



---

## THE CONTENT

---

### MATHEMATICS, PHYSICS AND INFORMATICS

<i>Abdullaev A. R., Nevolina O. A.</i> Cauchy's Problem for a Quasilinear Differential Equation of a Neutral Type	7
<i>Pastukhova G. V.</i> About One Problem from Kourov's Writing-Book	13
<i>Nurligareev Kh. D.</i> Semiregular Polygons on Regular Parquets	15
<i>Kostikova E. K., Zaika Ju. V.</i> Estimation of Parameters of the Hydrogen Thermodesorption Model	19
<i>Tikhomirova E. N.</i> To the Problem of Meteoric Streams Research	28
<i>Krechet V. G., Sadovnikov D. V., Levkoeva M. V.</i> A Five-Measured Geometrical Scalar-Electro-Vacuum Problem	34
<i>Uvarov A. D.</i> Compactification of Varieties of Modules $MQ(-1, 2)$ of Stable Stratifications of the Rank 2 on a Three-Dimensional Quadric	37
<i>Zavodchikov M. A.</i> About Some Family of Coherent Bunches of the Rank 2 without Torsion with Classes of Chern $c_1 = -1, c_2 = 2, c_3 = 0$ on 3-Dimensional Projective Space (Part I)	45

### BIOLOGY

<i>Firago A. L., Ereymeyshvili A. V.</i> Estimation of Heavy Metals Percentage in Foodstuff Used in Children's Meal	55
<i>Stepanova M. V., Ereymeyshvili A. V.</i> Physical Development of Preschool Age Children and a Microelement Status	60
<i>Voronin L. V.</i> Powdery Mildew Mushrooms of the Yaroslavl region	67
<i>Digurova I. I., Gushchin A. G., Shipov A. A.</i> Use of the Cluster Analysis to Estimate Microhemorheological Indicators of Rats in Norm	71
<i>Egorova M. M., Ovchinnikova O. A., Petrochenko E. P., Oslyakova A. O., Yakusevich V. V.</i> A Hemorheological Profile of Patients with a Chronic Obstructive Illness of Lungs in the Combination with Cardiovascular Pathology	74
<i>Egorova M. M., Ovchinnikova O. A., Petrochenko E. P., Oslyakova A. O., Yakusevich V. V.</i> Modification of Blood Rheological Properties and the External Breath Function of Patients with a Chronic Obstructive Illness of Lungs under the Influence of Tiotropium Bromide (Spiriva)	81
<i>Mikhailov P. V., Kruglova E. V., Maslennikova Ju. L., Muraviov A. A., Kvasovets E. N.</i> The Level of Microcirculation of Persons with a Different Level of the Aerobic Working Capacity	87
<i>Ivanov A. P., Fateev D. M.</i> Changes of Heart Rate Variability of Rats after a Kidney Resection	94

<i>Milutina-Jakusheva D. A., Konstantinova E. E., Muraviov A. V.</i> Study of Microcirculation of Middle Age Women with the Compensated and Noncompensated Diabetes of 2-d Type	<b>98</b>
<i>Skorkina M. Ju., Fiodorova M. Z., Muraviov A. V.</i> Cytoarchitecture of Healthy Donors' Lymphocytes in Conditions of Activation and Blockade of $\beta$ -Adrenoreceptors	<b>104</b>

#### **GEOGRAPHY AND ECOLOGY**

<i>Kolbovsky E. Ju.</i> Strategic Spatial Planning as a Regional Development Tool	<b>110</b>
<i>Nevzorov V. A.</i> The Social and Economic Analysis of Towns of the Kostroma Region	<b>116</b>
<i>Kondakova N. Ju.</i> Historical Approach to Estimate a Social and Economic Condition of Rural Territories and Land Tenure in Russia	<b>121</b>
<i>Zhikharev A. M.</i> Calculation of Plane Superficial Drain of Rain Waters from the Urbanized Territories of the Central Part of Yaroslavl (Part II)	<b>127</b>
<i>Pashkina M. V., Bragin P. N.</i> A Cartographical Research of History of the Administrative-Territorial Division of Russia due to Needs to Analyse Regions' Social Geography	<b>132</b>
<i>Pashkina M. V.</i> Modeling of Complex Stability of Buildings and Constructions in the City Environment by Means of GIS	<b>138</b>
<i>Uliyanova T. L.</i> Research of Possibilities of Landscape Planning for Horse Tourism in the Large Urbanized Territory	<b>144</b>

#### **CHRONICLE AND INFORMATION**

<i>Gribov A. Ju.</i> V. Ja. Tsinger as a Philosopher, Mathematician and Teacher (to the 175 anniversary from the date of birth)	<b>148</b>
---	------------

<b>INFORMATION ABOUT THE AUTORS</b>	<b>153</b>
-------------------------------------	------------