

# Summaries

UDC 551.248.2:551.435.8(1–925.15)

**Gudymovich S.S.**  
**THE USE OF ANCIENT KARST FOR PALEOGEOGRAPHIC RECONSTRUCTIONS AND ANALYSIS OF NEOTECTONIC MOVEMENTS**

The author describes a new area of development of the ancient covered karst in the interfluvium in Batenevsky range of Minusinsky depression. Such karst influvium power is proposed to be used as the reference marks of preneotectonic relief at paleogeographic reconstructions; the difference between the absolute marks of the influvium bottom and valley bottoms of a modern erosional pattern is used as the amplitude of neotectonic uplift.

UDC 549.11+611.466.1

**Polienko A.K., Potseluev A.A., Ilyenok S.S.**  
**HETEROGENEITY OF UROLITH CHEMICAL COMPOSITION**

The authors studied the distribution of chemical elements in urolith structure and obtained the data on certain elements distribution and ratio in the points on the profile and in the shear (section) plane. It was ascertained that the heterogeneity in element distribution in the structure is connected with the features of urolith growth regions. It is recorded at the boundaries dividing mineral and organic components of urolith. The authors ascertained that some chemical elements occur in many observation points and the other ones are rarely observed.

UDC 548.75:549.514.51

**Korovkin M.V., Ananyeva L.G., Antsiferova A.A.**  
**EVALUATION OF QUARTZITE TRANSFORMATION DEGREE BY THE INFRARED SPECTROSCOPY METHOD**

The samples of quartzites picked from ore bodies of «Sopka-248» deposit in the Antonovsk group of fields (Russia, Western Siberia) were examined by the infrared spectroscopy method. Sediment-metamorphic quartzite is the product of lithification under the conditions of earlier metagenesis of quartz- hydromicaceous- sericitic facies. Amorphous silica was crystallized and crystalline phase of  $\alpha$ -quartz occurred due to metamorphism of flinty biogenic strata. In order to evaluate the degree of quartzite change the authors used the crystallinity index calculated by the parameters of double peak of infrared absorption at 778 and 797  $\text{cm}^{-1}$  which is conditioned by oscillations of Si–O–Si bounds in quartz. It was observed that the purest quartzites are characterized by the lowest relative values of the crystallinity index.

UDC 553.411.071:553.078.2

**Kucherenko I.V., Gavrilov R.Yu.**  
**STRUCTURAL AND DYNAMIC REGIMES OF FORMING GOLD-SULPHIDE-QUARTZ MINERALIZATION IN SULBAN GOLD-ORE ZONE (VITIM MID-CHANNEL BASIN). P. 2. URJAH ORE FIELD**

The article describes the most important fractured structures of Urjah ore field determining the location of gold-sulphide-quartz mineralization and rock jointing diagrams. The force field plans were reconstructed at the pre-ore and ore stages of forming the ore field structure. The authors show the difference of the scales of ore con-

taining structures formed in Karalon and Urjah ore fields. They discuss in comparative aspect the results of studying the structural and dynamic regimes of forming gold mineralization on the Northern flank of Sulban gold-ore zone and state the conclusions.

UDC 553.411.071.242.4+550.4

**Kucherenko I.V., Gavrilov R.Yu., Martynenko V.G., Verkhozin A.V.**  
**PETROLOGIC AND GEOCHEMICAL FEATURES OF WALLROCK METASOMATISM IN SUKHOI LOG GOLD FIELD (LENSKIY REGION). P. 2 PETROLOGY OF WALLROCK METASOMATISM**

The article introduces the results of reconstruction of mineralogical and petrochemical zonation at ore containing metasomatic halo in Sukhoi Log deposit. The authors prove the halo belonging to beresite metasomatic formation combining with the propylite one. The features of wallrock metasomatism in black shales rocks are discussed.

UDC 551.411(575.5)

**Ananyev Yu.S., Potseluev A.A., Zhitkov V.G.**  
**COSMO-STRUCTURAL POSITIONS OF GOLD DEPOSITS IN OVER-ANGARA PART OF YENISEI RIDGE**

Cosmo-structures of the over-Angara part at Yenisei ridge were examined based on the materials of multispectral space systems Modis and Landsat ETM+. The authors singled out four systems of the first order ring structures interpreted as granitization depth regions. The laws of gold mineralization location in cosmo-geological structures were shown. The selected cosmo-geological structures of different ranks are embodied in abnormal structures of geochemical fields.

UDC 550.84:553.411.071

**Ilyin S.S., Makarov V.A.**  
**GEOCHEMICAL ZONALITY OF GOLD DEPOSIT «QUARTZ MOUNTAIN» (ENISEI RIDGE)**

The article discusses zonality of primary geochemical haloes of gold deposit «Quartz Mountain» (Enisei ridge). On the basis of spectral analysis of core samples a three-dimensional distribution of gold and satellite elements was studied; vertical and cross zonality of the ore-mineralized zone were characterized. Vertical volatile correlations of gold and satellite elements were characterized. Geochemical associations, including two gold-bearing ones were identified and described. The authors determined a relationship of coarse, well-fineness gravity gold with an overlaid polymetallic association. The conclusion on a medium-lower ore zone erosion of an object was made.

UDC 553.3.071

**Timkin T.V.**  
**ENDOGENOUS ORE-METASOMATIC ZONALITY OF MAYSK-LEBEDSK GOLD ORE FIELD**

Primary ore-metasomatic zonality of Maysk-Lebedsk ore field (Gornaya Shoria) was studied. The occurrence and distribution of ore substance on the levels of ore body, deposit and the ore field as the whole were shown. The authors ascertained that gold ore areas have low ore zone erosion and their depth potential.

UDC 552.11:552.3:550.4:550.93(571.51)

**Vrublevskii V.V., Sazonov A.M., Gertner I.F., Tishin P.A., Kolmakov Yu.V.****GEOCHRONOMETRY AND MAGMATIC SOURCES OF ALKALINE ROCKS AND CARBONATITES OF SOUTHERN OVER-ANGARA PART, YENISEI RIDGE**

The derivatives of mantle magmatism in South over-Angara part in Yenisei Ridge are represented by medium-tatarian ijolite-foyaite and penchenginskiy fenite-carbonatite complexes of neo-Proterozoic era. The initial phases of their establishment (~725...680 million years ago) coincide with one of the eras of plume activity and rifting at the edge of Siberian paleocontinent. The sources of parental magmas conform in Nd-Sr-isotope parameters to the material of depleted mantle of PREMA/FOZO and E-MORB-types at certain mixing with saturated substance EM I. Geodynamic condition and initial positional closeness of late-Precambrian mantle alkaline magmatism occurrence are supposed to be identical in Yenisei Ridge and Eastern Sayan.

UDC 552.2+550.4(571.513)

**Vorontsov A.A., Fedoseev G.S.****THE CONDITIONS FOR FORMING DEVONIAN BASALTS AND DOLERITES OF SHIRA-SHUNET REGION IN MINUSINSK TROUGH**

The article introduces the data on the structure of Shira-Shunet region in Chebakovo-Balakhtinsk basin of Minusinsk trough; the authors consider geochemical and Sr-Nd isotope features of basites. It was determined that heterofacial basites are close to each other in the content of major and rare lithophylic elements that indicates their origin from a common magmatic source. It was shown that the source composition possesses the intermediate characteristics between the compositions of intra-plate sources of OIB and IAB types common for magmatism of convergent boundaries of lithophylic elements.

UDC 553.984;552.54

**Koveshnikov A.E., Nedolivko N.M.****WEATHERING ROCKS OF PRE-JURASSIC ROCKS OF WESTERN-SIBERIAN GEOSYNECLISE**

Pre-Jurassic (Vendian, Paleozoic) rocks of south-east part of Western-Siberian geosyncline underwent successive transformations: diagenesis and primary katagenesis during and just after petrification; orogenic stage of development and weathering crust formation in permi-Triassic; secondary katagenetic transformations starting with the Jurassic period. The weathering crusts are developed along the whole area of Paleozoic rock outcrop to the pre-Jurassic surface in the form of a thin near-surface zone of refined reservoir properties, in the form of siliceous-clay rubble mass by similar composition deposits; the bauxites including the re-deposited ones are developed by the changed effusives of the main composition and tuffs. The reservoirs are formed in the weathering crust formations. Their combination is called the oil and gas bearing contact zone horizon. The geometry of the formed oil and gas traps has the linear-extended blanket form.

UDC 553.984;552.54;551.253

**Koveshnikov A.E., Nedolivko N.M.****SECONDARY CATAGENETIC TRANSFORMATIONS OF PRE-JURASSIC ROCKS OF WESTERN-SIBERIAN GEOSYNECLISE**

Due to occurrence of secondary catagenetic transformations of pre-Jurassic rocks in Western-Siberian geosyncline the reservoir rocks of crack-metasomatic nature were formed in Paleozoic carbonate rocks. Dolomitization and leaching of limestone, kaolinisation and sideritisation of siliceous-carbonate and siliceous-clay rocks are the main hydrothermal processes. The development of oil and gas reservoirs and traps of hydrothermal-metasomatic nature is controlled by the fault grid of north-west and north-east bearing; at overlapping of the latter on the fields of carbonate rock development the reservoir rocks are formed. The geometry of formation does not depend on pre-Jurassic surface relief but on fault direction and the secondary process occurrence degree. They may occur separately or form a unified complex with the deposits associated with the weathering rocks.

UDC 550.83:519.241

**Erofeeva G.V., Erofeev L.Ya. ON THE TECHNIQUE OF ESTIMATION AND GEOLOGICAL INTERPRETATION OF PHYSICAL FIELD ANISOTROPY**

The authors analyze the opportunities of estimation procedures for anisotropy of physical fields studied in geoexploration. The article introduces a new technique for determining field anisotropy for anomalies of the second and minor orders; its efficiency is shown by a concrete example of a magnetic field.

UDC 550.83:551.3

**Ustinova V.N., Ustinova I.G.****DISCRETE HIERARCHICAL SYSTEMS IN GEOPHYSICS**

Sampling, hierarchical nesting and existence of typical forms of geological objects and geophysical fields allowed ranking them, developing probabilistic statistical methods for analyzing similar systems and field separation. The authors found out the presence of typical forms for seismic structures; reflected seismic signals; in morphological occurrence of seismic facies containing hydrocarbon accumulation; in space combination of structure-forming fractures. Typing of structure forms, morphological forms of geophysical anomalies, seismic signal with the assistance of autocorrelative analysis found application in procedures of recovering seismic signal and structural imaging while forming effective graphs for processing and interpreting seismic data.

UDC 550.831.053

**Isaev V.I., Gulenok R.Yu., Lobova G.A.****INTERPRETATION OF HIGH-PRECISION GRAVITY SURVEY DATA. THREE-DIMENSIONALITY OF OBJECTS**

The authors introduce the characteristic for lateral variation of lithophysical properties of oil and gas complexes at local objects. They propose the algorithm and technique of three-dimensional geo-density modeling of objects prospected by seismic survey, determination and delineation of high-porous lithofacies. The reverse linear problems of high-precision gravity survey are solved at the complexity universal near-real model. It allowed estimating the precision of determination and delineation of thin lithofacies. Applying only the algorithms and the two-dimensional modeling technique one can obtain the unacceptable errors in solution. The article introduces the example of solution for three-dimensional problem of high-precision gravity survey on Sakhalin Verkhnyshsk gas condensate field.

UDC 550.831.01

**Pyatakov Yu.V., Isaev V.I.****THE TECHNIQUES FOR SOLVING THE DIRECT GRAVITY PROBLEMS**

The article introduces the analytical survey of the techniques for solving the direct gravity problems. Approximation of density distribution is carried out by a set of elementary bodies of geometric shape having the predetermined density variation law. The authors stated the requirements for optimal algorithms of solving the direct problems and gave recommendations on their implementations.

UDC 681.584.311

**Prishchepov S.K., Vlaskin K.I. MAGNETOMETRIC DEVICE FOR DETECTING HIDDEN SUBSURFACE OBJECTS**

The authors determine problem specification of searching the hidden ferromagnetic subjects against a background of action of the earth normal magnetic field. The article considers the capacities of magnetometers intended for detecting magnetic anomalies. The authors introduce the complex gravity magnetometric device for determining the position of local magnet objects covered in non-ferromagnetic hiding environments.

UDC 552.31:546.71

**Korobeynikov A.F., Chernyshov A.I.**  
**RHENIUM DISTRIBUTION IN SIBERIAN**  
**ULTRAMAFITES MINERAGENIC TYPES**

Ultramafites of ophiolitic subvolcanic complexes of Sayan and Aldanian shield fold systems bear from 0,2 to 569 mg/t of Re. Dunites and harzburgites of Kalninsk and Kyzyr-Burlyuksk masses of Kurtushibinsk (West-Sayan) ophiolitic belt possess high concentrations of the element as well as Ospinsk mass of the East-Sayan belt with Re content to 383 and to 167 mg/t respectively. The authors discuss the features of Re distribution in various structural and deformation types of ultramafites. The least deformed protogranular dunites of the Western Sayan has high concentration of Re 56...90 mg/t. Plastically deformed difference of rocks with the most ordered mesogranular structure contains only 1...15 mg/t of Re. Rhenium content varies from 2 to 167 mg/t in syntectonically recrystallized dunites and harzburgites with porphyroclust, porphyroclath and mosaiclath structures. Chromite ores of ophiolitic complexes contain from 23 to 383 mg/t of Re. Serpentinites as the products of low-temperature metasomatism are characterized by low background anomalous concentrations of rhenium to 547 mg/t. Low Re contents from 0,3 to 364 mg/t are usually observed in dunites of alkali-ultrabasic Inaglinsk mass (Aldanian shield) with various deformation microstructures and in wehrlite, clinopyroxenites as well as metasomatites associating with them. Garnetiferous peridotite inclusions in kimberlite bodies of Siberian platform have the highest concentrations of rhenium to 6,8 g/t. It is probably caused by the processes of substance redistribution at intra-mantle high-temperature metasomatism.

UDC 552.513.550.8(571.16)

**Ezhova A.V.**  
**LITHOLOGICAL AND GEOPHYSICAL CHARACTERISTICS OF**  
**JURASSIC OIL AND GAS GRAVELITES, SANDSTONES AND SILT**  
**STONES OF SOUTH-EAST IN WESTERN-SIBERIAN PROVINCE**

The author considers the influence of structural-material composition of gravelites, sandstones and silt stones on the data of spontaneous potential and apparent resistivity logging, induction, natural radioactivity, neutron and caliper logging. It was ascertained that geophysical characteristic of gravelites and sandstones is determined by the composition of fluids and cements filling the intergranular space and to a less degree – by mineralogical composition; in silt stones the clay content influences greatly on geophysical parameters.

UDC 552.578.2.061.33

**Khromovskikh A.Yu.**  
**THE NATURE OF PLUNGING OIL-WATER CONTACTS OF**  
**UPPER-JURASSIC OIL ACCUMULATIONS IN KAYMYSOV**  
**ARCH**

It was ascertained that the regional hydrodynamic thrust and capillary pressure in reservoir rocks are the main factors controlling hydrocarbon distribution having migrated from Bazhenov formation within the upper-Jurassic accumulations.

UDC 550.84:551.8

**Serebrennikova O.V., Hai V.V.,**  
**Savinykh Yu.V., Krasnoyarova N.A.**  
**OIL GENESIS IN «WHITE TIGER» DEPOSIT (VIETNAM)**  
**BY THE DATA ON COMPOSITION OF SATURATED**  
**ACYCLIC HYDROCARBONS**

The article describes general characteristics of dispersed organic substance composition of Miocene and Oligocene rocks within the «White Tiger» deposit (Vietnam) and compares it to proper oil characteristics.

UDC 553.98

**Gladkov E.A.**  
**THE CONSIDERATION OF DEFORMATION-METASOMATIC**  
**CONVERSION OF OIL AND GAS DEPOSITS**  
**AT THEIR DEVELOPMENT**

When developing oil and gas deposits their initial reservoir properties change. The deformation-metasomatic conversion of produc-

tive deposits may be a possible reason. The processes resulting in a change of volume of void-pore space of both carbonate and terrigenous rocks should be taken into account.

UDC 550.8.05

**Zakharova A.A., Krokhaliev I.V., Peshkov V.E., Peshkov I.V.,**  
**Parovinchak K.M., Sinitsyn E.A.**  
**DETERMINATION OF THE DESIGN DATA FOR ESTIMATING**  
**RESERVES ON OIL DEPOSITS BY THE RESULTS**  
**OF HYDRODYNAMIC WELL INVESTIGATIONS**

The authors introduce theoretical substantiation of the method for determining oil displacement efficiency at natural conditions of deposit exploration. The coefficients obtained conform to the experimental data. The advantage of the technique is the account of larger (up to 10 ha) area of a layer when calculating oil filtration in reservoir conditions in comparison with the core model characterizing one point in a layer. The article shows that the technique error does not exceed 0,7 % at three times parameter determination at one well.

UDC 504.064.2.001.18:550.8.015

**Lukin A.I.A.**  
**ESTIMATION OF HYDRODYNAMIC IMPACT**  
**OF WELL OPERATION CONDITIONS BASED**  
**ON STATISTICAL FUNCTIONS**

The author studied the impact of operation of production wells at the Siberian chemical plant wastes landfill on pressure oscillations in observation wells and generation of frequency components of manmade and natural oscillations in a spectrum. The article demonstrates the opportunity of using the cross-correlation function and Fourier-analysis for estimating hydrodynamic impact of production well functioning.

UDC 550.42:57.4 (571.1)

**Savichev O.G.**  
**DEFINITION OF ICE JAM LEVELS OF RIVER WATERS**  
**IN THE SOUTH OF THE WESTERN SIBERIA**

The method of definition of additional increase in water levels during ice jams (as function of the water discharge and ice thickness) is offered. Its approbation is carried out by the example of the rivers of a southern part of Western Siberia (Tom, Chulyum, Kiya, Usa, Mras-Su and Kondoma rivers). The conditions of ice jam formation on the rivers considered with additional water level rise on 1,5 m and more are stated: a) rather sharp increase of a water runoff; b) the excess of the fixed water charge over the runoff norm approximately in 3,5 times and more; c) presence of an ice cover with ice thickness of 0,3 m and more on a significant part of the river. The recommendations to reduce the flooding risk on the Tom river are developed based on the results of ice phenomena modelling.

UDC 550.42:577.4(571.1)

**Savichev O.G., Shmakov A.V.**  
**VERTICAL PROFILE AND ANNUAL CHANGES OF CHEMICAL**  
**COMPOSITION IN WATERS OF THE TIMIRYAZEVO**  
**MEZOTROPIC MARSH (TOMSK, THE WESTERN SIBERIA)**

The complex for sampling marsh waters from different depths is developed and its approbation on the mezotrophic Timiryazev marsh near Tomsk (Western Siberia) is carried out. The change of marsh waters chemical composition is characterized: in a vertical peat profile – the minimal values of a mineralization in the top part of active horizon; within the hydrological year – maxima during the spring period for microelements, biogenic and organic substances or during the summer period – for main ions.

UDC 622.26

**Lukyanov V.G., Pankratov A.V.**  
**INCREASING CAPITAL PRODUCTIVITY OF SELF-POWERED**  
**EQUIPMENT AT MULTI-HOLE PENETRATION**  
**OF SUBSURFACE LEVEL BRANCHED SYSTEMS**

The article shows the economic efficiency of multi-hole operation system controlling self-powered equipment functioning.

UDC 621.644

**Povarnitsyn S.V., Rudachenko A.V.**  
**THE LABORATORY BENCH FOR DETERMINING EARTH MOVING OCCURRING AT PIPE DRIVING**

The authors generalize the issues of determining earth moving occurring at pipe driving. The article describes the bench construction developed and designed by the authors for studying power characteristics, determining earth moving, the method of pipe jacking in the ground. The recommendations for preparation and further treatment of image by particle image velocimetry are given.

UDC 550.42

**Berchuk V.Yu., Rikhvanov L.P., Gotye-Lyafay F.**  
**ACCUMULATION LEVELS AND DISTRIBUTION CHARACTER OF LANTHANIDES AND TRANSURANIUM ELEMENTS IN A VERTICAL SECTION OF FLOODPLAIN SOILS IN CHERNILSCHIKOVO ARM (THE TOM RIVER)**

The authors studied floodplain soils of the river Tom (Chernilshikovo arm) within 30 kilometers of the Siberian chemical combine. They defined the concentration levels and the character of vertical distribution of the elements (La, Ce, Sm, Eu, Tb, Yb, Lu, Th, U) determined by instrumental neutron activation analysis as well as specific activity levels for radioactive isotopes  $^{241}\text{Am}$ ,  $^{238}\text{Pu}$ ,  $^{239+240}\text{Pu}$ ,  $^{152}\text{Eu}$ ,  $^{154}\text{Eu}$  determined by alpha spectrometry. Th/U and  $^{238}\text{Pu}/^{239+240}\text{Pu}$  ratios are examined as pollution indicators. The authors discussed the sources causing element concentration increase in the soils.

UDC 621.039.7

**Gorbunova O.A., Vinokurov S.E.**  
**CONDITIONING OF LOW- AND MEDIUM RADIOACTIVE WASTE CONSIDERING CEMENT COMPOUND PROTECTION FROM MICROBIAL CORROSION**

It was ascertained for the first time that application of biocide polymer of polyhexamethyleneguanidine type in cementing liquid and solid radioactive waste of low and medium activity allows not only preventing microbial corrosion of cement compounds at long-term storage in near-surface reservoirs but also improving a number of important cementing process variables, raising the end product strength properties, increasing the end compound waste filling rate and extending the range of radioactive waste accepted for cementing.

UDC [621.039+621.311.24:621.039]:614.876(470+571)

**Khvostova M.S.**  
**ENGINEERING AND ECOLOGICAL FEATURES OF DECOMMISSIONING THE INDUSTRIAL URANIUM-GRAPHITE NUCLEAR REACTORS AND NUCLEAR RESEARCH FACILITIES**

The article covers the issues of expected decommissioning the industrial uranium-graphite nuclear reactors and nuclear research facilities. It is shown that the main issues of radiation safety are connected to treatment with the irradiated graphite stacks, activate metal structures, radioactive waste and spent nuclear fuel.

UDC 502.55

**Goryukhin M.V.**  
**THE RESEARCH OF HEAVY METAL INPUT TO ENVIRONMENTAL COMPONENTS BY THE EXAMPLE OF KHINGANSK TIN ORE DEPOSIT IN JEWISH AUTONOMOUS REGION**

The author studies the heavy metal outflow from the territory of Khingansk tin deposit developed in the recent past. The results obtained indicate the significant pollution of soils and waters of the river Levy Khingan and its feeders with the heavy metal salts. A set of pollutants in concentration decrease in the media analyzed is introduced in the following way: in water – Ni>Fe>Mn>Cu; in water extracts of soils and cleaning rejects – Fe>Mn>Zn>Pb>Ni>Cu>Co>Sn>Cd; in the extracts with ammonium-acetate buffer solution – Zn>Mn>Fe>Pb>Cu>Cd>Co>Ni. It was determined that the highest increase of heavy metal salt concentration in water is typical for nickel. It is to 8,6 MPC; for iron it is 5,5 and for manganese it is to 4,7; in the soil for zinc it is over 40, for lead it is over 15 and for manganese it is over 10 MPC.

UDC 591.5;552.578.2;547

**Kulkov M.G., Korzhov Yu.V., Artamonov V.Yu., Uglev V.V.**  
**STRUCTURE AND FEATURES OF CHANGING IN TIME OF ORGANIC SUBSTANCE WATER-SOLUBLE COMPLEX IN OIL POLLUTED WATER ENVIRONMENT**

The authors carried out the laboratory experiment for studying the composition of organic substance water-soluble complex in oil polluted water environment and features of its changing in time at constant and broken contact of water with oil film. A specific set of initial and transformed hydrocarbon and non-hydrocarbon compound-indicators showing the fact of water medium contact with oil was determined.

UDC 378:56(571.16)(092)

**Rychkova I.V., Ryabchikova E.D.**  
**MIKHAIL ERASTOVICH JANISHEVSKY – THE FOUNDER OF THE DEPARTMENT OF PALEONTOLOGY AT TOMSK TECHNOLOGICAL INSTITUTE**

In 2011 there was the 140<sup>th</sup> anniversary of M.E. Janishevsky's birth. Mikhail Erastovich Janishevsky is the founder of the department of paleontology at Tomsk technological institute (Tomsk polytechnic university), the outstanding paleontologist; and in 2012 there is the 110<sup>th</sup> anniversary of this department's foundation.

UDC [548.2+616.6]:378.662(571.16)

**Polienko A.K., Sevostyanova O.A.**  
**THE DEVELOPMENT OF THE RESEARCHES IN BIOMINERALOGY AND UROLOGY AT TOMSK POLYTECHNIC UNIVERSITY**

The authors state the history of initiation and development of the researches in biological mineralogy and urology at Tomsk polytechnic institute (university) which were carried out together with the urologists of the Siberian state medical university. The article shows the participation of mineralogists and urologists in researching organic-mineral aggregates (uroliths) formed in the human urinary system. The leading scientists in the field of biological mineralogy as well as the urologists participating in researching uroliths are noted in the article. The perspectives in developing the cooperation of mineralogists and urologists are determined.