

## Summary

**L. T. Zhukova, A. V. Grigoryev,  
V. L. Zhukov**

### **INNOVATION METHODS, UTILIZED IN THE EDUCATIONAL PROCESS OF THE INSTITUTE OF THE APPLIED SKILL**

In the article are examined the ways of an improvement in the quality of formation based on the example to the activity of the St. Petersburg university of technology and design, task, which it is necessary to solve with training of the highly skilled specialists of the decoratively applied skill.

**Keywords:** working programs, interdisciplinary level, the contemporary technologies of formation, innovation methods.

**V. M. Lipskaja**

### **GENDER AND MODERN DRESS**

In article the problem of gender identification with the help of a dress in system of culture is examined. The analysis of historical development of fashionable tendencies shows, that distinction «man's» and «female» styles bases not so much on natural — biological distinction of sex, how many on distinction of the social roles offered by a society.

**Keywords:** a culture, a dress, a style, a gender, female, man's.

**D. A. Galun**

### **SYMMETRY IN VISUAL MERCHANDISING**

The article is about using symmetry in visual merchandising.

**Keywords:** symmetry, harmony, visual display, shelf, side bar, front bar.

**V. L. Zhukov, V. V. Zhukov, M. S. Lukash**

### **RETROSPECTIVE OF LUMINOUS SOURCES IN THE INTERIOR IN THE STYLE «OF AR OF SOUNDING BOARDS»**

In the work is carried out a study of the process of designing of interior and its elements, as consecutively, continuously continuous instantaneous dynamic states of means and objects of design in question, which are characterized by the motion of the elements in the subject area of design into each instant, which gives the variety of the solutions of interior as a whole as the object of design. Fireplace and lamp are oriented in the subject area of interior as united dominant module. Basic concept — to create the specific dynamics and the kinematics of these luminous sources, which were obtained as a result the synthesis of the properties of the

infrared and visible part of the electromagnetic radiation and different materials, from which were prepared the fireplace and lamp. This made it possible to solve the problem of developing of artistic style and composition from position of one of the contemporary trends in the design — supers-graph and to ensure the optimum formation of the multidimensional means of the three-dimensional forms of interior.

**Keywords:** interior, means, the design.

**O. P. Dedik**

### **EARLY BRITISH TRADING CARDS HAVE EVOLVED INTO THE INSERTS IN THE PACKAGING OF PRODUCTS. THE ARTICLE CONSIDERS THREE TYPES OF CARDS IN THE COURSE OF THEIR DEVELOPMENT.**

**Keywords:** engraving, chromolithographed sets, collectible give-away, commercial collecting card, billhead, promotional material, British graphic design, packaging.

**A. G. Makarov, A. S. Gorshkov,  
P. P. Rymkevich, N. V. Pereborova**

### **METHOD OF CORRECTION OF PARAMETERS OF MATHEMATICAL MODEL OF THE RELAXATION OF POLYMERS ON POINTS OF THE EXPERIMENTAL DIAGRAM OF THE STRETCHING**

The method of specification of parameters of mathematical model of a nelinejno-hereditary relaxation on one or several points of the experimental diagram of a stretching is offered. Settlement forecasting of processes of a stretching is spent by techniques on the basis of an integrated parity of Boltsmana-Volterra. The automated variant of correction of parameters of mathematical model of a nelinejno-hereditary relaxation is considered automated on the basis of a computerization of corresponding techniques.

**Keywords:** a relaxation, creep, visco-elasticity, polymeric threads, mathematical modeling

**A. G. Usov**

### **STUDY OF FOLDS UNDER CONICAL BENDING LOW-STRETCHABLE SHEETS**

We consider the results of computer simulation of the conical bending of isotropic circular elastic sheets hung at the center point and study the draping parameters in dependence on the axial symmetry order of the bend's form.

**Keywords:** conical bending, accompanying trihedron, folds, self-intersection, draping parameters.

**V. A. Avrorov, V. V. Volkov,  
V. K. Polyakov, E. Y. Yudina**

**THE FORMALIZATION OF DESCRIBING  
TECHNICAL SYSTEMS IN COTTON  
SPINNING ON THE BASIS OF OPERATOR  
MODELING**

Operational modeling is one of the methods of analysis and synthesis of technological systems and production lines.

**Keywords:** production line, «kip-tape», fibrous mass, operational modeling of technological systems, operator model, technological system, the processor.

**V. L. Zhukov, V. V. Zhukov, O. O. Bichurina, V. A. Grozdinskiy**

**THEORY OF ORGANIZATION ABOUT  
THE INTEGRITY OF THE MODEL OF  
THE MEANS OF THE OBJECT OF THE  
DESIGN: [DOFORMALNOE] STUDY OF  
THE VISUAL INFORMATION SYSTEMS**

The specific positions of the theory of organization, holism, Gestalt psychology in the applied relation to the perception of the models of the means of the objects of the design through the integrity of properties, structures and dynamics of relations in the time are examined.

**Keywords:** model, means, the design.

**I. G. Dovzhenko, A. M. Kondyurin,  
M. V. Tamazov**

**COMPUTER DESIGN-ENGINEERING  
OF CHROMATICITY OF SILICATE  
MATERIALS**

In paper the main practical aspects of application computer design-engineering for receive of decorative silicate materials are considered. Shown are the potential of this method for creation of color harmony of the facade and interior of apartment buildings of cottage type.

**Keywords:** spectrophotometric curves, the coefficient of diffuse reflection, purity of color, non-fired decorative binder.

**T. von Arb-Knorozok**

**PRODUCT DESIGN FIRM «MORRIS & CO»  
AS THE ART OF MATERIALS AND ART  
PROCESSING**

The author of the article examines the activities of design firm «Morris & Co» as an innovative company on the artistic design and artistic processing of materials.

**Keywords:** art design, materials, design firm, an ornament.

**A. E. Asanova**

**KAZAKH ORNAMENT AS CONDITIONAL  
AND SYMBOLICAL FORM OF  
REFLECTION OF IDEAS OF LIFE**

Many ornaments meeting in clothes, personify figurative and associative compositions which absorbed in itself not only direct reflection of zoomorfnny, vegetative and geometrical motives of separate elements of ornaments, but also bear in itself the hidden sacral sense taking the roots since ancient times of worship pagan gods when all subjects of environment had the value for the person.

**Keywords:** ornament, patterns, elements, forms, motives, composition, culture, art, traditions.

**A. B. Parygin**

**SERIGRAPH IN THE ART OF POSTWAR  
GERMANY**

Open to question, in chronological sequence issues about the origins and development of the Serigraph in West European art are considered. The information about German graphic artists of the 1940–1970 is given. Special attention is paid to the innovators and pioneers of this media in Germany.

**Keywords:** serigraph, silkscreen, print, graphic art, type of graphic, German art of XX century, print techniques.

**A. V. Andreeva**

**ON THE MODERN ORTHODOX ART.  
UNDERSTANDING OF THE WAY THE  
CANON ARTIST MONUMENTALIST  
O. ZINONOM**

This article is devoted to the exploration of modern Orthodox art. Way to comprehend the Canon of monumet-alistom artist. Zinonom. Influence on ecclesiastical art on monuental'noe. Zinona as a representative of the Byzantine style of Zinona and its effect on capital style towards the reconstruction and development of the Church's monumental art at the crossroads of epochs: the case of Svyato-Danilovskogo monastery in Moscow.

**Keywords:** art, art studies, fresco, symbol, allegory, light, architecture, Byzantium, the spatial image, composition, creativity, design, idea, the artist, creativity.

**E. F. Yapparova, M. M. Chernyh**

**THE RASTER IMAGE MODELLING  
METHOD FOR WOOD LASER ENGRAVING**

The effect of a model tone on an image tone obtained by laser engraving was researched in this work, tone limits of model intensity for different kinds of wood were determined, the necessity for the raster image correction during modelling with respect to the tone limit was defined and the correction technique was presented.

**Keywords:** laser treatment, wood, engraving, tone, intensity.

**A. A. Lukken**

#### **WOOD DYEING OF NATURAL DYES**

Various classes of natural dyes and mechanisms of dyeing of wood are considered by vegetative dyes wood dyeing color methods.

**Keywords:** antocians, chlorophylls, carotinoids, indigoids, antrachinons.

**L. T. Zhukova, A. E. Fedotov**

#### **METHOD OF THE DECORATION OF THE SURFACE OF HORNY MATERIALS WITH THE USE OF THE NONFERROUS METALS**

In the work is proposed the method of the decoration of horny materials by different nonferrous metals, which will contribute to increase in the aesthetical properties of artistic articles made of the natural materials and to expansion of their nomenclature. This specifies the urgency of the present investigation.

**Keywords:** horny materials, the technology of the decoration.

**E. A. Sergeeva, S. V. Ilyushina**

#### **CREATING A TECHNICAL FABRICS WITH GIVEN SURFACE PROPERTIES BY NONEQUILIBRIUM LOW-TEMPERATURE PLASMA MODIFICATION**

One way of improving physical and mechanical properties of technical fabrics is modification of fibers properties using low-temperature plasma treatment. Nonequilibrium low-temperature plasma influence on the hydrophilic properties of technical fabrics, as well as the strength of these fabrics to rubbers is analyzed. The possibility to obtain materials with predictable properties by plasma treatment of fabrics is shown.

**Keywords:** modification, plasma, fabric, processing, capillarity, textile cord, strength of the bond.

**E. V. Saklakova, O. V. Astashkina**

#### **ABOUT SOME METHODS OF CARBON NANOTUBES PURIFICATION AND MODIFICATION**

The article describes the methods of purification and modification of carbon nanotubes. Reviewed by chemical, physical and electrochemical methods to remove carbon and metal impurities from the deposits of nanotubes. The analysis of different methods of carbon nanotubes modification by oxidation, reduction and by surfactant treatment was made. The methods to reduce the length of carbon nanotubes was discussed.

**Keywords:** carbon nanotubes, modification of carbon nanotubes, purification of carbon nanotubes.

**M. M. Chernyh, I. Yu. Pronina**

#### **CLASSIFICATION OF PRODUCTS FROM THE GLASS, RECEIVED BY MOLLIROVANY**

Classification of the products received by a mollirovaniye, by several signs is offered: to a form of a product, operation of formation, design and preparation configuration.

**Keywords:** glass, a mollirovaniye, a form, preparation, it is flexible, a formovka, a punch, a matrix.

**N. V. Tikhonova, T. V. Zhukovskaya**

#### **TREATMENT OF NON-EQUILIBRIUM LOW-TEMPERATURE PLASMA COMPLEX MATERIAL SHOE UPPERS BASED ON NATURAL LEATHER WITH OPENNESS**

The impact of nonequilibrium low-temperature plasma (NLTP) to the complex material shoe uppers leads to changes in many of its properties. Changes in the structure of complex materials at the same time sealing the papillary and reticular separation its layers leads to the elimination of such defects as breack and opennes.

**Keywords:** skin, a complex material, mechanical properties, defects, non-equilibrium low-temperature plasma, inductive and capacitive discharges, processing modes.

**A. V. Sivenkov, A. E. Pavlova, M. A. Sivenkova**

#### **PRACTICAL APPLICATION OF THE RESULTS OF RESEARCH PROCESS PATINATION OF BRASSES**

This article describes how to create a virtual laboratory work in patinated brass for the students specialty «Art processing of materials».

**Keywords:** patina, patination, agents, virtual laboratory work.

**D. S. Manasevich, A. E. Pavlova, E. I. Priahin**

#### **THE ANALYSIS OF PROCESS PATINATION OF PRODUCTS OF THE ARTS AND CRAFTS MADE FROM BRASS**

This article discusses the mechanism of formation of oxide films on brass in the process of patination, and the influence of chemical composition and quantitative ratio of the components of electrolyte solutions for a given color patina.

**Keywords:** patina, patination, redox potential, copper salts, brass.