ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

ХАБАРШЫСЫ

ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК РЕСПУБЛИКИ КАЗАХСТАН

THE BULLETIN

OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN

1944 ЖЫЛДАН ШЫҒА БАСТАҒАН ИЗДАЕТСЯ С 1944 ГОДА PUBLISHED SINCE 1944





NAS RK is pleased to announce that Bulletin of NAS RK scientific journal has been accepted for indexing in the Emerging Sources Citation Index, a new edition of Web of Science. Content in this index is under consideration by Clarivate Analytics to be accepted in the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index. The quality and depth of content Web of Science offers to researchers, authors, publishers, and institutions sets it apart from other research databases. The inclusion of Bulletin of NAS RK in the Emerging Sources Citation Index demonstrates our dedication to providing the most relevant and influential multidiscipline content to our community.

Қазақстан Республикасы Ұлттық ғылым академиясы "ҚР ҰҒА Хабаршысы" ғылыми журналының Web of Science-тің жаңаланған нұсқасы Emerging Sources Citation Index-те индекстелуге қабылданғанын хабарлайды. Бұл индекстелу барысында Clarivate Analytics компаниясы журналды одан әрі the Science Citation Index Expanded, the Social Sciences Citation Index және the Arts & Humanities Citation Index-ке қабылдау мәселесін қарастыруда. Web of Science зерттеушілер, авторлар, баспашылар мен мекемелерге контент тереңдігі мен сапасын ұсынады. ҚР ҰҒА Хабаршысының Emerging Sources Citation Index-ке енуі біздің қоғамдастық үшін ең өзекті және беделді мультидисциплинарлы контентке адалдығымызды білдіреді.

НАН РК сообщает, что научный журнал «Вестник НАН РК» был принят для индексирования в Emerging Sources Citation Index, обновленной версии Web of Science. Содержание в этом индексировании находится в стадии рассмотрения компанией Clarivate Analytics для дальнейшего принятия журнала в the Science Citation Index Expanded, the Social Sciences Citation Index и the Arts & Humanities Citation Index. Web of Science предлагает качество и глубину контента для исследователей, авторов, издателей и учреждений. Включение Вестника НАН РК в Emerging Sources Citation Index демонстрирует нашу приверженность к наиболее актуальному и влиятельному мультидисциплинарному контенту для нашего сообщества.

Бас редакторы

х. ғ. д., проф., ҚР ҰҒА академигі

М. Ж. Жұрынов

Редакция алқасы:

Абиев Р.Ш. проф. (Ресей)

Абишев М.Е. проф., корр.-мушесі (Қазақстан)

Аврамов К.В. проф. (Украина)

Аппель Юрген проф. (Германия)

Баймуқанов Д.А. проф., корр.-мүшесі (Қазақстан)

Байпақов К.М. проф., академик (Қазақстан)

Байтулин И.О. проф., академик (Қазақстан)

Банас Иозеф проф. (Польша)

Берсимбаев Р.И. проф., академик (Қазақстан)

Велихов Е.П. проф., РҒА академигі (Ресей)

Гашимзаде Ф. проф., академик (Әзірбайжан)

Гончарук В.В. проф., академик (Украина)

Давлетов А.Е. проф., корр.-мүшесі (Қазақстан)

Джрбашян Р.Т. проф., академик (Армения)

Қалимолдаев М.Н. проф., академик (Қазақстан), бас ред. орынбасары

Лаверов Н.П. проф., академик РАН (Россия)

Лупашку Ф. проф., корр.-мүшесі (Молдова)

Мохд Хасан Селамат проф. (Малайзия)

Мырхалықов Ж.У. проф., академик (Қазақстан)

Новак Изабелла проф. (Польша)

Огарь Н.П. проф., корр.-мүшесі (Қазақстан)

Полещук О.Х. проф. (Ресей)

Поняев А.И. проф. (Ресей)

Сагиян А.С. проф., академик (Армения)

Сатубалдин С.С. проф., академик (Қазақстан)

Таткеева Г.Г. проф., корр.-мүшесі (Қазақстан)

Умбетаев И. проф., академик (Қазақстан)

Хрипунов Г.С. проф. (Украина)

Юлдашбаев Ю.А. проф., РҒА корр-мүшесі (Ресей)

Якубова М.М. проф., академик (Тәжікстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының Хабаршысы».

ISSN 2518-1467 (Online), ISSN 1991-3494 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы»РҚБ (Алматы қ.)

Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде 01.06.2006 ж. берілген №5551-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 2000 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18,

www: nauka-nanrk.kz, bulletin-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:

Абиев Р.Ш. проф. (Россия)

Абишев М.Е. проф., член-корр. (Казахстан)

Аврамов К.В. проф. (Украина)

Аппель Юрген проф. (Германия)

Баймуканов Д.А. проф., чл.-корр. (Казахстан)

Байпаков К.М. проф., академик (Казахстан)

Байтулин И.О. проф., академик (Казахстан)

Банас Иозеф проф. (Польша)

Берсимбаев Р.И. проф., академик (Казахстан)

Велихов Е.П. проф., академик РАН (Россия)

Гашимзаде Ф. проф., академик (Азербайджан)

Гончарук В.В. проф., академик (Украина)

Давлетов А.Е. проф., чл.-корр. (Казахстан)

Джрбашян Р.Т. проф., академик (Армения)

Калимолдаев М.Н. академик (Казахстан), зам. гл. ред.

Лаверов Н.П. проф., академик РАН (Россия)

Лупашку Ф. проф., чл.-корр. (Молдова)

Мохд Хасан Селамат проф. (Малайзия)

Мырхалыков Ж.У. проф., академик (Казахстан)

Новак Изабелла проф. (Польша)

Огарь Н.П. проф., чл.-корр. (Казахстан)

Полещук О.Х. проф. (Россия)

Поняев А.И. проф. (Россия)

Сагиян А.С. проф., академик (Армения)

Сатубалдин С.С. проф., академик (Казахстан)

Таткеева Г.Г. проф., чл.-корр. (Казахстан)

Умбетаев И. проф., академик (Казахстан)

Хрипунов Г.С. проф. (Украина)

Юлдашбаев Ю.А. проф., член-корр. РАН (Россия)

Якубова М.М. проф., академик (Таджикистан)

«Вестник Национальной академии наук Республики Казахстан».

ISSN 2518-1467 (Online), ISSN 1991-3494 (Print)

Собственник: POO «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 №5551-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год Тираж: 2000 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219, 220, тел. 272-13-19, 272-13-18.

www: nauka-nanrk.kz, bulletin-science.kz

© Национальная академия наук Республики Казахстан, 2018

Editor in chief

doctor of chemistry, professor, academician of NAS RK

M. Zh. Zhurinov

Editorial board:

Abiyev R.Sh. prof. (Russia)

Abishev M.Ye. prof., corr. member. (Kazakhstan)

Avramov K.V. prof. (Ukraine)

Appel Jurgen, prof. (Germany)

Baimukanov D.A. prof., corr. member. (Kazakhstan)

Baipakov K.M. prof., academician (Kazakhstan)

Baitullin I.O. prof., academician (Kazakhstan)

Joseph Banas, prof. (Poland)

Bersimbayev R.I. prof., academician (Kazakhstan)

Velikhov Ye.P. prof., academician of RAS (Russia)

Gashimzade F. prof., academician (Azerbaijan)

Goncharuk V.V. prof., academician (Ukraine)

Davletov A.Ye. prof., corr. member. (Kazakhstan)

Dzhrbashian R.T. prof., academician (Armenia)

Kalimoldayev M.N. prof., academician (Kazakhstan), deputy editor in chief

Laverov N.P. prof., academician of RAS (Russia)

Lupashku F. prof., corr. member. (Moldova)

Mohd Hassan Selamat, prof. (Malaysia)

Myrkhalykov Zh.U. prof., academician (Kazakhstan)

Nowak Isabella, prof. (Poland)

Ogar N.P. prof., corr. member. (Kazakhstan)

Poleshchuk O.Kh. prof. (Russia)

Ponyaev A.I. prof. (Russia)

Sagiyan A.S. prof., academician (Armenia)

Satubaldin S.S. prof., academician (Kazakhstan)

Tatkeyeva G.G. prof., corr. member. (Kazakhstan)

Umbetayev I. prof., academician (Kazakhstan)

Khripunov G.S. prof. (Ukraine)

Yuldashbayev Y.A., prof. corresponding member of RAS (Russia)

Yakubova M.M. prof., academician (Tadjikistan)

Bulletin of the National Academy of Sciences of the Republic of Kazakhstan.

ISSN 2518-1467 (Online), ISSN 1991-3494 (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

 $Ministry\ of\ Culture\ and\ Information\ of\ the\ Republic\ of\ Kazakhstan\ N\ 5551-\c X,\ issued\ 01.06.2006$

Periodicity: 6 times a year Circulation: 2000 copies

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

http://nauka-nanrk.kz/, http://bulletin-science.kz

© National Academy of Sciences of the Republic of Kazakhstan, 2018

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

BULLETIN OF NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN ISSN 1991-3494

Volume 6, Number 376 (2018), 188 – 191

https://doi.org/10.32014/2018.2518-1467.44

Dr. Marat Naribayev

Kazakh-German University, Full member (Academician) of the International Informatization Academy

THE ECONOMIC BELT OF THE SILK ROAD: OPPORTUNITIES AND RISKS FOR KAZAKHSTAN

Key words: the Economic belt of the Silk Road, EBSR initiative, digitalization of the Silk Road, interface with the EAEU and the SCO, risks, environmental threats, regional cooperation.

The initiative "Economic belt of the Silk Road" (hereinafter referred to as the initiative or EBSR), voiced by the Leaderof China Xi Jinping, touches the prospects of economic development of the whole subcontinent - Eurasia [1].

The long-term, large-scale and conceptual nature of the initiative is confirmed by the fact that in 2015 the State Council of the People's Republic of China (CPC) decided to issue a document entitled "Excellent prospects and practical actions for the joint creation of the Economic belt of the Silk Road and the Silk Road of the XXI century" for the implementation of the strategic concept "One belt - one way", which united EBSR and the Silk Road of the Sea [2].

This document declares that EBSRis open to all countries, international and regional organizations, and also creates the basis for economic cooperation between the PRC and interested countries. It is assumed that the main routes of EBSRwill be from China:

- through the Central Asia region, Russia to Europe (to the Baltic Sea);
- through the Central Asia region and West Asia to the Persian Gulf and the Mediterranean Sea;
- to South-East Asia, South Asia, to the Indian Ocean [2].

The initiative is designed for several decades to come. At present, it represents one of the vectors of China's advance towards a new role of a global power. This should lead to the creation of a full-fledged free trade zone from the north-western provinces of China, Central Asia to Central and Eastern Europe.

China is carrying out large-scale multidirectional work to support and promote the Initiative. So In 2016 a special Russian-language magazine "Silk Road-Revue" was founded, which is published once a month and informs about events, events that are somehow connected with the implementation of EBSR. Only one issue of this magazine for 2018 - contains more than 20 articles, materials on this topic. Pages of the magazine are provided to experts from countries passing through the territory of the Great Silk Road.

And the Boao Forum for Asia (Boao, Hainan Province), held in April this year, in which more than 2,000 delegates from around the world participated, issued the "Annual Report on the Competitiveness of Asia in 2018". The document notes that the "Belt and the Way" initiative has become the driving force of regional economic integration in Asia, within which regional economic cooperation is constantly growing. The initiative provides a large number of jobs and higher incomes, as well as creates favorable conditions for contacts and cooperation [3].

This indicates the objectivity of the Initiative, which emerged on the transcontinental level. EBSR develops, involving countries and regions, attracting the approval of international organizations and regional structures. Against this backdrop, we can highlight some of the opportunities and risks of Kazakhstan's participation in this initiative.

EBSR as a risk of increasing environmental threats. The implementation of the Initiative is a potential source of increasing environmental threats for the Central Asian region and, in particular, for Kazakhstan. Within its framework, "dirty" enterprises will be transferred outside China [4]. Environmental risks and threats are obvious and significant. Among them are:

ISSN 1991-3494 № 6. 2018

- large growth in traffic volumes and construction of infrastructure;
- export of environmentally harmful production from the territory of China to other countries, including Kazakhstan;

- exclusion and active exploitation of land, water and other types of natural resources.

The first threat is associated with the expansion of traffic flows EBSR. For highways, the large-scale construction of railways will lead to a significant deterioration of the environment of the countries participating in the project.

The next threat - the export of "dirty" productions to transit countries, as a result, will lead to increased pollution of the environment. This threat should be balanced by the tightening of environmental standards and regulations based on the closure of such production and improving the management of the resources used.

The third threat, the alienation of land, water and other types of natural resources must be accompanied by purposeful efforts to increase environmental standards for the technologies and industries used, as well as compensatory measures for conserving the biological diversity of natural ecosystems [5].

Therefore, the Initiative identifies the need to develop measures and effective tools to reduce environmental threats. It is proposed to build objects of "green" low-carbon infrastructure to prevent the negative impact of EBSR projects on the environment and climate [2].

To reduce the impact of environmental threats of EBSR in Kazakhstan, an important measure is the implementation of the Concept on the transition of our country to a "green" economy [6]. The concept is aimed at the effective use of natural resources and improving the welfare of citizens of Kazakhstan through economic diversification, the creation of renewable energy sources, environmentally friendly technologies. Improving the living conditions of citizens, strengthening the health of the nation and increasing the life expectancy of the population will be due to the improvement of the state of the environment. Kazakhstan has the image of a responsible member of the world community for sustainable development at the global and national levels thanks to the initiatives of the President of the country N.Nazarbayev to create institutional foundations for promoting a "green" economy in the Eurasian space [7].

Information and digitalization of the Silk Road. A good opportunity for Kazakhstan is the initiative proposed by the to promote the construction of a cross-border network of fiber-optic lines and other types of communication, to raise the level of international telecommunications for the construction of the so-called "Information Silk Road" [2].

The participation of Kazakhstan in this direction is objectively supported by the State Program "Digital Kazakhstan" (Program). It is aimed at including:

- acceleration of economic development;
- improving the quality of life through digital technologies;
- the creation of a digital economy in the future [8].

The Program provides for the direction "Digital Silk Road", which involves the development of a high-speed and secure infrastructure for the transmission, storage and processing of data.

The implementation of the "Digital Silk Road" involvestwo initiatives: 1) expanding the coverage of communication networks; 2) increased cybersecurity. The first is planned to conduct broadband Internet access to the villages, develop a new generation mobile infrastructure and modernize the satellite system. To strengthen cybersecurity, the Program envisages the creation of an institutional structure, including a coordination center and three laboratories.

In rural areas, the Internet will be conducted through fiber-optic communication lines. They will be built within PGPs in more than 1,000 rural settlements. More than 2 million people can use communication services, in state agencies and budgetary institutions. In addition, the adoption of standards for a new generation of mobile communication 5G will provide additional opportunities for the development of the "Digital Silk Road" [8].

It is expected that the Program, during its implementation until 2022, will provide a tangible impetus for technological modernization of the country's leading industries, will create conditions for large-scale and long-term growth of labor productivity. EBSRwill become a driver of development, providing technological modernization of the country's leading industries and creating conditions for large-scale and long-term growth in labor productivity.

Pairing EBSRwith the Eurasian Economic Union (EAEU) and the Shanghai Cooperation Organization (SCO). The One-Way, One-Way Initiative stimulates the docking of the country's development program and their cooperation and enables the creation of new forms and channels of international cooperation and a new model of global governance [7].

As part of the effective cooperation mechanisms of the Initiative, it is envisaged to strengthen and take advantage of the multilateral mechanisms, to which the SCO primarily refers [2]. Here it is necessary to distinguish the following.

- 1. The SCO promotes the cooperation of member countries in the areas of trade, finance, investment, infrastructure, and energy. Work is underway to develop the transport infrastructure and mutual trade, which are priorities in EBSR.
- 2. The SCO countries have the necessary factors for economic growth raw materials, skilled labor, and technology. They also occupy a convenient geostrategic position with respect to existing and promising ways of world trade.
- 3. The SCO region is a huge and capacious consumer market, which includes three major economies of the world China, Russia, and India.
- 4. Presence of institutional factors. At the summit of the heads of SCO member states in June 2017, new institutional opportunities for deepening trade and economic cooperation and strengthening the competitiveness of the region were examined to promote the economic growth of member countries.

In this regard, the SCO is an important element (platform) for the development of ESMP, strengthening of interaction and coordination of joint efforts.

As for the Unified Energy System, there is an increasing role in the development of the Eurasian continent. Experts from different countries are considering a good opportunity to interface it with EBSR. The agreement on this was achieved at the highest level. Let us highlight a number of aspects.

- 1. Prospects for bilateral cooperation in the framework of the EAEC interfacing with EBSR. So Kazakhstan is actively implementing the plan for the cooperation of the interface of the national program "Nurly Zhol" and EBSR.
- 2. The EAEC plays an important role in the development of the Eurasian continent. At the same time, the following conditions must be met for conjugation of EBSR and EAEC:
 - A) Development of institutional support issues;
 - B) Ensuring security and stability as key conditions for successful pairing;
- C) The development of humanitarian cooperation is one of the important priorities and elements of the foundation of EBSR. A striking example of this is the provision of annual government educational scholarships to students from countries passing along the "Belt and the Way" [3].

The conjugation of the EAEU and EBSRwill contribute to the development of the process of the Eurasian partnership, open to interaction with all interested states and regional integration structures.

Summing up, it can be stated that the Economic belt of the Silk Road is an objective and evolving process, in which the current tendencies such as the digitalization of the Silk Road, interface with the regional blocks of the SCO and the EAEU are being formed. However, the impact of EBSRis also the reverse side - significant risks in the form of environmental threats.

In conclusion, I would like to note that the participation of the Central Asian countries, including Kazakhstan in EBSR, is objective. Therefore, it is necessary to continue work on the implementation of the Initiative and take advantage of the benefits of EBSR in order to promote the development of Kazakhstan's national economy, taking into account the trends and risks considered [9].

REFERENCES

- [1] Statement by President Xi Jinping of the People's Republic of China at the Nazarbayev University (full text). [Electronic resource] / Link: //http://kz.china-embassy.org. 09/16/2013.
- [2] "Excellent prospects and practical actions for the joint creation of the Economic belt of the Silk Road and the Silk Road of the XXI century". Consulate General of the People's Republic of China in Almaty, 2015.
 - [3] "Silk Road Revue". Journal of the China International Association of Publishers., "Zhenmin Huabao", N 4, 2018.
- [4] Naribayev M.K. SkokbayevZh.S. The initiative "Economic corridor of the Silk Road" in the perspective of the concept of "green economy" for Kazakhstan. Collection of articles of the XIII annual international scientific conference: Modern global trends: challenges and risks for Central Asia. Almaty, KNU, 2017.

ISSN 1991-3494 № 6. 2018

[5] Alieva A. The project EBSRis considered risky for ecology. [Electronic resource] / Link: http://dea.kg/1/biznes/mirovoj-biznes/621 29.04.2017.

- [6] The Republic of Kazakhstan. Concept on the transition of the Republic of Kazakhstan to the "green economy" // Internet portal of the national strategy "Kazakhstan-2050". 2013. May 30 [Electronic resource] / Link: http://strategy2050.kz/static/files/Concept Rus.pdf
- [7] Satybaldin AA, Esekina BK, Nurlanova NK The paradigm of the future energy: the path of Kazakhstan // Problems of the modern economy, N 3 (63), 2017. Electronic resource] / Link: http://www.m-economy.ru/art.php?nArtId=6173
- [8] State program "Digital Kazakhstan". 2017 // [Electronic resource] / Link: https://primeminister.kz/en/page/view/gosudarstvennaya programma digital kazahstan
- [9] Naribayev M.K. Economic corridor of the Silk Road: possible approaches and ways of Kazakhstan's participation. Collected articles of the round table: Economic corridor of the Silk Road and Kazakhstan: state and prospects. Almaty, IIIM & R at KGU, 2015.

Марат Нарибаев

Казахско-Немецкий университет

THE ECONOMIC BELT OF THE SILK ROAD: OPPORTUNITIES AND RISKS FOR KAZAKHSTAN

Аннотация. Мақалада Қазақстанның Жібек жолының экономикалық белдеуіне қатысуына байланысты пайда болатын жаңа үрдістер қарастырылады. ШЫҰ және ЕАЭО сияқты құрылымдардың ара қатынасы және халықаралық ынтымақтастықтың жаңа түрлерінің пайда болуы талданады. Қазақстанның Жібек жолының экономикалық белдеуіне қатысуының пайдалы жақтары, мүмкіндіктері және тәуекелдіктері анықталады.

Марат Нарибаев

Казахско-Немецкий университет

ЭКОНОМИЧЕСКИЙ ПОЯС ШЕЛКОВОГО ПУТИ: ВОЗМОЖНОСТИ И РИСКИ ДЛЯ КАЗАХСТАНА

Аннотация. В статье рассмотрены некоторые значимые аспекты и возможные подходы участия Казахстана в инициативе Экономический пояс Шелкового пути. Проанализированы формирующиеся и актуальные тенденции Экономического пояса Шелкового пути, такие как цифровизация Шелкового пути, сопряжение с ШОС и ЕАЭС. Определены благоприятные факторы, возможности и риски участия Казахстана в ЭПШП.

Information about author:

Naribayev Marat – Doctor of Economics, Professor, Kazakh-German University, Full member (Academician) of the International Informatization Academy, https://orcid.org/0000-0002-0251-7949

ISSN 1991-3494 № 6. 2018

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 described work 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 Cross Check originality detection service 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 2518-1467 (Online), ISSN 1991-3494 (Print)
http://www.bulletin-science.kz/index.php/ru/

Редакторы М. С. Ахметова, Т. М. Апендиев, Д. С. Аленов Верстка на компьютере Д. Н. Калкабековой

Подписано в печать 29.11.2018. Формат 60х881/8. Бумага офсетная. Печать – ризограф. 16,5 п.л. Тираж 500. Заказ 6.