REVIEW

for the educational program 7M07103 "Materials science and technology of new materials"

Familiarization with the educational program (EP) 7M07103 "Materials science and technology of new materials" was carried out in order to assess the prospects for preparing masters at the Department of Materials Science, Nanotechnology and Engineering Physics of the Kazakh National Research Technical University named after K.I. Satpaev. This OP was compiled in accordance with the State Educational Standard of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604.

The goals and objectives of the educational program are based on teaching undergraduates how to obtain new advanced materials, technologies and methods for studying structures at the micro level. Much attention is also paid to gaining skills in working with electron microscopy equipment and analyzing the data obtained.

The working and modular educational programs of this EP provide for the study of basic disciplines, the acquisition of skills in publishing scientific articles and the choice of relevant methods for conducting research in the field of materials science. Major disciplines consider physical and chemical methods for studying advanced materials and technologies for their production.

The uniqueness and individuality of the EP is also reflected in the presence of bases of practice for undergraduates. Undergraduates conduct research in modern equipped research institutes such as LLP "Physical Technical Institute", JSC "Institute of Metallurgy and Enrichment", JSC "National Center for Space Research" RSE "Institute of Combustion Problems", to analyze the results obtained at the University there is a national laboratory of an engineering profile. Research topics for undergraduates are selected according to market needs in the field of renewable and alternative energy (fuel cells, solar cells, chemical energy sources, photocatalysis), space materials science, additive manufacturing (3D printing, etc.). Therefore, the EP is combined and diversified, where materials scientists receive as

a result of training on fundamental issues of physics, metal forming and knowledge on the physical and chemical bases of obtaining and properties of materials based on various functional materials.

Based on the foregoing, I believe that the presented EP 7M07103 "Materials Science and Technology of New Materials" is relevant and can be recommended for teaching doctoral students at Satpayev University.

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