research Institute of Experimental and Theoretical Physics				
1.	IRN AP09057984 "Development and creation of S and X band antennas for CubeSat nanosatellites for Earth remote sensing". Head: Karibaev B.A.	2021–2023	MES RK	Grant funding, Information, communication and space technologies
2.	IRN AP09058525 "Development of 5G digital radio modules and microwave signal receiving stations based on SoC" Head: Ibraimov M.K.	2021–2023	MES RK	Grant funding, Information,

				communication and space technologies
3.	IRN AP09058014 "Physical features of the formation of large silicon nuclear radiation detectors". Head: Dzhapashov N.M.	2021–2023	MES RK	Grant funding, Geology
4.	IRN AP09058640 "Manifestations of physics beyond the Standard Model in processes involving the top quark and the Higgs boson". Head: Nurbakova G.S.	2021–2023	MES RK	Grant funding, Scientific research in the field of natural sciences
5.	IRN AP09058049 "Investigation of extensive air showers with delayed fronts". Head: Kalikulov O.A.	2021–2023	MES RK	Grant funding, Scientific research in the field of natural sciences
6.	IRN AP09058005 "Computer modeling of the properties of dusty space plasma". Head: Masheeva R.U.	2021–2023	MES RK	Grant funding, Information, communication and space technologies
7.	IRN AP09260349 "Dynamical properties of Coulomb systems in 2D and 3D geometry" Head: Arkhipov Yu.V.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
8.	IRN AP09261161 "3D modeling of turbulent heat and mass transfer processes in physical and chemically active media". Head: Askarova Aliya Sandybaevna	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
9.	IRN AP09259023 "Generalized chemical model of a heated dense substance" Head: Davletov A.E.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
10.	IRN AP09259554 "Development of criteria for assessing the impact on the main power lines and oil and gas pipelines of geomagnetically induced currents" Head: Mukasheva S.N.	2021–2023 (36 months)	MES RK	Grant funding Energy and mechanical engineering
11.	IRN AP09258757 "Investigation of the resonance mechanisms of cluster formation in the nucleon medium" Head: Penkov F.M.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
12.	IRN AR09259081 "Investigation of the properties of plasma and the interaction of the plasma column with intra-chamber materials in thermonuclear power reactors" Leader: Ramazanov T.SM.	2021–2023 (36 months)	MES RK	Grant funding Energy and mechanical engineering
13.	IRN AP09259876 "Physics of compact stellar objects"	2021–2023	MES RK	Grant funding,

	Head: Takibaev N.Zh.	(36 months)		Scientific research in the field of natural sciences
14.	IRN AP13067768 "Radio astronomical studies of hot nuclei in molecular clouds and study of star formation regions of massive stars". Head: Komesh Toktarkhan	2022–2024	MES RK	Grant funding, Scientific research in the field of natural sciences
15.	IRN AR14870834 "Implementation of environmentally friendly energy production technologies at Kazakhstani thermal power plants in order to reduce emissions of harmful substances into the atmosphere" Head: Bolegenova S.A.	2022–2024 (30 months)	MES RK	Grant funding Energy and mechanical engineering
16.	IRN AR14872061 "Classification of modulation types of the noise mixture of MIMO signals" Head: Zhanabaev Z. Zh.	2022–2024 (30 months)	MES RK	Grant funding, Information, communication and space technologies
17.	IRN AP14869876 "Axially symmetrical gravity configurations" Head: Beisen N.A.	2022–2024 (30 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
18.	IRN AP14869524 "Effects of non-linear vacuum electrodynamics and general relativity on magnetars Head: Abishev M.E.	2022–2024 (30 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
19.	IRN AP14869524 "Investigation of QCD effects in non-QCD theories" Leader: Dzhunushaliev V.	2022–2024 (30 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
20.	IRN AR15473758 "Study of the mechanism of sintering of bulk nanostructured thermoelectric materials in the process of their formation" Head: Yerzhep D.E.	2022–2024 Zhas galym	MSHE RK	Grant funding Energy and mechanical engineering
21.	IRN AP14971722 "Defect structure of functional crystalline materials: X-ray and neutron diffraction studies" Leader: Muhametuly B.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
22.	IRN AP15473118 "Comprehensive study of the physical characteristics of silicon nanostructures obtained in a solution containing hydrogen hexafluorosilicate" Head: Zhumatova Sh.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
23.	IRN AP15473243 "Focustalgan impulstik plasma agyndaryn material betin ondeu zhane ondir" Head: Moldabekov Zh.M.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology

24.	IRN AP15473470 "Technology for obtaining nanostructured materials at a vacuum arc installation" Leader: Mukhamedryskyzy M.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
25.	IRN AP14972391 "1r kabyksha corelarynyn exoticalyk kuilerin zertteu" Head: Valiolda D.S.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
26.	IRN AP14972943 "Numerical study of astrophysical effects of the nonlinear theory of vacuum electrodynamics" Head: Khasanov M.K.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
27.	IRN AP14971466 "Spatial structure of extensive air showers at cosmic ray energies above 1015 eV" Head: Shinbulatov S.K.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
28.	IRN AP14972694 "Influence of the interstellar medium and circumstellar shells on the evolution of stars" Head: Demesinova A.M.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
29.	IRN AP14972411 "Analysis of the structures of accretion disks of cataclysmic variables by information-entropy methods" Head: Subebekova G.R.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
30.	IRN AP14972742 "Investigation of the nature of the Ve phenomenon" Head: Amantayeva A.E.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
31.	IRN AR19575366 "Investigation of the physical properties of the accretion disk around four holes and their imitators" Head: Kurmanov E.B.	2023-2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
32.	IRN AR19574454 "Investigation of the efficiency of silicon solar cells under conditions of concentrated solar radiation with a new adaptive cooling system" Head: Saimbetov A.K.	2023-2025 35 months	MSHE RK	Grant funding Energy and mechanical engineering
33.	IRN AP19578879 "Investigation of observational manifestations of the FS CMa type by computer simulation methods" Leader: Agishev A.	2023-2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
34.	IRN AR19576858 "Manufacture and testing of prototypes of a solid-state pulse-plasma engine for small-sized spacecraft" Head: Dosbolaev M.K.	2023-2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies

35.	IRN AR19175613 "Variational methods in the quantum problem of several particles with Coulomb interaction in application to modern problems of physics" Type of research: fundamental Head: Aznabaev D.T.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
36.	IRN AR19174979 "Investigation of quasi-periodic oscillations of X-ray emission of neutron stars and black holes" Type of research: fundamental Head: Konysbaev T.K.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
37.	IRN AP19175392 "Description of the observational manifestations of stars B[e] phenomenon based on computer simulation methods" Head: Khokhlov A.A.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
38.	IRN AR678266 "Development of a selective gas sensor for explosive and harmful substances based on nanostructured semiconductors to ensure industrial safety" Head: Ibraimov M.K.	2023–2025 35 months	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
39.	IRN AR19676270 "Development of new nanocomposite materials based on HDLC films modified with iridium and palladium nanoparticles" Head: Ryaguzov A.P.	2023–2025 35 months	MSHE RK	Grant funding, Geology
40.	IRN AR19679741 "Application of information technologies in bioenergy for 3D modeling of biofuel combustion" Leader: Askarova.S.	2023–2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
41.	IRN AP19674715 "Routing of wireless "mesh" networks based on box-covering algorithms" Head: Akhtanov S.N.	2023–2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
42.	IRN AR19680205 "Study of adsorption processes in amorphous structures of cryocondensates at low temperatures on model surfaces of space objects" Head: Korshikov E.S.	2023–2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
43.	IRN AR19678552 "Improving the energy efficiency of mobile and static wireless sensor nodes in open and closed" Head: Nurgaliyev M.K.	2023–2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies

44.	AR19676900 "A new method for calculating the propagation of radio waves for terrestrial communications" Head: Sautbekov S.S.	2023–2025 35 months	MSHE RK	Grant funding, Information, communication and space technologies
45.	IRN AR19678245 "Photoinduced formation of complex molecular compounds in ices with a high content of organic substances in various astrophysical conditions" Aldiyarov A.U.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
46.	IRN AR19680128 "Motions of test particles and photons in the gravitational field of dilaton black holes" Head: Boshkaev K.A.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
47.	IRN AR19678033 "Investigation of the transport and optical properties of hydrogen at high pressures" Head: Kodanova S.K.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
48.	IRN AR19679617 "Investigation of thermophysical properties and structural-phase states of organic substances at low temperatures (80-300K) Руководитель: Соколов Д.Ю.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
49.	IRN AR19678376 "Physics of accretion flows in cataclysmic variables with different accretion rates" Head: Khokhlov S.A.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
National Open Nanotechnology Laboratory				
1.	IRN AP09058501 "Development of technological foundations for the creation of nanostructured materials that are promising for energy storage and photoelectrochemical devices." Head: Markhabaeva A.A.	2021–2023	MES RK	Grant funding Energy and mechanical engineering
2.	IRN AP09058404 "Establishment of patterns of radon distribution in environmental objects to study the risks of cancer by spectroradiometric monitoring." Head: Zaripova Yu.A.	2021–2023 (КМУ2)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
3.	IRN AP09258978 "Applied research of nanosized oncoradiogenic structures in organisms of biological objects and modernization of the spectrometric system of anti-cancer express devices". Head: Dyachkov V.V.	2021–2023 (36 months)	MES RK	Grant funding, Geology
4.	IRN AR09258922 "Nanoscale film structures based on wide-gap transition metal oxides and plasmonic nanoparticles with desired electronic properties"	2021–2023 (36 months)	MES RK	Grant funding, Geology

	Head: Mukhametkarimov E.S.			
5.	IRN AP13067767 "General relativistic effects in the magnetospheres of astrophysical compact objects" Leader: Toktarbay S.	2022–2024	MES RK	Grant funding, Scientific research in the field of natural sciences
6.	IRN AR14871061 Structure and Electronic Processes in Semiconductor Films with Phase Memory Modified by the Simultaneous Introduction of Impurities of Different Chemical Nature» Leader: Prikhodko O.Yu.	2022–2024 (30 months)	KH MSHE RK	Grant funding, Scientific research in the field of natural sciences
7.	IRN AR13268784 "Investigation of the influence of electrochemical etching modes on the optical and structural properties of porous silicon" Head: Sagidolda E.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
8.	IRN BR18574080 "Investigation of fundamental and applied problems of plasma physics, plasma-like media for the purpose of solving problems of modern energy and obtaining new functional materials" Head: Ramazanov T.S.	2023–2025 Targeted financing	MSHE RK	Targeted financing, Grant funding, Scientific research in the field of natural sciences
9.	IRN AP19576960 "Nanoselective structuring based on electron-beam lithography for creating nanoplasmonic elements, security elements and nanosensors" Head: Muratov M.M.	2023–2025 (35 months	MSHE RK	Grant funding, Geology
Research Institute of New Chemical Technologies and Materials				
1.	IRN AP09057905 "Development of technology for obtaining and using specific organic substances of coals and oil shale of the Republic of Kazakhstan as a source of catalysts and antioxidants of natural origin." Head: Jeldybayeva I.M.	2021–2023	MES RK	Grant funding, Geology
2.	IRN AP09057982 "Phytochemical composition and development of the use of medicinal plants for the treatment of skin diseases". Head: Dyusebaeva M.A.	2021–2023	MES RK	Grant funding, Geology
3.	IRN AP09058524 "Research and development of a process for obtaining high-quality motor fuels from stable gas condensate hydrocarbon feedstock of Kazakhstan." Head: Mұқtaly D.	2021–2023	MES RK	Grant funding, Geology
4.	IRN AR092606087 "Technology for the extraction and disposal of toxic compounds of industrial wastewater" Head: Mұқtaly D.	2021–2023 (36 months)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology

5	IRN AR09258741 "Development of a scientifically based technology for obtaining antioxidants of natural origin from low-mineralized silt sulfide muds of the Tuzkol deposit and coals of the Kiyakty deposit." Head: Kairbekov Zh.	2021–2023 (36 months)	MES RK	Grant funding
6.	IRN AP14869180 "Development of effective technology for the joint hydrogenation processing of coal and oil shale of the Republic of Kazakhstan to obtain components of motor fuels and chemicals Head: Kairbekov Zh.	2022–2024 (30 months)	KH MSHE RK	Grant funding, Geology
7.	IRN AP14870472 "Technology of green synthesis of structurally modified nanocomposites of metal sulfides with high photocatalytic activity and antibacterial properties" Head: Shalabaev Zh.S.	2022–2024 (30 months)	KH MHBO	Grant funding, Geology
8.	AP19677222 "Development of new active and selective catalysts for hydrogenation of diene and acetylenic hydrocarbons and their mixtures" Head: Jeldybayeva I.M.	2023–2025 35 months	MSHE RK	Grant funding, Geology
9.	IRN AR19680419 "Scientific substantiation of increasing the efficiency of flotation of industrial lead and zinc minerals from difficult-to-dress high-carbon polymetallic ore" Head: Tokpaev R.R.	2023–2025 35 months	MSHE RK	Grant funding, Geology
10.	IRN AR19680588 "Development of hybrid floor coverings with increased wear resistance" Head: Kabulov A.T.	2023–2025 35 months	MSHE RK	Grant funding, Geology
11.	IRN AR19679683 "Development of technology for the production of hydrogels based on modified polysaccharides with protective and stimulating compositions for seed coating" Head: Rakhmetullaeva R.K.	2023–2025 35 months	MSHE RK	Grant funding, Geology
Research Institute Center for Physical and Chemical Methods of Research and Analysis				
1.	IRN AP09058354 "Hybrid electrodes based on MXene and intercalation material for ultrafast energy storage devices based on aqueous electrolytes" Leader: Boy F.I.	2021–2023	MES RK	Grant funding Energy and mechanical engineering
2.	IRN AP09058606 "Development of a methodology for determining the weighted average concentrations of organic pollutants for monitoring the atmospheric air of the city of Almaty" Head: Baimatova N.Kh.	2021–2023	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology

3.	IRN AP09057951 "Development of "green" methods for the determination of pesticides in environmental objects based on vacuum solid-phase microextraction". Head: Orazbayeva D.S.	2021–2023	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
4.	RN AP09058656 "Development of scientific bases of metal complex hydroalkoxycarbonylation of C4-C10 olefins of oil refining" Head: Kudaibergenov N.Zh.	2021–2023	MES RK	Grant funding, Geology
5.	IRN AP09058268 "Physico-chemical design of new complex rare earth oxides for the production of functional materials." Head: Kenes K.M.	2021–2023	MES RK	Grant funding, Geology
6.	IRN AP09057924 "Development of photocatalytic air purification technology for the removal of volatile organic compounds." Head: Uralbekov B.M.	2021–2023	MES RK	Grant funding, Geology
7.	IRN AP09058322 "Synthesis and study of a composite based on an organometallic compound (MOF) for its use as an anode material in sodium-ion batteries." Head: Trusov I.A.	2021–2023	MES RK	Grant funding, Geology
8.	IRN: AP09058376 "Production and study of activated carbons based on vegetable raw materials waste and their use in the sorption of noble and heavy metals." Head: Kishibaev K.K.	2021–2023	MES RK	Grant funding, Geology
9.	IRN AP09058570 "Development of a method for electrochemical modification of a carbon sorbent to give it the required sorption properties"". Head: Atchabarova A.A.	2021–2023	MES RK	Grant funding, Geology
10.	IRN AP09058561 "Effective development of highly sensitive food analysis methods based on miniaturized solid phase microextraction" Head: Alimzhanova M.B.	2021–2023	MES RK	Grant funding, Geology
11.	IRN AP 09260116 "Development of agents based on mineral raw materials of Kazakhstan for desalination of salt water" Head: Seylkhanova G.A.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
12.	IRN AP09260383 "Development of a reversible anode for magnesium-ion batteries" Head: Argimbaeva A.M.	2021–2023 (36 months)	MES RK	Grant funding Energy and mechanical engineering
13.	IRN AP09259567 "Multi-natural additive that suppresses the spread of SARS in humans"	2021–2023 (36 months)	MES RK	Grant funding Life Science and Health

	Head: Zhenys Zh.			
14.	IRN AP09260359 "Comprehensive assessment of air pollution in Almaty: identification of sources, spatio-temporal analysis" Head: Kerimray A.M.	2021–2023 (36 months)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
15.	IRN AP09260371 "Establishment of the mechanism of influence of modifying coatings of the active material of cathodes of sodium-ion batteries on the kinetics of intercalation" Leader: Boy F.I.	2021–2023 (36 months)	MES RK	Grant funding, Scientific research in the field of natural sciences
16.	IRN AR09260629 "Establishment of conditions for applying antibacterial coatings on the surface of suture and biomedical materials" Head: Ospanova A.K.	2021–2023 (36 months)	MES RK	Grant funding, Geology
17.	IRN BR10965258 "Development of a research program to improve air quality in the cities of Nur-Sultan and Almaty using modern analytical methods and modeling tools." Head: Baimatova N.Kh.	2021–2023	MES RK	Grant funding, Targeted financing
18.	IRN AR13067724 "Innovative strategy for remediation of the territory of the former Pavlodar chemical plant from toxic forms of mercury" Head: Satybaldiev B.S.	2022–2024 (КМУ3)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
19.	IRN AR14871374 "Development of accurate methods for gas chromatographic determination of volatile organic compounds in environmental objects at the sampling site using solid-phase microextraction Head: Kenesov B.N.	2022–2024 (30 months)	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
20.	IRN AR14871087 "Development and implementation of a set of technologies to improve the quality of fat and oil products to reduce the risk of cardiovascular and oncological diseases in the country" Leader: Toshtay K.	2022–2024 (30 months)	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
21.	IRN AP14871403 Development of technology for the production of rubber compounds with specified characteristics Head: Nauryzbaev M.K.	2022–2024 (30 months)	MSHE RK	Grant funding, Geology
22.	IRN AP14871554 "Optimization of an innovative method for the synthesis of aluminized titanium carbide as the main material for obtaining 2D Mxene materials (Ti3C2, Ti2C)"	2022–2024 (30 months)	MSHE RK	Grant funding, Geology

	Leader: Воу F.I.Мальчик Ф.И.			
23.	AP14870308 "Development of technology for catalytic petrochemical synthesis of oxygen-containing compounds from aromatic hydrocarbons in the presence of nanoscale magnetic composites" Head: Shakieva T.V.	2022–2024 (30 months)	MSHE RK	Grant funding, Geology
24.	IRN AP14871991 "Development of energy-intensive anode materials based on conductive metal-organic compounds (MOF) for metal-ion batteries". Head: Galeeva A.K.	2022–2024 (30 months)	MSHE RK	Grant funding, Geology
25.	IRN AR14871970 "Development of an innovative aqueous electrolyte for high-energy metal-ion batteries" Head: Kurbatov A.P.	2022–2024 (30 months)	MSHE RK	Grant funding, Geology
26.	IRN AP15473133 "Bolat betine anticorrosion kasietteri jogars polymeric nanocomposite captamalardy electrochemical synthesis" Head: Bakhytzhan E F.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
27.	IRN AP14972864 "Synthesis, characterization, photoluminescent and antibacterial properties of nanomaterials based on europium/biosilica and silver/biosilica" Head: Bekisanova Zh.B.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
28.	IRN AR14972851 "Development of waste-free and cyclic production technology for the drug "Sodium pertechnetate 99mTc" solution for injection" Head: A. N. Gurin	2022–2024 Zhas galym	MSHE RK	Grant funding, Information, communication and space technologies
29.	IRN AR13268726 "Synthesis of magnetic and fluorescent iron-containing "heavy-metal-free" quantum dots" Head: Galiyeva P.A.	2022–2024 Zhas galym	MES RK	Grant funding, Geology
30.	IRN AR15473170 "Development of technology for the production of activated carbons based on special coke obtained from coals of the Shubarkol deposit" Head: Nechipurenko S.V.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
31.	IRN AR15473256 "Study of the activity of promoted composites based on mesoporous aluminosilicates in the process of dewaxing diesel fractions" Head: Abdildina K.M.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology
32.	IRN AR14972840 "Modification of solid electrodes by electrochemical synthesis of molecular bioimprint polymer MBIP" Head: Rakhymbay G.S.	2022–2024 Zhas galym	MSHE RK	Grant funding, Geology

33.	IRN AP14972836 "Electrochemical deposition of nanostructured catalysts from ionic liquids: electrode kinetics, new techniques and prospects for application" Leader: Avchukir Kh.	2022–2024 Zhas galym	MSHE RK	Grant funding Geology
34.	IRN AR15473354 "Development of neural network algorithms for macroscopic control of systems based on hydrophilic polymers" Head: Bakirov A.S.	2022–2024 Zhas galym	MSHE RK	Grant funding, Scientific research in the field of natural sciences
35.	IRN AP15473268 "Creation of scientific bases for the formation of new, inexpensive stable sorbents based on natural zeolites of the Kazakhstan deposit for carbon dioxide capture" Head: Mambetova M.M.	2022–2024 Zhas galym	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
36.	IRN BR18574219 "Development of environmentally friendly technologies for obtaining innovative products from natural and technogenic raw materials of Kazakhstan" Head: Nauryzbaev M.K.	2023–2025	MSHE RK	Targeted financing, Grant funding, Scientific research in the field of natural sciences
37.	IRN AP19577150 "Study of prolonging properties and cytotoxicity of antibacterial films for implantable products based on natural polysaccharides containing chlorhexidine and silver nanoparticles" Head: Savdenbekova B.E.	2023–2025 (35 months)	MSHE RK	Grant funding, Geology
38.	IRN AR19575956 "Crystal chemistry and optical properties of functional orthoborates with ytterbium" Head: Bolatov A.K.	2023–2025 (35 months)	MSHE RK	Grant funding, Scientific research in the field of natural sciences
39.	IRN AR19576851 "Synthesis of sulfide multielement standards for analysis by LA-ICP-MS" Head: Bahadur A.M.	2023–2025 (35 months)	MSHE RK	Grant funding, Scientific research in the field of natural sciences
40.	IRN AR19178014 "Development of a plant for the treatment of circulating and waste water from chromium (V1) by electrocoagulation for the chromium mining industry of Kazakhstan" Head: Kokhmetova S.T.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
41.	IRN AR19178184 "Study of the processes of REE concentration from products of supercritical CO2 conversion of Kazakhstani phosphogypsum" Head: Khavaza T.N.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Geology
42.	IRN AP19176452 "Study of complex formation of poly(2-oxazolines) with iodine for the creation of new antimicrobial biomaterials" Head: Makhaeva D.N.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Geology

43.	IRN AR19174425 "Development of the composition and technology for obtaining gels containing extracts of Limonium gmelinii plants, their pilot production, standardization, study of biological safety and activity" Leader: Kasymova D.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Geology
44.	IRN AP19176326 "Synthesis and application of microporous membranes from carbon graphene" Type of research: fundamental Head: Seitzhanova M.A.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Geology
45	IRN AP19177332 "Properties of two-dimensional transition metal dichalcogenides obtained by stoichiometric melting in vacuum and chemical vapor deposition (CVD) methods" Head: Aitzhanov M.B.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Geology
46.	IRN AP19177815 "Phytochemical composition and pharmacological activity of Lepidium sativum L seeds" Head: Shybyray E.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Geology
47.	IRN AR19679428 "Study of the catalytic properties of natural minerals and metallurgy waste for thermochemical complex processing of degraded plastic into liquid and gaseous hydrocarbon fuels" Head: Dosumova B.T.	2023–2025 35 months	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
48.	IRN AR19678248 "Development of fundamental aspects of the development of composite carbon dioxide sorbents and modified catalysts for its utilization by bioethanol into synthesis gas" Head: Anisova M.M.	2023–2025 35 months	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
49.	IRN AR19678156 "Development of technology for obtaining magnetically controlled organophilic sorbents" Head: Tazhibayeva S.M.	2023–2025 35 months	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
50.	IRN AR19679889 "Development of technologies for the complex processing of heavy oil waste into valuable technical products and fuel distillates" Head: Aubakirov E.A.	2023–2025 35 months	MSHE RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
51.	IRN AR19676281 "Chemical composition and biological activity of Kazakh species of Artemisia" Leader: Zhenis Zh.	2023–2025 35 months	MSHE RK	Grant funding, Geology

52.	IRN AR19677518 "Development of a rational technology for obtaining new substances from wild plants of Kazakhstan, their standardization and introduction into production of a technological scheme for their production" Head: Zhusupova G.E.	2023–2025 35 months	MSHE RK	Grant funding, Geology
53.	IRN AR19679878 "Conversion of plant biomass waste into microporous activated carbons for successful capture and separation of CO_2, N_2, and CH_4" Head: Kishibaev K.K.	2023–2025 35 months	MSHE RK	Grant funding, Geology
54.	IRN AR19679739 "Development of a technology for the production of a new immunomodulator based on a combination of monosaccharides for use in the complex treatment of oncological diseases" Head: Mangazbayeva R.A.	2023–2025 35 months	MSHE RK	Grant funding, Geology
55.	IRN AR19678726 "Development of conditions for obtaining hemostatic composites for medical and biological purposes based on Kazakhstani kaolin" Head: Ospanova A.K.	2023–2025 35 months	MSHE RK	Grant funding, Geology
56.	IRN AR19679298 "Development of heterostructural photocatalysts based on TiO_2 in the visible region of the spectrum for air purification" Head: Uralbekov B.M.	2023–2025 35 months	MSHE RK	Grant funding Geology
57.	IRN AR19679864 "Technology of fractional sorption separation of molybdenum and tungsten by ion-exchange resins from technological solutions" Head: Ismailova A.G.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
58.	IRN AR19679650 "Development of new polymeric materials with antimicrobial properties for the treatment of various surfaces" Head: Irmukhametova G.S.	2023–2025 35 months	MSHE RK	Grant funding, Scientific research in the field of natural sciences
Science and technology park				
1.	IRN AP09058590 "Monitoring of land degradation and desertification processes in the Talas district of the Zhambyl region using GIS and remote sensing data for sustainable land use." Head: Laishanov Sh.U.	2021-2023	MES RK	Grant funding, Sustainable development of the agro-industrial complex and safety of agricultural products
2.	IRN AP09260144 "Rational use of natural tourist and recreational resources of the Republic of Kazakhstan based on the assessment of recreational capacity and minimization of anthropogenic impact" Head: Asipova Zh.M.	2021–2023 (36 months)	MES RK	Grant funding, Rrational use of water resources, flora and fauna, ecology
Graduate School of Medicine Faculty of Medicine and Health				

1.	IRN AP14869249 "Clinical, genomic and environmental approaches to the study of preterm birth" Head: Zhurabekova G.A.	2022–2024 (30 months)	KH MHBO	Grant funding Life Science and Health
2.	IRN AP14870934 "Research of genetic, immune and mucosal predictors of chronic obstructive pulmonary disease, development and implementation of new methods for its diagnosis and prevention" Head: Akparova A.Yu.	2022–2024 (30 months)	KH MHBO	Grant funding Life Science and Health
3.	IRN AP14870089 "Development of molecular diagnostics of women's reproductive health disorders" Head: Kurmanova G.M.	2022–2024 (30 months)	KH MHBO	Grant funding Life Science and Health
4.	IRN AP14972889 "Study of gene-infectious mutual influence in the genesis of spontaneous preterm birth" Head: Berdalinova A.	2022–2024 «Zhas galym»	MSHE RK	Grant funding Life Science and Health
5.	IRN AR19677754 "Development of markers and a diagnostic algorithm for the detection and prevention of early cardiovascular aging" Head: Abzaliev K.B.	2023–2025 (35 months)	MSHE RK	Grant funding Life Science and Health
6.	IRN AR19676676 "Development of a molecular epidemiological map of the prevalence of echinococcosis in the human population of Kazakhstan" Head: Ismailova G.N.	2023–2025 (35 months)	MSHE RK	Grant funding Life Science and Health
7.	IRN AP19675905 "Study of immunogenetic and clinical predictors of immunopathology: infectious and autoimmune diseases after SARSCov2 infection" Head: Trimova G.Sh.	2023–2025 (35 months)	MSHE RK	Grant funding Life Science and Health
Faculty of pre-university education				
1.	IRN AR14972820 "Study of the biodiversity of entomopathogenic fungi common in agrocenoses of southern Kazakhstan" Head: Abdukarim R.Zh.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Sustainable development of the agro-industrial complex and safety of agricultural products
Social and Humanitarian Faculties				
Faculty of Oriental Studies				
1.	IRN AP09260492 "Spiritual foundations in the traditional worldview of the Kazakh and Indian peoples (religious and philosophical syncretism)" Head: Kokeeva D.M.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences

2.	IRN AP09259326 "Dastur al-'ilaj" as a source of steppe medicine" Head: Shadkam Zubaida	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences
3.	IRN AP14871064 "Ethnic, ethno-confessional discourse of nation-building in South Asia (Afghanistan, India, Pakistan)" Project manager: Erekesheva L.G.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
4.	IRN AR14972382 "Modern problems and tasks of the public service of the Republic of Kazakhstan: lessons from Japanese experience" Head: Акун В.Қ.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
5.	IRN AP15473125 "Policy of South Korea towards global and regional international organizations" Head: Ospanov N.M.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
6.	IRN AP19677768 "Pragmatic experience of the Confucian model of development of the countries of the East: China, Japan, Singapore, South Korea". Leader: Aldabek N.A.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
Факультет журналистики				
1.	IRN AP09260297 "Media strategy for information support and social adaptation of candas and migrants in Kazakhstan" Head: Negizbayeva M.O.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences
2.	IRN "Digital Kazakhstan as a tool of public diplomacy and the formation of a positive image abroad" Head: Tasilova A.A.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
3.	IRN AR19679909 "Development of an information resource in the field of digital literacy to identify indicators of incorrect information and disinformation in Kazakhstan" Head: Sultanbayeva G.S.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
Исторический факультет				
1.	IRN AP09260898 "Medieval Kyshkala (Barshynkent): in the context of the urban culture of the era of the Golden Horde" Leader: Eleuov M.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences
2.	IRN AP09261323 "The Sacredness of Symbols and Attributes in the Ethnic Culture of the Nomads of Central Asia" Head: Nogaybayeva M.S.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences

3.	IRN AP09260487 "Ancient Turkic cultural complex of East Kazakhstan: origins and transformation" Head: Samashev Z.	2021–2023 (36 months)	MES RK	Grant funding
4.	IRN AP09260449 "Production everyday life at the defense enterprises of Kazakhstan and the Ural-Volga region of Russia during the Great Patriotic War: a comparative analysis" Head: Zharkynbayeva R.S.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences
5.	IRN AP09261115 "Archaeological monuments of the Ayagoz region of the East Kazakhstan region: interdisciplinary research" Head: Omarov G.K.	2021–2023 (36 months)	MES RK	Grant funding, Research in the social and human sciences
6.	IRN AP14869303 "Ethnozooarchaeological study of the role of the wolf and dog in the ancient and modern cultures of Kazakhstan." Head: Kartaeva T.E.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
7.	IRN AP1486944 "The Turkic world of Eurasia (V-XIV centuries) according to Western historical and archival sources and materials of the Vatican." Head: Zhumagulov K.T.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
8.	IRN AP15473351 "Native" Administration of the Turkestan Governor-General (second half of the 19th - early 20th centuries): a comparative analysis of the practices of world empires" Head: Abdrakhim M.E.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
9.	IRN AP13268874 "Kazakh nomadic elite in the social transformation processes of the 19th - early 20th centuries." Head: Tuleshova U.Zh.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
10.	IRN AR15473303 "Post and telegraph service in the Semirechensk region - as part of the communication of the Russian Empire (1865-1917)" Leader: Iskakova G.Z.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
11.	IRN AR14972753 "Archival documents of the 20-30s of the XX century as a source of the socio-political history of Kazakhstan" Head: Kurmanbayeva K.S.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
12.	IRN BR18574057 "Interdisciplinary (archaeological and historical-ethnographic) study of the cultural heritage of the southeastern regions of Kazakhstan (Shu-Ileinsky district, Tarbagatai and Alakol depressions)" Head: Zhumataev R.S.	2023–2025 ПЦФ	MSHE RK	Targeted financing, Research in the social and human sciences
13.	IRN AR19576316 "Archaeological complexes of the Early Iron Age in the southern slopes of Tarbagatai: an interdisciplinary study"	2023–2025 (35 months)	MSHE RK	Grant funding,

	Head: Zhumataev R.S.			Research in the social and human sciences
14.	IRN AR19676962 "Ancient and medieval cities of the Karashyk Valley" Head: Eleuov M.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
15.	IRN AR19675718 "A new look at Yasawi's heritage: a comprehensive understanding of the phenomenon of "aulie" in the Kazakh tradition and the history of Sufism in Central Asia" Head: Nurtazina N.D.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
16.	IRN AR19678231 "Social "engineering" in the Kazakh steppe XIX - early XX centuries: features and results" Head: Sultangaliyeva G.S.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
17.	IRN AR19680046 "Saki monuments of northeastern Zhetysu (based on materials from the Kogalinskaya valley)" Head: Toleubaev A.T.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
International Institute of Kipchak Studies				
1.	IRN AP09260007 "Composition "Divan Lugat at-Turk" by Mahmud al-Kashgari (XI century) as a source on the steppe civilization" Head: Kumekov B.E.	2021–2023 (36 months)	MES RK	Grant funding Research in the social and human sciences
Факультет международных отношений				
1.	IRN AP14869709 "Features of teaching a foreign language based on national values" Head: Mukhametkalieva G.O.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in education and science
2.	IRN BR18574168 "The role of Kazakhstan in deepening the regional integration of the countries of Central Asia and the goals of sustainable development of the country in the framework of global trends of our time" Head: Baizakova K.I.	2023–2025	MSHE RK	Targeted financing, Research in the social and human sciences
3.	IRN AR19679313 "Competitiveness of the transit and transport potential of Kazakhstan in the context of the formation of historical and cultural integration of the Turkic-speaking states" Head: Zhekenov D.K.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
Faculty of Philology				
1.	IRN AP1487141 "World spiritual values: the idea of philanthropy in the work of Abai" Head: Salkynbay A.B.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences

2.	IRN AP15473441 "Development of word-formation designations in the corpus of texts in the Kazakh language" Leader: Pirmanova K.K.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
3.	IRN AP15473326 "The frequency dictionary of the Kazakh language is an innovative base for the methodology of teaching the state language to students of technical universities in Kazakhstan. Head: Karbozova B.D.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
4.	IRN AR19175235 "Linguistic Poetry of Magzhan Zhumabaev's Poetry: Peculiarities and Translation Strategies" Head: Alpysbayeva A.E.	2023-2025 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
5.	IRN AR19675130 "Lexicographic system of common Turkic phraseological units in Turkic languages" Head: Avakova R.A.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
6.	IRN AR19679652 "Russian prose of Kazakhstan of modern times: leading trends, genre studies, plot, hero" Head: Dzholdasbekova B.U.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
7.	IRN AR19679918 "Adaptation of texts in the Kazakh language: methodology, approaches, use in teaching the language" Head: Mambetova M.K.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
8.	IRN AR19677520 "Conflictogenic texts in the Kazakh-language mass media: forensic-linguistic parameters of a linguistic offense" Head: Tausogarova A.K.	2023–2025 (35 months)	MSHE RK	Grant funding, Research in the social and human sciences
9.	IRN AP19680048 "Methodology of the integration of language and media education in order to form media literacy among Kazakhstani youth as a key factor in their socialization and intercultural interaction" Head: Elubayeva P.K.	2023–2025 (35 months)	MSHE RK	Grant funding Research in education and science
Faculty of Philosophy and Political Science				
1.	IRN AP09058073 "Development of educational and methodological materials for the study of Kazakh culture and language for an English-speaking audience using modern information technologies." Head: Omirbekova A.O.	2021–2023	MES RK	Grant funding, Research in the social and human sciences
2.	IRN AP09058370 "Social integration of internal migrants into the local community of large cities: social networks, social capital and urban space development". Head: Serikzhanova S.S.	2021–2023	MES RK	Grant funding, Research in the social and human sciences

3.	IRN AP09261155 "Psychophysiological study of susceptibility to radicalist moods using a polygraph and primary prevention of students' radicalization" Head: Aimaganbetova O.Kh.	2021–2023 (36 months)	MES RK	Grant funding, Homeland security and defense
4.	IRN AP09259875 "Development of algorithms for recognizing negative emotional states of military personnel of the Armed Forces of the Republic of Kazakhstan" Head: Madalieva Z.B.	2021–2023 (36 months)	MES RK	Grant funding, Homeland security and defense
5.	IRN AP14870735 "Transformation of professional preferences of high school students in urban and rural schools: a comparative sociological analysis." Head: Sadyrova M.S.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
6.	IRN AP1487041 "Development of new approaches to solving the philosophical problems of many-valued logic as a means of establishing patterns of thinking" Head: Masalimova A.R.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
7.	IRN AP14872130 "Formation of professional self-determination of students with special educational needs (SEN) as a national strategy in the field of inclusive education in the Republic of Kazakhstan" Head: Magauova A.S.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in education and science
8.	IRN AP15473224 "Development of new approaches to building the theory of scientific revolutions" Head: Vituleva E.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
9.	IRN AR19175423 "Socio-psychological aspects of the manifestation of religious destructiveness" Type of research: fundamental Head: Karybaeva A.N.	2023-2025 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
10.	IRN AR19175847 "Development of the state language in the process of digital Kazakhstan: a sociological study" Head: Serikbayeva A.D.	2023–2025 35 months Zhas galym	MSHE RK	Grant funding, Research in the social and human sciences
11.	AR19175009 "Analysis of the memory policy of the ontological security of Kazakhstan in the context of new global challenges" Head: Muminov N.A.	2023-2025 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences
12.	IRN AR19679699 "Religiosity/spirituality, well-being and identity of Kazakhstani youth: a comparative country study" Head: Abdirayymova G.S.	2023–2025 35 months	MSHE RK	Grant funding, Research in the social and human sciences
13.	IRN AR19676658 "Identity Conflict of Local and Returned Kazakhs: Migration Policy of Kazakhstan and the Problem of Cultural Integration of Repatriates"	2023–2025 35 months	MSHE RK	Grant funding,

				Head: Aldzhanova N.K.			Research in the social and human sciences

No.	Title	Period	Funder	Type
14.	IRN AR19675827 "Philosophy of language and the language of philosophy of Abu Nasr al-Farabi" Head: Kurmanalieva A.D.	2023–2025 35 months	MSHE RK	Grant funding, Research in the social and human sciences
15.	IRN AR19675827 "Philosophy of language and the language of philosophy of Abu Nasr al-Farabi" Head: Kurmanalieva A.D.	2023–2025 35 months	MSHE RK	Grant funding, Research in the social and human sciences
16.	IRN AR19679820 "Institutionalization of social conflicts in Kazakhstan: conflict management through the transformation of values based on the integral technology of spiral dynamics" Head: Turarbekova L.V.	2023–2025 35 months	MSHE RK	Grant funding, Research in the social and human sciences
Faculty of Law				
1.	IRN AP09260964 "Private detective activity as a special element of the law enforcement mechanism of the modern state" Head: Alimkulov E.T.	2021–2023 (36 months)	MES RK	Grant funding, Homeland security and defense
2.	IRN AP14872126 "Intercultural competence of a university teacher and its impact on improving the competitiveness of higher education in Kazakhstan Head Zhatkanbayeva A.E.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in education and science
3.	IRN AP14870596 "Issues of legal regulation of rational use and protection of pasture ecosystems" Head Yerkinbayeva L.K.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
4.	IRN AP1487186 "Political and legal problems of the formation of integrity in the Republic of Kazakhstan in the modern period." Head: Useinova K.R.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
5.	IRN AP14872079 "Victimological problems of prevention of domestic violence" Head: Dzhansaraeva R.E.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
6.	IRN AP14872548 "Modern environmental law and order: Kazakhstani case" Leader: Erezhepkyzy R.	2022–2024 (30 months)	KH MHBO	Grant funding, Research in the social and human sciences
7.	IRN AP14973071 "Probation control as one of the forms of guarantees of the rights and freedoms of people." Head: Duzbayeva S.B.	2022–2024 «Zhas galym»	MSHE RK	Grant funding, Research in the social and human sciences

8.	IRN AR19678348 "The collapse of the Russian Empire and the revival of the Kazakh statehood: historical and legal analysis" Head: Nurpeisov E.K.	2023–2025 35 months	MSHE RK	Grant funding Research in the social and human sciences,
Institute of State and Law				
1.	IRN AP14872048 "Development of measures to ensure the national security of the Republic of Kazakhstan in the legislative sphere" Head: Salimgerey A.A.	2022–2024 (30 months)	KH MHBO	Grant funding, Homeland security and defense
Higher School of Economics and Business				
1.	IRN AP09057847 "Formation and development of the knowledge economy in the context of digitalization of the Republic of Kazakhstan: conceptual framework and prospects for implementation." Head: Tovma N.A.	2021–2023 (КМУ2)	MES RK	Grant funding Research in the social and human sciences
2.	IRN AP09260228 "Strengthening state regulation of the social sphere of the Republic of Kazakhstan in the post-pandemic period" Head: Ashirbekova L.Zh.	2021–2023 (36 months)	MES RK	Grant funding Research in the social and human sciences
3.	IRN AP09259851 "Development of the circular economy in Kazakhstan: potential, trends, prospects" Leader: Zhidebekkyzy A.	2021–2023 (36 months)	MES RK	Grant funding Research in the social and human sciences
4.	IRN AR14871940 "Development of software, including a mobile application for time tracking of employees of departments responsible for the diagnosis of main railway tracks." Head: Adilova N.	2022–2024 (30 months)	KH MHBO	Grant funding, Information, communication and space technologies
5.	IRN AR13268961 "The impact of the quality of economic growth on inequality in income distribution in modern Kazakhstan" Head: Temerbulatova Zh.S.	2022–2024 «Zhas galym»	MES RK	Grant funding Research in the social and human sciences
6.	IRN AR14973003 "Assessment of the food security of the Republic of Kazakhstan in the conditions of the volatility of the external environment" Head: Kalieva A.E.	2022–2024 «Zhas galym»	MSHE RK	Grant funding Research in the social and human sciences
7.	IRN BR18574200 "Revival of single-industry towns in the context of the creation of New Kazakhstan based on territorial marketing" Head: Tovma N.A.	2023–2025 ПЦФ	MSHE RK	Targeted financing, Grant funding Research in the social and human sciences
8.	AR19175800 "Analysis of the effectiveness of reforming the public administration system of the Republic of Kazakhstan in the field of healthcare" Head: Zharylgasinov T.M.	2023–2025 «Zhas galym»	MSHE RK	Grant funding Research in the social and human sciences

9.	AR19576425 "The impact of the quality of higher education on the competitiveness of the national economy in the era of digitalization and technological change" Head: Kondybayeva S.K.	2023–2025 (35 months)	MSHE RK	Grant funding Research in the social and human sciences
10.	AP19576593 "Responsible production in Kazakhstani enterprises as a tool to achieve GO 12: assessment of potential and development prospects" Head: Zhidebekkyzy A.Zh.	2023–2025 (35 months) (КМУ4)	MSHE RK	Grant funding Research in the social and human sciences
11.	IRN AP19678012 "The Triune Concept of Sustainable Development (ESG): business interests in the context of balanced development of regions" Head: Adambekova A.A.	2023–2025 35 months	MSHE RK	Grant funding Research in the social and human sciences
12.	IRN AR19677016 "Ecosystem model of socially oriented entrepreneurship in the context of sustainable development of South Kazakhstan" Head: Dzhulaeva A.M.	2023–2025 35 months	MSHE RK	Grant funding Research in the social and human sciences
13.	IRN AR19679799 "Development of a modified methodology for assessing spatial factors of growth and overcoming differences between regions" Head: Kerimbaev A.R.	2023–2025 35 months	MSHE RK	Grant funding Research in the social and human sciences
14.	IRN AP19679105 "Transformation of ESG financial instruments in the context of the development of the "green" economy of the Republic of Kazakhstan" Head: Nurmagambetova A.Z.	2023–2025 35 months	MSHE RK	Grant funding Research in the social and human sciences
15.	IRN AR19680320 "Research of new tools for the development of the business environment in the regions of Kazakhstan to increase the investment attractiveness and competitiveness of the country in the Eurasian region" Head: Rakhmatullaeva D.Zh.	2023–2025 35 months	MSHE RK	Grant funding Research in the social and human sciences