

ISSN 2518-1483 (Online),
ISSN 2224-5227 (Print)

2018 • 5

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

БАЯНДАМАЛАРЫ

ДОКЛАДЫ

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

REPORTS

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

ЖУРНАЛ 1944 ЖЫЛДАН ШЫҒА БАСТАҒАН
ЖУРНАЛ ИЗДАЕТСЯ С 1944 г.
PUBLISHED SINCE 1944



Бас редакторы
х.ғ.д., проф., ҚР ҰҒА академигі **М.Ж. Жұрынов**

Редакция алқасы:

Адекенов С.М. проф., академик (Қазақстан) (бас ред. орынбасары)
Величкин В.И. проф., корр.-мүшесі (Ресей)
Вольдемар Вуйцик проф. (Польша)
Гончарук В.В. проф., академик (Украина)
Гордиенко А.И. проф., академик (Белорус)
Дука Г. проф., академик (Молдова)
Илолов М.И. проф., академик (Тәжікстан),
Леска Богуслава проф. (Польша),
Локшин В.Н. проф. чл.-корр. (Қазақстан)
Нараев В.Н. проф. (Ресей)
Неклюдов И.М. проф., академик (Украина)
Нур Изура Удзир проф. (Малайзия)
Перни Стефано проф. (Ұлыбритания)
Потапов В.А. проф. (Украина)
Прокопович Полина проф. (Ұлыбритания)
Омбаев А.М. проф., корр.-мүшесі (Қазақстан)
Өтелбаев М.О. проф., академик (Қазақстан)
Садыбеков М.А. проф., корр.-мүшесі (Қазақстан)
Сатаев М.И. проф., корр.-мүшесі (Қазақстан)
Северский И.В. проф., академик (Қазақстан)
Сикорски Марек проф., (Польша)
Рамазанов Т.С. проф., академик (Қазақстан)
Такибаев Н.Ж. проф., академик (Қазақстан), бас ред. орынбасары
Харин С.Н. проф., академик (Қазақстан)
Чечин Л.М. проф., корр.-мүшесі (Қазақстан)
Харун Парлар проф. (Германия)
Энджун Гао проф. (Қытай)
Эркебаев А.Э. проф., академик (Қырғыстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының баяндамалары»

ISSN 2518-1483 (Online),

ISSN 2224-5227 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы» Республикалық қоғамдық бірлестігі (Алматы қ.)
Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде 01.06.2006 ж.
берілген №5540-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 500 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18,
<http://nauka-nanrk.kz>, reports-science.kz

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2018

Типографияның мекенжайы: «Аруна» ЖК, Алматы қ., Муратбаева көш., 75.

Главный редактор
д.х.н., проф., академик НАН РК **М. Ж. Журинов**

Редакционная коллегия:

Адекенов С.М. проф., академик (Казахстан) (зам. гл. ред.)
Величкин В.И. проф., чл.-корр. (Россия)
Вольдемар Вуйцик проф. (Польша)
Гончарук В.В. проф., академик (Украина)
Гордиенко А.И. проф., академик (Беларусь)
Дука Г. проф., академик (Молдова)
Илолов М.И. проф., академик (Таджикистан),
Леска Богуслава проф. (Польша),
Локшин В.Н. проф. чл.-корр. (Казахстан)
Нараев В.Н. проф. (Россия)
Неклюдов И.М. проф., академик (Украина)
Нур Изура Удзир проф. (Малайзия)
Перни Стефано проф. (Великобритания)
Потапов В.А. проф. (Украина)
Прокопович Полина проф. (Великобритания)
Омбаев А.М. проф., чл.-корр. (Казахстан)
Отелбаев М.О. проф., академик (Казахстан)
Садыбеков М.А. проф., чл.-корр. (Казахстан)
Сатаев М.И. проф., чл.-корр. (Казахстан)
Северский И.В. проф., академик (Казахстан)
Сикорски Марек проф., (Польша)
Рамазанов Т.С. проф., академик (Казахстан)
Такибаев Н.Ж. проф., академик (Казахстан), зам. гл. ред.
Харин С.Н. проф., академик (Казахстан)
Чечин Л.М. проф., чл.-корр. (Казахстан)
Харун Парлар проф. (Германия)
Энджун Гао проф. (Китай)
Эркебаев А.Э. проф., академик (Кыргызстан)

Доклады Национальной академии наук Республики Казахстан»

ISSN 2518-1483 (Online),

ISSN 2224-5227 (Print)

Собственник: Республиканское общественное объединение «Национальная академия наук Республики Казахстан» (г. Алматы)

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан №5540-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год.

Тираж: 500 экземпляров

Адрес редакции: 050010, г.Алматы, ул.Шевченко, 28, ком.218-220, тел. 272-13-19, 272-13-18
<http://nauka-nanrk.kz> reports-science.kz

©Национальная академия наук Республики Казахстан, 2018 г.

Адрес типографии: ИП «Аруна», г.Алматы, ул.Муратбаева, 75

E d i t o r i n c h i e fdoctor of chemistry, professor, academician of NAS RK **M.Zh. Zhurinov****E d i t o r i a l b o a r d :****Adekenov S.M.** prof., academician (Kazakhstan) (deputy editor in chief)**Velichkin V.I.** prof., corr. member (Russia)**Voitsik Valdemar** prof. (Poland)**Goncharuk V.V.** prof., academician (Ukraine)**Gordiyenko A.I.** prof., academician (Belarus)**Duka G.** prof., academician (Moldova)**Iolov M.I.** prof., academician (Tadjikistan),**Leska Boguslava** prof. (Poland),**Lokshin V.N.** prof., corr. member. (Kazakhstan)**Narayev V.N.** prof. (Russia)**Nekludov I.M.** prof., academician (Ukraine)**Nur Izura Udzir** prof. (Malaysia)**Perni Stephano** prof. (Great Britain)**Potapov V.A.** prof. (Ukraine)**Prokopovich Polina** prof. (Great Britain)**Ombayev A.M.** prof., corr. member. (Kazakhstan)**Otelbayv M.O.** prof., academician (Kazakhstan)**Sadybekov M.A.** prof., corr. member. (Kazakhstan)**Satayev M.I.** prof., corr. member. (Kazakhstan)**Severskiy I.V.** prof., academician (Kazakhstan)**Sikorski Marek** prof., (Poland)**Ramazanov T.S.** prof., academician (Kazakhstan)**Takibayev N.Zh.** prof., academician (Kazakhstan), deputy editor in chief**Kharin S.N.** prof., academician (Kazakhstan)**Chechin L.M.** prof., corr. member. (Kazakhstan)**Kharun Parlar** prof. (Germany)**Endzhun Gao** prof. (China)**Erkebayev A.Ye.** prof., academician (Kyrgyzstan)**Reports of the National Academy of Sciences of the Republic of Kazakhstan.****ISSN 2224-5227****ISSN 2518-1483 (Online),****ISSN 2224-5227 (Print)**

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)

The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 5540-Ж, issued 01.06.2006

Periodicity: 6 times a year

Circulation: 500 copies

Editorial address: 28, Shevchenko str., of 219-220, Almaty, 050010, tel. 272-13-19, 272-13-18,

<http://nauka-nanrk.kz> / reports-science.kz

**REPORTS OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN**

ISSN 2224-5227

<https://doi.org/10.32014/2018.2518-1483.10>

Volume 5, Number 321 (2018), 73 – 77

UDC 338.012

A.K.ButkenovaFinancial Academy JSC, NIAS MEPhI Moscow
butkenova@mail.ru**MONITORING OF HUMAN CAPITAL DEVELOPMENT
IN INDUSTRIAL ENTERPRISES**

Abstract. The article considers a grouping of indicators that allow to study in more detail the state and use of human capital and noted that due to monitoring it was revealed the absence in the existing system of labor remuneration in the enterprises under consideration of the evaluation of collective labor. For the development of human resources, the creation of favorable conditions for production is the basis for the successful application of their knowledge in industrial enterprises. Thus, a higher level of wages in other regions, lower interest rates on mortgages in other regions have an impact on migration processes in the region under study. Human potential, which is part of the country's economic system, is one of the main factors directly influencing the formation of a favorable innovative, investment climate in the country.

Keywords: politics, management, human capital, competitiveness, training, retraining.

INTRODUCTION

Heads of all structural divisions: chiefs of services, departments, sectors, shifts, workshops of the enterprises under consideration can theoretically encourage the initiative worker, in practice - no. Leaders are economically helpless in the operational management of their subordinates. And administrative measures of influence, as a rule, not only do not motivate, but more often, on the contrary, demotivate employees. The latter circumstance is caused by the punitive nature of the application of the existing wage system in practice. A normal labor incentive system should be predominantly incentive, i. encouragement must prevail over punishment. Psychologists have smoothly proved the ineffectiveness of punishments, since they, in the main, reduce the labor activity of workers. And encouragement is caused by increased motivation of work. Therefore, we believe that equalization in the distribution and punitive nature of the wage system is a real scourge of labor collectives of these enterprises.

The focus of the current wage system is the distribution of the wage fund for workers. But it is practically impossible to solve this problem professionally, since the labor of the majority of workers is not measured. And immoderate work can not be properly rewarded. Hence inevitably arise "equalization" in the payment of labor [9-10].

Unfortunately, a significant number of enterprise managers have not yet realized the need to restructure the internal economic mechanism of the organization, and they do not know what to replace the obsolete system of organizing wages. Virtually all leaders do not underestimate the work with the staff.

The analysis leads to the following conclusion: wages in many respects lost their motivating significance not only because of their equalization in its distribution, its weak connection with the labor and general results of the organization's work, but also because of the large drop in real wages.

MAIN PART

The principle of the construction of tariff grids - a relatively slow increase in tariffs and salaries as it rises from the first to the last level - does not allow maneuvering the rates and salaries of certain categories of workers.

Sooner or later, enterprises will be guided by the price of labor in the local, regional and state labor market. Over time, with the development of the international labor market, managers will have to take into account the price of labor abroad. Widely spread the experience of Western firms that scan the amount of salaries in their positions and specialties from their competitors and, taking into account the local labor market, establish salaries, tariff rates, bonus amounts.

All the set of incentives that organizations use in modern conditions, especially in Western countries, can be classified as follows to stimulate the work of personnel:

- material incentive;
- moral stimulation;
- incentives for participation in management;
- Stimulation of participation in the capital;
- incentives for participation in profits;
- Stimulation of social benefits.

As we see, in the arsenal of enterprises a very complex system of incentives for staff. Unfortunately, in many cases, all these types of incentives are used at enterprises separately, distributed among different management bodies of the enterprise, which makes it impossible to use them in a comprehensive, systemic way. All this hinders the development of motivation for work. So, usually material incentives are given to the departments of labor and wages, which are subordinate to the director of economics (chief economist), moral incentives to the personnel department (personnel department), which is subordinate to the director of personnel, social benefits to the administrative and economic department (household service), which is subordinate to the deputy general director for everyday life [12].

The problems of labor stimulation are acute problems not only for modern Kazakhstan, they are also topical and eternal for the economies of developed countries. The Achilles' heel of typical labor incentive schemes in the United States, Europe and other countries is the weak connection between pay and performance of firms. As a rule, workers are given "solid" salaries, their amount forms a wage fund, almost unrelated to production and other economic indicators.

As the great experience of Western firms shows, the participation systems in capital have little motivational potential. Possession of a small, symbolic, share of the company's shares does not allow to include the overwhelming majority of shareholders-workers in the process of business management. Without such inclusion, workers have little idea of how they can affect production at their workplace in the course of daily work. In addition, remuneration for participation in the capital is in the form of dividends only once a year. All this does not allow to significantly increase the motivation of their work [13].

In order to improve the system of motivation and pay for employees, it is proposed to introduce a new system of wage organization at the enterprises under consideration.

The main goal of all participation systems is to increase the efficiency of the business by increasing the motivation of the personnel. This is achieved by concession by the owners of part of the income in favor of the staff in the performance of the agreed conditions beforehand. In other words, the additional income received from the additional labor efforts of the personnel is divided in a certain proportion between labor and capital [14].

In this wage system, the wage fund directly depends on the main economic indicators of production: the volume of production and sales of goods and services, production costs, labor productivity and product quality. If any of these indicators improves, the production efficiency and staff income increase.

With this approach, the staff of enterprises is very interested in the growth of each of the main economic indicators and, in general, the efficiency of the entire production. Such rather abstract concepts for workers, such as labor productivity, production costs, sales volume and others, are filled with a very concrete economic content. Workers see a direct connection of their personal salary with the overall performance of production. With the correct setting of the work and the staff, employees will find out monthly how much they increased or decreased the wage fund due, for example, to the cost of production or its quality. In their minds, an understanding is established of the direct dependence of personal wages on the efficiency of production. All this generates collective and personal interests to save in big and small, work with fewer employees, improve product quality, etc. [15].

Thus, the new system of labor remuneration is a complex system of personnel participation in business. The staff receives a part of the income from the growth in the volume of production and sales of goods and services, from lower production costs, higher labor productivity and product quality.

An important feature of this system is that it motivates the improvement of the economic position of the enterprise with the growth of wages. Decrease in the economic indicators of enterprises immediately leads to a reduction in the wage fund and the average salary of employees. All this makes a new system of more motivating employees than the old wage systems.

This system of staff participation is not limited to the top level of management, where the payroll of its enterprise is formed. It permeates all levels of government and reaches to lower-level collectives (brigades, sections, departments, sectors, etc.) and individual workers. And every team and employee are economically interested in conducting production efficiently. All this makes it possible to define the system of labor management as a system of personnel participation in business.

The new system has a very valuable social and economic property: it opens the possibility of harmonizing the economic interests of owners of capital and hired personnel. The resulting growth in the average salary fixes the cadres, attracts a better labor force, which increases the efficiency of production and the mass of profit.

Economic interest encourages staff to innovate, creativity, enterprise - and this also entails an increase in the work efficiency and competitiveness of the enterprise. All this leads to an increase in the cost of business, growth of capital and income of owners.

When applying this system, the question arises about the minimum wage, less than which an enterprise should not charge employees. According to the labor legislation, the minimum wage is established by the state, and the enterprise has the right to be limited to it in case of a fall in production [16].

The system of participation in business has a fundamental advantage over the systems of participation in capital and profits in the field of labor motivation. It overcomes the weakness of these systems - a weak motivating force.

In the mid-80s of the last century, representatives of the Harvard Business School conducted a study, from which the important conclusion followed: the most important factor in reducing the competitiveness of American industry in world markets is the weak ideologization of work in American companies.

To create a civilized market economy in Kazakhstan, this factor is also of great importance. In the proposed wage system there is a section on corporate culture. In accordance with it, the formation of a modern corporate culture in any organization begins with the collective development of corporate norms containing the requirements of a high corporate culture, bringing these documents to every employee.

The following regulatory documents are being developed:

- - mission of the enterprise is a corporate document containing the main objectives of the enterprise, reflecting its social role, the main principles of external and internal corporate culture. The main groups of people whose interests are to be reflected in the mission of the enterprise are: customers of the products and services of the enterprise, its employees, business partners, the local community and society as a whole. The mission should be attractive, inspired, inspire and inspire the staff, sound like a call for creation, moving forward;

- - the declaration on corporate values - a corporate document addressed on behalf of the enterprise to the outside world, which solemnly proclaims the main principles of the corporate culture of the enterprise;

- - rules of corporate business relations - a corporate document containing rules of conduct of the personnel of the enterprise, norms of business relations both with partners and with colleagues on work;

- - rules of professional ethics - a corporate document containing the moral principles of work;

- - rules of internal labor regulations - an internal organizational and administrative document that determines the work schedule at the enterprise;

- - Regulations on structural subdivisions and job descriptions of employees, forming a unified system of interrelated documents. They are built on the basis of common principles and requirements for their content and reflect the basic requirements of the Labor Code and other fundamental corporate documents in force at the enterprise;

- - The system of assessment and remuneration of labor is an internal mechanism whose purpose is to create a system of motivation and stimulation of the work of personnel;
- - the system of strategic objectives of the enterprise - a corporate document reflecting the main lines of business of the enterprise;
- - the plan of measures to create a high corporate culture of the enterprise - a document through which it is possible to systematically and systematically form and develop the corporate culture of the enterprise.

The system of strategic objectives of the enterprise consists of the following groups of objectives:

- social - aimed at increasing the degree of satisfaction of employees with the conditions, organization, content of labor, remuneration and labor relations in the enterprise;
- corporate culture - aimed at the formation of higher value standards, external and internal image of the enterprise;
- strategic development - aimed at adapting the enterprise to continuous changes in the external environment, shaping the attitude of workers towards development, change and continuous improvement as a new way of life;
- marketing - aimed at conquering the market, finding new market opportunities, working to promote products, goods and services;
- production and technical - are aimed at ensuring production of products in accordance with the demand of consumers, the growth of technical and technological level of production, the introduction of modern technology and technology;
- financial - aimed at improving the financial condition of the enterprise;
- economic - aimed at increasing the economic efficiency of the enterprise.

CONCLUSION

In the process of adaptation of personnel, it is identified with the enterprise. The decisive role in this is the corporate culture of the enterprise. [17] Each worker correlates his spiritual values with the values of the enterprise. In the event that the values mostly coincide, the identification of the employee with the enterprise takes place. If the values of the enterprise are alien to the employee, unacceptable, then there is a contradiction between employee values and corporate values [18].

Between corporate culture and corporate benefits there is a direct link: the higher the value of personnel, the more developed the system of corporate benefits. So, for example, in Japanese firms the staff as a whole, and every single employee is highly valued. All this finds expression in a ramified system of corporate benefits. Corporate benefits are aimed at achieving different goals: attracting and retaining the personnel of the enterprise, creating a favorable social and psychological environment in the teams, intellectual, moral and physical development of workers, strengthening health, organizing cultural leisure. Along with this, corporate benefits motivate labor. Part of the benefits is distributed depending on the labor contribution of employees, length of service, official position, etc.

REFERENCES

- [1] Korchagin Yu.A. Human capital and development processes at macro and micro levels. Voronezh, **2010**.
- [2] Labor economics (social and labor relations). Textbook / Ed. ON. Volgin, Yu.G. Odegova. M., **2009**.
- [3] Klochkov V.V. Human capital and its development. - M., 2008.
- [4] A. Lyskov. Human capital: the concept and relationship with other categories // "Management in Russia and abroad." №6. **2009**, pp. 3-11.
- [5] Adamchuk VV, Romashov OV, Sorokina ME Economics and sociology of labor: A textbook for high schools. M., 2008.
- [6] Vukovich GG, Khilko DA (**2012**). The labor market and employment problems in the Russian Federation. Society: sociology, psychology, pedagogy, №3, p.16-20.
- [7] Igoshina K.E. (**2016**). Problems of the Russian labor market and the main directions of the state policy of regulation of employment of the population. Nauka-Rastudent: electronic journal, December, URL: <http://nauka-rastudent.ru/36/3871/>
- [8] Mustafina L.E. (**2015**). The Russian labor market: problems and trends. SCI-Article, URL: <http://sci-article.ru/stat.php?i=1448300971>.
- [9] Shustova N.N. (**2011**). The Russian labor market: problems and trends. Problems of modern economy, No. 4 (40), pp. 25-29.

[10] Akhatova E.Kh. (2014). Analysis of the current state and trends in the development of the labor resources of the Republic of Kazakhstan. In the collection of the conference "The Multifaceted Evaluation of Business: Problems and Perspectives in the Conditions.

ӨОК 338.12

А.К. Буткенова

«Қаржы академиясы» АҚ, Мәскеу NIAS MEPhI

ӨНЕРКӘСІПТІК КӘСІПОРЫНДА АДАМ КАПИТАЛДЫ ДАМЫТУДЫҢ МОНИТОРИНГІ

Аннотация. Мақалада көрсеткіштер тобы толығырақ адам капиталының мәртебесін және пайдалану зерделеу үшін және байланысты мониторинг ұжымдық еңбек бағалаудағы кәсіпорынның ағымдағы еңбекақы жүйесінде болмауы анықталған, деп атап өтті. адам ресурстарын дамыту жұмыс орнында қолайлы жағдайлар жасау үшін оларды өнеркәсіпте білім табысты қолдану үшін негіз болып табылады. Осылайша, өзге аймақтарда жалақы жоғары деңгейі, өзге аймақтарда ипотекалық қарыздар бойынша төмен пайыздық мөлшерлемелер зерттеу облысында көші-қон процестерінің әсер бар. Адам әлеуеті, елдің экономикалық жүйесінің бір бөлігі, елдегі инвестициялық климат, қолайлы инновациялар қалыптастыру тікелей әсер етуі негізгі факторлардың бірі болып табылады.

Түйін сөздер: саясат, менеджмент, адам капиталы, бәсекеге қабілеттілік, оқыту, қайта дайындау

УДК 338.012

А.К. Буткенова

АО «Финансовая академия», НИЯУ МИФИ г. Москва

**МОНИТОРИНГ РАЗВИТИЯ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА
НА ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЯХ**

Аннотация. В статье рассмотрена группировка показателей, позволяющих более детально изучить состояние и использование человеческого капитала и отмечено, что благодаря мониторингу было выявлено отсутствие в существующей системе оплаты труда на рассматриваемых предприятиях оценки коллективного труда. Для развития человеческих ресурсов создание благоприятных условий на производстве является основой успешного применения ими своих знаний на предприятиях промышленности. Так, более высокий уровень зарплаты в других регионах, более низкие процентные ставки по ипотечным кредитам в других регионах оказывают воздействие на миграционные процессы в исследуемом регионе. Человеческий потенциал, входящий в экономическую систему страны, является одним из основных фактором, оказывающих непосредственное воздействие на формирование благоприятного инновационного, инвестиционного климата в стране.

Ключевые слова: политика, управление, человеческий капитал, конкурентоспособность, подготовка, переподготовка.

Information about authors:

Butkenova A.K. - Financial Academy JSC, NIAS MEPhI Moscow, butkenova@mail.ru; <https://orcid.org/0000-0001-9071-7475>

МАЗМҰНЫ

Техникалық ғылымдар

<i>Ахметов Б., Гнатюк С., Жмурко Т., Кинзерявий В., Юбузова Х.</i> Шуы бар кванттық арнада қауіпсіздік байланыстың детерминистикалық хаттама жұмысының имитациялық үлгісінің эксперименттік зерттеулер.....	5
<i>Усольцева Г.А., Әкбаров М.С., Акчил А., Яркова А.А.</i> Құрамында қалайы бар электролитті қожды физико-химиялық талдау.....	11
<i>Кенжебаева Ж.Е.</i> Түрлі жүйелердегі геоинформациондық технологиялар.....	20

Биология ғылымдар

<i>Кершанская О.И.</i> Қазақстанда ауылшаруашылығы дақылдарының элиталы сорттарын құрастыру үшін CRISPR/CAS9 геномын редакциялаудың жаңа революциялық биотехнологиясы.....	24
--	----

Аграрлық ғылымдар

<i>Әбуғалиев С.Қ., Сейдәлиев Н.Б., Дәлібаев Е.К., Жамалов Б.С., Муқа Ш.Б.</i> Сүтті сиыр шаруашылығында тапсырыспен шағылыстыруды және геномдық талдауды ұйымдастыру.....	41
---	----

Қоғамдық ғылымдар

<i>Әмірбекұлы Е., М. Ф. Грела., Тазабекова А.</i> Кәсіпкерлік Алматы қаласының бәсекелестікке қабілеттілігінің факторы ретінде.....	48
<i>Абуов К.К., Абдильдинова Н.Е., Галиева А.Х.</i> Солтүстік Қазақстанның ауыл шаруашылық еңбек нарығын қалыптастыру және дамыту (Ақмола облысының мысалында).....	56
<i>Аюпова З.К., Құсайынов Д.Ө.</i> Қазақстан республикасындағы мемлекеттік пен құқықтың қалыптасу ерекшеліктері.....	61
<i>Бижанов Д.Т., Нургабылов М.Н., Абдрахманова Р.С., Дошан А.С.</i> Отын үнемді қауіпсіздік және еліміздің энергетикалық ресурстарды мәселелері.....	66
<i>Буткенова А.К.</i> Өнеркәсіптік кәсіпорында адам капиталды дамытудың мониторингі.....	73
<i>Ескалиева А. Ж., Дарискалиева М.С., Канатова А.Ж.</i> Адам капиталының сапасын қысқасының перспективалары..	78
<i>Иғалиева Л.Н.</i> Аймақтағы әлеуметтік-экономикалық дамуды және экологиялық қауіпсіздікті қамтамасыз етілуді бағалау (Атырау облысы мысалында).....	82
<i>Ищанова Р.К.</i> Мемлекеттің қаржылық жүйесінің құрылысы мемлекеттік бюджеті.....	89
<i>Панзабекова А.Ж., Мұсаева Д.М., Жанбозова А.Б.</i> Ақпараттық қоғамның тұрғындардың өмір сүру сапасына әсері тұрғысынан қалыптасуы мен дамуы.....	94
<i>Сабирова Р.К., Адиева Э.М., Бисембиева Ж.К.</i> Қазақстанның мемлекеттік бюджеті: қаржы және пайдалану Мәселелері.....	100
<i>Тлесова Э., Хойч А., Кураш Н.</i> Орталық азия мемлекеттерінің экономикасы.....	104
<i>Туякова А.Е.</i> «Рухани жаңғыру» бағдарламасындағы патриотизмні Қазақстандық даму тарихы факторы ретінде қалыптастыру.....	111

СОДЕРЖАНИЕ

Технические науки

<i>Ахметов Б., Гнатюк С., Жмурко Т., Кинзерявий В., Юбузова Х.</i> Экспериментальные исследования имитационной модели работы детерминистического протокола безопасной связи в квантовом канале с шумом.....	5
<i>Усольцева Г.А., Акбаров М.С., Акчил А., Яркова А.А.</i> Физико-химический анализ электролитического оловосодержащего шлама	11
<i>Кенжебаева Ж.Е.</i> Геоинформационные технологии в различных системах.....	20

Биологические науки

<i>Кершанская О.И.</i> Новая революционная биотехнология редактирования генома CRISPR/CAS9 для создания элитных сортов сельскохозяйственных культур в Казахстане.....	24
---	----

Аграрные науки

<i>Абугалиев С.К., Сейдалиев Н.Б., Далибаев Е.К., Жамалов Б.С., Муқа Ш.Б.</i> Организация проведения заказного спаривания и геномного анализа бычков в молочном скотоводстве.....	41
---	----

Общественные науки

<i>Әмірбекұлы Е., М. Ф. Грела, Тазабекова А.</i> Предпринимательство как фактор роста конкурентоспособности г. Алматы.....	48
<i>Абуов К.К., Абдильдинова Н.Е., Галиева А.Х.</i> Формирование и развитие аграрного рынка труда в северном Казахстане (на примере Акмолинской области).....	56
<i>Аюпова З.К., Кусаинов Д.У.</i> Особенности формирования государственности и права в республике Казахстан.....	61
<i>Бижанов Д.Т., Нургабылов М.Н., Абдрахманова Р.С., Дошан А.С.</i> Проблемы экономической безопасности топливно-энергетических ресурсов страны.....	66
<i>Буткенова А.К.</i> Мониторинг развития человеческого капитала на промышленных предприятия.....	73
<i>Ескалиева А. Ж., Дарискалиева М.С., Канатова А.Ж.</i> Перспективы усиления качества человеческого капитала.....	78
<i>Игалиева Л.Н.</i> Оценка социально-экономического развития и обеспечения экологической безопасности региона (на примере Атырауской области).....	82
<i>Ицанова Р.К.</i> Государственный бюджет как ведущее звено финансовой системы государства.....	89
<i>Панзабекова А.Ж., Мусаева Д.М., Жанбозова А.Б.</i> Формирование и развитие информационного общества в контексте его влияния на качество жизни населения.....	94
<i>Сабирова Р.К., Адиетова Э.М., Бисембиева Ж.К.</i> Государственный бюджет Казахстана: проблемы финансирования и использования.....	100
<i>Тлесова Э., Хойч А., Кураш Н.</i> Экономика центрально-азиатских стран.....	105
<i>Туякова А.Е.</i> Формирование патриотизма в рамках программы «Рухани жаңғыру» как исторический фактор развития Казахстана.....	111

CONTENTS

Technical sciences

<i>Akhmetov B., Gnatyuk S., Zhmurko T., Kinzeryayy V., Yubuzova Kh.</i> Experimental research of the simulation model for deterministic secure communication protocol in quantum channel with noise.....	5
<i>Ussoltseva G., Akbarov M., Akchil A., Yarkova A.</i> Physico-chemical analysis of a tin-containing electrolytic slime.....	12
<i>Kenzhebayeva Zh.E.</i> Geoinformation technologies in various systems.....	20

Biological sciences

<i>Kershanskaya O.I.</i> New breakthrough CRISPR/CAS9 biotechnology of genome editing for creation of elite crops in Kazakhstan.....	24
--	----

Agrarian science

<i>Abugaliyev S.K., Seydaliyev N.B., Dalibayev E.K., Zhamalov B.S., Muka Sh.B.</i> Procedure of custom mating and genomic analysis of bull-calves in dairy cattle breeding.....	41
---	----

Social sciences

<i>Amirbekuly Ye., Manuel Fernandez Grela, Tazabekova A.</i> Entrepreneurship as a driver of competitiveness of the city of Almaty	48
<i>Abuov K.K., Abdildinova N.E., Galiyeva A. K.</i> Formation and development of the agrarian labor market in northern Kazakhstan (on the example of the Akmola region).....	56
<i>Ayupova Z.K., Kussainov D.U.</i> Features of formation of statehood and law in the republic of Kazakhstan.....	61
<i>Bizhanov D.T., Nurgabylov M.N., Abdrakhmanova R.S., Doshan A.S.</i> Problems of economic security of the fuel and energy resources of the country.....	66
<i>Butkenova A.K.</i> Monitoring of human capital development in industrial enterprises.....	73
<i>Eskalieva A.Zh., Dariskalieva M.S., Kanatova A.Zh.</i> Prospects for strengthening the quality of human capital.....	78
<i>Igaliyeva L.N.</i> Assessment of socio-economic development and environmental security of the region (on the example of Atyrau region).....	82
<i>Ichshanova R.K.</i> State budget as the leading link of the financial system of the state.....	89
<i>Panzabekova A.Zh., Mussayeva D.M., Zhanbozova A.B.</i> Formation and development of information society in the context of its impact on quality of population life.....	94
<i>Sabirova R.K., Adietova E.M., Bisembieva Zh.K.</i> State budget of Kazakhstan: problems of financing and use.....	100
<i>Tlessova E., Khoich A., Kurash N.</i> Economy of central asian countries.....	105
<i>Tuyakova A.E</i> Formation of patriotism in the framework of the program " ruhani zhangyru " as a historical factor of the development of Kazakhstan.....	111

**Publication Ethics and Publication Malpractice
in the journals of the National Academy of Sciences of the Republic of Kazakhstan**

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the originality detection service Cross Check <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

www.nauka-nanrk.kz

ISSN 2518-1483 (Online), ISSN 2224-5227 (Print)

<http://www.reports-science.kz/index.php/ru/>

Редакторы *М. С. Ахметова, Т.А. Апендиев, Аленов Д.С.*
Верстка на компьютере *А.М. Кульгинбаевой*

Подписано в печать 13.10.2018.
Формат 60x881/8. Бумага офсетная. Печать – ризограф.
7 п.л. Тираж 500. Заказ 5.