

**ABOUT COMPLEX INTERPRETATION OF DATA OF GEODETIC
AND GRAVIMETRIC MONITORING OF TECHNOGENIC
GEODINAMIKA
ON OIL AND GAS DEPOSITS**

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The technique and some results of integrated interpretation of geodetic, gravimetric monitoring technological Geodynamics received two cycles of observations at Vyangapurovskoye hydrocarbons.

Key words: Geodynamic landfill, leveling, gravimetry, geodynamics technological monitoring, interpreting the results of field measurements of complex.

INSTALLING OF THE PRODUCTS ARE VERTICAL TYPE

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In article is considered the way of installation of constructions of vertical type with height exceeding height of raising of a hook of the crane and with support on a special assembly rack.

Key words: installation of designs of vertical type, a basic rack, the crane, installation of ratification columns.

SELECTION AND JUSTIFICATION OF OPTIMAL CONDITIONS OF LINEAR INTERPOLATION TOPOGRAPHIC REDUCTION FOR MASS EFFECT OF FOREIGN MIDDLEWARE

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Relevance of the use of topographic reduction in gravity in determining the gravity anomalies in the mean time. In the article the possibility of using a new technique developed by the authors calculate the topographic reduction for the far region, which lies outside the area of 200 km, to the outer area, located in a zone with a radius of from 20 to 200 km with respect to the observation point.

Key words: intermediate layer, topographic reduction, external accounted area, digital elevation model, the linear interpolation.

ABOUT THE DISTRIBUTION LAW OF LINEAR FUNCTION OF ACCIDENTAL ARGUMENT

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The distribution law of the amendments is researching for different distribution laws of measurements chance errors in theory and experiment.

Key words: analysis, distribution law, error, amendment.

ABOUT COORDINATIZATION – TERMS AND CONCEPTS (HISTORICAL REVIEW)

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The description of time, conditions and the reasons of emergence of the term and the concept "coordinatization" is given; history of events and the facts connected with this concept. Stages of evolution of coordinatization of surrounding space are determined, since prehistoric time and finishing the beginning of the XXI century.

The table of various characteristics of koordinatizirovanny space depending on historical time is provided.

Key words: coordinatization, systems of coordinates, dimension.

USING ADDITIONAL GEOMETRIC CONDITIONS IN SOLVING PROBLEMS OF GEODESY AND PHOTOGRAMMETRY

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The use of additional geometric conditions leads to improving conditionality of equations' systems in solving geodetic and photogrammetric tasks. It helps to increase accuracy and reliability of the computed parameters.

Key words: additional geometric conditions, conditionality of equations' systems.

GEOMETRICAL PROPERTIES AND TECHNOGENIC RISK ASSESSMENT BY EXPONENTIAL SMOOTHING

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The paper deals with mathematical simulation of the systems time-space state by geometrical properties. The computing experiment for technogenic risk assessment has been conducted. Differential and integral function of technogenic risk distribution has been produced.

Key words: mathematical model, the system time-space state, the system geometrical characteristics, the function of technogenic risk distribution.

DEFINING GEOMETRICAL INVARIANTS OF THE SURFACE IN APPLIED GEOINFORMATICS

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The purpose of studying systems in applied geoinformatics is defining their properties in space and in time, i.e. their form, dimensions and location in space as the functions of time. The form and the dimensions of the system are determined by the border, which divides the system from its surroundings. Lines and surfaces serve the geometrical image of such a border. Many geometrical properties and

characteristics of the surfaces which are invariant as to the change of their coordinate data are manifested in the coefficients of the first and the second quadratic forms of the surface.

The article studies the major tasks of defining the geometrical invariants of the surfaces. For a surface with parameters the invariants are the length of the arch on the surface, the angle between the curves on the surface, the area of some field on the surface, the crookedness of the surface, the curve of a line on the surface.

Key words: geoinformatics, geometrical invariants, numerical invariants, parametrised surface, angle between the curves on the surface, area of some field on the surface, crookedness of the surface.

THE FORMATION AND DEVELOPMENT OF THE CADASTRE REGISTRATION AND THE PROTECTION OF HISTORICAL AND CULTURAL HERITAGE IN RUSSIA

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The article describes the history of the development and establishment of accounting and protection of historical and cultural heritage in Russia. Presented by contemporary legal preservation of immovable objects historical and cultural heritage.

Key words: immovable objects historical and cultural heritage, protection, the cadastre registration, legal support.

MAIN INDICATORS OF RATIONAL USE OF LANDS OF FOREST FUND

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The problem of land use management, as applied to forest geosystems defined as the rational use of forest geosystems (RILGS). The composition of the task to be formalized, the system performance of rationality, aggregated into four basic groups: organizational, legal, economic, environmental, technical. Are the rules and examples of calculations of indicators.

Key words: rational use of land, forest geosystems, indicators, criteria, indicators, indices, assessment.

DEVELOPMENT OF INFORMATION FORMS OF MAINTAINING DATABASES ABOUT REAL ESTATE FOR THE INVENTORY

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In article forms for maintaining databases about real estate for the inventory are presented.

Key words: forms, databases, cadastre, real estate, characteristics of real estate.

THE ANALYSIS OF THE ECONOMIC AND ECOLOGICAL EFFICIENCY OF THE RURAL LAND USE

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The article describes results of theoretical research of evaluation of the economic and ecological efficiency of the rural land use. The ecological factors affecting land use are considered. Their impact is represented as a system of indicators.

Key words: the rural land use, evaluation of the economic and ecological efficiency, factor indicators.

THE GROWTH RATE OF PLANT TEST FACILITIES WHEAT SEEDS DEPENDS ON THE ACTIONS OF LOW-INTENSITY ELECTROMAGNETIC RADIATION OF NATURAL ORIGIN

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The data of experiment possible effects of electromagnetic radiation (EMR) of natural origin on the growth rate of wheat seeds, depending on the location of the test-objects relative to each other and the intensity of radiation.

Key words: plant test object, the electromagnetic radiation of low intensity, the rate of growth.

THE TREND OF DEVELOPMENT OF MODULATOR THERMAL IMAGING SYSTEMS

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The article briefly describes the main ways of visualizing images of middle and far-infrared electromagnetic radiation in the visible range with a thermal imaging systems. Detailed analysis of modern military technology thermal imaging systems used in other countries. Trends in the development and creation of

modular thermal imaging devices designed for the Armed Forces, as well as future prospects.

Key words: thermal imaging systems, night vision devices, the module signal processing, cryogenics.

RAPID ANALYSIS OF BLOOD BY IR-SPECTROSCOPY

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The article reports on the possibility of the study of the fundamental characteristics of blood components by IR-spectroscopy. Proposed the smooth and/or discrete tunable infrared radiation – a laser to achieve the parametric resonance overlap with the absorption bands of the main components of blood. It is shown that the spectral width of the developed infrared radiation - parametric laser is much narrower than the absorption bands of the functional groups on the basic components of the blood, which allows for highly accurate and rapid analysis of blood.

Key words: optical parametric oscillator, differential absorption and scattering, analog-to-digital converter.

METHOD OF ANALYZING THE INTERNAL OF PARTIAL SUBSYSTEMS IN A MECHANICAL

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This paper presents a method of preparation of differential equations of motion of a mechanical system, which is based in the representation of each partial motion.

Key words: differential equation, the inertial force, degrees of freedom, partial movement.

COMPLEX OPTICAL MICROWAVE AND IR EXPERIMENTAL MEASUREMENT OF THE PARAMETERS PLASMA ANTENNAS REACTIVE TYPE FOR SAFE WIFI NETWORK

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Substantiated new mechanism for creating plasma antennas with controlled spatial characteristics based on thermo chemical nozzle material erosion or liner systems for secure communications. The configuration of the plasma antenna and its orientation in space can be changed as a corresponding change in the nozzle, and its orientation. The results of the basic experimental research carried out with the use of optical systems of measurements in the microwave and infrared spectrum, which shows a pulse antenna up to frequencies of 100 GHz.

Key words: plasma antenna, gas plasma theology.

METROLOGICAL PERFORMANCE OF METHOD OF ELIMINATING SPECULAR HIGHLIGHTS WITH INHOMOGENEOUS SCATTERING PLATE IN OPTICAL WAVEBAND

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Proposed and experimentally substantiated method to eliminate specular highlights in an optical image with inhomogeneous scattering plate.

Key words: metrology, measurement, highlight, scattering layer

TO HISTORY OF FORMATION AND DEVELOPMENT OF TRAINING OF SPECIALISTS IN THE FIELD OF LAND MANAGEMENT AND CADASTRES IN SSGA

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The premises and the initial period of training of specialists in specialty «Land management and cadaster» in SSGA. Presents data on the number of graduates of the Department of cadastre.

Key words: land management, cadastre, specialty, specialist, educational process, the Department of the Academy.

PLAUSIBLE REASONING AND DIDACTICS OF TEACHING

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The achievement of the objectives of educational programs of higher professional education possible with the integration of the four stages of the training given in didactics and complemented by modern analytical systems. For humanitarian disciplines (ecology and nature management, Economics, cadastre) under the competence necessary to understand the possession of plausible reasoning. It is proposed as a frame to use a system of numerical sets.

Key words: didactics, plausible reasoning, episteme, mathesis, genesis, the system of numerical sets.