Transformation of the Finance under Quarantine Conditions

Temirov Xamid (PhD)

Tashkent institute of textile and light industry. Republic of Uzbekistan. titli_info@edu.uz Mansurov Mansur (PhD) Tashkent institute of textile and light industry. Republic of Uzbekistan. titli_info@edu.uz Xudoykulov Mamarasul (PhD) Tashkent institute of textile and light industry. Republic of Uzbekistan. titli_info@edu.uz Azimova Lola Tashkent institute of textile and light industry. Republic of Uzbekistan. titli_info@edu.uz Yuldasheva Minavar Tashkent State Transport University tashiit_rektorat@gmail.ru

ABSTRACT

The subject of the research is a quarantine condition as a factor in the transformation of the finance. The objectives of the article are to identify the dominant trends in the transformation of the finance as a result of the quarantine condition, to determine the features of the current global financial and economic crisis caused by the quarantine condition, to consider anti-crisis measures taken by national regulators to mitigate the consequences of the crisis, to analyze the consequences of the quarantine condition for the finance and the possibilities for its development after the end of the pandemic. The analysis of the dominant tendency of de-globalization due to the pandemic and the growing tendencies of regionalization and protectionism, as well as the transition to a bipolar structure of finance. Determined that the crisiscaused by a pandemic differs in that it occurs in the spheres of production and consumption. Determined thatthe current crisis marks the transition to the sixth technological order, within whichglobal cyber financial system. It has been established that after the end of the pandemic, the finance will movetowards a model of lower income and greater stability. It is concluded that the COVID-19 pandemic will develop into a major economic and geopoliticalcrisis and can provoke a significant transformation of the modern world economic order.

Key words: pandemic, finance, coronavirus; financial and economic crisis; global cyber financial system; de-globalization; regional autarchy; protectionism; institutionalization of the crisis; sixthtechnological structure; supranational regulation of the world economy.

INTRODUCTION

2020 began with the conditions of relative stability of the world economy in developing countries and cautious forecasts of economists and analysts, predicting the growth of the world economy, finance by 2-3%. However, the "black swan" the threat to the global economy was not adequately assessed in January 2020. We are talking about the COVID-19 epidemic, which began in the Chinese province of Wuhanin December 2019 and reached its highest stage in February 2020. And only in March 2020, the World Health Organization (WHO) declared a pandemic, quarantine and the world economy, finance essentially stopped [1]

The beginning of a new structural world financial and economic crisis was avoided for ten years mainly due to the adoption of comprehensive measures of national and supranational regulation of the economy and finance. The collapse of oil prices in March became a kind of false start of the crisis in 2020. Mainly, COVID-19 virus became a trigger of the financial and economic crisis, therefore any economist would not riskgive a forecast of the time in March 2020 when it will be possible to restoreworld economic growth [2].

It is obvious that without a healthy world economy, it is impossible to accelerate the development of national economies, finance. However, at present, the state of the finance is determined by a complex of negative trends caused by its halt in the spring of 2020due to the pandemic. That is why it is practically unpredictable and, it is difficult to analyze it. The COVID-19 pandemic began in the context of the so-called new trajectory of global economic, financial growth, announced by economic and financial analysts, which, in our opinion, looked unreasonably optimistic [1]. A recurring trend of unstable growth in nationaleconomies up to 2019 could persist for a long time due to the fact that financial abundance, accompanied by an exorbitant debt burden, forced the economics of a number of countries to develop in multidirectional vectors, expressed in annual economic growth of varying intensity [2]. But the pandemic and the ensuing temporary halt in the economies of most countries interrupted these multi-vector processes.

The dominant trends that had a negative impact on world economic development and directly slowed it down were the reduction in operations in the world financial market, the growth of global debt with a high degree of volatility in corporate debt, unreliable and very long global production chains of addedcost, volatile cross-border flowscapital and extremely volatile oil prices.

All of the above trends in the world finance depend on each other and create conditions for the transformation of finance growth into the next world economic recession [3].

FINANCE IN THE CONDITION OF QUARINTINE

Essentially, against the backdrop of a pandemic and a forced compliance with quarantine measures began to be clearly manifested, and the symptoms of the economic and financial crisis began to grow like an avalanche: stock prices fell on world stock exchanges, the price of gold increased, global value added production chains were broken, including number in the global automotive and aviation industries. Companies reported shortages of components, international trade fairs, the financial services has completely stopped: tourism, air transportation, hotel

and the restaurant business, the so-called industry, beauty, etc. Ceased to function all small and medium-sized businesses formed more than 60% of the global service industry, which in the XXI century structurally accounted for 80-90% of the world

economy [10].

The COVID-19 pandemic from China has stalled the already modest (if not sluggish) growth of the global economy, finance. Mackinsey analysts predict[]that global financial, economic growth will decline amid successfully launching economies, finances of the leading countries of the world after leavingquarantine can range from 5.5 to 8-9%. In the spring in 2020, there was a decrease in quotations of all exchange commodities: the price index for non-food agricultural products decreased by 23.4%; for metals - by 14.2%. In March-April 2020, the price of Brent crude fluctuated at \$ 16.5 in USA, which was 40% below the average monthly price for the same period in 2019 and 77% less than the average annual price in 2019 [4].

It is seemed to most economists-theorists and practitioners that by 2022 the world economy, finance would be able to get out of the gravitational trap of the 2008-2009 global financial crisis. Optimistic forecasts were reasoned strong quarterly GDP growthsince mid-2017, the lowest

http://annalsofrscb.ro

unemployment rate in 49 years, separate signals of wage growth, a steady increase in stock markets and house prices. Pessimistic forecasts were built on the basis of the following factors: due to a one-time decline taxes and unstable dynamics of budget deficits caused by the rapid growth of private sector debt; employment growth can hide the problem of unreliability of employment and unmotivated employees. Given these trends persistence of recession in the globalfinance, economylooked like a more likely scenario than the optimistic forecast [4].

Pessimistic forecasts of a slowdown in global economic growth in 2020 were confirmedeconomic indicators in European countries. In Western Europe, unemployment rates decreased slightly, but were higher than in the USA, and their growth in 2019 (relative to 2018) for the Eurozone and the E.U amounted to 0.4 and 0.5%, respectively. In addition, the growth of the German economy has slowed down due to a decrease in the volume of national exports, and the French economy has failed to demonstrate sustained growth since the beginning of 2018 [6]

By the beginning of 2020, it became obvious that the conclusion on a positive "outcome" and a way out of the "gravitational" consequences of the international financial and economic crisis of 2008-2009 were premature. There was a real likelihood of a rollback to a new crisis in a number of countries, in other words, "the crisis is ripe". In some developing countries that were already in a state of recession or were close to it, the factor of financial, economic and political uncertainties that provoked by the pandemic especially increased the danger of a rapid unfolding of the economic crisis. The crisis in the energy market has made it difficult without addition to the difficult situation with economic growth in developing countries - energy exporters [5].

In Asian countries, namely in the two finance, economies with the highestrate of financial economic growth in the world: the Chinese and Indian, - the pace of

economic growth. The halt of the Chinese economy in January-February 2020 due to the COVID-19 epidemic in Wuhan [7] led to a loss of paceeconomic growth already according to the results of the first quarter in 2020. If we add to these losses the reduction (practically suspension of) tourist flow to and from China, distrust of Chinesegoods, especially network distribution, a drop in the business activity index to 40 p.p., then it can be concluded that in a trade war with the United States and China was losing the position of "favorite of the race"[8].

TAKING ANTI-CRISIS MEASURES

The consequences of the world financial and economic crisis of 2008-2009 were largely mitigated and translated into an economic recession that lasted for more than a decade, thanks to the measures taken by the countries of the so-called quantitative easing [10]. In particular, the U.S government regulatory agencies quickly set about implementing a set of anti-crisis programs. In 2008-2009. \$ 700 billion was invested from the US budget (according to Obama's plan). The effect of central banks' policy on key rates was offset by the consequences of the crisis and remained insignificant until 2019 [6].Despite the lack of effective resultssuch a policy of central banks in the post-crisis decade (2009–2019) in the developed countries, to use passive monetary methods of economic regulation and rejection of active fiscal measures.

The main argument in favor of this position isostensibly no alternative, although experience since 2009 appears to show that opportunities for monetary measures. Nevertheless, at the beginning of 2020, almost all countries following the US, they resorted to "money injections" into the economy. The size of general government measuresnational GDP were in Germany -60%; Italy - 44%; France - 26%; England - 21%; USA - 14%; Spain - 12%; Russian Federation - 2.1%;

Kazakhstan - 9%; Armenia - 2% 12 [9].

QUARANTINE CONDITIOS AS A FACTOR OF THE FINANCIAL CRISIS

The COVID-19 pandemic has an almost 100% chance of escalating into a major economic and geopolitical crisis. Coronavirus can provoke the collapse of the modern world order and become the point of record "Ice age" in the world economy. As a result of the pandemic, national economies go into a "self-isolation regime", against the background of which national conflicts escalate, borders are closed, protectionism or bloc confrontation.

Symptoms of the crisis in the world economy and global finance against the backdrop of the COVID-19 pandemic as a crisis factor are currently growing: stock prices are falling, the price of gold as a hedging asset is growing. However, in the opinion of most analysts, a classic and painful crisis, like in 2008-2009, can be avoided. The first, the situation in the banking sector is much more stable, sustainability management measures banks, in particular the Basel Accords. Banks, including backbone, demonstrate now sufficient resilience against the backdrop of a pandemic and practically onset of the financial and economic crisis. The second, the pandemic is definitelyviolated the entire system of international exchanges, and in most cases it has severed global value chains [9]. This situation makes it possible to ecover rapid economic: from workers places to logistics and transport chains, as well as consumption. The third, after the crisismore careful alignment is expected and a significant reduction in global chains added value production; moreover, such processes are already beginning. The fourth, the current financial and economic crisis provoked by the COVID-19 pandemic differs from most previous crises in that it is characterized not only by a reduction and even a halt in production, but also by a sharp reduction in consumption caused by quarantine measuresin the most developing countries. The pandemic has become the strongest factor of pressure on the global effective demand. The fifth, in the context of a pandemic, it became obvious that the world monetary and financial system is unregulated at the supranational level, as a consequence, periodic financial crises create a permanent crisis background for development of the world finance, economy, which was demonstrated by the pandemic. For finance and economy, there was enough such a world destabilizing factor as a quarantine and pandemic, and the entire "architecture" of the finance, economy and world finance collapsed. The sixth, modern financial and economic the crisis is caused by the pandemic and the lack of an effective vaccine could drag on for several years. In this case, the crisis will be institutionalized and can become chronic (withinabout four years).

Despite the above opinion that the current crisis will be milder than the 2008–2009 crisis, the global economic situation looks much worse than in 2008. In particular, the total debt of the G20 (G20) in 2008accounted for 200% of world GDP, and in 2019 - 240% [8]. There is much less freedom of anti-crisis maneuvers since bank interest rates have long been close to zero, and the state debt is significantly higher than in 2008 [7]. And, finally, in the last four years in the globalfinance, economy, tendencies opposite to globalism have clearly formed: the trends of protectionism, as well as the so-called regional autarky - the system

closed reproduction with minimal dependence on exchange with the external environment. In this regard, it seems appropriate to refer to the experience of overcoming the crisis caused by major epidemics in the national finance and economies of individual countries. In particular, the large-scale epidemic of the Ebola virus was an acute regional problem in West Africa in 2015. The

economic impact of the epidemic in the countries of the region was very different. For example, in Sierra Leone in 2015 [8], national GDP fell by 25% and economic growth slowed down. In Liberia, there was no such economic "failure" but after coming out of the epidemic, a longeconomic stagnation: average annual rateeconomic growth in 2015–2019 did not exceed 0.5% (before the epidemic, they averaged 5% annually). At the same time, the opposite picture was also observed. Guinea's national finance and economy reacted to the pandemic in the absolutely unpredictable manner: fairly high annual economic growth rates in the period 2010–2014. - 3.8% after 2015 and the exit from the epidemic period increased to 6.7%.Not so significant, but still the acceleration of GDP growth rates after 2015 was observed in Mali (from 2.3 to 4%) and Senegal (from 3.1 to 5%) [9].

The above figures for the economic recovery of the countries of the region after the end of the Ebola epidemic in 2015 show that a period of prolonged recession after the current COVID-19 pandemic is not necessary. Individual countries may experience economic growth after emerging from the crisis caused by the epidemic. Naturally, the question arises: what caused economic growth after the Ebola epidemic in certain countries of West Africa? Why did economic growth start in Guinea, but not in Sierra Leone? What is the difference between these countries? Indirect information can be obtained by comparing the economic recovery programs presented by countries affected by the Ebola epidemic in West Africa in 2015. To the World Bank in April 2015, the Guinea Economic Recovery Agenda contained concrete and well-structured economic interventions with the main objectives of restoring and developing the business environment.

In addition, when analyzing the phenomenon of economic growth after an epidemic, one should take into account the factor of the psychological reaction of society [13], out of the crisis caused by the epidemic and total quarantine does not mean that the global economy will not undergo changes as a result of the pandemic. Global cataclysms, including epidemics and pandemics, as a rule, finally shape long-established trends, turning them into irreversible changes. The pandemic that began in spring 2020. It will accelerate the transition to the sixth technological order, which is characterized by massive use online technologies, ubiquitous robotizationand production as a result, deserted industries and ubiquitous virtual reality [11].

The immediate-term impact of COVID-19 is clear. Virtually every area of commerce, from global supply chains to financial markets, has been disrupted. Finance functions have been forced to rapidly evolve to keep up with the pace of change. But thriving beyond the now means embracing the steamroller pace of this need to transform.Finance was already experiencing significant shifts towards digital transformation. The difference now is that it is no longer a choice.While business models are being adapted and rebuilt, the finance function finds itself in a unique position to be at the heart of change across an organization.Doing lead digital transformation initiatives are able to demonstrate significant cost savings through efficiency gains. But deeper than that, finance transformation should allow finance leaders to take a lead role in enterprise value creation and performance management.

With finances fluctuating not only month-by-month but day-by-day, agile reporting forecasting and investment flexibility are an imperative for finance functions who want to thrive in today's world. Through harnessing the collection of data and turning it into valuable insights, finance can evolve from being a business cost center to the engine room for driving business performance. The

question is: is your finance function, and your finance workforce, able to adapt to this challenge?Patrick Fenton, Leader of the Global Finance Center of Excellence with KPMG International, details the significance of digital transformation for today's finance functions, particularly in reducing costs.Fenton says"Cost is a big driver in our post COVID-19 world. And businesses save on costs when things are done more efficiently" [8].

In the sixth technological order, classic bankslose their importance, their place is taken by the largest anonymous financial funds. One of the consequences of the pandemic will be an increase in demand for financial products with minimization of personal contacts. The share of remote transactions in the total volume of financial and credit activities will significantly increase. The creation of a global cyber financial system can occur bypassing existing intergovernmental agreements and international monetary and financial institutions [11]. The emergence of a unified cyber financial system will make international monetary and financial institutions such as the International Monetary Fund and the World bank. In such an international monetary and financial system, countries will completely lose their national financial sovereignty. In the medium term, in the global cyber financial

architecture may have a digital currency or multiple currencies.

IMPACT OF THE QUARANTINE FOR THE FINANCE

Scenarios for the development of the world economy during the periodwhich will follow after the pandemic are represented by two groups of forecasts: optimistic and negative. If the optimistic forecasts assume the development of the world economy in the direction of its digitalization and the transition to the sixth

technological order, then negative forecasts are based on the assumption that the coronavirus will provoke the collapse of the modern world financial and economic order: a long "ice age" will come in the world economy and finances, national conflicts will worsen, borders may be closed, and countries go into self-isolation. Will gradually line up world economy of virtuality, economy production facilities and services within walking distance, cheap local energy sources. Obviously that in the negative forecast work its current understanding will remain [12].

1. Forecasts of the consequences of the pandemic for the worldeconomies include a number of possible scenarios forbased on the following conclusions.

Globalism, especially "hyperglobalization" will gradually give up its positions, the world economy will return to "bloc" confrontation, primarily along the US-China vector in a classic bipolar rather than multipolar form. National economies are

in conditions of "self-isolation". There is no doubt that the pandemic will strengthen the role of government regulation and strengthen nationalism and protectionism. Most governments, especially developed countries, will take extraordinary measures to combatcrisis, and many of them will not want to give up from new powers when the crisis is over. The example of this is the complex of emergency measures adopted. The continuing anti-crisis potential of the dollar allowed for decisive, large-scale and unusual measures to be taken both in the field of monetary policyin the public sector. In many ways, these measures were based on the policy of isolationism from the current problems of the world economy.

2. There will be a departure from the modern model of economic globalization. It is clear that the coronavirus pandemic could play the role of "the straw that breaks your backcamel" of financial

and economic globalization. Strengthening China's Economic and Military Poweras already led the political elites to the intentionmaking a firm decision to deny Beijing accessto intellectual property and high technology controlled. Increasing public and political pressure to reduce carbon dioxide emissions has already sparked debate about dependence many companies from long supply chains and the need to form shorter value added production chains. The coronavirus pandemic is cleardemonstrated that countries, companies and societies must learn to live long enough time in conditions of economic self-isolation. In such a geo-economic context, it is unlikely that countries will return to the idea of mutually beneficial globalization, which became defining at the beginning of the 21st century. In the absence of incentives to protect common benefits from global economic integration, the entire global financial and economic architecture that emerged in the 20th century will quickly atrophy and move into a new format of international economic and financial ties.

3. There will be a transition to sinocentric globalization. The COVID-19 pandemic will not fundamentally change the world's economic and financialtrends, but will accelerate the changes that have already begun: the transition from globalization, where the leadingpositions are taken by the United States, towards globalization, which is more focused on China. It appears that after the end of the pandemic and the gradual exit of the world economy to pre-crisis level, the trend of sinocentric globalization will continue. US efforts to offset China's efforts to overcome the economic barrier to average earnings by further improving and diversifying its economy are increasing the risk of increased turbulence in the world high-tech market and cause rapidweakening of confidence in the multilateral format cooperation of countries in world markets. To a certain extent, the "trade and currency war"affected the prospects effective global economic growth, reducing imports and promoting protectionism as part of a new growth strategy.

4. The profitability of the global economy will fall, but it will become more stable. The COVID-19 pandemic has undermined the fundamentals of the global economy in an era of globalism. After a period of pandemic and crisis, it is clear that companies will have to rethink the organization of production and distribution based on the multinational supply chains created by corporations by reducing the number of links in these chains and a significant shortening of the chains themselves. True, global value chains were struggling even before the coronavirus pandemic due to an increase in labor cost. Pandemic COVID-19,stopping the global economy for several months, disrupted all global supply chains: the closure of enterprises in places covered by the coronavirus left other industries without the necessary supplies and goods. A notable consequence of the pandemic will bethat many companies will want to shorten the chain supply and choose between efficiency and availability (stability) of work. Government intervention in the organization will expand work of strategic industries and enterprises, as well as backbone financial institutions[10]. Profits will fall, but economies become more stable.

5. The new strategy to maintain its leadership in the global economy. The COVID-19 pandemic showed that this strategy proved to be inadequate. But there is also the opposite point of view, which proves that the COVID-19 pandemic represents the crisis phase of the 80-year economic cycle (instead of two world wars, as was the case in the 20th century). Within the framework of the theory of 80-year development cycles of the US economy, a pandemic is a stage of crisis in an 80-year economic development cycle. This cycle is usually divided into four stages: the phase of instability (20 years); phase acute crisis (4–5 years); reconstruction phase (15–16 years old);

phase of sustainable development (40 years). This crisis began due topandemic COVID-19 and will last for at least four years (from 2020 to 2024). There is no world war, it is impossible in the era of nuclear weapons, but its function is performed by a pandemic: even the 2020 Summer Olympics was canceled, as was the case during the two world wars in the 20th century. Essentially a pandemic replaced the war.

6. The global chain will changevalue added after the COVID-19 pandemic. The 2020 crisis caused by the pandemic will change the balance of power in the international arena. In the long term, the coronavirus pandemic will reduce production, the capacity of the global economy, especially as a result of company closures and rising unemployment. This risk is especially strong for developing countries and those states that have significant share of economically vulnerable workers. Pressure will also experience the international system of relations, which will lead to instability and conflict as within states, and between countries [12]. Structural crisis of the global financial and the economic system - evidence that how vulnerable global supply chains are. Thus, the coronavirus pandemic is not will only have long-term economic consequences, but will also lead to fundamental changes in the structure of the world economy.

Globalization made it possible to locate production facilities around the world and deliver goods to the market at any time. This reduced storage costs, and stocks that were on the shelves more than a few days were considered losses. Thus, the supply and consumption of goods were regulated by an elaborate corporation globally by the logistics system. The COVID-19 pandemic has proven that it is possible to stop the entire global production, logistics system and trade. Taking into account the scale of economic, financial losses during the recovery from the crisis, it is necessary to expect the institutional formation of a new stage of global capitalism, providing for a reduction in supply chains, the transfer of production closer to sales markets and the filling of warehouses with surplus stocks. This will reduce the profits of companies in the short term, but will make the entire global economic system more reliable [13].

CONCLUSION

The COVID-19 pandemic will escalate into a major economic and geopolitical crisis and could trigger the collapse of the modern world order. A long economic "ice age" will follow, national conflicts will escalate, borders will close, protectionism and / or regional autarchy will prevail. The digitalization of society will continue: more and more events will be held online,major fairs, performances, lectures, most of the shopping centers will be closed, purchases will be carried out mainly via the Internet. Work from home and online services, including medical consultations will prevail.

Indeed, so far the symptoms of the crisis are growing: stock prices on world exchanges are falling, the price of gold is growing, international economic ties are being severed, includingin the world auto and aviation industry. Companies report component shortages, international trade fairs are canceled, tourism and hospitality are in decline. If the epidemic continues by the end of the year, all major indicators will go into negative territory. According to many Western observers, the coronavirus shock has taken by surprise a world that has been fragmented over the years. Geopolitical uncertainty, populism, nationalism and protectionism negatively affected the economy, and the coronavirus epidemic has only exacerbated these trends. Their growth can lead

to the destruction of transport and production connections and end globalization in its current form. One of the possible consequences could be the "virtualization" of the finance and economy:

the flow of information online will replace the physical exchange of goods and people. In any case, the changes will be large-scale, and everyone needs to prepare for them.

REFERENCES

- 1. Orlova G. A., Markov A. K. Economic growth: theory and practice. *Newspaper of Economy and Finance* .2014;(7):P.23–29.
- 2. Sukharev O. S. Economic growth and financial policy. *Economic analysis: theory and practice*. 2011;(32):P.47–52.
- 3. Ershov M. V. 2018: The recovery of the world finance and economy in the world: seriously and for a long time? *Upravlenetz* = *Manager*. 2018;(2):P.37–42.
- 4. Alymkulova A. S. Prospects for the development of the world finance and economy in the post-crisis period. *Economy and business*. 2018;(8):P.23–32.
- 5. Bulatov A. S., Kvashnin J. D., Kuznetsov A. V. The international capital movement. *VestnikMGIMOUniversitet*.
- 1. 019;(4):P.14–16.
- 6. Baluk I. A. On the problem of rising external debt in the globalized world finance and economy. *Financial Journal*. 2016;(5): P.75–81.
- 7. Holmstrom B. Understanding the role of debt in the financial system. BIS Working Papers. 2015; January: 479 p
- 8. Rodina G. A. The birthplace of G. A. Modern financialization as a new quality of the economy. *Social and political research*. 2019;(4):P.37–43.
- 9. Kostin A. B. Analysis of the crisis in the world economy. *St. Petersburg State Economic University*. 2019;(2):P.34–43.
- 10. Spartacus A. N., French V. V. Modern trends and risks in the development of the world economy. 2019:(4):P.18–25.
- Varnavsky V. G. Transformation of the world finance and geoeconomic space in the conditions of reindustrialization. *World economy and international relations*. 2019;(2): P.34–46.
- 12. Kostin K. B. Drivers of global economic growth. *Petersburg State Economic University*. 2017;(2): P.19–25.
- 13. Mackinsey. URL: <u>https://www.mckinsey.com/</u> industries/financial-services/our-insights (26.05.2020).
- 14. Mansurov MansurAlisherovich. The Importance of Treasury and Central Bankbills in the Implementation of Monetary Policy. *International Journal of Psychosocial Rehabilitation*. 2020. № 24(2). Pp. 341-349
- 15. Kunduz Igamberdiyeva.XamidTemirov. Mansur Mansurov. MamarasulXudoykulov. FeruzaAzimova. Directions of attracting investments into the real sector enterprises. *Journal* of Advanced Research in Dynamical and Control Systems. 2020. 12(2). Pp.137-142
- Bazarova D. Some problems of counteracting crimes related to laundering of illegal proceeds in Uzbekistan Journal of Advanced Research in Dynamical and Control Systems. Volume 11, Issue 7, 2019, Pages 873-885

http://annalsofrscb.ro

- Ismailova, Z., Choriev, R., Ibragimova, G., Abdurakhmanova, S., &Abdiev, N. (2020). Competent model of Practice-oriented education of students of the construction profile. Journal of Critical Reviews. Innovare Academics Sciences Pvt. Ltd. https://doi.org/10.31838/jcr.07.04.85
- Ismailova, Z., Choriev, R., Musurmanova, A., & Aripjanova, M. (2020). Methods of training of teachers of university on advanced training courses. Journal of Critical Reviews. Innovare Academics Sciences Pvt. Ltd. https://doi.org/10.31838/jcr.07.05.85
- Ismailova, Z., Choriev, R., Salomova, R., &Jumanazarova, Z. (2020). Use of economic and geographical methods of agricultural development. Journal of Critical Reviews. Innovare Academics Sciences Pvt. Ltd. https://doi.org/10.31838/jcr.07.05.84
- 20. Isakov, A., Tukhtamishev, B., & Choriev, R. (2020). Method for calculating and evaluating the total energy capacity of cotton fiber. IOP Conference Series: Earth and Environmental Science, 614(1), 012006
- 21. Davirov, A., Tursunov, O., Kodirov, D., Baratov, D., &Tursunov, A. (2020). Criteria for the existence of established modes of power systems. IOP Conference Series: Earth and Environmental Science, 2020, 614(1), 012039
- 22. Obidov, B., Choriev, R., Vokhidov, O., &Rajabov, M. (2020). Experimental studies of horizontal flow effects in the presence of cavitation on erosion-free dampers. IOP Conference Series: Materials Science and Engineering, 883(1), 012051
- 23. Khasanov, B., Choriev, R., Vatin, N., & Mirzaev, T. (2020). The extraction of the water-air phase through a single filtration hole. IOP Conference Series: Materials Science and Engineering, 2020, 883(1), 012206
- 24. Shokhrud F. Fayziev The problem of social stigma during a pandemic caused by COVID-19 International Journal of Advanced Science and Technology Vol. 29, No. 7, (2020), pp. 660-664 <u>http://sersc.org/journals/index.php/IJAST/article/view/13965/7188</u>
- 25. FayziyevShokhrudFarmonovich Medical law and features of legal relations arising in the provision of medical services. International journal of pharmaceutical research Volume 11, Issue 3, July Sept, 2019 P. 1197-1200 doi:10.31838/ijpr/2019.11.03.088 http://www.ijpronline.com/ViewArticleDetail.aspx?ID=11016
- 26. Bryanskaya Elena, FayzievShokhrud, Altunina Anna, Matiukha Alena Topical Issues of an Expert Report in the Process of Proving in a Criminal Examination. International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 8958, Volume-9 Issue-1, October 2019 5345-5349 DOI: 10.35940/ijeat.A2946.109119

https://www.ijeat.org/wp-content/uploads/papers/v9i1/A2946109119.pdf

 FayzievShokhrud (2019) Legal Aspects of Transplantology in the Republic of Uzbekistan. Systematic Reviews in Pharmacy, ISSN: 0976-2779, Vol: 10, Issue: 2, Page: 44-47 doi:10.5530/srp.2019.2.08

http://www.sysrevpharm.org//fulltext/196-1575419211.pdf?1586863081

- 28. Tulaganova, G.Some issues of observance of international legal norms of fight against legalization of criminal incomes in the Republic of UzbekistanJournal of Advanced Research in Dynamical and Control Systems 12(2 Special Issue), c. 143-155
- 29. 1. Bekchanov D; Kawakita H; Mukhamediev M; Khushvaktov S; Juraev M. Sorption of cobalt (II) and chromium (III) ions to nitrogen- and sulfur- containing polyampholyte on the basis of polyvinylchloride /Polymers for Advanced Technologies 2021

https://doi.org/10.1002/pat.5209

- 30. Davron, B., Mukhtar, M., Nurbek, K., Suyun, X., Murod, J. Synthesis of a New Granulated Polyampholyte and its Sorption Properties. *International Journal of Technology*. Volume 11(4), pp. 794-803. ., (2020) <u>https://doi.org/10.14716/ijtech.v11i4.4024</u>
- Mukhamediev, M.G., Bekchanov, D.Z. New Anion Exchanger Based on Polyvinyl Chloride and Its Application in Industrial Water Treatment. Russ J ApplChem 92, 1499–1505 (2019). <u>https://doi.org/10.1134/S1070427219110053</u>
- Mukhamediev, M.G., Auelbekov, S.A., Sharipova, Z.T. et al. Polymer complexes of gossypol and their antiviral activity. Pharm Chem J 20, 276–278 (1986). <u>https://doi.org/10.1007/BF00758817</u>
- 33. Ikramova, M.E., Mukhamediev, M.G., Musaev, U.N. Complexation of hydrazine- and phenylhydrazine-modified nitron fibers with iodine/ Plasticheskie Massy: SintezSvojstvaPererabotkaPrimenenie, (12), ctp. 41–45 (2004)
- Gafurova, D.A., Khakimzhanov, B.S., Mukhamediev, M.G., Musaev, U.N. Sorption of Cr(VI) on the anion-exchange fibrous material based on nitron. Russian Journal of Applied Chemistry, 75(1), crp. 71–74, (2002)
- Rustamov, M.K., Gafurova, D.A., Karimov, M.M. et al. Application of ion-exchange materials with high specific surface area for solving environmental problems. Russ J Gen Chem 84, 2545–2551 (2014). <u>https://doi.org/10.1134/S1070363214130106</u>