

Approved by the NFSU Scientific Council,  
protocol No.26 of 12, October 2023

Approved by the Call commission “Cambridge –  
NRFU 2022. Individual grants for research  
(development) for Ukrainian researchers (with the  
support of University of Cambridge, UK)”,  
protocol No. 34 of 10, October 2023

**Call title: “Cambridge – NRFU 2022. Individual grants for research (development) for Ukrainian researchers (with the support of University of Cambridge, UK)”.**

Rating list of projects from the designated information prior to their numerical evaluation  
(from highest value to lowest)

No.	Application ID	Applicant's full name	Project title	Average rating
1.	2022.02/0004	Kyryllin Igor Volodymyrovych	Investigation of the possibility of using bent crystals to deflect charged particles at electron-positron colliders	98,7
2.	2022.02/0048	Karchevskiy Mykola Vitaliovych	Rationalization of Combating Crime in Ukraine	96,6
3.	2022.02/0046	Pysmenskyi Yevhen Oleksandrovych	Criminal Policy of Ukraine under the Influence of Factors of Military Nature and Its Reflection in Expert Opinion	96,2
4.	2022.02/0022	Grekov Dmytro Leonidovych	Simulation of high-frequency plasma heating in the Joint European Torus nuclear fusion facility (Great Britain)	94,6
5.	2022.02/0052	Nurmagambetov Oleksiy Yuriyovych	Dual Models of Kerr black holes in flat and curved spacetimes	94,4
6.	2022.02/0054	Zhyla Semen Serhiyovych	Theory development for designing autonomous and nonautonomous helicopter systems of surface elevation measurements for safe landing in different weather conditions	93,5
7.	2022.02/0062	Hryhorieva Khrystyna Antonivna	Legislative reform of agricultural support as a guarantee of food security in Ukraine in war and post-war conditions	91,1
8.	2022.02/0007	Khodosovtsev Olexander Yevgenovych	Resistance of epiphytic lichen communities in old-growth and primeval forests of the Ukrainian Carpathians to global climate changes and regional management	89,4

9.	2022.02/0036	Kovtun Yurii Viktorovych	Investigation of high-frequency discharges for wall conditioning of toroidal fusion devices	88,7
10.	2022.02/0008	Tretiak Oleksii Volodymyrovych	Analysis of the strength of high-power Turbogenerator assembly units to ensure their reliable operation under the influence of supercritical loads to ensure the energy security of Ukraine during martial law	87,7
11.	2022.02/0045	Boiko Dmytro Mykolayovych	Social Effects and Challenges of Distance Learning in the Higher Education of Ukraine: from COVID-19 to the War	85,5
12.	2022.02/0001	Suchikova Yana Oleksandrivna	Design and Research of Oxide Heterostructures for Portable Solar Cells	84
13.	2022.02/0067	Kotliar Volodymyr Mykolaiovych	Structural study of electron-rich aminoheterocycles as CCN-binucleophilic component in heterocyclization reactions	82,7
14.	2022.02/0025	Oliynick Serhii Volodimirovich	Development of the scanning photodielectric spectroscopy method of high-resistance CdZnTe type crystals	82,7
15.	2022.02/0059	Naumenko Victoriia Volodymyrivna	Novel Bispectrum-Based Encoding Technique for Wireless Communication Technology	82
16.	2022.02/0024	Ganzha Olena Anatolyivna	Methodology approbation for geological and economic ranking of the promising objects with titanium-zirconium specialization of Ukraine	81,8
17.	2022.02/0041	Dukhopelnykov Yevhen Volodymyrovych	Study of the interaction between doxorubicin and polyethylene glycol in scope of creation of effective antitumor dosage forms	81,1
18.	2022.02/0051	Lystvan Kateryna Volodymyrivna	Study of the influence of epigenome modifiers on plant metabolism	80,9
19.	2022.02/0032	Melnychuk Anatolii	The preserved/lost memory of a place: a Ukrainian city in the crucible of military uricide	80,9
20.	2022.02/0056	Kucher Lesia Yuriiivna	Basic trends in the management of innovative projects in the agricultural sector under conditions of post-war recovery	80,7
21.	2022.02/0005	Nosyriev Oleksandr Oleksandrovich	Post-war restoration of the industrial potential of the regions in the strategy of ensuring the economic security and national interests of Ukraine	80,7
22.	2022.02/0030	Zuyok Valeriy Anatoliyovych	Research to validate the application of an alternative structural material for fuel rod cladding and a protective coating with optimal corrosion characteristics on the surface of fuel rod cladding tubes made of zirconium alloys	77,4
23.	2022.02/0020	Lobunets Yuriy M.	Develop a thermoelectric heat pump that implements the reverse Lorentz thermodynamic cycle with internal heat regeneration	77,3

24.	2022.02/0027	Kondratiev Andrii Valeriiovich	Biomechanical rationale of restorative structures application in treatment and rehabilitation of craniomaxillofacial injuries	76,3
25.	2022.02/0019	Kopp Michael Iosif	Determination of the mechanisms of generation and nonlinear evolution of vortex and magnetic structures in porous and nanofluidic hydrodynamic media	75,9
26.	2022.02/0063	Kopilov Evheny Pavlovich	The Interaction of Penicillium fungi with micro- and macrosymbionts in the system of Bradyrhizobium japonicum – Glycine max	74,5
27.	2022.02/0066	Lytovchenko Artem Dmytrovich	The war factor in the dynamics of the perception of the pandemic threat of COVID-19: preventing the risks of multiplication macrosocial threats	74,4
28.	2022.02/0003	Laktionov Ivan S.	Development of methods and models of the Internet of things support-decision systems creation for agrotechnical purposes	73,7
29.	2022.02/0038	Mikhailov Anton Igorovich	Method of physicochemical analysis of compounds of chemical elements with a small atomic number based on the Compton effect	73,5
30.	2022.02/0002	Tsybuliak Natalia Yuriiivna	The Impact of War on the Burnout of Ukrainian Academic Staff	73,1
31.	2022.02/0034	Tkachenko Tatiana V.	The influence of low-frequency sound vibrations on the physicochemical and catalytic properties of industrial catalysts for the carbon oxides' hydrogenation	72,9
32.	2022.02/0023	Pyzhova Maryna Oleksandrivna	Remuneration as a mechanism for preserving human potential to ensure Ukraine's competitiveness in the world	72,9
33.	2022.02/0040	Ratner Maryna Anatoliivna	Computer modeling and theoretical investigation of atomic clustes with intrinsic metatable pore	72,3
34.	2022.02/0014	Miroshnikov Vitalii Yurievich	Analytical-numerical method for determining the stress-strain state of a layer with supports in the form of longitudinal incised cylindrical inclusions	71,8
35.	2022.02/0017	Kanunnikova Nadiia Oleksandrivna	Development of methods for the formation of protective coatings for equipment of nuclear power plants	71,4
36.	2022.02/0035	Brodskii Roman Yevgeniyovich	Study of the behavior of swarms of intelligent particles in labyrinths	70,9
37.	2022.02/0060	Lytvyn Stanislav Yegorovitch	Kinetics of oxidation of pure (ligand-free) iron nanoparticles synthesized by the EB PVD method	66,7
38.	2022.02/0042	Maiorova Kateryna Volodymyrivna	A technological system of precision reverse engineering of vehicles and their assembly components for insuring the quality throughout the product life cycle	66,4
39.	2022.02/0043	Chukhray Andrey Grigoryevich	Artificial Intelligence – based Technology of Adaptive Interactive Computer Tutoring Systems	64,9

40.	2022.02/0037	Lopatina Hanna Oleksandrivna	The design of formation and preservation of the career potential of pedagogical personnel who provide educational services to people with special needs in wartime and postwar Ukraine	64,9
41.	2022.02/0061	Simeiko Kostiantyn V.	Research of the synthesis process of boron carbide using graphite of nuclear purity	63,2
42.	2022.02/0028	Borysov Roman Ihorovych	Losses of secondary education in Ukraine during the war: the interrupted learning and factors of adaptation of IDP and refugee high school students to new educational spaces	63,2
43.	2022.02/0057	Kolomoitsev Oleksii Olehovych	Fluorescent sensors for heavy metal ions based on 5-formylthiazole 2-hetarylsubstituted derivatives	61,5
44.	2022.02/0053	Krytskyi Dmytro Mykolayovych	Using swarm intelligence when controlling a group of drones	57,6
45.	2022.02/0047	Mohylnyi Hennadii A.	Analysis and implementation of modern information technologies in the educational process	56,8
46.	2022.02/0029	Bondarenko Dmytro V	Creation of a solar panel and battery based on dynamic switching of pv-cells and battery cells	55,7
47.	2022.02/0009	Sinchuk Alla V.	Study of processes of electrodischarge synthesis of nanosized titanium and tungsten oxide compounds photoactive under the visible light spectrum	55,3
48.	2022.02/0049	Myhovych Iryna Viktorivna	Internationalization and employability – their cross-practice influence for higher education sector of military-conflict- / war-affected countries (comprehensive empirical analysis of Ukraine and Croatia)	54,2
49.	2022.02/0006	Morozova Olga Igorivna	Development and implementation of information systems and technologies for the acquisition of professional knowledge in the dual system of specialist training	28,3