

ABSTRACT&REFERENCES

DOI: 10.15587/2313-8416.2017.95628

FORMATION NETWORK FEATURES RESEARCH OF EXTRACURRICULAR EDUCATIONAL ESTABLISHMENTS IN LOCAL EDUCATIONAL DISTRICTS

p. 6-9

Iryna Merylova, Department of Design and architectural design, Prydniprovs'ka State Academy of Civil Engineering and Architecture, Chernyshevs'koho str., 24-A, Dnipro, Ukraine, 49600
E-mail: irina_merilova@mail.ru
ORCID: <http://orcid.org/0000-0001-5375-1359>

The main directions of development of extracurricular educational establishment's network are examined in research. Proposals for improving the network of extracurricular establishments in the structure of territorial educational districts have been formed. It is established that the perspective development of the network of educational institutions is carried out on the basis of groups of architectural and town planning principles, among which accessibility, flexibility, cooperation and blocking of the territories of educational establishments are especially important for the formation of the network of additional education institutions

Keywords: network of extracurricular establishments, local education districts, architectural and urban planning principles

References

1. Pro osvitu: Zakon Ukrayiny vid 23 travnia 1991 № 1060-XII zi zminamy (2013). Zakonodavstvo Ukrayiny u sferi osvity ta profesynoho navchannya. The Verkhovna Rada of Ukraine, The Committee on Science and Education. Kyiv, 4–43.
2. Pro pozashkil'nu osvitu: Zakon Ukrayiny vid 23 chervnia 2000 № 1841–III zi zminamy (2013). Zakonodavstvo Ukrayiny u sferi osvity ta profesynoho navchannya. The Verkhovna Rada of Ukraine, The Committee on Science and Education. Kyiv, 163–190.
3. Kovalska, G. L. (2016). Mistobudivni osnovi rozvitu merezhi doshkil'noyi ta zagal'noosvitnih navchal'nih zakladiv [Urban planning bases of the development of preschool and general educational establishments network]. KNUBA. Kyiv, 39.
4. Osadchiy, I. G. (2012). Teoriya i praktika spryamovanogo rozvitu sistemi zagal'noyi seredn'oyi osviti sil's'koyi mistsevosti [Theory and practice of directed development of secondary education in rural areas]. Natsional'na akademiya pedahohichnykh nauk Ukrayiny. Kyiv, 40.
5. Tishkevich, O. P. (2010). Arhitekturno-planoval'na organizatsiya sil's'kih malokomplektnih shkil [Architectural and planning organization of the ungraded rural schools]. KNUBA. Kyiv, 209.
6. Kovalska, G. L., Merylova, I. O. (2015). Extracurricular educational establishments formation experience in Ukraine. Bulletin of Prydneprov's'ka State Academy of Civil Engineering and Architecture, 1 (10), 76–81.
7. Polozhennya pro osvitniyj okrug [The Regulations on educational district] (2010). Kabinet Ministriv Ukrayini, No. 777. Available at: <http://zakon3.rada.gov.ua/laws/show/777-2010-%D0%BF>
8. Kovalskiy, L. M., Merylova, I. O. (2015). Merezha zakladiv pozashkil'noyi osviti v strukturni mis'koyi zabudovi (na priklyad m. Dnipropetrovs'ka) [Network of adult education institutions in the structure of urban development]. Dosvid ta perspektivi rozvitu mist Ukrayini. Problemi rekonstruktsiyi v teoriyi ta praktitsi mistobuduvannya. Kyiv: KNUBA, 27, 177.
9. Merylova, I. A. (2015). Varianty razvitiya seti vneshkol'nogo obrazovaniya v Ukraine na osnove analiza mirovyh kontsepsij [Variants of extracurricular educational network's develop-

ment in Ukraine on the base of world concepts' analysing]. Vestnik Pridneprovskoj gosudarstvennoj akademii stroitel'stva i arhitektury, 2, 52–63.

10. Kontsepsiya reformuvannya mistsevogo samovryaduvannya ta teritorial'noyi organizatsiyi vliadi v Ukrayini [The concept of local government reform and territorial organization in Ukraine] (2014). Kabinet Ministriv Ukrayini, No. 333-r. Available at: <http://zakon3.rada.gov.ua/laws/show/333-2014-%D1%80>

DOI: 10.15587/2313-8416.2017.95622

ANALYSIS OF THE PREREQUISITES OF THE FORMATION OF OPEN LABORATORIES, AS A RESULT OF THE INTERDISCIPLINARY APPROACH TO RESEARCH

p. 9-12

Kateryna Ryzhkova, Postgraduate student, Department of Architecture Building and Structures, Odessa State Academy of Building and Architecture, Didrichsona str., 4, Odessa, Ukraine, 65029
E-mail: kryzhkova@gmail.com

ORCID: <http://orcid.org/0000-0001-6682-1205>

The article considers the conditions for creating open laboratories on the basis of research complexes with the aim of creating tools for interaction between research of various industries in order to achieve the maximum intensity of the modern scientific process. It is noted that the process of forming a new flexible planning layout of the research laboratory, which will facilitate collaboration between researchers and expand the boundaries of the fundamental sciences, requires the creation of a universal laboratory module capable of rapid reconfiguration

Keywords: scientific process, interdisciplinary approach, research, flexibility, adaptability, laboratory, open laboratory

References

1. Jong, T. M. D., Voordt, V. D. (2002). Ways to Study and Research Urban, Architectural and Technical Design. Amsterdam: Delft University Press, 554.
2. Cohen, W. M., Nelson, R. R., Walsh, J. P. (2002). Links and Impacts: The Influence of Public Research on Industrial R&D. Management Science, 48 (1), 1–23. doi: 10.1287/mnsc.48.1.1.14273
3. Watch, D. D., Kliment, S. A. (2008). Building Type Basics for Research Laboratories. New York: John Wiley & Sons, 288.
4. Planning Academic Research Facilities (1992). Washington: National Science Foundation.
5. Solobay, P. A. (1997). Structurally funktsionalne i kompozitsiye modelyuvannya vuzivskih kompleksiv. Traditsii that novatsii in vischiy arhitekturno-hudoznhii osviti, 3, 19–21.
6. Tsitovich, G. N. (1982). Universities developing planning structure. Moscow: Stroyizdat, 197.
7. Savel'ev, B. A., Belyavskij, A. V. (1974). Scientific research centers, institutes and laboratories. The spatial organization of research institutions. Moscow: Nauka, 122.
8. Solobay, P. A. (1998). Evolyutsiya arhitekturi navchal'nih kompleksiv universitetiv i modelyuvannya ih kompozitsiynih structures. Traditsii that novatsii in vischiy arhitekturno-hudoznhii osviti, 4-5, 151–158.
9. Federal Energy Management Program (2002). United States Department of Energy, 26. Available at: https://www1.eere.energy.gov/femp/pdfs/yrinrview_2002a.pdf
10. Platonov, Yu. P., Sergeev, K. I., Zosimov, G. I. (1977). Design research complexes. Moscow: Stroyizdat, 133.

DOI: 10.15587/2313-8416.2017.95163

THE HISTORY OF RESEARCHES OF FORESTS AND FORESTRY IN VOLYN REGION

p. 13-16

Volodymyr Yurovchik, PhD, Senior Lecturer, Department of theory and methods of school subjects teaching, Volyn Institute of Postgraduate Pedagogical Education, Vynnychenko str., 31, Lutsk, Ukraine, 43025

E-mail: Yurovchik@ukr.net

ORCID: <http://orcid.org/0000-0003-1947-4807>

History of forests and forestry in Volyn region from ancient times to the present day is investigated. The extent of human impact on forests is described. The modern problems of forests and forest resources in Volyn region are considered. The system of measures, aimed at ensuring rational use and reproduction of forests and improvement of environmental situation in the region's forests is justified

Keywords: forest, forest resources, forestry, potash, sawmills

References

1. Lahanovs'kyy, L. (2003). Tam, de tury khodyly. Uryadovyy kur'yer, 187, 9.
2. Herenchuk, K. I. (Ed.) (1975). Pryroda Volyns'koyi oblasti. Lviv: Vyshcha shkola, 146.
3. Ivanyts'kyy, B. H. (1939). Lisy i lisove hospodarstvo v Ukraine. Warszawa, 350.
4. Korets'kyy, L. M. (1960). Volyns'ka oblast' (Heohrafichnyy narys). Kyiv: Radyans'ka shkola, 133.
5. Telishevs'kyy, D. A. (2004). My pochynaly iz zemlyanok... Volyn, 105, 3.
6. Hensiruk, S. A. (1975). Lesa Ukraine. Moscow: Lesnaya promyslennost', 280.
7. Hensiruk, S. A. (1980). Lisy – bahatstvo i okrasa zemli. Kyiv: Naukova dumka, 212.
8. Hensiruk, S. A. (1973). Lisovi resursy Ukraine, yikh okhorona i vykorystannya. Kyiv: Naukova dumka, 526.
9. Kopiy, L. I. (2002). Optymizatsiya lisystosti zakhidnoho regionu Ukraine. Lviv, 20.
10. Kopiy, L. I. (1996). Teoretychni aspecty zbil'shennya lisystosti Zakhidnoho regionu Ukraine. Naukovyy visnyk UkrDTU, 5, 126–131.
11. Kopiy, L. I., Soloviy, I. P. (1991). Problemy optymizatsiy siyi landshaftiv zakhidnoho regionu URSSR. Lisove hospodarstvo, lisova, paperova i derevoobrobna promyslovosti, 22, 30–33.
12. Kotsan, N. N. (1994). Terytorial'na orhanizatsiya lisopromyslovoho kompleksu Volyns'koyi oblasti. Lutsk, 21.
13. Lazaruk, V. A. (1987). Svityaz. Zhovten, 10, 44–57.
14. Mel'nyk, V. S. (2004). Problemy Volyns'koho lisa. Volyn, 15, 1.
15. Stoyko, S. M., Tretyak, P. R. (1983). Pryroda – Stykhyya – Chelovek. Lviv: Vyshcha shkola, 120.
16. Holubets, M. A. (1999). Heobotanichne rayonuvannya. Lviv: UEL, 1, 153.
17. Holubets, M. A. (1978). El'nyky Ukraynskykh Karpat. Kyiv: Naukova dumka, 264.
18. Hensiruk, S. A., Ivanyts'kyy, S. M. (1999). Lisove hospodarstvo i formuvannya optymal'noyi lisystosti v zakhidnomu lisostepu i Polissi. Lviv: NTSh, 242.
19. Derzhavnyy arkhiv oblasti Volyns'koyi oblasnoyi derzhavnoyi administratsiyi F. 46; Op. 1,2,2,5,6; Spr. 557,202, 208, 70, 417 (1929, 1931, 1932, 1935, 1937–1938). Otchet volynskoho voevody o razvytyy otdela zemledelyya y vetrynaryy, 37, 34, 55, 84, 119.

20. Statystychni materialy Volyns'koho oblasnoho upravlinnya lisovoho hospodarstva (2000–2009). Lutsk.

21. Hal'chenko, Ya. Ya. (2004). Lisova konstytutsiya – nahal'na vymoha chasu. Holos Ukraine, 142, 8.

22. Svitlikovs'ka, H. Y. (2004). Khto z lisu hoduyet'sya, a khto – zhyryue. Volyn, 43, 2.

23. Mel'nyk, V. S. (2002). Z istoriyi okhorony pryrody na Volyni. Istoryko-krajeznavchi narysy. Lutsk: Nadstyr"ya, 152.

24. Havrylyuk, Ya. M. (2003). Zlodiy'ska sokyra nad Volyns'kym lisom. Volyn, 114, 3.

DOI: 10.15587/2313-8416.2017.96462

DEFINITION OF THE METHANE-GENERATING POTENTIAL OF FIELDS OF THE VELYKI MOSTY MINES NO 3, 4, 6 OF THE MEZHYRICHCHYA GAS-COAL FIELD

p. 17-24

Vasyl Uziyuk, Doctor of Geological and Mineralogical Sciences, Department of historical geology and paleontology, Ivan Franko Lviv National University, Universytets'ka str., 1, Lviv, Ukraine, 79000

E-mail: coalgeol@franko.Lviv.ua

ORCID: <http://orcid.org/0000-0003-1101-4099>

Ihor Shaynoha, PhD, Department of historical geology and paleontology, Ivan Franko Lviv National University, Universytets'ka str., 1, Lviv, Ukraine, 79000

E-mail: chigvos@ukr.net

ORCID: <http://orcid.org/0000-0003-3657-1318>

Mykola Zubyk, Engineer, Department of Geochemistry of deep flu-ids, Institute of Geology and Geochemistry of Combustible Mineral of National academy of sciences of Ukraine, Naukova str., 3-a, Lviv, Ukraine, 79060

E-mail: zubyk_mikola@ukr.net

ORCID: <http://orcid.org/0000-0002-1448-2958>

For the first time the common methane-generating potential of fields of the Velyki Mosty mines (N 3, 4, 6) of the Mezhyrichchya gas-coal field was calculated.

Its volume in Earth's bowels which was established according by geological, laboratory-analytical and statistical methods on 2 55 coal seams and layers drilling by 374 wells was defined in the next quantity: mine VM No3 – 75149 million m³, mine VM No 4 – 157458 million m³, mine VM NNo 6 – 125564 million m³, in sum – 358171 million m³.

It was proved that the next quantity of the methane from peat bed in atmosphere on the peat stage of coal formation was exited: mine VM No 3 – 1517 million m³, mine VM No 4 – 3173 million m³, mine VM No 6 – 2537 million m³, in sum – 7227 million m³

Keywords: methane generating potential, peat, coal, layer, seam, mine field, field, well

References

1. Dolenko, G. N., Boychevskaya, L. T., Boychuk, M. V. et. al.; Gavryish, V. K. (Ed.) (1985). Neftegazonosnyie provintsiy Ukrayny. Kyiv: Naukova dumka, 172.
2. Porfirev, V. P., Krayushkin, V. A., Chekunov, A. V., Sologub, V. B. et. al.; Shnyukova, E. F. (Ed.) (1987). Priroda nefti gaza i iskopaemyih ugley. Neft i ugor – kaustobiolityi. Vol. 1. Abiogen-naya neft. Vol. 2. Kyiv: Naukova dumka, 223, 216.
3. Van-Krevelen, D. V., Shuer, Zh. (1960). Nauka ob ugle. Moscow: Gosnauchtehizdat literatury po gornomu delu, 304.

4. Kozlov, V. P., Tokarev, L. V. (1961). Masshtabyi gazoo-brazovaniya v osadochnih tolschah (na primere Donetskogo bassey-na). Sovetskaya geologiya, 7, 19–35.
5. Uziuk, V. I., Bik, S. I., Ilchishin, A. V. (2001). Gazogen-eratsiyniy potentsial kam'yanovugilnih baseyniv Ukrayini. Geologiya i geohimiya goryuchih kopalini, 2, 110–121.
6. Petrikovskaya, M. E., Ivanov, A. K., Kushniruk, V. A. (1969). Issledovanie izotopnogo sostava metanovyih gazov Mezhrechenskogo kamennougolnogo mestorozhdeniya v svyazi s ego gazonosnostyu. Geologiya i geohimiya goryuchih iskopaemyih, 18, 38–45.
7. Karavaev, V. Ya. (1990). Tektonika Lvovsko-Volyinskogo basseyna. Otchet po NIR: Uglenosnyie formatsii Lvovsko-Volyinskogo baseyna i ih promyishlennoe znachenie. Lviv: Fondyi IGGGK NAN Ukrayini, 1, 240–281.
8. Karavaev, V. Ya., Antsiferov, A. V., Golubev, A. A. (2010). Tektonika Lvovsko-Volyinskogo basseyna. Vol. 2. Donetsk: Veber, 251–266.
9. Rogozina, E. A., Norenkova, I. K., Viltovskaya, S. V. et al. (1978). Generatsiya gazov pri biohimicheskem preobrazovanii or-ganicheskogo veschestva. Himiya tverdogo topliva, 2, 30–33.
10. Patteisky, K. (1926). Die Geologie derin Kohlengelbirge aufretenolen Gase. Gluckauf, 49.
11. Mott, R. A. (1943). The origin and composition of coals. Fuell in science and practice, 22 (1).
12. Uspenskiy, V. A. (1954). Opyit materialnogo balansa protsessov, proishodyaschih pri metamofizme ugolnyih plastov. Izvestiya AN SSSR. Seriya geologiya, 6, 94–101.
13. Lidin, G. D. (1963). Gazoobilnost kamennougolnyih shaht SSSR. Vol. 3. Moscow: Izd-vo AN SSSR, 350.
14. Ermakov, V. I., Skorobogatov, V. A.; Eremin, I. V., Zimakov, B. M. (Eds.) (1984). Obrazovanie uglevodorodnyih gazov v uglenosnyih i subuglenosnyih formatsiyah. Moscow: Nedra, 206.
15. Sokolov, V. L., Gulyaeva, N. D., Uziuk, V. I. (1978). Gazoobrazovanie na vysokih stadiyah uglefikatsii (po eksperimentálnym dannym). Geologiya nefti i gaza, 10, 34–38.
16. Volkov, V. N. (1973). Geneticheskie osnovy morfologii ugolnyih plastov. Moscow: Nedra, 136.

DOI: 10.15587/2313-8416.2017.955523

DEVELOPMENT OF STRATEGIC MANAGEMENT MODELS OF INTEGRATED CORPORATE STRUCTURES

p. 25-28

Maria Naumenko, Doctor of Philosophy economic direction, Professor, Department of Management and the military economy, National Academy of the National Guard of Ukraine, Zahysnykiv Ukrayini sq., 3, Kharkiv, Ukraine, 61001

E-mail: naumenkomariya@yandex.ua

ORCID: <http://orcid.org/0000-0001-6864-7159>

In the article features of the organization of strategic management by the integrated associations of subjects of managing are considered. The use of maximizing the manifestation of integration and synergetic effects as guidelines for the strategic development of integrated education is proposed. An aggregated representation of the model basis of strategic management of an integrated business association, distributed within the framework of the prospects of a balanced scorecard

Keywords: strategic management, business entities, scorecard, modeling, balanced scorecard

References

1. Anohin, P. K. (1973). Printsipialnyie voprosyi obschey teorii funktsionalnyih sistem. Printsipyi sistemnoy organizatsii funktsiy. Moscow: Nauka, 5–61.
2. Gorbatov, V. M. (2006). Konkurentospособност i tsikliy razvitiya integrirovannyih struktur biznesa. Kharkiv: ID «INZhEK», 591.
3. Kaplan, R. S., Norton, D. P. (2003). Sbalansirovannaya sistema pokazateley. Ot strategii k deystviyu. Moscow: Olimp-Biznes, 304.
4. Kaplan, R. S., Norton, D. P. (2006). Strategiccheskoe editstvo: sozdanie sinergii organizatsii s pomoschyu sbalansirovannoy sistemy pokazateley. Moscow: ID «Vilyas», 384.
5. Kollis, D. Dzh., Montgomeri, S. A. (2007). Korporativnaya strategiya. Resursnyiy podhod. Moscow: Olimp-Biznes, 400.
6. Mincberg, G., Al'strehnd, B., Lehmpel, Dzh. (2000). Shkolyi strategiy. Saint Petersburg: Piter, 336.
7. Pilipenko, A. A. (2008). Strategichna integratsiya pid-priemstv: mehanizm upravlinnya ta modelyuvannya rozvitku. Kharkiv: VD «INZhEK», 408.
8. Popov, O. E. (2009). Teoretiko-metodologichni ta kont-septualni zasadi formuvannya organizatsiyno-ekonomichnogo mehanizmu korporativnogo upravlinnya. Kharkiv: VD «INZhEK», 360.
9. Redko, V. G. (1999). Evolyutsionnaya kibernetika. Available at: <http://www.keldysh.ru/pages/BioCyber/Lectures.html>
10. Camarinha-Matos, L. M., Afsarmanesh, H. (Eds.) (2008). Collaborative networks: reference modelling. New York: Springer, 334. doi: 10.1007/978-0-387-79426-6

DOI: 10.15587/2313-8416.2017.95550

ANALYSIS OF THE CURRENT STATE OF MANAGEMENT OF PERSONNEL POLICY FORMATION PROCESSES OF THE ENTERPRISE

p. 29-32

Sergey Sokolovskyi, Major-General, PhD, Associate professor, Head of National Academy of the National Guard of Ukraine, Zahysnykiv Ukrayini sq., 3, Kharkiv, Ukraine, 61001

E-mail: mail@avv.gov.ua

ORCID: <http://orcid.org/0000-0003-4264-7737>

The article analyzes the current state of management of personnel policy formation processes. The main types of personnel selection are considered, special attention is focused on the necessary and additional selection. The situational plan of supply and demand of labor resources at the enterprise is analyzed. Areas of improvement of the situation are given at the ratio of supply and demand of labor resources at different structural levels

Keywords: personnel policy, control, labor, movement, current state, enterprise, management

References

1. Dzhirev, S. H. (2006). Sodeystvie trudovoy zanyatosti. Moscow: Prospekt, 463.
2. Zima, O. G. (2004). Situatsiyniy analiz ruhu trudovih resursiv na pidpriemstvi. Ekonomika rozvitku, 4 (32), 79–83.
3. Zolotarev, A. N. (2004). Povyshenie produktivnosti vospriozvodstvennyih protsessov. Kharkiv: ID «INZhEK», 172.
4. Lepeyko, T. I., Kachala, A. O. (2005). Obgruntuvannya pokaznikiv otsinki yakosti trudovogo potentsialu. Ekonomika rozvitku, 4 (36), 72–75.
5. Masich, L. A., Zimenko, L. I. (2011). Aktualnyie voprosyi statisticheskogo analiza ryinka truda v Ukraine. Ekonomika i organizatsiya upravlinnya, 9, 62–70.
6. Moskalenko, N. O. (2005). Upravlinnya trudovim potentsialom dlya zabezpechennya konkurentnih perevag pidpriemstva. Ekonomika rozvitku, 2, 89–91.
7. Piters, T., Uormen, R. (1986). V poiskakh effektivnogo upravleniya: Opyit luchshih kompaniy. Moscow: Progress, 424.

8. Smolyuk, V. L. (2005). Mehanizm upravleniya razvitiem trudovogo potentsiala predpriyatiya. Ekonomika rozvitu, 3, 63–65.
9. Chernyavskaya, I. G. (2003). Umenie upravlyat kadrami. Ukrainskaya investgazeta, 42 (420), 15.
10. Chmihalo, O. L. (2011). Perspektivi rozvitku suchasnoho rinku pratsi Ukrayini. Upravlinnya rozvitkom, 11 (108), 70–71.

DOI: [10.15587/2313-8416.2017.96644](https://doi.org/10.15587/2313-8416.2017.96644)

RESEARCH OF METHODOLOGICAL PROVISION OF MATERIAL INCENTIVE FOR THE ACTIVITIES OF INNOVATION AND TECHNOLOGICAL DEVELOPMENT

p. 32-37

Irina Cherevan, PhD, Associate Professor, Department of Marketing and Management, Kyiv University of Market Relations, Bereznyakivs'ka str., 26-B, Kyiv, Ukraine

E-mail: rectorat@kumr.edu.ua

ORCID: <http://orcid.org/0000-0002-2727-359X>

Lidya Plotnikova, PhD, Associate Professor, Department of Marketing and Management, Kyiv University of Market Relations, Bereznyakivs'ka str., 26-B, Kyiv, Ukraine

E-mail: liplotn@gmail.com

ORCID: <http://orcid.org/0000-0002-9882-0220>

The article defines the nature of income, expenses and profit from the activities of enterprises for innovation and technological development; feasibility of establishing the net profit within their fund, out of which consumer share is to be used as bonus payments for employees. It is suggested to use the graph theory for providing the efficiency of innovation and technological activities in manufacturing enterprise. Methodological provision is grounded for calculating bonus payments for employees of enterprises ensuring innovation and technological development

Keywords: innovation and technological development, material incentive, graph theory, profit share, model

References

1. Abazina, O. A. (2014). Metodichniy pidkhid do materialnogo stimulyuvannya diyalnosti z energozberezhennya pratsivnikiv aviatransportnih pidprielstv [The methodical approach to material incentives of employees of energy saving air transport enterprises]. Donbass state engineering Academy Science Bulletin, 2, 122–128.
2. Astapova, G. V., Maleta, O. S. (2013). Analiz rozvitku pidprielstv aviatsiynoi galuzi i viznachennya ekonomichnikh problem vprovadzhennya innovatsiynikh ekologichnikh zakhodiv [The analysis of the business aviation industry and the determination of the economic problems of implementing innovative environmental measures]. Sustainable economic development, 1, 82–86.
3. Kostenko, O. K. (2014). Planuvannya pokaznikiv efektyvnosti diyalnosti z resursozberezhenyya v aviatsiynikh pidprielstvakh [Planning of resource performance indicators in aviation enterprises]. The development strategies of Ukraine, 1, 100–105.
4. Butenko, A. I., Lazareva, E. V. (2007). Innovatsiyna sprozmozhnist sub'ektiv pidprielitskoi diyalnosti [The innovative capacity of businesses]. Odessa: Feniks, 108.
5. Voytsekhovska, V. V. (2005). Ekonomichna otsinka innovatsiynikh zmin osnovnikh zasobiv pidprielstva [Economic evaluation of innovative changes in fixed assets]. Problems of Economics and Management, 533, 26–31.
6. Zagorko, V. M. (2011). Marketingove zabezpechennya innovatsiynikh protsesiv na pidprielstvakh Ukrayini [Marketing support for innovative processes in the Ukraine]. The problems of systematic approach to economics, 36, 3–7.

7. Illyashenko, N. S. (2009). Formuvannya organizatsiyno-ekonomichnikh zasad innovatsiynogo marketingu na promislovikh pidprielstvakh [Formation of the organizational and economic principles of innovation in industrial marketing]. Kharkiv Polytechnic Institute. Kharkiv, 21.

8. Korneva, O. V. (2000). Informatsiyno-kibernetichni aspekti innovatsiynogo rozvitku pidprielstv [Informational and cybernetic aspects of innovative development of enterprises]. The Economist, 10, 5–10.

9. Burkinskiy, B. V., Khumarova, N. I. (2011). Khumarova Innovatsiyniy imperativ stanovlennya «zelenoi» ekonomiki [Innovation imperative of becoming «green» economy]. Ecological Bulletin, 4, 2–3.

10. Vishnevskiy, V. P. (2009). Chomu Ukraina ne innovatsiyna derzhava [Why Ukraine is an innovative state]. The state and the regions. Series: Economics and Business, 1, 24–35.

11. Astapova, G. V., Novikova, N. I., Kostenko, O. K., Shcherban, R. E., Ustinova, O. V. (2012). Vdoskonaleni mekanizmi ekonomichnogo i materialnogo stimulyuvannya pratsivnikiv korporativnih pidprielstv aviatsiynogo transpurtu [Improved economic mechanisms and financial incentives for workers of undertakings air transport]. Donetsk: TOV Yugo-Vostok, 192.

12. Drachuk, Yu. Z. (2009). Effektivnost innovatsiy i bezopasnost proizvodstva [The efficiency of innovation and safety of production]. Donetsk: IEP NAN of Ukraine, 271.

13. Stepanov, A. P. (2005). Innovatsionnye parametry integratsii ukrainskoy ekonomiki v mirovoye soobshchestvo [Innovative parameters of integration of the Ukrainian economy into the world community]. The strategy of development of Ukraine, 2, 128–136.

14. Shkarlet, S. M. (2007). Ekonomichna bezpeka pidprielstva: innovatsiyniy aspekt [The economic security of the enterprise: Innovation]. Kyiv: Knizhkovye vid-vo NAU, 436.

DOI: [10.15587/2313-8416.2017.95353](https://doi.org/10.15587/2313-8416.2017.95353)

INVESTIGATION OF CLASSICAL-ROMANTIC TRADITIONS IN THE EARLY PIANO COMPOSITIONS OF A. LUBCHENKO

p. 38-42

Maria Kalashnik, Doctor of Arts, Professor, Head of Department, Honored Art Worker of Ukraine, Department of Music and instrumental preparation, G. S. Skovoroda Kharkiv National Pedagogical University, Alchevskyh str., 29, Kharkiv, Ukraine, 61002

E-mail: ASD_X@mail.ru

ORCID: <http://orcid.org/0000-0002-6432-2776>

Yuriii Novikov, Professor, Rector, Honored Artist of Ukraine, Michail Glinka Dnipropetrovsk Academy of Music, Lyvorna str., 10, Dnipro, Ukraine, 49044

E-mail: ASD_X@mail.ru

ORCID: <http://orcid.org/0000-0003-0230-6380>

The classic-romantic tendencies of early piano concerts of the composer, pianist, conductor, laureate of international competitions Anton Lubchenko are considered in the article. There have been noticed genre preferences, style, harmonic means, melodic expression of the thematism. The stylistic features of the concerts are disclosed in the author's focus on the theme-melody as the main medium of figurative content, the classic ways of form organization, tonal thinking in a twelve-tone scale

Keywords: classic-romantic style, traditions, musical forms, harmonic means, melodic expression of the thematism, pianism

References

1. Grigoreva, G. (1989). Stilevye problemy russkoy sovetskoy muzyiki vtoroy poloviny XX veka. Moscow: Sovetskij kompozitor, 206.
2. Ivanova, I. L. (2003). Zhanr dramaticeskoy simfonii G. Berlioza i opyit ego sovremennogo prevorenija: simfoniya «SalveRgina» A. Lubchenko. Problemy vzaemodiyi mistetstva, pedagogiki ta teoriyi i praktiki osviti. G. Berlioz ta svitova kultura, 12, 128–145.
3. Ivanova, I. L. (2004). Zhitie liriki vo vtorom kontserte dlya alta s orkestrom Antonina Lubchenko. Kiyivske muzikoznavstvo. Kulturologiya ta mistetstvo, 15, 212–220.
4. Ivanova, I. L., Mizitova, A. A. (1992). Instrumentalnyi kontsert 80-h rokiv: deyaki tendentsiyi rozvitu zhanru (na prikladi tvoriv kompozitoriv harkivskoy shkoli). Muzichna Kharkivschina. Kharkiv, 50–61.
5. Ivanova, I. L., Mizitova, A. A. (1995). K probleme edinstva stilya F. Mendelsona. F. Mendelson-Bartoldi i traditsii muzikalnogo professionalizma. Kharkiv: Kharkovskie assamblei. Instytut muzykoznanija, 3–9.
6. Ivanova, I. L., Mizitova, A. A. (2008). Poetika igry v strunnyih kvartetah D. Shostakovicha. Problemy vzaemodiyi mistetstva, pedagogiki ta teoriyi i praktiki osviti, 22, 216–217.
7. Ivanova, I. L. (2002). O ritmicheskikh osobennostyah temo- i formoobrazovaniya v pervyih chastyah kamerno-instrumentalnyih tsiklov Shuberta. Ritm i forma. Saint Petersburg: Soyuz hudozhnikov, 110–130.
8. Kalashnik, M. P. (2004). Zhanrova poetika kontserta ya yiyi vidbitya v instrumentalnih kontsertah Antonina Lubchenka. Ukrayinske muzikoznavstvo, 33, 233–243.
9. Kalashnik, M. P. (2009). Karnavalnost i igra kak sposoby prelomleniya professionalnogo tezaurusa v muzykalnom tekste: k probleme obucheniya i vospitanija uchaspeshego – kompozitora. Pedagogika i psichologiya formuvannya tvorchoyi osobistosti, 54, 157–163.
10. Kalashnik, M. P. (2004). Mezhdju «haosom» i «krasotoy»: stranitsyi tvorchestva Antonina Lubchenko. Formuvannya tvorchoyi osobistosti v informatsionnomu prostoru suchasnoyi kultury. Kharkiv, 65–75.

DOI: 10.15587/2313-8416.2017.95581

DEVELOPMENT OF THE METHOD OF IMPLEMENTATION OF THE EUROPEAN UNION'S DIRECTIVES TO THE LEGISLATIVE BASE OF UKRAINE IN THE FIELD OF BIODIVERSITY

p. 43-51

Vyacheslav Bratkevych, PhD, professor, Department of Computer Systems and Technologies, Simon Kuznets Kharkiv National University of Economics, Nauky ave., 9-a, Kharkiv, Ukraine, 61166
E-mail: vvb1944@yandex.ua
ORCID: <http://orcid.org/0000-0002-7217-776>

Elena Dmitrieva, Doctor of Economic Sciences, Senior Researcher, Deputy Director, Scientific and research Institution «Ukrainian Scientific and Research Institute of Ecological Problems», Bakulina str., 6, Kharkiv, Ukraine, 61166
E-mail: dmitrieva.olena@gmail.com
ORCID: <http://orcid.org/0000-0002-7494-0674>

Irina Koldoba, Head of sector, Sector ecologically safe nature management of human settlements and economic facilities, Scientific and research Institution «Ukrainian Scientific and Research Institute of Ecological Problems», Bakulina str., 6, Kharkiv, Ukraine, 61166
E-mail: ivkoldoba@ukr.net
ORCID: <http://orcid.org/0000-0001-9334-6219>

Nataliya Teliura, Senior Lecturer, Department of Environmental Engineering, O. M. Beketov Kharkiv National University of Urban Economy, Marshala Bazhanova str., 17, Kharkiv, Ukraine, 61002
E-mail: nata.teliura@ukr.net

ORCID: <http://orcid.org/0000-0003-0732-7789>

A technique is proposed that allows to formalize the procedure for implementing the legislative framework of Ukraine in the EU Directive on environmental biodiversity. A distinctive feature of the methodology is its orientation to the method of analyzing hierarchies, which makes it possible to obtain a quantitative assessment of the level of implementation.

The features and options for implementing the main stages of implementation are considered. A formula is proposed for calculating the integral indicator of the conformity assessment of the contents of articles of the laws of Ukraine with the EU Directives

Keywords: implementation, EU Directives, laws of Ukraine, criteria, assessment, weighting factor, analytic hierarchy process

References

1. On approval developed by the Ministry of Environment plans for the implementation of certain legislative acts of the ES (2015). The Cabinet of Ministers of Ukraine, No. 371-p. Available at: <http://zakon2.rada.gov.ua/laws/show/371-2015-p>
2. Forest Code of Ukraine (1994). Verkhovna Rada of Ukraine, No. 3852-XII. Available at: <http://zakon5.rada.gov.ua/laws/show/3852-12>
3. Bondaruk, G. V., Kagalo, O. O., Procenko, L. D., Artov, A. M., Proc', B. G. (2013). Regulatory support biodiversity in the forest sector of Ukraine: analysis and prospects of development. Lviv, 266.
4. Dmitrieva, O. A. (2008). Sustainable water use in settlements of Ukraine. Kyiv: Council of Productive Forces of Ukraine, 459.
5. Saaty, T. (2008). Adoption decisions with dependence and obratnih communication: Analytycheskiye Networks. Moscow: Publishing house LCI, 360.
6. Saaty, T. (1993). Adoption decisions. The method of analysis yerarhyy. Moscow: Radio i svyaz, 278.
7. Teliura, N. O. (2006). Strengthening stability in the region by organizing green private business. The activity of business. Module I. Kharkiv: Constant, 47.
8. Teliura, N. O. (2004). Development and implementation of the training course «Integraed quality management system and environment based on international standards ISO». Education for sustainable development. Uzhhorod.
9. Teliura, N. O. (2006). The main directions of ecological business, its legal, financial and organizational support. Book 1. Ch. 5. Kyiv: PH "Around colors", 400–436.
10. Bratkevych, V. V. (2016). Quality of support E-learning. Systemy obrobky informatsiyi, 4, 219–222. Available at: http://nbuv.gov.ua/UJRN/soi_2016_4_42

DOI: 10.15587/2313-8416.2017.95710

EVALUATION OF THE QUALITY OF TEACHING AS AN ELEMENT OF MANAGEMENT OF JOINT INTERNATIONAL EDUCATIONAL PROJECT

p. 51-59

Aleksandr Ryzhkov, PhD, Associate Professor, Head of Centre, Educational and Scientific Centre of International Cooperation, Admiral Makarov National University of Shipbuilding, Heroyiv Ukrayiny ave., 9, Mykolayiv, Ukraine, 54025

E-mail: oleksandr.ryzhkov@nuos.edu.ua

ORCID: <http://orcid.org/0000-0003-0535-7722>

Project management of educational services in international market is impossible without evaluation of the quality of teaching. In innovative project management methodology for the provision of educational services is applied the general calculation of a quantitative assessment of the quality of teaching. To significantly reduce the time for calculations, the universal computing program has been created, which allows to process extensive data blocks with the visualization of the results in the two-dimensional coordinate system

Keywords: project management of education, universal computing program, quantitative assessment of the quality, fundamental approaches of project management, international educational program

References

1. Bobrytska, V. I. (2013). Mobility as a key principle of forming a European educational space. Higher Education in Ukraine: European integration of higher education in Ukraine in the context of the Bologna Process, 3, 234–238.
2. Focus on Higher Education in Europe: The Impact of the Bologna Process (2010). European Commission, 156. Available at: http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/122EN.pdf
3. The Bologna Process 2020 – The European, Higher Education Area in the new decade (2009). Bologna processes, 6. Available at: https://www.eurashe.eu/library/modernising-phe/Bologna_2009_Leuven-Communique.pdf
4. Human Development Report 2013. The Rise of the South: Human Progress in a Diverse World' (2013). New York: UNDP, 202. Available at: http://hdr.undp.org/sites/default/files/reports/14/hdr2013_en_complete.pdf
5. Belikov, S. B., Klimov, O. V., Pavlenko, D. V., Tkach, D. V. (2013). Regional labor market – a factor that determines the training of young specialists. Higher Education in Ukraine: European integration of higher education in Ukraine in the context of the Bologna Process, 3, 113–116.
6. Ryzhkov, S. S. (2013). Report of the rector for 5 years. Mykolayiv: NUS, 221 c.
7. Bushuev, S. D. (2000). Guidelines for Project Management. Kyiv: Publishing house “Business Ukraine”, 196.
8. Burkov, N. V., Novikov, D. A. (1998). Models and Mechanisms theory of active quality management systems in the preparation of professionals. Moscow: Research Center of quality control specialists preparation, 158.
9. Zynnurov, U. H., Huzayrov, M. B. (1991). Comments expenses for the preparation of professionals in dependence from qualification requirements for graduate. Moscow: ITs, 12.
10. Kadykova, I. M., Alferova, A. L., Chelpanova, I. V. (2010). Applying Balanced Scorecard to manage university faculty Economics and Management Engineering industry: Theory Practice, 3 (11), 40–53.
11. Hotomlyanskyy, O., Derevyanko, T. (2006). Methodological issues of professional evaluation results of the teaching staff of higher education. Education and Management, 9 (3), 144–151.
12. Balyhin, G. A. (2003). Management of education development, organizational-economic aspect. Moscow: Economics, 432.
13. Ryzhkov, A. S. (2017). Quality Management of NUS educational program “2+2” with ZIMC. Collection of Scientific Publications NUS, 1.
14. Ryzhkov, A. S. (2017). Development of a project management methodology to provide educational services to the foreign customer. Bulletin of the NUS, 1.
15. Learn with MATLAB and Simulink Tutorials. MathWorks. Available at: <https://www.mathworks.com/support/learn-with-matlab-tutorials.html>

16. Ryzhkov, O. S. (2014). Management of international educational projects of the National University of shipbuilding on the example of the ukrainian-chinese cooperation. Collection of Scientific Publications NUS, 6, 84–91. doi: 10.15589/jnn20140613

DOI: 10.15587/2313-8416.2017.96683

ANALYSIS OF DISCRETE-PROBABILISTIC INFORMATION TECHNOLOGIES OF EVALUATING TECHNICAL AND ECONOMIC INDICATORS OF PRODUCTION

p. 52-65

Igor Ruzhentsev, Doctor of Technical Sciences, Professor, Head of Department, Department of Metrology and technical expertise, Kharkiv National University of Radio Electronics, Nauky ave., 14, Kharkiv, Ukraine, 61166

E-mail: igor.ruzhentsev@nure.ua

Sergey Lutsky, PhD, Senior Lecturer, Department of Metrology and technical expertise, Kharkiv National University of Radio Electronics, Nauky ave., 14, Kharkiv, Ukraine, 61166

E-mail: lutsk.sv6@gmail.com

ORCID: <http://orcid.org/0000-0002-5327-6591>

The article reveals some questions of the analysis of technical and economic indicators of the company's activities concerning the forecasting of the production program, the technological process of manufacturing products, the efficiency of using materials, pricing policy, profitability and some others.

Discrete-probabilistic calculations provide an opportunity to obtain more accurate representations and conclusions about the technical and economic performance of the enterprise, which characterize the effectiveness of production operations and the necessary resource support

Keywords: measure, technology, technical and economic indicators, system-information approach, discrete-probabilistic information

References

1. Dmitriev, V. I. (1989). Applied Information Theory. Moscow: Higher school, 326.
2. Vasiliev, V. N. (1986). Organization management and economics of flexible integrated production in machine building. Moscow: Mashinostroenie, 312.
3. Hawkins, J., Blakeslee, S. (2007). On Intelligence. Moscow: Williams, 240.
4. Gottfredson, L. S. (1994). Mainstream Science on Intelligence. Wall Street Journal, A18.
5. Melnik, L. G. (2010). Scientific foundations of self-organization of economic systems. P. 1. Mekhanizm reguluvannya ekonomiki, 1 (3), 12–26.
6. Yeleneva, Yu. A. (2010). The economy of machine building. Moscow: Akademiya, 256.
7. Prokhorov, A. M. (Ed.) (1985). Soviet encyclopedic dictionary. Moscow: Sovetskaya encyclopedia, 1600.
8. Lutsik, S. V. (2010). System-information campaign to the synthesis of computer-integrated technologies of machining at the stages of the life cycle of products. News of SevNTU. Mashynopryladobuduvannya i transport, 107, 132–137.
9. Plank, M. (2012). The revolution in the microcosm. Quantum theory. Series: Science. The greatest theories. Moscow: De Agostini, 33.
10. Ruzhentsev, I. V., Lutsky, S. V., Fetkiv, V. P., Podzigin, O. I. (2016). Discrete-probabilistic information laws factor of increasing production efficiency. Metrology and measuring technology. Kharkiv, 21.

DOI: 10.15587/2313-8416.2017.96524

STROBING THE MOVING OBJECTS MARKS IN THE IMAGE PROCESSING SYSTEM WITH STATIONARY VIDEO CAMERA

p. 66-71

Oleksii Bieliaiev, Postgraduate student, Assistant, Department of Media Engineering and Information Radioelectronic Systems, Kharkiv National University of Radio Electronics, Nauky ave., 14, Kharkiv, Ukraine, 61166

E-mail: oleksii.bieliaiev@nure.ua

ORCID: <http://orcid.org/0000-0003-2437-902X>

Volodymyr Kartashov, Doctor of technical sciences, Professor, Head of Department, Department of Media Engineering and Information Radioelectronic Systems, Kharkiv National University of Radio Electronics, Nauky ave., 14, Kharkiv, Ukraine, 61166

E-mail: volodymyr.kartashov@nure.ua

ORCID: <http://orcid.org/0000-0001-8335-5373>

Francy Loutouangou, Postgraduate student, Department of Media Engineering and Information Radioelectronic Systems, Kharkiv National University of Radio Electronics, Nauky ave., 14, Kharkiv, Ukraine, 61166

E-mail: francy19@mail.ru

ORCID: <http://orcid.org/0000-0001-9109-066X>

The method of a fast-acting increase in the images processing system with a stationary camera is offered by applying the strobing operation to detected objects. The article gives a short analysis of the most often used practice methods of tracking moving objects on images with a static and dynamic background. Also the fast-acting parameters are given and analyzed for the synthesized method in the condition of a high interference

Keywords: image processing, tracking algorithms, image recognition, strobing the marks, shooting trainer

References

1. Bieliaiev, O. V., Kartashov, V. M. (2015). Obnaruzhenie ob'ektor zadannoj formy i opredelenie ih koordinat na izobrazhenii v mul'timedijnom strelkovom trenazhere [Objects detection and determination of their coordinates on the image in a multimedia shooting simulator]. Information processing systems, 10 (135), 16–21.
2. Zubkov, O. V., Korytsev, I. V., Oleynikov, V. M., Sidorov, G. I., Kondrashov, E. V. (2011). Pat. No. 59467 UA. Electronic-laser shooting simulator. MPKF41G3/26. No. u201015833; declared: 28.12.2010; published: 10.05.2011, Bul. No. 9.
3. Kartashov, V. M., Sidorov, G. I., Bieliaiev, O. V. (2013). Pat. No. 80324 UA. Advanced electronic laser shooting simulator. MPKF41G3/26. No. u201213148; declared: 19.11.2012; published: 27.05.2013, Bul. No. 10.
4. Slipchenko, M. I., Kartashov, V. M., Sidorov, G. I., Bieliaiev, O. V. (2013). Pat. No. 83387 UA. Advanced electronic laser shooting simulator. MPKF41G3/26. No. u201301988; declared: 18.02.2013; published: 10.09.2013, Bul. No. 17.
5. Jafri, R., Arabnia, H. R. (2009). A Survey of Face Recognition Techniques. Journal of Information Processing Systems, 5 (2), 41–68. doi: 10.3745/jips.2009.5.2.041
6. Nixon, M. (1985). Eye spacing measurement for facial recognition. SPIE Proceedings, 575, 279–285. doi: 10.1117/12.966515
7. Reisfeld, D. (1994). Generalized symmetry transforms: attentional mechanisms and face recognition. Tel-Aviv, 56.
8. Graf, H., Chen, T., Petajan, E., Cosatto, E. (1995). Locating faces and facial parts. International Workshop on Automatic Face- and Gesture-Recognition, 41–46.
9. Cox, I., Ghosn, J., Yianilos, P. (1996). Featurebased face recognition using mixture-distance. Proceedings of IEEE Conference on Computer Vision and Pattern Recognition, 209–216. doi: 10.1109/cvpr.1996.517076
10. Konushin, A. (2003). Slezenie za tochechnymi osobennostjami sceny [Tracking the point features of the scene]. Computer graphics and multimedia, 4. Available at: <http://www.ict.edu.ru/fi/002409/num4pntrac.pdf>
11. Vezhnevets, A. P. (2006). Metody klassifikacii s obucheniem po precedentam v zadache raspoznavanija ob'ektov na izobrazhenijah [Classification methods with learning by use of precedents in the problem of recognition of objects in images]. International Conference of Computer Graphics and View. Novosibirsk. Available at: http://graphicon.ru/html/2006/proceedings/papers/fr10_34_VezhnevetsA.pdf
12. Amit, Y. (2002). 2D object detection and recognition: models, algorithms, and networks. Cambridge: MIT Press, 324.
13. Viola, P., Jones, M. J. (2001). Rapid Object Detection using a Boosted Cascade of Simple Features. IEEE CVPR. doi: 10.1109/cvpr.2001.990517
14. Ferryman, J. M., Maybank, S. J., Worrall, A. D. (2000). Visual Surveillance for Moving Vehicles. International Journal of Computer Vision, 37 (2), 187–197. doi: 10.1023/a:1008155721192
15. KaewTraKulPong, P., Bowden, R. (2002). An Improved Adaptive Background Mixture Model for Real-time Tracking with Shadow Detection. Video-Based Surveillance Systems, 135–144. doi: 10.1007/978-1-4615-0913-4_11
16. Kuzmin, S. Z. (1967). Digital processing of radar information. Moscow: Soviet radio, 400.
17. Abezgauz, G. G., Tron, A. P., Kopenkin, Yu. N., Koronna, I. A. (1970). Handbook of Probabilistic Calculations. Moscow: Military Publishing, 536.