

## ABSTRACT&amp;REFERENCES

DOI: 10.15587/2313-8416.2019.165104

## ANALYSIS OF THE DEVELOPMENT OF «BRICK STYLE», ITS LEADING REPRESENTATIVES VICTOR SCHROETER AND JEROME KITNER

p. 6-13

**Tatyana Davidich**, PhD, Associate Professor, Department of Architecture, Kharkiv National University of Civil Engineering and Architecture, Sumska str., 40, Kharkiv, Ukraine, 61002

E-mail: davidich34@gmail.com

ORCID: <http://orcid.org/0000-0002-7445-1109>

*The article discusses the history of the origin, development and scope of the “brick style” – one of the directions of nineteenth-century architectural eclecticism, the origins of which go back to the Romanesque and Gothic styles of Western Europe. Since the 1850s, this «style» has been widely used in the architecture of industrial buildings and structures, as well as in educational and medical buildings and in low-rise residential buildings of cities. Most often the civilian engineers and architects of German origin worked in this style. Architects V. Schroeter and J. Kitner contributed to further improving and expanding the possibilities of using the “brick style” in the Russian Empire*

**Keywords:** 19th century eclecticism, historicism of thinking, “brick style”, civil and industrial architecture, modern reconstruction

## References

- Davidich, T. F., Kachemceva, L. V. (2016). Eklektika v arhitekture [Eclectics in the architecture]. Kharkiv: Gumanitarnyi centr, 268.
- Khokholev, V. (2009). Yekaterinoslavskiy kirpichnyi stil' [Yekaterinoslav brick style]. Available at: [https://gazeta.dp.ua/read/ekaterinoslavskiy\\_kirpichniy\\_stil](https://gazeta.dp.ua/read/ekaterinoslavskiy_kirpichniy_stil)
- Cherkasov, G. N. (2013). London, Gamburg. Neispol'zovannyye vozmozhnosti arkhitektury [London, Gamburg. Unused possibilities of architecture]. Arhitektura i stroitel'stvo, 3, 27–40.
- Nikolayeva, T. I. (2007). Viktor Shreter, Iyeronim Kitner [Victor Schroeter, Jerome Kitner]. Saint Petersburg: KOLO, 400.
- Artem'yeva, U., Prokhvatilova, S. (Eds.) (1998). Zodchiye Sankt-Peterburga. XIX – nachalo XX veka [Architects of St. Petersburg. XIX – early XX century]. Saint Petersburg: Lenizdat, 1070.
- Kidson, P., Murrey, M., Tompson, P. (2003). Istoriya angliyskoy arkhitektury [The history of English architecture]. Moscow: Centrpoligraf, 382.
- Mignot, C. (1983). Architecture of the 19-th century. Tashen verlag GmbH, 322.
- Borisova, E. A. (1979). Russkaya arhitektura vtoroy poloviny XIX v. [Russian architecture of second half of 19-th century]. Moscow: Nauka, 320.
- Dmytryev, V. K. (2007). Arkhitektory Sankt-Peterburha [Architects of St. Petersburg]. Saint Petersburg: Korona Pryn, 336. Available at: <https://walkspb.ru/istochniki/84.html>
- Shaba, P. (1889). Kirpichnyye fasady XIX veka. Khrestomatiynnye obraztsy ornamentov i rospisey dlya fasadov. Viktorianskaya kirpichnaya i terrakotovaya arkhitektura. Available at: <http://www.abitant.com/posts/kirpichnye-fasady-xix-veka/>
- Brick gothic. Available at: [https://ru.wikipedia.org/wiki/Кирпичная\\_готика](https://ru.wikipedia.org/wiki/Кирпичная_готика)
- Danilov, D. (2014). Kogda my vykurim gaz. Novaya zhizn' gazgol'derov i neftekhranilishch [When we smoke out the gas. New life of gas holders and oil storages]. Available at: <https://lenta.ru/articles/2014/02/26/gazholder/>
- Yamshanov, I., Goryunov, V., Murgul, V. (2015). Architecture of Neogothic Castles, Palaces, Estates, Mansions and Profitable Houses in the Russian Empire XIX Century. Procedia Engineering, 117, 663–674. doi: <http://doi.org/10.1016/j.proeng.2015.08.229>
- Yamshanov, I., Goryunov, V., Murgul, V. (2015). Neogothic Park Pavilions and Utility Constructions in the Russian Empire XIX Century. Procedia Engineering, 117, 675–684. doi: <http://doi.org/10.1016/j.proeng.2015.08.232>
- Bajare, D., Svinka, V. (2000). Restoration of the historical brick masonry. Proceedings of the 9th International Congress on Deterioration and Conservation of Stone, 3–11. doi: <http://doi.org/10.1016/b978-044450517-0/50080-5>
- Shpaykhershtadt – skladskey gorod v Gamburgu i futuristicheskiy gorodskoy proyekt – Khafensiti [Speicherstadt is a warehouse city in Hamburg and a futuristic city project Hafensiti]. Available at: <https://technolirik.livejournal.com/9700.html>
- Osobnyaksem' i V.A. Shretera, nabreki Moiki. Available at: <http://allpetrischule-spb.org/index.php?title=%D0%A4%D0%B0%D0%B9%D0%BB:Moika114.jpg>
- Gorodskoy teatr v Rybinske [City Theater in Rybinsk]. Available at: <https://slawa2312.livejournal.com/4784.html>
- Shraiber, A. (2016). Tbilisskii teatr opery i baleta: ot Vorontsova do Ivanishvili. Available at: <https://sputnik-georgia.ru/columnists/20160130/229953419.html>
- V Mariinskom teatre proyduť besplatnyye kontserty [Free concerts will be held at the Mariinsky Theater]. Available at: <https://regnum.ru/news/2574567.html>
- Gnilorybov, P. (2016). Nikolay Vtorov. Na chem zarabatyval samyy bogatyy rossiyskiy millioner [Nikolai Vtorov. What earned the richest Russian millionaire]. Available at: [https://new-retail.ru/magaziny/istoriya/nikolay\\_vtorov\\_na\\_chem\\_zarabatyval\\_samyy\\_bogatyy\\_rossiyskiy\\_millioner3899/](https://new-retail.ru/magaziny/istoriya/nikolay_vtorov_na_chem_zarabatyval_samyy_bogatyy_rossiyskiy_millioner3899/)
- Golovan, A. (2014). Svyato-Sergiyevskiy khram v g. Bad-Kissingene (Germaniya) [Hieromonk An-

thony (Golovan). St. Sergius Church in Bad Kissingen (Germany)]. Available at: [http://ruskline.ru/monitoring\\_smi/2014/09/13/svyatosergievskij\\_hram\\_v\\_g\\_badkissingene\\_germaniya/](http://ruskline.ru/monitoring_smi/2014/09/13/svyatosergievskij_hram_v_g_badkissingene_germaniya/)

23. Kitner, Iyeronim Sevast'yanovich [Kitner, Jerome Sevastyanovich]. Available at: [https://ru.wikipedia.org/wiki/Китнер,\\_Иероним\\_Севастьянович](https://ru.wikipedia.org/wiki/Китнер,_Иероним_Севастьянович)

24. Zhdanova, M. (2015). Istoriya neparadno-go Peterburga: Sennaya ploshchad' [The history of unspoiled Petersburg: Sennaya Square]. Available at: <https://saint-petersburg.ru/m/history/zhdanova/334214/>

25. 4 korpus. Available at: <https://kpi.ua/ru/node/10841>

26. Osobnyak K. B. Zigelya. Arkhitekturnyy sayt Sankt-Peterburga [Mansion K. B. Zigel. The architectural site of St. Petersburg]. Available at: <http://www.citywalls.ru/house396.html?s=c7t93d99qob85emc3lp4r3qel1>

27. Dekoratsionnyy magazin i zal direktsii Imperatorskikh teatrov [Decoration shop and hall of the directors of the Imperial Theaters]. Available at: <http://www.citywalls.ru/house4714.html>

28. V Khar'kove na meste byvshey mel'nitsy postroyat IT-park [In Kharkiv, an IT park will be built on the site of the former mill]. Available at: <http://kharkov.moygorod.ua/ru/news/5518/>

-----  
DOI: 10.15587/2313-8416.2019.164571

#### MATERIAL SUPPORT ORGANIZATION OF THE UNITS OF NATIONAL GUARD OF UKRAINE

p. 14-17

**Oleg Gafurov**, PhD, Senior Lecturer, Department of Technical and Logistics, National Academy of National Guard of Ukraine, Zakhysnykiv Ukrainy sq., 3, Kharkiv, Ukraine, 61001

E-mail: [mail@avv.gov.ua](mailto:mail@avv.gov.ua)

ORCID: <http://orcid.org/0000-0002-0716-5866>

*The article analyzes the general principles of the organization of material support of military units, which allows to determine the theoretical basis for the formation of a preparatory stock of things for servicemen. A procedure is developed for determining the required number of supplies for the needs of the military units of the National Guard of Ukraine, which creates opportunities for setting the norm of the insurance stock of supplies, depending on the degree of guaranteed provision of military units by specific types of things. The substantiation of the technology of stock valuation of military support units is fulfilled, which provides maximum simplification of the calculations itself and the use of software tools for this purpose*

**Keywords:** material support, military personnel, military units, preparatory stock, things, stock standards

#### References

1. Naumenko, M. O. (2018). Vdoskonalennia upravlinnia yakistiu produktsii vysokotekhnolohichnykh pid-

pryemstv. Visnyk ekonomiky transportu i promyslovosti UDUZT, 62, 335–342.

2. Sokolovskyi, S., Naumenko, M. (2018). Analysis of the features information flows management of logistic processes of the units of the National guardian departments of Ukraine. ScienceRise, 2 (43), 19–21. doi: <http://doi.org/10.15587/2313-8416.2018.123606>

3. Skimmyhorn, W. L. (2016). Comparing Military and Civilian Household Finances: Descriptive Evidence from Recent Surveys. Journal of Consumer Affairs, 50 (2), 471–483. doi: <http://doi.org/10.1111/joca.12109>

4. Horokhovskiy, Ye. (2011). Tyl Zbroinykh Syl Ukrainy: nadiinist v imia boiezdatnosti. Viisko Ukrainy, 1, 26–29.

5. Bashkirov, N., Khairbekov, Z. (2014). Kontseptual'nye osnovy tylovogo obespecheniya Vooruzhennykh sil SSHA. Zarubezhnoe voennoe obozrenie, 5, 28–33.

6. Gilmore, D. A. (2010). Decade of Supply Chain Management. Supply Chain Digest, 15.

7. Linders, M. R., Firon, Kh. E. (2003). Upravlenie snabzheniem i zapasami. Saint Petersburg: OOO «Viktoria plus», 768.

8. Heydari, M., Sharbafchi, M. (2017). Management of Substance use Disorder in Military Services: A Comprehensive Approach. Advanced Biomedical Research, 6 (1), 122. doi: [http://doi.org/10.4103/abr.abr\\_283\\_16](http://doi.org/10.4103/abr.abr_283_16)

9. Muntiiian, V. I. (2015). Oboronnyi biudzhet: svitovyi dosvid ta mozhyvi shliakhy reformuvannia v Ukraini. Kyiv: Vydavnychiy tsentr “Prosvita”, 240.

10. Romanchenko, I. S., Shuienkin, V. O. (2007). Pohliady na rozvytok systemy materialno-tekhnichnoho zabezpechennia Zbroinykh Syl Ukrainy. Nauka i oborona, 4, 22–27.

-----  
DOI: 10.15587/2313-8416.2019.164305

#### MANAGEMENT OF MATERIAL SUPPLY OF MILITARY UNITS OF THE NATIONAL GUARD OF UKRAINE

p. 17-20

**Lydia Tovma**, PhD, Senior Lecturer, Department of Logistic Support, National Academy of the National Guard of Ukraine, Zahysnykiv Ukrainy sq., 3, Kharkiv, Ukraine, 61001

E-mail: [l.f.tovma@gmail.com](mailto:l.f.tovma@gmail.com)

ORCID: <http://orcid.org/0000-0002-5074-8303>

*The article analyzes the main functions of the management of material support of the military units of the National Guard of Ukraine, which makes it possible to outline the key aspects of the command measures to maintaining the proper level of material stocks. The scheme of organization of the material resources supply in the military units of the National Guard of Ukraine, which regulates the organization of the material stocks supply, is explored. The indicators of level of current and insurance reserves of military units are offered, allowing to determine the opti-*

*um size of material reserves of military units of the National Guard of Ukraine*

**Keywords:** *military units, servicemen, material supply, material stocks, supplies, reserve norm*

#### References

1. Prytulska, N., Motuzka, Yu. (2014). Tovaroznavchi zasady pozytsionuvannya produktiv dlia enteralnoho kharchuvannya. *Tovary i rynky*, 2, 53–59.
2. Munttian, V. I. (2012). *Ekonomika ta oboronni vytraty: analiz zarubizhnykh doslidzhen i ukrainskyi shliakh rozvytku*. Kyiv: NDFI, 464.
3. Munttian, V. I. (2015). *Oboronnyi biudzheth: svi-tovyi dosvid ta mozhlyvi shliakhy reformuvannya v Ukraini: monohrafiia*. Kyiv: Vydavnychiy tsentr “Prosvita”, 240.
4. Romanchenko, I. S., Shuienkin, V. O. (2007). *Pohliady na rozvytok systemy materialno-tekhnichnoho zabezpechennia Zbroinykh Syl Ukrainy*. *Nauka i oborona*, 4, 22–27
5. *Nutrition Science and Food Standards for Military Operations (Nutrition et normes d'alimentation pour les opérations militaires)*. Final Report of RTO Task Group. Available at: <https://www.sto.nato.int/publications/STO%20Technical%20Reports/RTO-TR-HFM-154/STR-HFM-154-ALL.pdf>
6. Meydani, S. N., Eksir, F. (2005). Optimization of immune function in military personnel. Nutrient composition of rations for short-term, highintensity combat operations, 9, 330–335.
7. Milman, N. (2011). Anemia—still a major health problem in many parts of the world! *Annals of Hematology*, 90 (4), 369–377. doi: <http://doi.org/10.1007/s00277-010-1144-5>
8. Larson, M. J., Wooten, N. R., Adams, R. S., Merrick, E. L. (2012). Military Combat Deployments and Substance Use: Review and Future Directions. *Journal of Social Work Practice in the Addictions*, 12 (1), 6–27. doi: <http://doi.org/10.1080/1533256x.2012.647586>
9. Naumenko, M. O. (2018). *Vdoskonalennia upravlinnia yakistiu produktsii vysokotekhnolohichnykh pid-priemstv*. *Visnyk ekonomiky transportu i promyslovosti UDUZT*, 62, 335–342.
10. Sokolovskyi, S., Naumenko, M. (2018). Analysis of the features information flows management of logistic processes of the units of the National guardian departments of Ukraine. *ScienceRise*, 2 (43), 19–21. doi: <http://doi.org/10.15587/2313-8416.2018.123606>

DOI: 10.15587/2313-8416.2019.164564

**ANALYSIS OF PSYCHOLOGICAL CONDITIONS OF PERCEPTION OF PRESENTATION MATERIAL BY CADETS AND OFFICERS OF THE NATIONAL GUARD OF UKRAINE**

p. 21-24

**Mykola Tovma**, PhD, Associate Professor, Department of Military Social and Psychological Support, National

Academy of the National Guard of Ukraine, Zahysnykiv Ukrainy sq., 3, Kharkiv, Ukraine, 61001

E-mail: [nikolatovma@gmail.com](mailto:nikolatovma@gmail.com)

ORCID: <http://orcid.org/0000-0001-8814-9544>

*An analysis of the psychological advantages of using a multimedia presentation for officers and cadets of the National Guard of Ukraine is made, which allows to outline the positive aspects of the psychological perception of material for both officers and cadets, and for the teacher. The study of scenarios for the use of presentations in the training of cadets and officers is conducted. This allows the teacher to concentrate on preserving psychological reserves in order to effectively statement of the material. The analysis of evaluation criteria for presentations is carried out, which allows the best psychological perception of diverse information for all psycho types of listeners*  
**Keywords:** *multimedia presentation, National Guard of Ukraine, psychological perception, psychological aspects, cadets*

#### References

1. Chi, Y.-L., Chen, T.-Y., Tsai, W.-T. (2014). Creating Individualized Learning Paths for Self-regulated Online Learners: An Ontology-Driven Approach. *Lecture Notes in Computer Science*, 546–555. doi: [http://doi.org/10.1007/978-3-319-07308-8\\_52](http://doi.org/10.1007/978-3-319-07308-8_52)
2. Denoyelles, A., Raible, J., Seilhamer, R. (2015). *Exploring Students' e-Textbook Practices in Higher Education*. Louisville: EDUCAUSE Review, 26.
3. Garrido, A., Onaindia, E. (2013). Assembling Learning Objects for Personalized Learning: An AI Planning Perspective. *IEEE Intelligent Systems*, 28 (2), 64–73. doi: <http://doi.org/10.1109/mis.2011.36>
4. Jean-Louis, M. (2015). *An Overview of Online Learning in Canada*. Thunder Bay ON: Contact North, 234.
5. Karampipiris, P. (2005). Adaptive Learning Resources Sequencing in Educational Hypermedia Systems. *Educational Technology & Society*, 8 (4), 128–147.
6. Martin, B. R. (2016). Twenty challenges for innovation studies. *Science and Public Policy*, 43 (3), 432–450. doi: <http://doi.org/10.1093/scipol/scv077>
7. Naumenko, M., Hrabovskyi, Y. (2018). Elaboration of methodology for designing a publishing and printing web portal. *Eastern-European Journal of Enterprise Technologies*, 2 (2 (92)), 14–22. doi: <http://doi.org/10.15587/1729-4061.2018.126305>
8. Sursock, A. (2015). *Trends 2015: Learning and Teaching in European Universities* European University Association. Brussels: EUA, 128.
9. Chiu, T. K. F. (2016). Introducing electronic textbooks as daily-use technology in schools: A top-down adoption process. *British Journal of Educational Technology*, 48 (2), 524–537. doi: <http://doi.org/10.1111/bjet.12432>
10. Hrabovskyi, Y. (2018). Designing the intelligent user interface for electronic education support systems. *ScienceRise*, 11 (52), 36–39. doi: <http://doi.org/10.15587/2313-8416.2018.147987>

DOI: 10.15587/2313-8416.2019.164245

**DEVELOPMENT OF THE METHOD FOR ESTABLISHMENT OF THE ELECTRONIC TRAINING PORTAL FOR PREPARATION OF OFFICERS OF THE NATIONAL GUARD OF UKRAINE**

p. 25-28

**Andrii Chukhlatyi**, Department of Operative Art, National Academy of National Guard of Ukraine, Zakhysnykiv Ukrainy sq., 3, Kharkiv, Ukraine, 61001

E-mail: Chukhlatyi.a@gmail.com

ORCID: <http://orcid.org/0000-0001-6436-3343>

*The main sections of the e-learning portals for the training of officers of the National Guard of Ukraine are analyzed, which provides the opportunity to structure the portals. The main advantages and criteria for assessing the quality of the portal of e-learning are studied, which allow to determine the preliminary conditions for the development of a method for creating a portal for e-learning for the training of officers of the National Guard of Ukraine. The method of creating a portal for e-learning for the preparation of officers of the National Guard of Ukraine is formed, which allows to determine the main stages of creating the educational environment via the Internet*

**Keywords:** methodology, National Guard of Ukraine, Internet network, e-learning portal, officers

**References**

1. Berezovskyi, V. S., Stetsenko, I. V., Zavadskyi, I. O. (2013). Stvorennia elektronnykh navchalnykh resursiv ta onlainove navchannia. Kyiv: Vyd. hrupa BHV, 176.
2. Sokolovskyi, S., Naumenko, M. (2018). Analysis of the features information flows management of logistic processes of the units of the National guardian departments of Ukraine. *ScienceRise*, 2 (43), 19–21. doi: <http://doi.org/10.15587/2313-8416.2018.123606>
3. Naumenko, M., Hrabovskyi, Y. (2018). Elaboration of methodology for designing a publishing and printing web portal. *Eastern-European Journal of Enterprise Technologies*, 2 (2 (92)), 14–22. doi: <http://doi.org/10.15587/1729-4061.2018.126305>
4. Hrabovskyi, Y. (2018). Designing the intelligent user interface for electronic education support systems. *ScienceRise*, 11 (52), 36–39. doi: <http://doi.org/10.15587/2313-8416.2018.147987>
5. Afanasiev, M. V., Romashova, Ya. V. (2010). Informatsiini tekhnolohii v navchalnomu protsesi. *Vyshcha shkola*, 10, 49–62.
6. Bichel, J. (2013). The state of e-learning in higher education: An eye toward growth and increased access (research report). Louisville: EDUCAUSE, 46.
7. Karampiperis, P. (2005). Adaptive Learning Resources Sequencing in Educational Hypermedia Systems. *Educational Technology & Society*, 8, 128–147.
8. Nuriev, N. K., Zhurbenko, L. N., Starygina, S. D. (2010). Didakticheskie sistemy novogo pokoleniya. *Vyshee obrazovanie v Rossii*, 8/9, 128–137.

9. Sursock, A. (2015). Trends 2015: Learning and Teaching in European Universities. Brussels: EUA, 128.

10. Kalinovskiy, A. I. (2005). Yuzabiliti: kak sdelat' sayt udobnym. Moscow: Novoe znanie, 220.

DOI: 10.15587/2313-8416.2019.164584

**MANAGEMENT OF A HIGH-TECHNOLOGICAL ORGANIZATION BASED ON ANALYSIS OF THE EFFICIENCY OF PERSONNEL POTENTIAL**

p. 29-32

**Valentina Gerasimenko**, Senior Lecturer, Department of Management and Military Economy, National Academy of the National Guard of Ukraine, Zahysnykiv Ukrainy sq., 3, Kharkiv, Ukraine, 61001

E-mail: mail@avv.gov.ua

ORCID: <http://orcid.org/0000-0002-4828-1353>

*In the article the analysis of the initial parameters of the modeling of the management process of the organization is carried out on the basis of the analysis of the efficiency of personnel potential, which allows to identify unused reserves of productivity increase. A step-by-step regression with Backward setup is performed, which allows to calculate the regression parameters. An adequate model of labor productivity is constructed and an economic interpretation of its parameters is made, which allow to create opportunities for using the model to analyze the current reserves of productivity growth*

**Keywords:** human potential, step regression, productivity, high-tech organization, management, efficiency

**References**

1. Naumenko, M. (2017). Development of strategic management models of integrated corporate structures. *ScienceRise*, 3 (32), 25–28. doi: <http://doi.org/10.15587/2313-8416.2017.95523>
2. Danylenko, O. A. (2011). Metodychni pidkhody do otsinky efektyvnosti upravlinnia personalom orhanyzatsii. *Aktualni Problemy Ekonomiky*, 6 (120), 89–94.
3. Naumenko, M. O., Zhabko, Yu. P. (2014). Upravlinnia personalom pidpriemstva v suchasnykh rynkovykh umovakh. *Visnyk ekonomiky transportu i promyslovosti*, 47, 140–147.
4. Kovalchuk, S. Ye., Holiuk, V. Ya. (2018). Osoblyvosti upravlinnia personalom torhovelnoho pidpriemstva. *Aktualni problemy ekonomiky i upravlinnia*, 12, 81–91.
5. Chen, L., Ellis, S. C., Suresh, N. (2016). A supplier development adoption framework using expectancy theory. *International Journal of Operations & Production Management*, 36 (5), 592–615. doi: <http://doi.org/10.1108/ijopm-09-2013-0413>
6. Kock, A., Georg Gemünden, H. (2016). Antecedents to Decision-Making Quality and Agility in Innovation Portfolio Management. *Journal of Product Innovation Management*, 33 (6), 670–686. doi: <http://doi.org/10.1111/jpim.12336>

7. Prodan, I. O. (2013). Stanovlennia systemy upravlinnia personalom pidpriemstva na innovatsiinykh zasada-kh. Visnyk Natsionalnoho universytetu «Lvivska politekh-nika». Menedzhment ta pidpriemnytstvo v Ukraini: etapy stanovlennia i problemy rozvytku, 776, 61–66.

8. Butenko, I. A., Kurnosova, A. V. (2014). Napri-amky vdoskonalennia kadrovoi polityky ta pidvyshchen-nia efektyvnosti upravlinnia personalom pidpriemstva. Visnyk ekonomichnoi nauky Ukrainy, 3, 7–11.

9. Zhou, L., Zhang, Y.-Y., Wang, Z.-J., Rao, L.-L., Wang, W., Li, S. et. al. (2016). A Scanpath Analysis of the Risky Decision-Making Process. Journal of Behavioral Decision Making, 29 (2-3), 169–182. doi: <http://doi.org/10.1002/bdm.1943>

10. Bielik, V. D. (2014). Stratehichni napriamy udo-skonalennia upravlinnia personalom na pidpriemstvakh kharchovoi promyslovosti. Visnyk Zhytomyrskoho der-zhavnoho tekhnolohichnoho universytetu, 3, 114–121.

DOI: 10.15587/2313-8416.2019.164237

#### ANALYSIS OF THE PLANNING OF LABOR ORGANIZING RESOURCES IN POST-INDUSTRIAL ECONOMY

p. 33-35

**Ganna Chuhlata**, Senior Lecturer, Department of Management and Military Economy, National Academy of National Guard of Ukraine, Zakhysnykiv Ukrainy sq., 3, Kharkiv, Ukraine, 61001

E-mail: [chuhlata.g@gmail.com](mailto:chuhlata.g@gmail.com)

ORCID: <http://orcid.org/0000-0002-1905-9884>

*The main options for choosing the method of selecting specialists are analyzed, which allow to outline the possible activities of the organization according to specific relationships between the supply and demand of the workforce. The possible measures of personnel policy of the organization in the conditions of the information economy are investigated, which makes it possible to determine the activities of the organization to resolve the “demand higher than the offer” situation. The peculiarities of implementation of the program of work of organizations in the field of labor resources in the conditions of postindustrial society is analyzed, which allows to evaluate the possible results from training and involvement of specialists*

**Keywords:** labor resource planning, organization, post-industrial economy, personnel policy, personnel management

#### References

1. Ross, G. V., Yankin, D. V. (2016). Optimizatsiya organizatsionnoy struktury predpriyatiya na baze biznes-protsesov delovoy aktivnosti personala. Konsul'tant direktora, 6.

2. Shekshnya, S. V., Emoshkin, N. N. (2002). Strategicheskoe upravlenie personalom v epokhu Interneta. Moscow: Biznes-shkola Intel-sintez, 320.

3. Zakharchyn, H. M., Liubomudrova, N. P., Vynnychuk, R. O. (2015). Motyvuvannia y rozvytok personalu:

kuulturolohichnyi aspekt. Lviv: Vydavnytstvo Lvivskoi politekhniky, 284.

4. Partyka, I. V. (2015). Suchasni pidkhody do upravlinnia personalom na innovatsiinykh zasada-kh. Hlobalni ta natsionalni problemy ekonomiky, 8, 559–561.

5. Singh, H. (2003). Building Effective Blended Learning Programs. Issue of Educational Technology, 43 (6), 51–54.

6. Klattebag, D. (2008). Komandnyy kouching na rabochem meste: tekhnologiya sozdaniya samoobuchayushheysya organizatsii. Moscow: EKSMO, 288.

7. Karampiperis, P. (2005). Adaptive Learning Resources Sequencing in Educational Hypermedia Systems. Educational Technology & Society, 8 (4), 128–147.

8. Pushkar, A. I., Vil'khivskaya, O. V. (2014). Tekhnologii elektronnoho biznesa v innovatsionnom razvitii predpriyatiy. Kharkiv: Shhedra sadiba plyus, 256.

9. Butenko, I. A., Kurnosova, A. V. (2014). Napri-amky vdoskonalennia kadrovoi polityky ta pidvyshchen-nia efektyvnosti upravlinnia personalom pidpriemstva. Visnyk ekonomichnoi nauky Ukrainy, 3, 7–11.

10. Petrova, E. V., Petrov, O. A. (2012). Sovershenstvovanie sistemy upravleniya personalom kak uslovie effektivnogo funktsionirovaniya organizatsii. Vestnik CHG-PU im. I. Ya. Yakovleva, 1 (73 (1)), 123–126.

DOI: 10.15587/2313-8416.2019.164772

#### SOLUTION OF CREATIVE DESIGN OF ARTISTIC AND DECORATIVE FORM DEPENDING ON THE USED MATERIALS

p. 36-39

**Oksana Pilipchuk**, Associate Professor, Department of Drawing and Painting, Kyiv National University of Construction and Architecture, Povitroflotskyi ave., 31, Kyiv, Ukraine, 03037

E-mail: [artist-30-03@yandex.ua](mailto:artist-30-03@yandex.ua)

ORCID: <http://orcid.org/0000-0002-1306-6071>

**Andrey Polubok**, Associate Professor, Department of Drawing and Painting, Kyiv National University of Construction and Architecture, Povitroflotskyi ave., 31, Kyiv, Ukraine, 03037

ORCID: <http://orcid.org/0000-0001-6759-4470>

*The article raises question of problem relevance of solution of the creative intention of the composition of artistic and decorative forms in the color space of the interior space, depending on the used materials. With the help of the performed analysis, the basic principles are determined and the structure is proposed, which can also be an instrument in the work of the artist-designer; which allows to approach the solution of the set creative task with great professionalism*

**Keywords:** creative design, artistic and decorative form, coloristics, material, art and design, interior space

**References**

1. Alekseev, S. S. (1954). *Arhitekturnyi ornament*. Moscow: Gosizdat, 135.
2. Vinner, A. V. (1953). *Materialy i tekhnika monumentalnoi zhivopisi. Stennaia, plafonnaia i dekorativnaia zhivopis*. Moscow: Iskusstvo, 756.
3. Volkov, N. N. (1965). *Tsvet v zhivopisi*. Moscow: Iskusstvo, 252.
4. Dzhadd, D., Vyshetcki, G.; Artiushin, L. F. (Ed.) (1978). *Tsvet v nauke i tekhnike*. Moscow: Mir, 592.
5. Novikova, E. B. (1991). *Interer obshchestvennykh zdani. Khudozhestvennye problemy*. Moscow: Stroizdat, 368.
6. Zeugner, G. (1963). *Farbenlehre für Maler*. Berlin: VEB Verlag für Bauwesen, 168.
7. Sapogo, I. G. (1984). *Predmet i forma. Rol vospriiatia materialnoi sredy v sozdani plasticheskoi formy*. Moscow: Sovetskii khudozhnik, 304.
8. Favorskii, V. A. (1998). *Literaturno-teoreticheskoe nasledie*. Moscow: Sovetskii khudozhnik, 588.
9. Van Assen, J. J. R., Wijntjes, M. W. A., Pont, S. C. (2016). Highlight shapes and perception of gloss for real and photographed objects. *Journal of Vision*, 16 (6), 6. doi: <http://doi.org/10.1167/16.6.6>
10. Van Doorn, A., Koenderink, J. J., Pont, S. (2012). Shading, a View from the Inside. *Seeing and Perceiving*, 25 (3-4), 303–338. doi: <http://doi.org/10.1163/187847511x590923>
11. Zaitcev, A. I. (1986). *Nauka o tsvete i zhivopisi*. Moscow: Iskusstvo, 158.
12. Bozhko, Yu. G. (1991). *Arhitektonika i kombinatorika formoobrazovaniia*. Kyiv: Vishha shkola, 245.
13. Meerwein, G., Rodeck, B. (2007). *Farbe – Kommunikation*. Basel, Boston, Berlin: Raum Birkhauser Verlag AG, 152.
14. Kalinicheva, M. M. (Ed.) (2012). *Tekhnicheskaiia estetika i dizain. Slovar*. Moscow: Akademicheskii proekt: Kultura, 356.
15. Shimko, V. T. (2004). *Arkhitekturno-dizainerskoe proektirovanie. Osnovy teorii*. Moscow: Arkhitektura – S, 296.

DOI: 10.15587/2313-8416.2019.164784

**ANALYSIS OF OPPORTUNITIES PYTHON PROGRAM LANGUAGE FOR WORKING WITH SPATIAL DATA**

p. 40-46

**Maksim Kukhar**, PhD, Assistant, Department Land Administration and Geoinformation Systems, O. M. Beketov National University of Urban Economy in Kharkiv, Marshala Bazhanova str., 17, Kharkiv, Ukraine, 61002  
E-mail: [maksimposhta@gmail.com](mailto:maksimposhta@gmail.com)  
ORCID: <http://orcid.org/0000-0001-8305-6269>

*In the article an analysis of the tasks for use of modern software to support work with spatial data is done. Op-*

*portunities of Python programming language are analyzed for working with this spatial data.*

*Based on features this programming language and already existing ArcGIS and ArcPy spatial data processing software Python features are analyzed in this region*

**Keywords:** Python, ArcGIS, ArcPy, programming, spatial, data, analysis, model

**References**

1. Tvoroshenko, I. S. (2018). *Specializovane programne zabezpechennya [Specialized software]*. Kharkiv: HNUMG im. O. M. Beketova, 118.
2. Yakovenko, A. V. (2018). *Osnovi programuvannya. Python. Part 1 [Basic software. Python. Part 1]*. Kyiv: KPI im. Igorya Sikors'kogo, 195.
3. Sweigart, A. (2010–2012). *Invent Your Own Computer Games with Python*. 447. Available at: [https://inventwithpython.com/IYOCGWp\\_book1.pdf](https://inventwithpython.com/IYOCGWp_book1.pdf) Last accessed: 20.03.2019
4. Chan, A. (2011). *Cooperative Object-Oriented Programming in Python*. Int'l Conf. Software Eng. Research and Practice, 656–659. Available at: <https://faculty.unctfsu.edu/achan/papers/serp11.pdf> Last accessed: 20.03.2019
5. Leonov, A. L. (2011). *Vvedenie v Python i ArcPy ArcReview [Introduction to Python and ArcPy ArcReview]*. *Geograficheskoe Znanie: Esri: ot istokov do nashikh dnei*, 4 (59). Available at: [https://www.esri-cis.ru/news/arcreview/detail.php?ID=4873&SECTION\\_ID=194](https://www.esri-cis.ru/news/arcreview/detail.php?ID=4873&SECTION_ID=194) Last accessed: 20.03.2019
6. Pimpler, E. (2013). *Programming ArcGIS 10.1 with Python Cookbook*. Packt Publishing, 304.
7. Zerkal', M. V., Oleshchenko, A. V., Palekha, Yu. M.; Oleshchenko, A. V. (Ed.) (2017). *Posibnik koristuvacha ArcGIS 10.x dlya fahivciv u sferi mistobuduvannya i prostorovogo rozvitku [ArcGIS 10.x User Guide for Urban Planning and Spatial Development]*. Kyiv: DP «DNIPROMISTO», 90.
8. *ArcGis Pro Describing data*. Available at: <https://pro.arcgis.com/en/pro-app/arcpy/get-started/describing-data.htm> Last accessed: 20.03.2019
9. *ArcGis Pro UpdateCursor*. Available at: <https://pro.arcgis.com/en/pro-app/arcpy/data-access/updatecursor-class.htm> Last accessed: 20.03.2019
10. *ArcGis Pro ListLayers*. Available at: <http://desktop.arcgis.com/en/arcmap/10.3/analyze/arcpy-mapping/listlayers.htm> Last accessed: 20.03.2019

DOI: 10.15587/2313-8416.2019.164597

**ANALYSIS OF THE USE OF MULTIMEDIA COMPONENTS IN MODERN MOBILE LEARNING TECHNOLOGIES**

p. 46-50

**Yevhen Hrabovskiy**, PhD, Associate Professor, Department of Computer Systems and Technologies, Simon

Kuznets Kharkiv National University of Economics,  
Nauky ave., 9-a, Kharkiv, Ukraine, 61166  
E-mail: Yevgen.Hrabovskyi@hneu.edu.ua  
ORCID: <http://orcid.org/0000-0001-7799-7249>

*The article analyzes the pedagogical conditions of the implementation of mobile learning, which allows to optimize the learning process in open distance education. The algorithm of creation of high-quality infographics for mobile learning is developed, which provides an opportunity for the formation of sensitive content for users. Methodical recommendations for ensuring the quality of the use of web-based multimedia resources of mobile learning systems are developed, on the basis of which the opportunity to increase the productivity of the learning process is provided*

**Keywords:** mobile learning, technology, multimedia components, infographics, responsive content, multimedia resources

#### References

1. Hrabovskyi, Y. (2018). Designing the intelligent user interface for electronic education support systems. *ScienceRise*, 11 (52), 36–39. doi: <http://doi.org/10.15587/2313-8416.2018.147987>
2. Naumenko, M., Hrabovskyi, Y. (2018). Elaboration of methodology for designing a publishing and printing web portal. *Eastern-European Journal of Enterprise Technologies*, 2 (2 (92)), 14–22. doi: <http://doi.org/10.15587/1729-4061.2018.126305>
3. Bichel, J. (2013). The state of e-learning in higher education: An eye toward growth and increased access (research report). Louisville: EDUCAUSE, 46.
4. Sursock, A. (2015). *Trends 2015: Learning and Teaching in European Universities*. Brussels: EUA, 128.
5. Jaggars, S. S., Edgecombe, N., Stacey, G. W. (2013). What we know about online course outcomes. Research overview Community College Research Center, Columbia University, 126.
6. Banciu, V. M., Gordan, S. (2012). Stanciu The Social Benefits of E-learning in the Study of Foreign Languages in Romanian Education. *International Conference on Management and Education Innovation IPEDR*, 37, 101–105. Available at: <http://www.ipedr.com/vol37/021-ICMEI2012-E00044.pdf>
7. Kovalenko, O. (2013). Evaluation of e-learning deployment scale. OECD publishing, 134.
8. Major, C. (2015). *Teaching Online: A Guide to Theory, Research, and Practice*. Johns Hopkins University Press, 336.
9. Terras, M. M., Ramsay, J. (2012). The five central psychological challenges facing effective mobile learning. *British Journal of Educational Technology*, 43 (5), 820–832. doi: <http://doi.org/10.1111/j.1467-8535.2012.01362.x>
10. Farwell, T. (2013). Keeping an Online Class Interesting and Interactive. *Distance Learning*, 10 (3), 27–32.

DOI: 10.15587/2313-8416.2019.165271

#### THE METHOD OF JOINT DEFINITION OF SMALL ARMS RATIONAL BALLISTIC CHARACTERISTICS AND THE STRIKING ELEMENT CONSTRUCTIVE CHARACTERISTICS FOR THE MODEL OF SMALL ARMS OF THE SECURITY FORCES

p. 51-54

**Alexander Bilenko**, Doctor of Technical Sciences, Associate Professor, Doctoral and Adjuncture, National Academy of National Guard of Ukraine, Zakhysnykiv Ukrainy ave., 3, Kharkiv, Ukraine, 61001

E-mail: [albilenko@ukr.net](mailto:albilenko@ukr.net)

ORCID: <http://orcid.org/0000-0001-6007-3330>

**Alexander Kyrychenko**, Operational Tactical Faculty, National Academy of National Guard of Ukraine, Zakhysnykiv Ukrainy ave., 3, Kharkiv, Ukraine, 61001

E-mail: [Kirikalexio@ukr.net](mailto:Kirikalexio@ukr.net)

ORCID: <http://orcid.org/0000-0002-9107-5002>

*The method of joint definition of small arms rational ballistic characteristics and the striking element constructive characteristics for the model of small arms of the security forces is developed.*

*The method allows to determine the ballistic characteristics of the small arms sample and the striking element mechanical properties that provide sufficient energy characteristics of the striking element when meeting the target on distances including the aiming distances, the safe values of its kinetic and specific energy after reflection from the obstacle, as well as the minimum range of slaughter action on distances larger than the aiming distances*

**Keywords:** small arms, safety of weapons use, ricochet, conditional recovery factor, energy characteristics

#### References

1. Bilenko, O. I., Kyrychenko, O. O. (2014). Ways of increasing the safety of small arms employment by law enforcement forces. *Eastern-European Journal of Enterprise Technologies*, 2 (3 (68)), 35–39. doi: <http://doi.org/10.15587/1729-4061.2014.23117>
2. Karger, B., Joosten, U. (2001). A case of “boomerang” bullet ricochet. *International Journal of Legal Medicine*, 115 (2), 70–71. doi: <http://doi.org/10.1007/s004140000148>
3. Obzor proisshestviy za 13.01.2009 g. (2009). RIA Novosti. Rossiyskoe agentstvo mezhdunarodnoy informatsii. Sibirskiy okrug. 2009. Available at: <http://sibir.rian.ru/incidents/20090113/81746850.html>
4. Osobennosti ognestrel'nyh povrezhdeniy pri rikoshete i preodolenii puley pregrad pered raneniyem. Available at: <http://www.vuzlib.su/beta3/html/1/12314/12398>
5. Politseyskiye SSHA pri shturme zdaniya ubili semiletneho rebenka. Available at: <http://www.pravda.ru/news/accidents/17-05-2010/1032031-police-0/>

6. Popoy V. L. (2002). Sudebno-meditsinskaya ballistika. Saint Petersburg: Gipokrat, 656.

7. Oruzhye Ukrainy (stanom na 12.04.2014 r.). Available at: <http://www.fort.vn.ua/catalog/> Last accessed: 05.07.14

8. Kirilov, V. M., Sabel'nikov, V. M. (1980). Patrony strelkovogo oruzhiya. Moscow: CNII informacii, 372.

9. Bilenko, O. I., Kyrychenko, O. O., Pavlov, D. V. (2017). Doslidzhennia vplyvu materialu metalnogo elementu na kharakterystyky rykoshetu. Zbirnyk naukovykh prats Natsionalnoi akademii Natsionalnoi hvardii Ukrainy, 2 (30), 15–21.

10. Bilenko, O. I., Kyrychenko, O. O., Pavlov, D. V. (2018). Metodyka vyznachennia ratsionalnykh balistychnykh kharakterystyk zrazka striletskoi zbroi syl bezpeky dlia pidvyshchennia bezpechnosti yoho zastosuvannia. Zbirnyk naukovykh prats Natsionalnoi akademii Natsionalnoi hvardii Ukrainy, 2 (32), 17–26.

DOI: 10.15587/2313-8416.2019.164289

**POSSIBILITIES OF ENHANCEMENT OF THE STRENGTH AND DURABILITY OF EPOXY COMPOSITES BY SILICON CARBIDE AND TITANIUM NITRIDE FILLING**

p. 55-59

**Dmitriy Starokadomsky**, PhD, Senior Researcher, Department of Composite Materials, Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine, Henerala Naumova str., 17, Kyiv, Ukraine, 03164

E-mail: Km80@ukr.net

ORCID: <http://orcid.org/0000-0001-7361-663X>

**Sergij Golovan**, Research Fellow, Institute of Chemistry of High-Molecular Compounds of the National Academy of Sciences of Ukraine, Kharkivske highway, 48, Kyiv, Ukraine, 02160

E-mail: sergeyGolovan@rambler.ru

**Nadia Sigareva**, Postgraduate Student, Department of Composite Materials, Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine, Henerala Naumova str., 17, Kyiv, Ukraine, 03164

E-mail: Microft2@ukr.net

**Olexander Tkachenko**, Leading Engineer, Department of Composite Materials, Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine, Henerala Naumova str., 17, Kyiv, Ukraine, 03164

**Nadia Moshkovska**, Engineer, Department of Composite Materials, Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine, Henerala Naumova str., 17, Kyiv, Ukraine, 03164

**Lyudmyla Kokhtych**, Researcher, Department of Coherent and Quantum Optics, Institute of Physics of National Academy of Sciences of Ukraine, Nauky ave., 46, Kyiv, Ukraine, 03028;

Assistant, Department of Energy Systems, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Peremohy ave., 37, Kyiv, Ukraine, 03056  
E-mail: kokhtych@gmail.com

ORCID: <http://orcid.org/0000-0002-6973-9984>

**Ivan Garashchenko**, Leading Engineer, Department of Composite Materials, Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine, Henerala Naumova str., 17, Kyiv, Ukraine, 03164

*Composites based on ED20+PEPA resin with filling of SiC, TiN microparticles and their mixtures with cement are studied. The possibilities for a significant increase in microhardness – 1.5-2 times, modulus at bending (1.4–1.7 times), compressive strength (for SiC), abrasion resistance and chemical resistance (in nitric acid and acetone/ethyl acetate) are revealed. At the same time, the fire resistance of the compositions and their strength properties significantly increases*

**Keywords:** epoxy composite, strength, microhardness, heat resistance, diagrams, swelling in acetone, nitric acid, shrinkage

**References**

1. Starokadomskiy, D. (2018). Dlinnyy vek epoksidki. Nauka i Zhizn, 1, 66–71.

2. Lypatov, Yu. S. (1991). Physico-chemistry of a filled polymers. Kyiv: Naukova Dumka, 220.

3. Starokadomsky, D. L. (2008). Some features of the swelling of photopolymer composites with various indicators of high-silica silica. Plastic Masses, 2, 33–36.

4. Emelina, O. Yu. (2014). Composite polymeric materials, modified by dispersion fillers, applicable in the construction and repair of equipment. Bulletin of Kazan Technological University, 17 (3), 128–130.

5. Voronkov, A. G., Yartsev, V. P. (2006). Epoxy polymer solutions for the repair and protection of building products and structures. Tambov: Publishing House of Tambov State Techn. University, 92.

6. Poornima, V., Thomas, S., Huczko, A. (2010). Epoxyresin/SiC nanocomposites. Synthesis & characterization. Kompozyty, 10, 11–14.

7. Vijayan, P. P., Pionteck, J., Huczko, A., Puglia, D., Kenny, J. M., Thomas, S. (2014). Liquid rubber and silicon carbide nanofiber modified epoxy nanocomposites: Volume shrinkage, cure kinetics and properties. Composites Science and Technology, 102, 65–73. doi: <http://doi.org/10.1016/j.compscitech.2014.07.017>

8. Ishchenko, A., Radionenko, A., Ischenko, E. (2017). Tribotechnical research into friction surfaces ba-



sed on polymeric composite materials. *Eastern-European Journal of Enterprise Technologies*, 6 (12 (90)), 12–19. doi: <http://doi.org/10.15587/1729-4061.2017.114367>

9. Reshetnyk, M., Starokadomsky, D., Ishenko, A. (2017). Filling with the Graphene Nanoplates as a Way to Improve Properties of Epoxy-Composites for Industrial and Geophysical Machinery. *American Journal of Physics and Applications*, 5 (6), 120–125. doi: <http://doi.org/10.11648/j.ajpa.20170506.19>

10. Kablov, V. F., Lifanov, V. S., Logvinova, M. Ya., Kochetkov, V. G. (2013). Fire and heat resistant epoxy

composites filled with silicon carbide. *Modern problems of science and education*, 6, 10–17.

11. Starokadomsky, D. (2018). Physico-mechanical properties and micro-nanostructure of epoxy composites filled with gypsum, chalk and cement. *Composites and Nanostructures*, 10 (1 (37)), 45–57.

12. Zolotareva, V. V., Grigorenko, T. I., Kocherigin, Yu. S., Samoylova, E. E. (2013). The effect of fine fillers (BN, SiO<sub>2</sub>, Cr<sub>2</sub>O<sub>3</sub>, Omiacarb, iron powder) on the wear of epoxy and epoxy-rubber polymers. *Modern building materials*, 1 (99), 108–114.