

ABSTRACT&REFERENCES

DOI: 10.15587/2313-8416.2018.140787

DEVELOPMENT OF REQUESTS FOR DECREASING TRAFFIC BY «STREET-ART»

p. 6-9

Tetyana Zhydkova, PhD, Associate Professor, Department of Urban Development, O. M. Beketov National University of Urban Economy in Kharkiv, Marshala Bazhanova str., 17, Kharkiv, Ukraine, 61002

E-mail: tavlz@ukr.net

ORCID: <http://orcid.org/0000-0001-7903-7073>

Olga Popova, PhD, Associate professor, Department of Architecture of Buildings and Structures and Design of Architectural Environment, O. M. Beketov National University of Urban Economy in Kharkiv, Marshala Bazhanova str., 17, Kharkiv, Ukraine, 61002

E-mail: olya133113@gmail.com

ORCID: <http://orcid.org/0000-0002-4559-352X>

Road safety is one of the main problems of our time. According to investigations of specialists, the disruption of drivers of high-speed mode is a key cause of road traffic accidents, especially within pedestrian crossings. An alternative means of coercion for drivers is provided to ensure a reduction in speed within the hazardous area – the arrangement of pedestrian crossings by the image of precautionary three-dimensional drawings as an element of street design.

Keywords: road safety, pedestrian crossings, speed limitations, artificial barriers, street art.

References

1. Statistika avariynosti v Ukrayini. Available at: <http://www.sai.gov.ua/ua/ua/static/21.htm>
2. Ukrayinska deklaratsiya za bezpeku dorozhnogo ruhu. Available at: <http://medtransvp.com.ua/declaration/>
3. Globalniy plan osuschestvleniya Desyatiletiya deystviy po obespecheniyu bezopasnosti dorozhnogo dvizheniya 2011–2020 gg. Available at: http://www.who.int/roadsafety/decade_of_action/plan/plan_russian.pdf
4. Pro shvalennya Strategiyi pidvischennya rivnya bezpeki dorozhnogo ruhu v Ukrayini na period do 2020 roku (2017). Zatverdzheno postanovoyu Kabinetu Ministriv Ukrayiny No. 481-r. 14.06.2017. Available at: <http://zakon0.rada.gov.ua/laws/show/481-2017-%D1%80>
5. Derzhavna programa pidvischennya rivnya bezpeki dorozhnogo ruhu v Ukrayini na period do 2020 roku (2018). Zatverdzheno postanovoyu Kabinetu Ministriv Ukrayiny No. 435. 25.04.2018. Available at: <http://zakon3.rada.gov.ua/laws/show/en/435-2018-%D0%BF>
6. Maksymchuk, Yu. (2017). Yake znachennya maye per- evischennya shvidkosti. Available at: <https://www.autocentre.ua/ua/avtopravo/pdd-i-bezopasnost/kakoe-znachenie-imeet-prevy-shenie-skorosti-339719.html>

7. Pravila dorozhnogo ruhu 2018. Available at: <https://vodiy.ua/pdr/>

8. DSTU 4123:2006 Pristriy primusovogo znizhen- nya shvidkosti dorozhno-transportnoyi tehniky na vulitsyah i dorogah. Zagalni tehniczni vimogi. Vidannya ofitsiyne (2006). Kyiv, 11.

9. DBN V.2.3-5:2018 Vulitsi ta dorogi naselenih punktiv (2018). Kyiv, 55.

10. U Vinnitsi plastikovi «shkolyari» nagaduyut vodi- yam pro pishohodiv na dorogah. Available at: <http://vinnitsaok.com.ua/2017/04/17/225400>

11. «Zebra», kotoraya zastavit pritorozit lyubogo vodite- lya. Available at: <http://cpykami.ru/zebra-pritorozit-voditelya/>

12. Huzhnyi li Gepmanii «letayuschie zebpyi»? Available at: <https://germania.one/nuzhny-li-germanii-letajushhie-zebry/>

13. Vize-Bürgermeister Bernhard Baier: „Österreichs erst- er 3D-Zebrastreifen in Linz – ÖVP-Idee für internationales Modell zur erhöhten Fußgängersicherheit umgesetzt“ Available at: http://www.oevp-linz.at/index.php?id=2826&tx_news_pi1%5Bcontrol- ler%5D=News&tx_news_pi1%5Baction%5D=detail&tx_news_ pi1%5Bnews%5D=73661&tx_news_pi1%5Bday%5D=17&tx_ news_pi1%5Bmonth%5D=11&tx_news_pi1%5B- year%5D=2017&cHash=22e81388d2e95f5a9936760110efda84

14. Zebra v 3D: V Islandii zadumalis o bezopasnosti pe- shehodov. Available at: <http://www.smartmarketing.com.ua/zebra-in-3d-iceland-thought-about-the-safety-of-pedestrians/>

DOI: 10.15587/2313-8416.2018.141072

GENERAL STAFF OF THE ARMY OF THE UPR (THE SPECIFICS OF ACTIVITIES IN THE CONDITIONS OF INTERNMENT IN THE CAMPS OF POLAND, 1921–1924)

p. 10-12

Ihor Sribnyak, Doctor of Historical Sciences, Professor, Head of Department, Department of World History Historical-phil- osophical faculty, Borys Grinchenko Kyiv University, Bulvar- no-Kudriavska str., 18/2, Kyiv, Ukraine, 04053

E-mail: i.sribniak@kubg.edu.ua

ORCID: <http://orcid.org/0000-0001-9750-4958>

The article analyzes the specifics of the activities of the General Staff of the Army of the Ukrainian People's Republic under conditions of internment in the camps of Poland in 1921-1924., which continued to perform its functions as the main military unit for planning the development of the armed forces of the UPR and restoration of Ukrainian statehood by armed means. The staff of the General Staff took an active part in the development of new regulations for the army, carried out an examination of bills that determined the structure of the troops in the conditions of internment and in case of restoration of military actions for the restoration of the UPR, identified ways of reforming cultural and educational work in the camps

Keywords: general staff, internment, camp, general, Kalisz, UPR army, Poland

References

1. Kolyanchuk, O. (2000). Ukrayins'ka viys'kova emihratsiya u Pol'shchi 1920–1939 rr. [Ukrainian military emigration in Poland 1920–1939]. Lviv, 276.
2. Sribnyak, I. (1997). Obezzbrojena, ale neskorena: Internovana Armija UNR u taborakh Pol'shchi y Rumuniyi (1921–1924 rr.) [Disarmed, but not overwhelmed: Interwar Army of the UPR in the camps of Poland and Romania (1921–1924 bienni-um)]. Kyiv-Filadelfiya, 187.
3. Sribnyak, I. (2018). «...Za pravo vil'no zhyty i prat-syuvaty v ridniy khati» (ukrayins'ka emihratsiyana hromada v Chenstokhovi, Pol'shcha u 1921 r.) [For the right to live and work freely in the native home» (Ukrainian emigration community in Czestochowa, Poland in 1921)] Evropský filozofický a historický diskurz. Praha, 4, 2, 24–31. Available at: <http://elibrary.kubg.edu.ua/id/eprint/24081>
4. Sribnyak, I. (2017). «Pochuttya velykoho obov'yazku, pokladenomu na Heneral'nyy shtab Bat'kivshchynoyu...»: zasnuvannya ta diyal'nist' Akademichnykh kursiv shtabnykh starshyn u tabori Kalish (Pol'shcha) u 1921–1924 rr. [«The feeling of great responsibility assigned to the General Staff of the Motherland ...»: the founding and the activities of the academic staff courses at the Kalish camp (Poland) in 1921–1924]. Nad Wisłą i Dnieprem. Polska i Ukraina w przestrzeni europejskiej – przeszłość i teraźniejszość. Toruń-Kijów. 1, 24–32. Available at: <http://elibrary.kubg.edu.ua/id/eprint/19931>
5. Tsentral'nyy derzhavnyy arkhiv vyshchikh orhaniv vlady ta upravlinnya Ukrainy (TSDAVO Ukrainy) [Central State Archive of the Supreme Governments and Administrations of Ukraine], f. 1078, op. 2, spr. 234, ark. 2–2zv.
6. TSDAVO Ukrainy, f. 1078, op. 4, spr. 6, ark. 71.
7. TSDAVO Ukrainy, f. 1075, op. 2, spr. 476, ark. 113b.
8. TSDAVO Ukrainy, f. 1078, op. 2, spr. 233, ark. 39.
9. TSDAVO Ukrainy, f. 1075, op. 2, spr. 822, ark. 207.
10. TSDAVO Ukrainy, f. 1075, op. 2, spr. 822, ark. 207-2073b.
11. TSDAVO Ukrainy, f. 3947, op. 1, spr. 13a, ark. 48-503b.
12. TSDAVO Ukrainy, f. 1078, op. 2, spr. 317, ark. 3, 6.
13. TSDAVO Ukrainy, f. 1078, op. 2, spr. 317, ark. 15, 22, 23.

DOI: 10.15587/2313-8416.2018.141409

DETERMINATION AND CLASSIFICATION OF SPECIFIC FEATURES OF STYLES AND IMAGES OF MODERN TATTOO

p. 13-19

Alexander Krotevich, Director, Design studio, Kyiv National University of Technology and Design, Nemyrovycha-Danchenka str., 2, Kyiv, Ukraine, 01011
E-mail: aleksandrr_44@ukr.net
ORCID: <http://orcid.org/0000-0002-6934-9310>

In the article the influence of factors and features styles and images in the art of tattoo and the formation of a subjective opinion on the aesthetic development of different social groups, different in nature communities in modern society. The styles, species and subspecies of the tattoo have been analyzed, separate peculiarities and differences of techniques and specifics of the implementation of a stable image on the body. Results of research on studying directions, factors, features of stylistic decisions in progressive art of tattoos are formulated and systematized

Keywords: design, styles, features, factors, types of tattoos, compositions, tattoos, image, aesthetics, social significance, tattoo artist

References

1. Mel'nikov, I. V. (2009). Tatuirovki v Yaponii: ot istokov i do nashih dney. Litres, 24.
2. Gricak, E. (2009). Same modnye tatuirovki. Moscow: RIPOK Klassik, 256. Available at: <http://you-books.com/book/E-N-Griczak/Same-modnye-tatuirovki>
3. Vazhnye figury povliyavshie na tatuirovku v Starom Svete. Available at: http://tattooeed.ru/all_about_tattoo/2014/vazhnye-figury-povliyavshie-na-tatuirovku-v-starom-svete.html
4. Hambli, U. D. (2014). Istoriya tatuirovki. Znaki na tele. Ritualy, verovaniya, tabu. Moscow: Centrpoligraf, 272.
5. Levi-Stros, K. (2001). Strukturnaya antropologiya. Moscow, 512.
6. Baranovskiy, V. A. (2002). Iskusstvo tatuirovki. Moscow: Slavyanskiy dom knigi, 373.
7. Enciklopedicheskiy slovar' Brokgauza i Efrona (1890–1907). Vol. VIII. Sankt-Peterburg: Semenovskaya Tipolitografiya, 497.
8. Darkevich, V. P. (1976). Argonavty srednevekov'ya. Moscow: Nauka, 200.
9. Anton Kusters. Available at: <https://antonkusters.com/>
10. Krotevych, O. V. (2017). Kulturolohichni aspekty vyznachennia osoblyvostei transformatsiyi mystetstva tatuiuvannya v pervisnomu suspilstvi. Visnyk Kyivskoho natsionalnoho universytetu tekhnolohiy ta dyzainu. Seriya: Tekhnichni nauky, 5 (114), 224–234.

DOI: 10.15587/2313-8416.2018.140981

COMPARTMENTAL ANALYSIS OF THE FUNCTIONING QUALITY OF CONSORTING ECOTONES OF PROTECTIVE TYPE

p. 20-23

Mariya Ruda, PhD, Assistant, Department of Ecological Safety and Nature Protection Activity, Lviv Polytechnic National University, Stepana Bandery str., 12, Lviv, Ukraine, 79013
E-mail: marichkarmv@gmail.com
ORCID: <http://orcid.org/0000-0003-0590-4589>

Ulyana Taras, PhD, Director, Regional landscape Park «Znesin-nya», Oleksy Dovbusha str., 24, Lviv, Ukraine, 79008
E-mail: taras.ulyana89@gmail.com
ORCID: <http://orcid.org/0000-0003-2656-3752>

It is found that consortium ecotones of protective type – natural discrete structural units of vegetation cover, which have specific properties. It is proposed to investigate consortium ecotones of protective type with the help of compartmental analysis. It is proved that the flow of energy can be both the form of the system under study and also serve as resources (inflows into flows) into another system. At all stages of the functioning of consortium ecotones of protective type, certain pollution takes place, energy and materials are used. Eco-indicator of consortium ecotones of protective type is defined as a closed system of material flows reflected in the process tree

Keywords: consortium ecotones, ecotones, compartment, mathematical modeling, indicator, energy, environmental impact

References

1. Burden, R. F., Randerson, P. F. (1972). Quantitative Studies of the Effects of Human Trampling on Vegetation as an Aid to the Management of Semi-Natural Areas. *The Journal of Applied Ecology*, 9 (2), 439–457. doi: <http://doi.org/10.2307/2402445>
2. Strandberg, M.; Desmet, G., Janssens, A., Melin, J. (Eds.) (1992, 1994). Radiocesium in a Danish pine forest ecosystem: A collection of papers presented at the Seminar on the Dynamic Behaviour of Radionuclides in Forests. *Science of the Total Environment*, 157. Special issue. Forests and radioactivity. Stockholm, 125–132.
3. Cajander, A. (1926). The theory of forest types. *Acta Forestalia Fennica*, 29 (3). doi: <http://doi.org/10.14214/aff.7193>
4. Clements, F. E. (1949). Plant succession and indicators. A definitive edition of plant succession and plant indicators. New York.
5. Chiras, D. D. (1991). *Environmental Science: Action for a Sustainable Future*. Amsterdam – Bonn... Madrid – San Juan, 549.
6. Cunningham, W. P., Cunningham, M. A., Saigo, B. W. (2005). *Environmental Science: a global concern*. Boston – Toronto: McGraw-Hill Publisher, 630.
7. Enger, E. D., Smith, B. F. (2004). *Environmental Science: a study of interrelationships*. Boston – Toronto: McGraw-Hill Publisher, 477.
8. Green, T., Redecker, Ed. B., Finck, P. et. al. (2002). *The role of invisible biodiversity in pasture landscapes. Pasture Landscapes and Nature Conservation*. Berlin, Heidelberg, New York, London, Tokyo: Springer, 135–145.
9. Harper, J. L. (1977). *Population biology of plants*. New York: Academic Press, 892.
10. Kozłowski, S. (2000). *Ekorozwoj. Wyzwanie XXI wieku*. Warszawa: Wydawnictwo Naukowe PWN, 373.
11. Raunkiaer, C. H. (1934). *The life forms of plants and statistical plant geography, being the collected papers of C. Raunkiaer*. Oxford: Clarendon Press, 632.

DOI: 10.15587/2313-8416.2018.141123

ADAPTIVE DETERMINATION OF DIFFUSIVE AND SPECULAR COMPONENTS OF COLORS FOR RENDERING OF FACE IMAGES OF PERSONS AT PLANNING OF PLASTIC OPERATIONS

p. 24-28

Sergii Pavlov, Doctor of Technical Sciences, Professor, Vinnytsia National Technical University, Khmelnytske highway, 95, Vinnitsa, Ukraine, 21021

E-mail: E-mail: psv@vntu.edu.ua

ORCID: <http://orcid.org/0000-0002-0051-5560>

Sergii Romanyuk, Postgraduate Student, Vinnytsia National Technical University, Khmelnytske highway, 95, Vinnitsa, Ukraine, 21021

E-mail: rom8591@gmail.com

Nikolai Nechiporuk, Vinnytsia National Technical University, Khmelnytske highway, 95, Vinnitsa, Ukraine, 21021

E-mail: E-mail: kolia6@protonmail.com

Formation of color components of image areas of a face is a complex computational problem, since for each pixel of a surface it is necessary to calculate the intensity of color, for which it is necessary to define single vectors to the source of light and normal to the surface. Therefore, the actual task is simplification of the procedure of painting the significant loss of the realism of the final image.

It is proposed to use adaptive polynomials of second and third degrees depending on the curvature of the surface to painting. For a polynomial of the third degree, an approximation formula is obtained for determining the diffuse and specular components of color. The hardware for the determination of coefficients and the approximation polynomial is proposed

Keywords: rendering, diffuse and specular color components 3D image, plastic surgery, face image

References

1. Romaniuk, O. N., Melnykov, O. M. (2006). Adaptyvna normalizatsiia vektoriv normalei pry vyznachenni dyfuznoi ta spekuliarnoi skladovykh koloru. *Reiestratsiia, zberihannia i obrobka danykh*, 8 (3), 11–19.
2. Khern, D., Beyker, M. (2005). *Komp'yuternaya grafika i standart OpenGL*. Moscow: Izdatel'skiy dom «Vil'yams», 1168.
3. Romaniuk, O. N., Chorny, A. V. (2006). *Vysokoproduktyvni metody ta zasoby zafarbovuvannia tryvymirnykh hrachnykh obektiv*. Vinnytsia: UNIVESUM-Vinnytsia, 190.
4. Tsisarzh, V. V. (2004). *Matematicheskie metody komp'uternoy grafiki*. Kyiv: Fakt, 464.
5. Romaniuk, O. N. (2001). *Kompiuterna hrafka*. Vinnytsia: VDTU, 129.
6. Romaniuk, O. N., Chorny, A. V. (2005). *Novyi pidkhid do vyznachennia spekuliarnoi skladovoi koloru. Suchasni problemy radioelektroniky, telekomunikatsii ta pryladobuduvannia*. Vinnytsia, 41.

7. Romaniuk, O. N. (2004). Odyn iz shliakhiv sproshchennia obchysliuvalnogo protsesu pry zafarbovuvanni tryvymirnykh hrafichnykh ob'ektiv. Vymiriuvalna ta obchysliuvalna tekhnika v tekhnolohichnykh protsesakh, 2, 72–75.

8. Romaniuk, O. N. (2005). Adaptivne vykorystannia ri-znykh metodiv zafarbovuvannia pry formuvanni tryvymirnykh hrafichnykh fyhur. Novi tekhnolohii, 3 (9), 78–86.

9. Romaniuk, O. N. (2006). Vykorystannia kvadratych-noi interpoliatsii dlia zafarbovuvannia tryvymirnykh hra-fichnykh ob'ektiv. Reiestratsiia, zberihannia i obrobka danykh, 8 (4), 31–37.

10. Romaniuk, O. N. (2007). Efektyvna model dlia vidt-vorennia spekuliarnoi skladovoi koloru. Problemy informatyzat-sii ta upravlinnia, 2 (20), 115–120.

DOI: 10.15587/2313-8416.2018.141126

CONSTRUCTION OF MODELS OF RESEARCH METHODS AND ANALYSIS OF DAMAGE CAUSES OF BUILDINGS AND CONSTRUCTIONS

p. 29-35

Illia Sachenko, Head of department, Department of custom-er, LTD «ALTIS-KONSTRAKSHN», Lobanovskoho ave., 44, Kyiv, Ukraine, 03680

E-mail: sachenko@altis.ua

ORCID: <http://orcid.org/0000-0002-3716-0249>

This research highlights the issues related to the methods of ex-amination and analysis of the causes of damage diagnostics of the technical condition of buildings and structures. The infor-mation technology of the decision support system has been fur-ther developed, which is based on powerful analytical tools for intellectualization, which allow experts to make more plausible assessments and managerial decisions

Keywords: survey methods, analysis of damage causes, techni-cal condition, category, buildings and structures

References

1. GOST 10180-78. Concrete. Methods for determi-nation of the compressive strength and the tensile strength. Gosstroy of the USSR, Publishing house of standards (1979). Moscow, 24.

2. Mikhailenko, V. M., Eremenko, B. M. (2013). Infor-mation technology assessment of technical condition of building structures using fuzzy models. Construction, materials, engi-neering, 70, 133–141.

3. Mikhailenko, V. M., Terentyev, O. O., Eremenko, B. M. (2014). Treatment of experimental results of the expert system for diagnostics of technical condition of buildings. Construction, materials, engineering, 78, 190–195.

4. Terentyev, O. O., Sabala, Y. Y., Malyna, B. S. (2015). Fundamentals of fuzzy output for problem diagnostics of tech-nical condition of buildings. Managing the development of com-plex systems, collection of scientific papers, 22, 138–143.

5. Terentyev, O., Tsiutsiura, M. (2015). The Method of Direct Grading and the Generalized Method of Assessment of Buildings Technical Condition. International Journal of Science and Research (IJSR), 4 (7), 827–829.

6. Normatyvni dokumenty z pytan obstezhen, pasporty-zatsiyyi, bezpechnoi ta nadiynoi ekspluatatsiyyi vyrobnychyykh bu-divel i sporud (2003). Kyiv, 144.

7. GOST 18105-86 (STSEV 2046-79). Betony. Pravila kontrolya prochnosti. Gosstroy SSSR, Izdatel'stvo standartov (1987). Moscow, 18.

8. GOST 8829-84 (DSTU B.V.2.6-7-95). Izdeliya stroitel'-nye betonnye i zhelezobetonnye sbornye. Metody ispytaniya nagru-zheniem. Pravila ocenki prochnosti, zhestkosti i treshchinostoykosti. Gosstroy SSSR, Izdatel'stvo standartov (1982). Moscow, 20.

9. II-04-7. Vypusk 1. Sbornye elementy zdaniy karkas-no-konstrukcionnyh. Lestnicy. Zhelezobetonnye lestnicy dlya zdaniy s vysoty etazhey 3,3, 4,2 metra (1966). Moscow, 20.

10. Katalog priborov nerazrushayushchego kontrolya ka-chestva zhelezobeta. NIISK Gosstroya SSSR (1986). Kyiv, 24.

DOI: 10.15587/2313-8416.2018.141156

DEVELOPMENT OF ENERGY EFFICIENT DRYING REGIME OF STARCH-CONTAINING RAW MATERIAL

p. 36-41

Raisa Shapar, PhD, Senior Researcher, Leading Researcher, Department of Mass Transfer in Heat Technologies, Institute of Engineering Thermophysics of NAS of Ukraine, Bulakhovskogo str, 2, Kyiv, Ukraine, 03164

E-mail: r.sh@ukr.net

ORCID: <http://orcid.org/0000-0001-6448-8760>

Olena Husarova, Researcher, Department of Mass Transfer in Heat Technologies, “Institute of Engineering Thermophysics of NAS of Ukraine, Bulakhovskogo str, 2, Kyiv, Ukraine, 03164

E-mail: O.V.Husarova@nas.gov.ua

ORCID: <http://orcid.org/0000-0001-7622-9168>

The article gives the classification of plant materials, focuses on starch-containing raw materials, in particular, sweet potato roots, chemical composition, existing drying methods. The results of stud-ies of heat-water treatment and the process of convective dehydra-tion of root crops are presented. Energy-efficient two-stage drying modes have been developed, in which the the air temperature in the first stage of the process is 80...100 °C, in the second – 55... 70 °C, the material temperature during dewatering 50...60 °C. Re-duction of drying time, reduction of heat losses to 15 %, production of dried products with high organoleptic characteristics

Keywords: sweet potato roots, heat and moisture treatment, stage drying, chips, food powder, energy-efficient regimes

References

1. Sniezhkin, Yu. F., Shapar, R. O. (2012). Tekhnolohich-ni aspekty vyrobnytstva sushenykh produktiv [Technological

aspects of the production of dried products]. Udoskonalennia protsesiv i obladnannia-zaporuka innovatsiinoho rozvytku kharchovoi promyslovosti [Improvement of processes and equipment, the key to the innovative development of the food industry]. Kyiv: NUKHT, 102–104.

2. Food and Agriculture Organization of the United Nations. Available at: <http://www.fao.org/home/en/> Last accessed: 15.05.2018

3. Nirmal, K. S. (Ed.) (2011). Handbook of Vegetables and Vegetable Processing. Wiley-Blackwell, A John Wiley & Sons, Ltd., Publication, 772. doi: <http://doi.org/10.1002/9780470958346>

4. Bovell-Benjamin, A. C. (2007). Sweet Potato: A review of its past, present, and future role in human nutrition. *Advances in Food Nutrition Research*, 52 (1), 1–59. doi: [http://doi.org/10.1016/s1043-4526\(06\)52001-7](http://doi.org/10.1016/s1043-4526(06)52001-7)

5. Joykumar Singh, N., Pandey, R. K. (2012). Convective air drying characteristics of sweet potato cube (*Ipomoea batatas* L.). *Food and Bioproducts Processing*, 90 (2), 317–322. doi: <http://doi.org/10.1016/j.fbp.2011.06.006>

6. Zhong, T. (2003). The effect of ohmic heating on vacuum drying rate of sweet potato tissue. *Bioresource Technology*, 87 (3), 215–220. doi: [http://doi.org/10.1016/s0960-8524\(02\)00253-5](http://doi.org/10.1016/s0960-8524(02)00253-5)

7. Silayo, V., Laswai, H., Mkuchu, J., Mpagalile, J. (2003). Effect of Sun-Drying on Some Quality Characteristics of Sweet Potato Chips. *African Journal of Food, Agriculture, Nutrition and Development*, 3 (2). doi: <http://doi.org/10.4314/ajfand.v3i2.19143>

8. Okungbowa, F. I., Osagie, M. (2009). Mycoflor of sun-dried sweetpotato (*Ipomoea batatas* L.) slices in Benn City, Nigeria. *Nigeria. African Journal of Biotechnology*, 8 (14), 3326–3331. Available at: <https://www.ajol.info/index.php/ajb/article/view/61090/49282> Last accessed: 30.05.2018

9. Dzantieva, L. B., Hurumova, Z. K., Hoziev, A. M. (2017). Pat. No. 0002631393. Method for the production of food spiraling chips from sweet potato tubers [Sposob proizvodstva pischevyih spiralevidnyih chipsov iz klubney batata]. No. 2017100171; declared: 09.01.2017; published: 21.09.2017. Bul. No. 27.

10. Li, M., Jiang, J. (2017). Pat. No. 106901277 China. Method for producing health sweet potato chips. No. 102017000296117; declared: 28.04.2017; published: 30.06.2017.

11. Volchkova, N. T., Ionova, A. M., Kabanov, V. T. et al. (1984). *Proizvodstvo produktov pitaniya iz kartofelya* [Manufacture of food products from potatoes]. Moscow: Light and Food Industry, 192.

12. Aliyeva, N. F. (2011). The identification of the activity of peroxidase in apples and potatoes under normal and saline conditions. *The World of Medicine and Biology*, 31 (4), 65–67. Available at: <https://womab.com.ua/ua/smb-2011-04/122> Last accessed: 07.06.2018

DOI: 10.15587/2313-8416.2018.141413

FIREPROOF POLYMER MATERIALS BASED ON OLEFIN COPOLYMERS. REGULATION OF PHYSICAL-MECHANICAL CHARACTERISTICS

p. 42–49

Olena Chulieieva, PhD, Chief of the scientific and technical center, YUZHicable WORKS, PJSC, Avtohen-na str., 7, Kharkiv, Ukraine, 61099

E-mail: echuleeva@ukr.net

ORCID: <http://orcid.org/0000-0002-7310-0788>

Volodymyr Zolotaryov, Doctor of Technical Sciences, Professor, General Director, YUZHicable WORKS, PJSC, Avtohen-na str., 7, Kharkiv, Ukraine, 61099

E-mail: zavod@yuzhcable.com.ua

ORCID: <http://orcid.org/0000-0002-3886-4993>

Determination of the influence of the modifier on the physical and mechanical properties of fireproof materials based on olefinic polymers for the cable industry. Investigation of the physical and mechanical properties of polymer compositions was carried out on a tensile machine. The effect of the amount of a modifier on the increase in the physical and mechanical properties of EVA polymer compositions was studied. These characteristics are retained by more than 80 % after aging for all test samples. The effectiveness of directed regulation of the physical and mechanical properties of fireproof EVA compositions by a structural modifier is shown. The results of the studies make it possible to quickly adjust the formulation of the compositions

Keywords: modifier, ethylene-vinyl acetate copolymer, fire-retardant fillers, physical and mechanical characteristics, oxygen index

References

1. Peshkov, I. B. (2013). *Materialy kabel'nogo proizvodstva*. Moscow: Mashinostroenie, 456.

2. Tirelli, D. (2013). Antipireny dlya kompozitov. *The Chemical Journal*, 1-2, 42–45.

3. Obzor mineral'nyh antipirenov-gidroksidov dlya bezgalogennyh kabel'nyh kompozitsiy (2009). *Kabel'-news*, 8, 41–43.

4. Bezgalogennyye ognepornyye kabeli. Available at: <http://www.amtenergo.ru/statji/ognestoikie-kabeli.html>

5. Lujan-Acosta, R., Sánchez-Valdes, S., Ramírez-Vargas, E., Ramos-DeValle, L. F., Espinoza-Martinez, A. B., Rodriguez-Fernandez, O. S. et al. (2014). Effect of Amino alcohol functionalized polyethylene as compatibilizer for LDPE/EVA/clay/flame-retardant nanocomposites. *Materials Chemistry and Physics*, 146(3), 437–445. doi: <https://doi.org/10.1016/j.matchemphys.2014.03.050>

6. Sonnier, R., Viretto, A., Dumazert, L., Longerey, M., Buonomo, S., Gallard, B. et al. (2016). Fire retardant benefits of combining aluminum hydroxide and silica in ethylene-vinyl acetate copolymer (EVA). *Polymer Degradation and Stability*, 128, 228–236. doi: <https://doi.org/10.1016/j.polyimdeggradstab.2016.03.030>

7. Jeenchan, R., Suppakarn, N., Jarukumjorn, K. (2014). Effect of flame retardants on flame retardant, mechanical, and thermal properties of sisal fiber/polypropylene composites. *Composites Part B: Engineering*, 56, 249–253. doi: <https://doi.org/10.1016/j.compositesb.2013.08.012>
8. Yen, Y.-Y., Wang, H.-T., Guo, W.-J. (2012). Synergistic flame retardant effect of metal hydroxide and nanoclay in EVA composites. *Polymer Degradation and Stability*, 97 (6), 863–869. doi: <https://doi.org/10.1016/j.polymdegradstab.2012.03.043>
9. Feng, C., Liang, M., Chen, W., Huang, J., Liu, H. (2015). Flame retardancy and thermal degradation of intumescent flame retardant EVA composite with efficient charring agent. *Journal of Analytical and Applied Pyrolysis*, 113, 266–273. doi: <https://doi.org/10.1016/j.jaap.2015.01.021>
10. Shevchenko, V. G. (2010). *Osnovy fiziki polimernykh kompozitsionnykh materialov*. Moscow: MGU im. Lomonosova, 98.
11. Makarova, N. V., Trofimec, V. Ya. (2002). *Statistika v Excel*. Moscow: Finansy i statistika, 368.
12. Muhin, N. M., Buryndin, V. G. (2011). *Opreddenie reologicheskikh i fiziko-mekhanicheskikh svoystv polimernykh materialov*. Ekareburg: UGLTU, 33.
13. Bobovich, B. B. (2009). *Nemetallicheskie konstruktsionnye materialy*. Moscow: MGU, 384.

DOI: 10.15587/2313-8416.2018.141417

ECOLOGICAL SAFETY OF MUNICIPAL WASTE OF ZHYTOMYR REGION

p. 50-53

Iryna Kotsiuba, PhD, Associate professor, Department of ecology, Zhytomyr State Technological University, Chudnivska str., 103, Zhytomyr, Ukraine, 10005

E-mail: chaszmin30@gmail.com

ORCID: <http://orcid.org/0000-0001-6271-7355>

Sergii Lyko, PhD, Associate professor, Department of ecology, Rivne State University of Humanities, S. Bandery str., 12, Rivne, Ukraine, 33028

E-mail: chaszmin30@gmail.com

ORCID: <http://orcid.org/0000-0002-0470-4836>

Characteristics of nature protection policy in Ukraine are established. The significance of the development of environmental logistics solutions for solid municipal waste is confirmed in order to reduce the negative impact on the environment. The significance of logistics for reducing the amount of waste and achieving its financial, social and environmental goals is presented. The importance of environmental information and ecological knowledge as a special resource in innovation activity is emphasized. The characteristic features of the introduction of the ecological approach in the field of logistics are revealed

Keywords: environment, ecological crisis, solid municipal waste, logistics, ecology, landfill, landfill, seasonal changes

References

1. DBN V.2.4-2-2005. Polihony tverdykh pobutovykh vidkhodiv. Osnovni polozhennia proektuvannia (2005). Kyiv: Derzhbud Ukrainy, Minpryrody Ukrainy, 40. Available at: <http://profidom.com.ua/v-2/v-2-4/1703-dbn-v-2-4-2-2005-poligoni-tverdi-h-pobutovih-vidkhodiv-osnovni-polozhenna-projektuvanna>
2. Kulchytska-Zhyhailo, L. O. (2008). Standarty YeS ta chynni v Ukraini normy i pravyla proektuvannia ta ekspluatatsiyi polihoniv tverdykh pobutovykh vidkhodiv. *Materialy mizhnarodnoi naukovo-tekhnichnoi konferentsiyi: «Polihony tverdykh pobutovykh vidkhodiv: proektuvannia ta ekspluatatsiya, vymohy Yevropeiskoho Soiuzu, Kiotskyi protokol»*. Lviv: Triada plius, 145–155.
3. Waste statistics. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Waste_statistics
4. Sharma, D., Ganguly, R. (2016). Parametric Analysis of Leachate and Water Resources around Municipal Solid Waste Landfill area in Solan. *MATEC Web of Conferences*, 57, 03011. doi: <https://doi.org/10.1051/mateconf/20165703011>
5. hun, S.-K., Kim, N.-J. (2012). The Effect of Leachate and Organic Waste Water Injection on Decomposition Characteristics of Landfill Waste. *Journal of Korea Society of Waste Management*, 29 (8), 697–704. doi: <https://doi.org/10.9786/kswm.2012.29.8.697>
6. Lototskyi, O. B., Bistrom, Y. (2005). Natsionalna stratehiya upravlinnia z tverdymy komunalnymy vidkhodamy v Ukraini – shliakhy do stabilnoho maibutnoho. *Sbornik dokladov mezhdunarodnogo kongressa «ETEVK-2005»*. Kyiv: VPC «Tri krapki», 47–51.
7. Gworek, B., Dmuchowski, W., Koda, E., Marecka, M., Baczevska, A., Brągoszewska, P. et. al. (2016). Impact of the Municipal Solid Waste Łubna Landfill on Environmental Pollution by Heavy Metals. *Water*, 8 (10), 470. doi: <https://doi.org/10.3390/w8100470>
8. Nigro, A., Barbieri, M., Sappa, G. (2015). Hydrogeochemical characterization of Municipal Solid Waste landfill. *Rendiconti Online Della Società Geologica Italiana*, 35, 304–306. doi: <https://doi.org/10.3301/rol.2015.126>
9. São Mateus, M. do S. C., Machado, S. L., Barbosa, M. C. (2012). An attempt to perform water balance in a Brazilian municipal solid waste landfill. *Waste Management*, 32 (3), 471–481. doi: <https://doi.org/10.1016/j.wasman.2011.11.009>
10. Kotsiuba, I. H. (2016). Prohnozuvannia sezonnoho morfolohichnoho skladu tverdykh komunalnykh vidkhodiv m. Zhytomyra. *Visnyk Pryazovskoho Derzhavnogo Tekhnichnoho Universytetu*. Seriya: Tekhnichni nauky, 33, 213–221.
11. Kotsiuba, I. H., Shcherbatiuk, A. F., Hodovska, T. B. (2016). Prohnozuvannia obsiahiv utvorennia tverdykh komunalnykh vidkhodiv v misti Zhytomyri. *Visnyk NTU «KhPI»*. Seriya: Mekhaniko-tekhnologichni systemy ta kompleksy, 7 (1179), 95–100.
12. Kotsiuba, I. H., Podchashynskyi, Yu. O., Lyko, S. M., Lukianova, V. V. (2017). Matematychni modeliuвання ta prohnozuvannia obsiahiv nakopychennia tverdykh komunalnykh vidkhodiv mista. *Naukovo-tekhnichnyi zbirnyk “Visnyk Natsionalnoho transportnoho universytetu”*, 3, 109–116.

13. Podchashinskiy, Y., Kotsiuba, I., Yelnikova, T. (2017). Math modeling and analysis of the impact of municipal solid waste landfill leachate on the environment. *Eastern-European Journal of Enterprise Technologies*, 1 (10 (85)), 4–10. doi: <https://doi.org/10.15587/1729-4061.2017.91033>

14. Metodyka rozroblennia otsinky vplyvu na navkolyshnie pryrodne seredovyshe dlia ob'ektiv povodzhennia z tverdymy pobutovymy vidkhodamy: Nakaz Ministerstva budivnytstva, arkhitektury ta zhytlovo-komunalnoho hospodarstva Ukrainy vid 10 sichnia 2006 roku No. 8 (2006). Kyiv: Derzhbud Ukrainy, 21. Available at: <http://ua-info.biz/legal/basert/ua-dmpwje.htm>

DOI: 10.15587/2313-8416.2018.141418

PARK ZONES OF KYIV AS A SEGMENT OF MODERN INDUSTRY

p. 54-57

Iryna Vakulyk, PhD, Associate Professor, Department of Journalism and Linguistic Communication, National University of Life and Environmental Sciences of Ukraine, Heroiv Oborony str., 15, Kyiv, Ukraine, 03041

E-mail: vakulyk@ukr.net

ORCID: <http://orcid.org/0000-0002-4812-7719>

The ecological development of a modern metropolis is connected with the existence of park zones, which belong to the state nature reserve fund and are protected as a national heritage. In the largest cities, the overwhelming pace of territorial growth in residential construction has a proportional impact on the dynamics of the reduction of natural-social formations such as parks and gardens. In order to preserve and restore the capital's green areas, a map has been suggested, which depicts the recreation areas, which carry the major recreational loading in a big city
Keywords: parks, green plantings, metropolis, map-scheme, park industry, nature reserve fund, environmental protection

References

1. Vakulyk, I. I., Shynkaruk, O. V. (2017). Zelenyye nazashdeniya parkov i skverov Kiyeva: problema terminologicheskoy nominatsii [Green plantations of Kyiv parks and public gardens: problem of terminological nomination]. *Scientific herald of National University of life and environmental sciences of Ukraine. Series: philological sciences*. 272. 70-76.

2. Lyubchenko, O. M. (2011) Park v konteksti dozvil'no-rozvazhalnykh paradyhm yevropeyskoyi kultury [Park in the context of entertainment and entertainment paradigms of European culture]. *Kiev National University of Culture and Arts*. Kyiv. – 32 p.

3. Dudin, R. B., Bagatskaya, O. M., Levus T. M., Vakulyk I. I. (2018) Parkovi nasadzheniya m. Khmelnytskoho: suchasnyy stan ta shlyakhy optymizatsiyi [Park plantings of the city of Khmelnytsky: modern state and ways of optimization]. 9. 5-6. 125-130. Available at : URL:<http://journals.nubip.edu.ua/index.php/Bio/article/view/9609>

4. Kushnir, A. I., Vakulyk, I. I. (2018) Tsinnist unikalnykh vikovykh derev – pamyatok pryrody [Value of unique old trees – a natural monument]. 10. 3-4. Available at: URL:<http://journals.nubip.edu.ua/index.php/Bio/article/view/11270>

5. Vakulyk, I. I. (2018) Greenery of kyiv parks and public gardens: to the issue of a description. *Scientific Bulletin of NUBiP of Ukraine. Series: Humanitarian studios*. 280. 83-87. Available at : URL: <http://journals.nubip.edu.ua/index.php/Gumanitarni/article/view/10925/9564>

6. Lavrentyevskaya chronicle. Izd. 2nd, add. Leningrad: Publishing house of the Academy of Sciences of the USSR. 1926-1928. Available at : URL: <http://litopys.org.ua/lavrlet/lavr04.htm#lystob30>

7. Nikolaenko, S. M. ed. (2018) Florystychni i tsenotychni riznomanityta u vidnovlenni, okhoroni ta zberezhenni roslynnoho svitu [Floristic and cenotic diversity in recovering, protection and preservation of the plant world]. Kyiv: Publishing House Lyra-K, 476.

8. Vakulyk, I. I. (2018) Botanical Garden of the National University of Bioresources and Nature Management of Ukraine: the latest trends in the design of the design. *Modern artistic education: experience, problems and perspectives. Materials science-practice conf. April 20*. Kyiv. Available at : URL: <http://kdidpamid.edu.ua/new/wp-content/uploads/2018/06>

9. Pryrodno-zapovidnyy fond Ukrayiny (2018) [Natural Reserve Fund of Ukraine]. Available at : URL:<http://zakon2.rada.gov.ua/laws/show/2456-12>

10. Movchan, M. M. red. (2001). Pryrodno-zapovidnyy fond m. Kyiva. Dovidnyk. Kyiv: «Arktur-A». 2001. 64.

DOI: 10.15587/2313-8416.2018.140701

ESCAPISM OF VIRTUAL REALITY AS ITS PERSONAL FEATURE

p. 58-60

Vera Okorokova, PhD, Associate Professor, Department of World History and Methodology of Science, South Ukrainian national pedagogical university after K. D. Ushynsky, Staroporfirivska str., 26, Odessa, Ukraine, 65020

E-mail: veraok888@ukr.net

ORCID: <http://orcid.org/0000-0003-0661-4313>

The article is devoted to the consideration of the escapism of virtual reality as its characteristic feature. An analysis of the origins of escapism is conducted as a social phenomenon, the greatest expression of which contributed to the virtualization of society. On the basis of the analysis of escapist consciousness, the common roots of escapism and virtual reality are revealed, which is expressed in the creation of “another world”, another reality, different from social reality, the ability of man to “escape” from the real commonplace

Keywords: virtual reality, escapism, escapist's consciousness, computer games, micronations, social reality

References

1. Trufanova, E. O. (2012). Ehskapizm i ehskapistkoe soznanie: k opredeleniyu ponyatii [Escapism and escapist consciousness: to determination of concepts]. *Filosofiya i kultura*, 3, 96–107.
2. Alieva, N. Z. (2013). Ehskapistkoe mirovozzrenie i identichnost' cheloveka [Escapist world view and identity of man]. *Sovremennye problemy nauki i obrazovaniya*, 6. Available at: <http://online.rae.ru/pdf/1601>
3. Kozyreva, L. V. (2012). Socialnaya determinaciya ehskapizma: opyt konceptualizacii [Social determination of escapism: experience of conceptualization]. *Sovremennye problemy nauki i obrazovaniya*, 2. Available at: <http://www.science-education.ru/102-6067>
4. Nyatina, N. V. (2013). Ehskapizm – otklonenie v socializacii molodyozhi [Escapism is a rejection in socialization of young people]. *Vestnik Kemerovskogo gosudarstvennogo universiteta*, 1 (2 (54)), 133–136.
5. Kozyreva, L. V. (2011). Netipichnyi ehskapizm kak lichnostnaya praktika subekta [Offtype escapism as personality practice of subject]. *Mezhdunarodnyi zhurnal prikladnyh i fundamental'nyh issledovaniy*, 10, 133–134. Available at: <http://applied-research.ru/ru/article/view?id=1804>
6. Shapinskaya, E. N. (2013). Ehskapizm v kiberprostranstve: bezgranichnye vozmozhnosti i novye opasnosti [Escapism is in a cyberspace: boundless possibilities and new dangers]. *Kul'turologicheskii zhurnal*. Available at: http://cr-journal.ru/rus/journals/215.html&aj_id=15
7. Shapinskaya, E. N. (2014). Virtual'naya real'nost' kak prostranstvo ehskapizma [Virtual reality as space of escapism]. Available at: <https://cyberleninka.ru/article/n/virtualnaya-realnost-kak-prostranstvo-eskapizma-bezgranichnye-vozmozhnosti-i-novye-opasnosti>
8. Litinskaya, D. G. (2012). Tipy sovremennogo ehskapizma i fenomen ehkzistencial'nogo ehskapizma [Types of modern escapism and phenomenon of existential escapism]. *Yaroslavskii pedagogicheskii vestnik*, 1, 308–311.
9. Davydov, O. B. (2015). Filosofskii aspekt social'nogo ehskapizma v ehpohe virtual'nosti [Philosophical aspect of social escapism in the epoch of virtualness]. *Vestnik Severo-Vostochnogo federal'nogo universiteta im. M. K. Ammosova*, 12 (2), 77–81. Available at: <https://cyberleninka.ru/article/v/filosofskiy-aspekt-sotsialnogo-eskapizma-v-epohu-virtualnosti>
10. Zhilinka, V. V. (2017). Virtualnaya realnost kak ehskapizm XXI veka: sovremennaya antiutopicheskaya tendentsiya (na primere rasskaza L.Kaganova «Nulgorod» i romana A.Starobinets «Zhivuschiy») [Virtual reality as escapism of XXI century: modern antiutopian tendency]. *Novaya Rusistika*, 1, 25–38.