


APPROVED

Dean of the MF

Erakhtina I.I.


 1.09.2021

**Plan of research work
of Mechanical Faculty
for 2021-2022**

<i>N^o</i> <i>nn</i>	<i>Events (name of work)</i>	<i>Deadlines</i>	<i>Executors</i>
1	R&D execution 1. Design and creation of prototypes of automated production control systems, remote monitoring and diagnostics of the microclimate in polymer agricultural sleeves for storing grain 2. Creation of a prototype of a universal device based on a lathe for the implementation of milling technology 3. Development and implementation of technology for the manufacture of refractory materials for the metallurgical industry with optimal porosity and increased heat resistance 4. Creation, development and implementation of technologies for the production and processing of wear-resistant materials of a new generation for obtaining parts of metallurgical units 5. Improvement of the technology for the manufacture of precision castings from complex alloy steels with a homogenized structure and improved properties using raw materials of Kazakhstani content	June 2022 December 2021 December 2021 December 2021 December 2021	Nikonova T.Yu. Mussaev M.M. Kulikov V.Yu. Issagulov A.Z. Kvon Sv.S
2	Publication of R&D results: 2.1 Publication of articles - 60 Including: - in the rating Kazakhstan magazines - 30; - foreign magazines: (RSCI) - 15; (Clarivate Analitics and Scopus) - 15. 4.2 Participation in conferences - 100 Including: - in republican / interuniversity - 40; - in international - 60	During a year	Teaching staff of the departments
3	Inventive activity Submission of 10 applications for innovative patents and 20 ICUs	During a year	Teaching staff of the departments

-	International activity c Vilnius Cedeminas Technical University article on the topic "Effect of Laser Processing Parameters on Microstructure, Hard-ness and Tribology of NiCrCoFeCBSi / WC coatings"; project in collaboration "Creation of technology for restoration of rods of large-size equipment" - with Poznan University of Technology - invitation of PhD doctor, professor Gierz Lukasz - development of the educational program "Digital Engineering" in the direction of additive technologies with participation in the international project Erasmus + together with Peter the Great SSPU Training of scientific and pedagogical personnel through graduate school - Kyrgyz State Technical University named after I. Razzakov (Bishkek) Training of undergraduates in academic mobility Joint publication of R&D results with Professor J. Michaud (University of Lorraine, France)	October 2021 September 2021 May 2022 During the year During the year During the year	Zharkevich O.M. Nikonova T.Yu. Yurchenko V.V. Yurchenko V.V. Bukanov Zh.U. Kulikov V.Yu. Kvon Sv.S.
5	Research work with students and undergraduates	According to the NIRSM plan	Teaching staff of the departments
6	Conducting department seminars	According to the plan	Zharkevich O.M.

Sub dean for science MF

Zharkevich O.M.