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MYTHOLOGICAL SYSTEMS IN MORPHOGENESIS, COLORIST, EIDOS AND THE CONCEPT OF PASTEL PLASTIC TECHNOLOGIES ALLEGORICAL ECLECTICISM FOR MUSICAL LIVING ROOMS «VASKELA SEASONS» AND «MOON SONATA»

In contrast to traditional established and outdated stereotypes, mythology demonstrates an autonomous, principled, alternative position that goes back to myth as a phenomenon of human awareness. Critical, humanitarian, anthropological thinking postulates in the myth of the universum of human sensory, giving rise to the cognitive technologies of pastel attractors that determine the organization of human life space in the global subject area of design objects.

Keywords: pastel, design, modernism, decorative products, semantic networks, meta-sign, cognitive technology, metaphorical and table modeling

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CURIE'S SYMMETRY PRINCIPLE IN THE ISSUES OF THE BORDER DESIGN ART

This applies particularly to the fields of architecture and ornamentalistics, where the proper combination of geometric shapes determines the artistic value of the project. The current article is devoted to a brief analysis of the structure of artistic borders, which have a complex composition character, based on a superposition of the motive structure as well as the structure of the geometric basis of space, its symmetry transformation.

Keywords: Curie's symmetry principle, symmetry of borders, border symmetry types, glide plane, translation axis, geometrical image * **Corresponding author:** Inga A. Kaposhko, Siberian Federal University, Krasnoyarsk, Russia, e-mail: IKaposhko@sfu-kras.ru.

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SYMBOLS IN PAINTING AND SCULPTURE OF CHINA

The cultural codes of symbolism need to be revisited for any rethinking of traditional culture. This article explores the origins and meaning of symbols in art forms such as painting and sculpture. As an example, the most popular works of artists and sculptures are used, in which the basis of symbolism can be seen.

Keywords: Chinese art, symbolism, Chinese culture, painting, sculpture * **Corresponding author:** Lu Zhijie, Lomonosov Moscow State University, Moscow, Russia, e-mail: 1040929968@qq.com.

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INVESTIGATION OF THE RESISTANCE OF MATERIALS TO CUTTING WITH A CHAIN SAW

The paper considers the resistance of materials to cutting with a chain saw of materials used in the sewing of special clothing for loggers, in accordance with GOST 12.4.257–2014. Also in this paper, the development of an installation for testing the cutting resistance with a manual chain saw, in accordance with GOST R EN 381-1-2012, is presented. Studies of the resistance of materials to cutting with a chain saw of materials were carried out on the developed installation.

Keywords: resistance of textile materials, paraaramide fibers, workwear for loggers, manual chain saw * **Corresponding author:** Sergey V. Kudrinsky, Kosygin Russian State University (Technologies. Design. Art), Moscow, Russia,

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ACCELERATED CORROSION TESTING TECHNIQUE FOR MEDIUM DESIGN OBJECTS

The impact of corrosion on metal design objects, which need to take into account the conditions of the aggressive urban environment, is considered.

Keywords: corrosion, design objects, metal, restoration, corrosion tests, coatings, cold gas-dynamic spraying * **Corresponding author:** Lyubov T. Zhukova, Saint-Petersburg State University of Industrial Technologies and Design, Saint Peters-

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INFLUENCE OF COLOR CHARACTERISTICS ON THE GLOSS INDICES OF MINK SKINS

The main optical properties have been studied, the relationship between the intensity of the gloss and the color parameters of mink skins of certain color types has been established. A statistically significant positive moderate relationship was found between the L^ lightness and the GU brightness; the presence of a statistically significant, negative, weak relationship between the Cartesian coordinate a^* and the brightness GU is shown; a statistically significant positive weak relationship was found between the Cartesian coordinate b^* and the brightness GU. The scatter diagrams were obtained, which made it possible to clarify the tightness of the relationship between the analyzed parameters and build a regression model described by the corresponding equations. It was shown that the greatest degree of interdependence (21.5 %) exists between the degree of gloss and lightness of the skin L^* . To assess the total influence of the color parameters L^* , a^* , b^* on the glitter GU, a multiple linear regression model was used, the adequacy of which was statistically confirmed.*

Keywords: optical properties, color parameters, gloss, hairline, mink, color type, multivariate statistical analysis, correlation-regression analysis

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DESIGN TECHNIQUES IN MODERN KNITWEAR

In the work, knitwear of famous world brands are investigated and an analysis is made of what techniques the authors use in creating modern costume reflecting the specifics of knitwear design.

Keywords: knitting industry, sustainable fashion, design, art, author's style, knitwear, knitting, costume * **Corresponding author:** Maria V. Bondarenko, Russian State University named after A. N. Kosygin (Technologies. Design. Art),

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METHOD OF TRANSFORMATION IN JEWELRY DESIGN

The article discusses the transformation method in jewelry design. Typical sources for remaking are listed. Specific examples describe the typology of transformation methods (borrowing individual structural elements, creating an image-quotation, decorating the scheme). It is especially important that for the analysis we have selected examples of jewelry that are made according to the generally accepted industrial technology for making jewelry.

Keywords: jewelry design, jewelry, transformation method * **Corresponding author:** Irina A. Gruzdeva, Ural Federal University named after the first President of Russia B. N. Yeltsin, Ekaterinburg, Russia, e-mail: i.a.gruzdeva@urfu.ru.

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STUDY OF THE COLOR PROPERTIES OF PASTELS OF DIFFERENT COMPOSITIONS TO CREATE DESIGN OBJECTS WHEN USED UNDER DIFFERENT CLIMATIC AND ATMOSPHERIC CONDITIONS

The article identifies the operational advantages and disadvantages of dry pastels of different brands and its solutions with different liquid compositions to determine the feasibility and functionality of application, using different basics, as well as in the operation of artistic panels under different climatic and atmospheric conditions. A comparative analysis of coloristic properties is carried out. It is concluded that it is possible to obtain new artistic and aesthetic effects, as well as to create pastel picturesque panels without sprinkling of a paint layer and without the need to use covered fixers with the possibility of working on large areas for interior and exterior painting.

Keywords: pastel, color properties, operational properties * **Corresponding author:** Ekaterina N. Tugolukova, Saint-Petersburg State University of Industrial Technologies and Design, Saint Petersburg, Russia, e-mail: gazeta@sutd.ru.

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INCREASING THE RELIABILITY OF MATHEMATICAL MODELING OF

RELAXATION-OPERATIONAL PROCESSES OF POLYMER TEXTILE MATERIALS

The issues of mathematical modeling of relaxation processes of polymeric textile materials are considered. The use of the optimality criterion for mathematical modeling of viscoelasticity makes it possible to control the degree of accuracy in determining the relaxation characteristics and the degree of reliability in predicting relaxation processes. The proposed method makes it possible to solve technological problems in the selection of materials with optimal relaxation characteristics from the point of view of operational properties.

Keywords: mathematical modeling, polymer textile materials, deformation properties, relaxation processes, operational processes * **Corresponding author:** Avinir G. Makarov, Saint-Petersburg State University of Industrial Technologies and Design, Saint Peters-

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DIGITAL TOOLS IN CROSS-CULTURAL COMMUNICATIONS

The article reveals the concept of digital transformation in culture based on the study of educational practices and concepts of events within the framework of interdisciplinary international projects, the development of new international curricula. The new results of the introduction of digital tools in the field of education and cultural management are considered: the provision of streaming events with the involvement of international experts and creative youth from Russia and Finland, the development of digital tools in design and communication, a business strategy in the field of creative industries.

Keywords: digital art, learning space, data visualization, creative multimedia, design thinking, cross-cultural communication * **Corresponding author:** Ekaterina S. Prozorova, Saint-Petersburg State University of Industrial Technologies and Design, Saint

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AVANT-GARDE SOLUTIONS TO BIBLICAL MYTHOLOGY OF M. CHAGALL'S WORK IN JEWELRY IMAGES

This work is a study of the creation of images of objects of design in a cluster of jewelry art in the adaptation of the work of M. Chagall using subjects of biblical mythology, presented in the avant-garde style. Keywords: M. Chagall, mythology, jewelry, avant-garde, design, Christianity

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MATHEMATICAL MODELING OF DEFORMATION PROPERTIES OF POLYMER MATERIALS TAKING INTO ACCOUNT THE CHOICE OF THE OPTIMAL MODEL

Mathematical modeling of the deformation properties of polymeric materials is of great importance, both from the scientific research and from the practical point of view, and makes it possible to give recommendations on the creation of new promising materials with specified deformation properties. The article proposes a method for choosing the optimal model for the specified modeling and several possible options.

Keywords: mathematical modeling, optimization criteria, polymer materials, deformation properties, relaxation, creep *** Corresponding author:** Nina V. Pereborova, Saint-Petersburg State University of Industrial Technologies and Design, Saint Petersburg,

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STUDY OF THE STATE AND PROSPECTS OF BIOMIMETIC APPROACH IN CREATION OF ART CAST PRODUCTS WITH ADDITIVE MANUFACTURING

The paper examines biomimicry, bionic design, generative design and topological optimization in the context of the additive production of foundry models, which will be used to cast art products. Main problems of the technological field are listed and ways to solve them through the creation of design rules implemented in digital form are indicated as well.

Keywords: additive manufacturing, art casting, 3D printing, biomimicry, bionic design *** Corresponding author:** Alexander D. Bityutskiy, National University of Science and Technology «MISIS», Moscow, Russia, e-mail:

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COMPUTER PREDICTION OF DEFORMATION PROCESSES OF POLYMER TEXTILE MATERIALS

Methods of computer forecasting of deformation processes of polymeric textile materials based on mathematical modeling of these processes are considered. The specified forecasting makes it possible to solve the problem of comparative analysis of the properties of materials, as well as to investigate the relationship between the properties of materials and their structure.

Keywords: computer forecasting, mathematical modeling, polymer materials, deformation properties, relaxation, creep * **Corresponding author:** Nina V. Pereborova, Saint-Petersburg State University of Industrial Technologies and Design, Saint Peters-

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PREDICTION OF DEFORMATION PROCESSES OF POLYMERIC TEXTILE MATERIALS FROM THE POSITION OF MATHEMATICAL MODELING AND SYSTEM ANALYSIS OF THEIR VISCOUS ELASTICITY

The article discusses the issues of predicting deformation processes of polymeric textile materials from the standpoint of mathematical modeling and system analysis of their viscoelasticity. It is shown that the deformation processes of polymeric textile materials are decisive in determining their functionality.

Keywords: computer forecasting, mathematical modeling, polymer textile materials, deformation processes, functional properties * **Corresponding author:** Nina V. Pereborova, Saint-Petersburg State University of Industrial Technologies and Design, Saint Peters-

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ARTISTIC AND EDUCATIONAL ANALYSIS AND APPLICATION OF PARALLAX-SCROLLING TECHNOLOGY IN THE GRAPHIC NOVEL «THE

BOAT»

It is concluded that in the world of information technology, artists are increasingly turning to the possibility of designing art with the help of new media technologies, namely parallax scrolling. The article reveals the concept of new media and the degree of influence of their specifics on art, as well as the analysis of the characteristics of the results of the interaction of new technologies and art on the example of the artistic and educational analysis of the graphic novel «The boat».

Keywords: graphic novel, comic, new media art, digital art, animation, parallax-scroll *

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