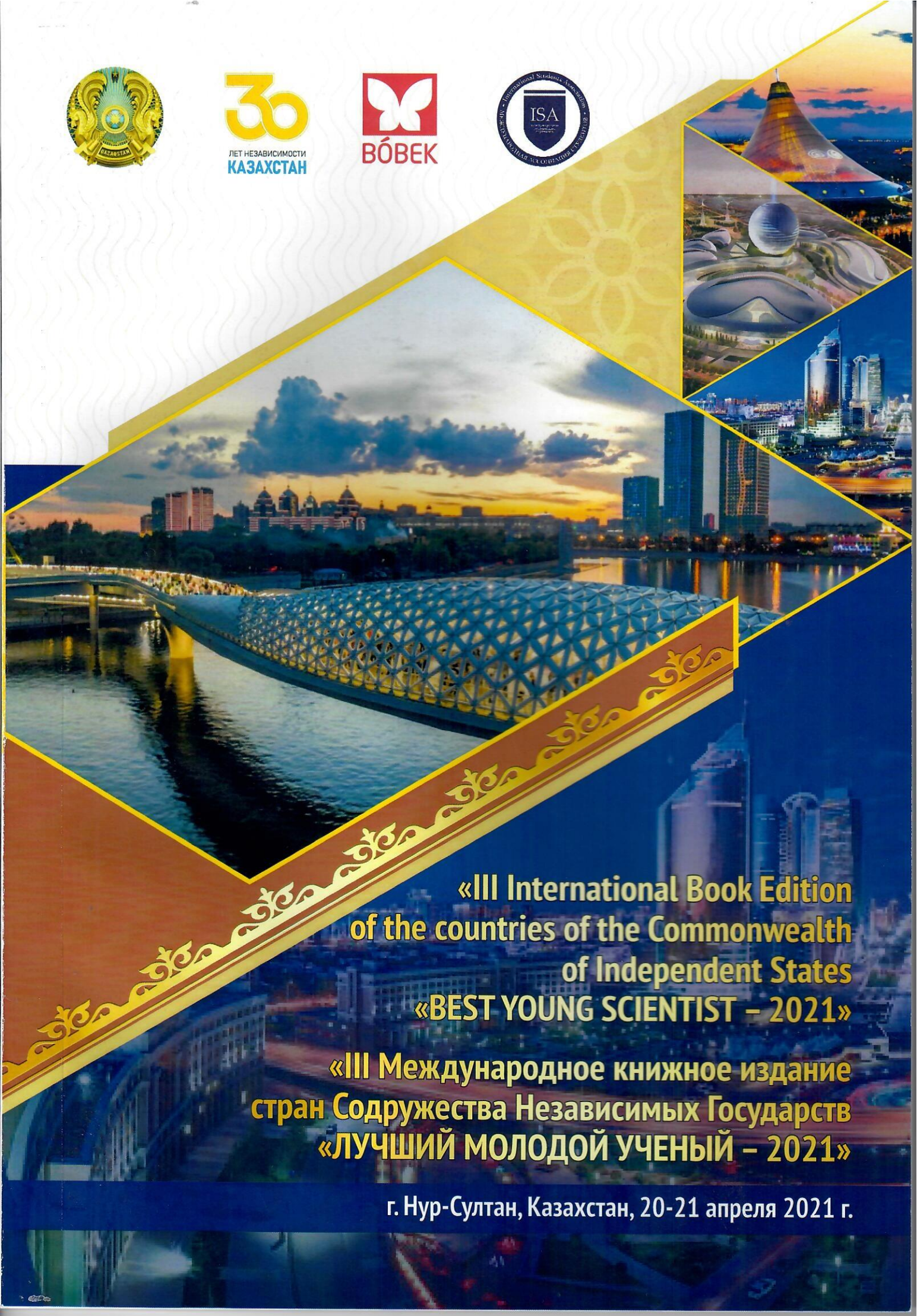

«III International Book Edition of the countries of the Commonwealth of Independent States «BEST YOUNG SCIENTIST – 2021»

«III Международное книжное издание стран Содружества Независимых Государств «ЛУЧШИЙ МОЛОДОЙ УЧЕНЫЙ – 2021»

г. Нур-Султан, Казахстан, 20-21 апреля 2021 г.

ОБЪЕДИНЕНИЕ ЮРИДИЧЕСКИХ ЛИЦ В ФОРМЕ АССОЦИАЦИИ «ОБЩЕНАЦИОНАЛЬНОЕ ДВИЖЕНИЕ «БОБЕК» КОНГРЕСС УЧЕНЫХ КАЗАХСТАНА

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III Международое книжное издание стран Содружества Независимых государств «ЛУЧШИЙ МОЛОДОЙ УЧЕНЫЙ – 2021» («Ученые - СНГ») является уникальным проектом нацеленым на пропаганду науки и личностных успехов молодых ученых всего СНГ и Европы.

Формирование научной базы III Международного книжного издания стран СНГ / «ЛУЧШИЙ МОЛОДОЙ УЧЕНЫЙ – 2021», несомненно, будет способствовать значительному расширению информированности научно-педагогической общественности о развитии науки в странах СНГ и Европы.

В данном проекте приняли участие молодые ученые Республики Казахстан, Российской Федерации, Республики Узбекистан, Республики Таджикистан, Республики Киргизстан, Республики Беларусь и т.п. в рамках международного сотрудничества во благо дальнейшей интеграции науки.

III The international book publication of the countries of the Commonwealth of Independent States "BEST YOUNG SCIENTIST 2021" ("Scientists - CIS") is a unique project aimed at promoting the science and personal success of young scientists from all over the CIS and Europe.

The formation of the scientific base of the III International Book Edition of the CIS countries / "BEST YOUNG SCIENTIST - 2021" will undoubtedly contribute to a significant increase in the awareness of the scientific and pedagogical community about the development of science in the CIS and Europe.

This project was attended by young scientists of the Republic of Kazakhstan, the Russian Federation, the Republic of Uzbekistan, the Republic of Tajikistan, the Republic of Kyrgyzstan, the Republic of Belarus, etc. in the framework of international cooperation for the benefit of further integration of science.

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СОДЕРЖАНИЕ
CONTENT

Избавляйтесь от кредитов. Кредит – это лишь переплата за товар. Он будет оправдан только в том случае, если вы планируете инвестировать деньги в собственный бизнес. В Казахстане, как и во многих странах мира, огромный рынок потребительских кредитов. Люди плохо проинформированы и почти не разбираются в порядке их выплаты, отчего пропускают сроки и получают большие штрафы. Кредит заставляет вас работать на себя. Он порождает в людях страх бедности. Именно поэтому старайтесь обходить их стороной. Избавляйтесь от кредитов – чем дольше они на вас «висят», тем больше вы теряете денег.

Будьте ответственны за свое будущее. Нам каждый день приходится принимать финансовые решения. И именно от этих решений зависит наше благосостояние.

SCIENTIFIC MOBILITY OF KAZAKHSTANI SCIENTISTS: PROBLEMS AND PROSPECTS OF GOVERNMENT REGULATION

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Abstract: *The modern era is characterized by high mobility scientists, which is explained by the peculiarities of scientific work and its dynamism. Scientific activity knows no boundaries, and mobility is an important factor in the cultural and professional mutual enrichment of scientific communities. In this regard, this article discusses some problems of scientific mobility of Kazakhstani scientists and their prospects.*

Keywords: *scientific mobility, brain drain, government regulation, intellectual migration, scientific personnel.*

International research and teaching teams are a natural phenomenon for many European and North American universities. According to Eurostat, the statistical institute of the European Union, in the UK, foreign researchers make up 7.2 % of the workforce engaged in research and technological development, in Germany, it is 6.4 %, in France – 4.1 % [1].

Due to the development of mobility in modern science, the issue of "brain drain" has become acute. In recent years, in the community and especially among scientists amplified the anxiety caused by the ongoing process of breaking science, its systematic underfunding and related care researchers of institutes and academics in other fields of employment [2].

Therefore, the identification and prevention of factors that reduce the scientific potential and the further development of the research base by the state through regulation will ensure that in the next millennium Kazakhstan will be one of the developed countries of the world. In Soviet times, the concept of "brain drain" received a negative meaning of luring highly skilled specialists from developing countries for their exploitation in the leading imperialist states. There is no need to say that in Kazakhstan, scientific activities are funded sparingly, many Kazakh state-funded scientists barely make ends meet and are ready to work even in conditions of "exploitation" abroad. Increasing competition in the scientific world leads to the fact that, despite the desire to go abroad on a long-term contract, a small minority can realize this goal in practice, while maintaining themselves in science. Some of the scientific

emigrants move to a different field of activity, and in this case, Kazakhstan loses a scientist, and the host country gets a lower-skilled worker. Scientists and specialists leave their country if they find in the host country a higher material remuneration for their work, greater opportunities for creative self-realization, better laboratory equipment, more comfortable living conditions, better respect for civil rights and democratic freedoms than in their homeland [3].

Recently, many publications have appeared claiming that the international exchange of scientists is fraught with the threat of destroying the established scientific schools. However, the phenomenon of international mobility of scientists is not in itself negative. The loss of Kazakhstan's science from the international scientific exchange threatens to lead it to a permanent lag. Scientists from different countries of the world need close contact with each other, and international research centres open up opportunities for fruitful joint work.

Thanks to mobility, the latest research directions are provided by scientific personnel. Mobility also enables multinational research teams and networks to work, which increases the competitiveness of the countries to which it is directed, as well as their primacy in using the results obtained. However, mobility can become a negative factor for domestic science if its volumes constantly increase, threatening to wash out intellectual resources. The "brain drain" is a global phenomenon that worries the public not only in Kazakhstan but also in the relatively prosperous countries of Western Europe [4]. In the West, there has been a growing concern about the shortage of skilled researchers. For the countries of the European Union, this deficit is estimated at 700 thousand people [1]. In Europe, the issue of increasing emigration of European scientists to the United States and Canada is being keenly discussed. The reasons are higher wages, better conditions for research, a desire to work in an international scientific environment. The position of an American professor attracts scientists from other countries, first of all, with a salary (for a professor it is about 100-150 thousand dollars a year), but there are many other advantages. In the United States, the only one who is provided with a permanent job for the rest of his life is a professor. As soon as a lecturer takes this position, the university loses the right to dismiss him. This is done by the state to ensure that the scientist is free from the pressure of the administration in choosing their scientific interests. The American professor has ample opportunities for self-realization with maximum personal freedom. He and the laboratory he heads are the cornerstones of American science. It is the professor who turns out to be a kind of "money-making machine". Winning a grant of, for example, a million dollars, he brings an additional 560 thousand dollars to his university [5].

European countries take various measures to regulate and adjust the scientist's mobility. Some programs encourage the return of scientists flow who have achieved good results in the countries of North America. Also, Europe is trying to fight the shortage of scientific personnel, including at the expense of Kazakhstan, or rather Kazakhstani scientists.

In Kazakhstan, migration mobility has a pronounced emigration character and often becomes irrevocable (there is no return flow). Migration flows of scientists are carried out on 3 levels. The first level is the relocation of the most skilled and talented Kazakhstani scientists from the province to the capital cities of Almaty and Nur-Sultan. The second level is a departure from Kazakhstan to Europe. The third is moving from Europe to the United States.

The departure of scientists from the province to Almaty and Nur-Sultan is one of the main features of Kazakhstan's mobility of scientists. As a result, in a large part of Kazakhstan's regions, the state of scientific research and the level of teaching in regional universities is clearly provincial in nature. Neither in Europe nor, especially, in the USA, there is no such problem. There are research centres and universities distributed fairly evenly throughout the country, and there is no concentration of scientists in the capital cities. Just remember that in the United States, Princeton University is located in New Jersey, Harvard in Massachusetts, Yale in Connecticut, Stanford in California, and so on. In Kazakhstan, the situation is different. The main research centres are located in Almaty and Nur-Sultan. Regional

universities (with some exceptions) are less well funded, which affects the level of technical equipment and teaching. Oddly enough, the migration of regional scientists to the capitals remains almost unnoticed. If the emigration of Kazakhstani scientists is constantly and extensively discussed, recommendations are made, and measures are taken, then the "provincialization" of regional Kazakhstani science and scientists is not mentioned at all. And this can be a very big loss of Kazakhstan's scientific potential. To solve this acute problem, it is necessary, first, to develop a return flow, to encourage scientists to return to the regions from which they come, offering them comparable working conditions,, housing conditions and wages; secondly, to continue to grow their scientific personnel, but to provide them with working conditions in which they would not think about moving to the capitals or emigrating; and, thirdly, the influx of metropolitan scientists to the regions, both for permanent residence and work and for temporary teaching, can also give good results. It is also necessary to develop a return flow of scientists who emigrated from Kazakhstan to Russia, Europe, or North America. China's experience in this area is very interesting. The Chinese government is doing everything possible to bring back to China talented scientists who have achieved success in the West. This government grant program for foreign scientists is called "100 talents" in Chinese. It was started in 2003, as part of "Project 985" (China State Program for financing higher education and science). About 1,000 scientists have passed through it, the vast majority of them are Chinese emigrants. Project 985 spent approximately $ 1.25 billion a year on 10 leading universities, and in 2004 the grant program was expanded to 30 universities. Thus, the Chinese, who worked as scientists in the West, return to their homeland with good salaries. Those who return are paid 2-10 times more than the standard salary of a professor in China [6].

The study of the scientist's mobility is given great importance, this issue is widely studied in different countries. The emigration of scientists destroys traditions in science. This leads to the fact that scientific schools are dying in Kazakhstan, especially in the field of natural sciences, electronics, and cybernetics, many of which were unique. Meanwhile, to create full-fledged scientific schools, 2-3 generations of scientists are needed. Thus, the traditions of transmitting the accumulated knowledge, culture and social experience to new generations, which were laid down in the past, are lost. And after some time in domestic science, especially fundamental science, everything will have to start over.

Thus, along with the exchange of experience with other countries, the development of the scientific potential of Kazakhstan is closely linked to the adoption of measures to strengthen and preserve scientific schools, the provision of funds by the state to finance those areas of research that meet the objectives of preserving the unique scientific potential of the country. However, in Kazakhstan, timid attempts are being made to develop programs to stimulate the return flow of Kazakhstani scientists from abroad, but until now nothing concrete has been proposed in this direction at the state level.

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