



#### 01 Geoinformatics - an Innovative View of the Earth

- (17492 oral) Lidar photography as a source for filling the 3D cadastre and the BIM database \*D. S. Naumovych (National Aviation University), V. I. Zatserkovnyi (Taras Shevchenko National University of Kyiv, Institute of Geology), O. Ye. Nikolaienko (National Aviation University), V. V. Koval, Ye. V. Leviscenko (The Military and Research Office of the General Staff of the Armed Forces of Ukraine)
- (17532 oral) Use of geoinformation technology to study the structure and morphometric parameters of river basins M. M. Prykhodko, V. V. Romaniuk, D. V. Kukhtar, I. L. Bodnaruk, \* M. V. Adamovych (Ivano-Frankivsk National Technical University of Oil and Gas)
- (17554 oral) Problems of registration of geological sites (monuments) in the State Land Cadastre \*L. V. Samoilenko, V. I. Zatserkovnyi (Taras Shevchenko National University of Kyiv, Institute of Geology)
- (17600 oral) The Experience of Modeling Magmatogenic Ore Systems on the Example of Zhumba Quartz-Vein Deposit, East Kazakhstan \*V. I. Zatserkovnyi (Taras Shevchenko National University of Kyiv, Institute of Geology), M. A. Mizernaya (D. Serikbayev East Kazakhstan state technical university), G. B. Orazbekova (D. Serikbayev East Kazakhstan state technical university), A. P. Miroshnikova (D. Serikbayev East Kazakhstan state technical university)
- (17621 poster) Using of Landsat space images to study the dynamic of coastline changes in the Black Sea north-western part in 1983-2013 \*E. A. Cherkez, V. I. Medinets, T. V. Pavlik, Ye. I. Gazyetov, S. V. Medinets, T. V. Kozlova (Odessa National I. I. Mechnikov University)
- (17704 poster) Geoelectrical heterogeneities of the crust and upper mantle of the territory of Ukraine **A. Kushnir**, **T. Burakhovych**, \*V. Ilyenko, B. Shyrkov (Institute of Geophysics NAS of Ukraine, Kyiv, Ukraine)
- (17721 oral) Determining of the effects of groundwater regime on the status of architectural monuments of Kyiv-Pechersk Lavra \*V. M. Hudak (Taras Shevchenko National University of Kyiv, Institute of Geology), I. A. Cherevko (National Kyiv-Pechersk Historical and Cultural Reserve), V. I. Zatserkovnyi, V. I. Ostroukh, A. V. Ilchenko (Taras Shevchenko National University of Kyiv)
- (17754 oral) Analysis of the accuracy of the orthophoto map building according to aerial photography results executed with UAV \*V. I. Zatserkovnyi, S. D. Kryachok, L. S. Mamontova, B. Popkov (Taras Shevchenko National University of Kyiv), I. Chepkov (The Central Scientific Research institute of Armament and Military Equipment of the Armed Forces of Ukraine)
- (17818 poster) The use of geoinformation technologies for visualization the features of the underwater terrain of the Antarctic Territories and the geological processes which contributed to its formation M. D. Krochak, M. V. Bandurenko, \*V. I. Holoborodko, Y. I. Voropai (Institute of Geology of the Taras Shevchenko National University of Kyiv)
- (17934 poster) Survey results on students interest in geological sciences **H. A. Liventseva** (Chairman of the Board of Public Organization Ukrainian Association of Geologists)





- (17980 oral) The theory of information providing for researches and works on geological environment management \*D. P. Khrushchov (Institute of Geological Sciences of NASU), V. V. Dolin (Institute of Environmental Geochemistry of NASU), S. V. Goshovski (Ukrainian State Geological Research Institute), O. O. Remezova (Institute of Geological Sciences of NASU), V. Ye. Goncharov (Free geologist), O. T. Azimov (Scientific Centre for Aerospace Research of the Earth, IGS of NASU), O. L. Shevchenko (Taras Shevchenko National University of Kyiv), L. P. Bosevska (Ukrainian Research Institute of the Salt Industry), O. P. Lobasov (Free geologist), O. V. Yaremenko (Institute of Geological Sciences of NASU)
- (18132 oral) Methods for mapping and assessment drivers of change effects on terrestrial and marine ecosystem services in Lithuania \*E. Gomes, M. Inácio, K. Mikša, M. Kalinauskas, P. Pereira (Environmental Management Center, Mykolas Romeris University, Lithuania)
- (18143 poster) Retrospective monitoring of changes in land areas under the quarries of the «Mokryanskogo deposit II» based on the analysis of different space images \*A. V. Skorobahatko, I. M. Baysarovych (Taras Shevchenko National University of Kyiv), M. S. Kovalchuk (Institute of Geological Sciences Academy of Sciences of Ukraine), V. V. Babiy (National Aviation University)
- (18148 oral) Seven-year cyclicity manifestations in groundwater mode revealed by wavelet analysi \*O. Shevchenko (Taras Shevchenko National University of Kyiv, 90 Vasylkivska Str., Kyiv, 03022 Ukraine), A. Skorbun (Institute for Safety Problems of Nuclear Power Plants NAS of Ukraine, Kirova str., 36a, Chornobyl, 07270, Ukraine), D. Charnyi (The institute of Environmental Geochemistry of National Academy of Sciences of Ukraine, Palladin av. 34-A, Kyiv 142, MCP 03680, Ukraine)
- (18268 oral) Interactive map of the nature reserve fund of Ukraine in the Poltava region as an innovative measure of environmental monitoring **E. Bondarenko** (Kyiv Taras Shevchenko National University), \*M. Kyryliuk (Institute of Geography, NAS of Ukraine)
- (18273 poster) Using the TAR3D program for 3D data visualization in geoelectric studies. \*V. N. Tarasov, I. M. Logvinov (Institute of Geophysics NAS of Ukrane)
- (18319 poster) Structure of the "Relict continental dunes" GIS geodatabase as the basis of unification, systematization and analysis of information \*L. Dubis (Ivan Franko National University of Lviv, Lviv, Ukraine; The John Paul II Catholic University of Lublin, Lublin, Poland), N. Habchak (State High Educational Institution «Uzhhorod National University», Uzhhorod, Ukraine), S. Bortnyk, V. Zatserkovnyi (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine), Yu. Andreychuk (Ivan Franko National University of L'viv, Ukraine; L'viv Polytechnic National University, L'viv, Ukraine)
- (18409 poster) Seismic tomographic model along the geotraverse VI profile **D. V. Lysynchuk**, \*L. **V. Farfuliak**, **K. V. Kolomiets** (Institute of Geophysics, National Academy of Sciences of Ukraine, Kiev, Ukraine), **O. V. Kolomiets** (VM Glushkov Institute of Cybernetics, National Academy of Sciences of Ukraine, Kiev, Ukraine)
- (18442 poster) Use of spatial morphometric analysis of the Zmiinyi island underwater slope relief to reveal tectonic movements in Holocene \*E. A. Cherkez, O. A. Pogrebnaya, V. I. Medinets, T. V. Kozlova, Ye. I. Gazyetov, S. V. Medinets (Odesa National I. I. Mechnikov University)





(18448 - oral) "Paleogeomorphological atlas" as a way to accumulate generalized and obtain new information «historical-dynamic morphosystem of the Earth» \*O. O. Komliev, S. Yu. Bortnik (Taras Schevchenko National University, Ukraine; Uniwersytet Yana Kochanovskiego w Kielcach, Poland), E. O. Revezova (Geological Institute of National Academy of Sciences of Ukraine, Ukraine), S. V. Zhylkin (Institute of Geography of National Academy of Sciences of Ukraine, Ukraine), N. M. Pogorilchuk (Taras Schevchenko National University, Ukraine), Yu. M. Filonenko (State University by Nicolay Gogol, Nezhin, Ukraine)

(18481 - poster) The crustal structure of the transition from the East Black Sea Basin to the Shatsky Ridge from reinterpretation of existing refraction seismic profiles 14-15-16 **T. Yegorova**, **E. Baranova**, **A. Murovskaya**, \***L. Farfuliak** (*Institute of Geophysics of National Academy of Sciences of Ukraine*), **K. Repina** (*Donetsk National Technical University*)

(18361 - oral) Technology of Frequency Resonance Processing of Satellite Images: Results of Testing on gold deposits and areas of gold ore occurrences

M. Yakymchuk (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin, \*G. Drogitskaya (Institute of Geophysics of Ukraine National Academy of Science)

### 02 Geoinformation Researches for Petroleum Exploration

(17135 - oral) Recommendations for wells drilling in the unfavorable structural-tectonic conditions **S. Vyzhva** (Taras Shevchenko National University of Kyiv Institute of Geology), **I. Solovyov**, **V. Kruhlyk**, \***G. Lisny** (Geounit LLC)

(17273 - poster) Decision-making on increasing the efficiency of well operation using the gas-lift method \*R. H. Kuliyev (Institute of Geology and Geophysics of Azerbaijan National Academy of Sciences), G. M. Efendiyev (Institute of Oil and Gas of Azerbaijan National Academy of Sciences)

(17949 - oral) Geomagnetic studies at Rubaniv gas field in outer zone of Carpathian Foredeep, Ukraine

V. Maksymchuk, R. Kuderavets (Carpathian Branch of Subbotin Institute of Geophysics of the NAS of Ukraine), \*O. Menshov (Taras Shevchenko National University of Kyiv), P. Bodlak, I. Chobotok, Y. Nakalov, N. Pyrizhok (Carpathian Branch of Subbotin Institute of Geophysics of the NAS of Ukraine)

(17998 - poster) Seismic-facies research in the southern near-flank zone of the Dnieper-Donets basin \*N. I. Nesina, V. V. Ohar (Institute of Geology Taras Shevchenko National University of Kyiv)

(18121 - poster) Total Organic Carbon and Gamma Radioactivity Distribution of the Rudov Beds Formation within the Area Adjusted to Yablunivske O&G Field (Dnieper-Donets Basin) \*O. Karpenko (Taras Shevchenko National University of Kyiv), V. Ogar (Taras Shevchenko National University of Kyiv), I. Karpenko (Naftogaz Group)

(18142 - poster) Experience of the 3D interpretation of gravity data in the southeast of Volyno-Podillya S. G. Anikeyev, B. B. Hablovskyi, S. E. Rozlovska, M. V. Shtogryn, \*A. E. Zagray (Institute of Tourism and Geosciences)





- (18145 poster) The experiences with anisotropic averaging transformation of gravity and magnetic fields (on the example of the southeast part of Ukrainian Carpathians) S. G. Anikeyev, S. E. Rozlovska, B. B. Hablovskyi, M. V. Shtogryn, \*M. O. Karpenko (Institute of Tourism and Geosciences)
- (18213 oral) Estimation of the pore space structure of tight gas reservoirs of the Moscovian stage locates in DDB Eastern part using a limited well logging dataset. \*O. V. Oliinyk (JSC "Ukrgasvydobuvannya"), V. V. Antoniuk, I. M. Bezrodna (Institute of Geology, Taras Shevchenko National University of Kyiv), N. V. Rusachenko (JSC "Ukrgasvydobuvannya")
- (18279 poster) The influence peculiarities of the chemical composition of washing liquids on the results of electrical and acoustic methods **O. N. Trubenko**, **D. D. Fedoryshyn**, \*R. **O. Marynchak**, **S. D. Fedoryshyn**, **A. O. Trubenko** (Ivano-Frankivsk National Technical University of Oil and Gas)
- (18424 poster) The use of integrated geological, geophysical and technological information to divide a section into homogeneous intervals and make decisions when drilling wells \*I. A. Piriverdiyev (Institute of Oil and Gas of Azerbaijan National Academy of Sciences)
- (18452 oral) Identification of non-structural traps based on AVO-analysis and Elastic Inversion within the northern edge of the Dnieper-Donets Depression \*P. Kuzmenko (SE "Naukanaftogaz", Taras Shevchenko National University of Kyiv), I. Mykhalevych (LLC "Cub Gaz"), S. Vyzhva (Taras Shevchenko National University of Kyiv)
- (17648 oral) On the prospects of hydrocarbon and hydrogen accumulations detecting within local areas of Ukrainian shield **M. Yakymchuk** (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin (Institute of Geophysics, NAS of Ukraine)
- (17666 oral) The most expensive "dry" exploratory well in the history of the oil industry: reasons of failure based on data of direct-prospecting methods application **M. Yakymchuk** (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin (Institute of Geophysics, NAS of Ukraine)
- (18362 oral) Results of reconnaissance studies for hydrocarbon deposits within some districts in Northern Ukraine M. Yakymchuk (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin, \*T. Mikheeva (Institute of Geophysics of Ukraine National Academy of Science)
- (18364 oral) On the prospects of hydrocarbon accumulations detection in traditional reservoirs in deep horizons of cross-section within shale gas production areas **M. Yakymchuk** (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin (Institute of Geophysics of Ukraine National Academy of Science)

#### 03 Geoinformation Researches for Mineral Exploration

(17773 - oral) Three-dimensional model as the basis for exploration planning (as an example, the Prutivka copper-nickel deposit) **N. Bariatska** (Geological Service Company LLC)





- (17839 oral) The use of retrospective data for creating 3D models on the example of the Balakhivka graphite deposit **N. Safronova** (Geological Service Company LLC)
- (17946 poster) Retrospective monitoring of changes in land areas under the quarries of the Irshan Mining Plant based on the analysis of different space images \*S. I. Tymchenko (Taras Shevchenko National University of Kyiv), M. S. Kovalchuk (Institute of Geological Sciences Academy of Sciences of Ukraine), I. M. Baysarovych (Taras Shevchenko National University of Kyiv)
- (18137 poster) 3-D «geochemical» modelling of molybdenum mineralization at the East flank of Serhiivka complex Au-Mo deposit V. Sukach (Institute of geochemistry, mineralogy and ore formation, NAS of Ukraine), \*O. Hrinchenko (Institute of Geology, Taras Shevchenko national university of Kyiv, Ukraine), I. Antykhovych (Halliburton, Houston, TX, USA), L. Riazantseva (State Enterprise «Pivdenukrgeology», Dnipro, Ukraine)
- (18309 poster) New (?) calcium-thorium-uranium silicate (calciothorouranite) from thorium-uranium ore albitites from the Novooleksisvka ore occurrence, the Ukrainian Shield \*I. Mihalchenko (State Institution "The Institute of Environmental Geochemistry of National Academy of Sciences of Ukraine"), A. Andreev (Taras Shevchenko National University of Kyiv, Educational-Research Institute "Institute of Geology")
- (18420 poster) Inner structure and kinematic of the Mankivska fault zone S. V. Mychak, \*L. V. Farfuliak, A. V. Marchenko (Institute of Geophysics, National Academy of Sciences of Ukraine, Kiev, Ukraine), V. M. Belskyi (M. P. Semenenko Institute of geochemistry, mineralogy and ore formation of the National Academy of sciences of Ukraine)
- (18292 oral) The use of 2D/3D GIS software for exploration purposes: case studies from Canada and Ukraine \*K. Poliakovska (Taras Shevchenko National University of Kyiv Institute of Geology), I. R. Annesley (Université de Lorraine École Nationale Supérieure de Géologie), O. Ivanik (Taras Shevchenko National University of Kyiv Institute of Geology), J. Sykes (Appia Energy Corp.), K. Pandur (First Geolas Consulting)
- (18428 poster) Peculiarity of inelastic properties of sedimentary SiO2, foam polystyrene \*A. P. Onanko, D. V. Charnyi, Y. A. Onanko, M. P. Kulish, O. P. Dmytrenko, R. V. Homenko (Taras Schevchenko National University of Kyiv)
- (18429 poster) Peculiarity of elastic characteristics of sedimentary SiO2, zeolite, foam polystyrene \*A. P. Onanko, D. V. Charnyi, Y. A. Onanko, M. P. Kulish, O. P. Dmytrenko, S. A. Popov (Taras Schevchenko National University of Kyiv)
- (18499 oral) GIS technology in the geological and technological modeling of iron ore deposits \*O. V. Plotnikov (Kryvyi Rih National University), M. M. Kurylo (Taras Shevchenko National University of Kyiv), V. S. Stapay (Kryvyi Rih National University)
- (18503 poster) Stratification analysis of productive layers of BIF deposits based on Markov chain theory \*O. V. Plotnikov (Kryvyi Rih National University), M. M. Kurylo (Taras Shevchenko National University of Kyiv), V. S. Stapay (Kryvyi Rih National University)
- (18363 oral) The results of testing methods of frequency resonance processing of satellite images within areas of technical micro-diamonds (lonsdalite) deposits location **M. Yakymchuk** (Institute of





Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin (Institute of Geophysics of Ukraine National Academy of Science)

### O4 Creation of Integrated Databases for Effective Nature Management and Administration

(17718 - oral) A first attempt at the regional implementation of a geoarchaeological site database for Ukraine: study areas of the Volyn' Upland and the Transcarpathian Lowland \*O. S. Bonchkovskyi, N. P. Gerasimenko (Taras Shevchenko National University of Ukraine)

(17815 - poster) Geoinformation Assessment of Kanivsky Prydniprov'ye Paleorelief by Structural Morphometry \*L. V. Tustanovska, O. M. Ivanik (Institute of Geology), T. V. Shovkoplyas (Faculty of Mechanics and Mathematics), K. P. Hadiatska, Y. A. Krucheniuk (Institute of Geology)

(17979 - poster) Formation of cadastral data on the Nikolaevskii wolframite mineralization (Right-Bank Region of the Ukrainian Shield) S. P. Lashko (Kremenchuk Mykhailo Ostrohradsky National University)

(18366 - oral) Analysis of approaches for "Geological heritage of Ukraine" geo-portal creation V. I. Zatserkovnyi, \*D. P. Trofymenko (Taras Shevchenko National University of Kyiv), L. V. Ilyin (Lesya Ukrainka Eastern European National University), N. V. Trofimenko, V. Hotko (Taras Shevchenko National University of Kyiv)

(18378 - poster) Geoportal GGID of NJSC "Naftogaz of Ukraine" - use of geological and geophysical information by means of geoinformation technologies S. Halyuk, \*V. Antonyshyn, L. Yakushyn, L. Melnyk (SE "Naukanaftogaz"), A. Koval (NJSC "Naftogaz of Ukraine")

(18470 - oral) Methodological principles of creation of the integrated database of geological and geomorphological monuments of Ukraine \*S. Yu. Bortnyk (Taras Shevchenko National University of Kyiv, Ukraine; Jan Kochanowski University in Kielce, Poland), V. V. Stetsyuk, N. P. Gerasimenko, O.O. Komliev, O.V. Kovtoniuk, T. M. Lavruk, O. M. Pidkova, N.M. Pohorilchuk, O.S. Bonchkovskyi (Taras Shevchenko National University of Kyiv)

### 05 Geological Modeling

(17403 - oral) Multifactor mathematical modelling of ecological and economic systems (the example of coal mining development) \*L. Horoshkova (Zaporizhzhya National University), I. Khlobystov (National university of "Kyiv-Mohyla academy"), B. Danylyshyn (Kyiv National Economic University named after Vadym Hetman)

(17404 - oral) Modelling of resource flows in the coal industry of Ukraine \*L. Horoshkova (Zaporizhzhya National University), I. Khlobystov (National university of "Kyiv-Mohyla academy"), V. Volkov (Zaporizhzhya National University)





- (17426 poster) Niobium and titanium in the thorium-uranium albitites of the Novooleksiivka ore occurrence (Ukrainian shield) \*I. Mihalchenko (State Institution "The Institute of Environmental Geochemistry of the National Academy of Sciences of Ukraine"), A. Andreev (Taras Shevchenko National University of Kyiv, Educational-Research Institute "Institute of Geology"), V. Zagorodniy (Physical-Chemical Materials Science Center National Academy of Sciences of Ukraine)
- (17523 oral) Model of the new gold deposit Mananila (Tanzania) \*V. Mykhailov, O. Andreeva, O. Omelchuk (Institute of Geology of Taras Shevchenko National University of Kyiv)
- (17603 poster) Comprehensive environmental monitoring based on aerospace and ground research data \*V. Trysnyuk, V. Prystupa, T. Trysnyuk, V. Vasylenko, A. Kurylo (Institute of Telecommunications and Global Information Space of the National Academy of Sciences of Ukraine)
- (17605 poster) Improvement of the complex evaluation method of vital activity risks \*V. Trysnyuk (Institute of Telecommunications and Global Information Space of the National Academy of Sciences of Ukraine), O. Demydenko (State Enterprise «Ukrainian Research and Training Center for Standardization, Certification and Quality»), K. Smetanin (Zhytomyr Military Institute of SP Korolev), A. Zozulia (Institute of Telecommunications and Global Information Space of the National Academy of Sciences of Ukraine)
- (17674 poster) Paleomagnetism of volcanic rocks of the Volynian series from Podolia (SW Ukraine) \*I. Poliachenko, S. Cherkes, D. Hlavatskyi (National Academy of Sciences of Ukraine, Institute of Geophysics)
- (17756 oral) Gabbroid intrusions of Wilhelm Archipelago, West Antarctica \*O. V. Mytrokhyn (Taras Schevchenko National University of Kyiv, Institute of Geology), V. G. Bakhmutov (Institute of Geophysics, National Academy of Sciences of the Ukraine), A. G. Aleksieienko, T. V. Mytrokhina (Taras Schevchenko National University of Kyiv, Institute of Geology,)
- (17810 poster) Geospatial data on the distribution of silicon and aluminum in the thickness of shungite rocks of the Mlynkovskii area (Ukrainian Shield) \*S. P. Lashko (Kremenchuk Mykhailo Ostrohradsky National University), V. G. Yatsenko, V. V. Pokalyuk, L. P. Zaborovskaya (Institute of Environmental Geochemistry of the National Academy of Sciences of Ukraine)
- (17885 oral) Seismic and density heterogeneity distribution in the earth crust of the White Sea Region \*L. I. Bakunovich, B. Z. Belashev, M. Yu. Nilov, N. V. Sharov (FGBUN FIC Karelian Research Centre, Russian Academy of Sciences Institute of Geology, Petrozavodsk)
- (17988 poster) Identification of geological facilities of productive deposits at oil and gas field by geophysical research data \*I. Piatkovska, I. Fedak, Y. Koval (Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk)
- (18024 oral) Estimation of neotectogenesis factors of the Middle Dnieper region by structural-morphometric method \*L. V. Tustanovska, V. V. Shevchuk, O. M. Ivanik, K. P. Hadiatska, S. G. Volkova (Institute of Geology)





- (18043 poster) Morphology of native copper crystals as component in modeling the mineral formation process **I. V. Kvasnytsia** (Taras Shevchenko National University of Kyiv, Educational and Scientific Institute "Institute of Geology")
- (18074 oral) Specialized GIS for construction and analysis of digital models of regional line geological objects. Visualization means. \*I. P. Dolinskiy (SE «Naukanaftogaz»), A. P. Lobasov (-), A. A. Haharin (National Technical University of Ukraine "Igor Sikorsky Kyiv Politechnic Institute")
- (18286 poster) A new scheme of tectonic zoning of the lithosphere upper part of the Pre-Caspian depression V. S. Druzhinin (Institute of Geophysics Ural Branch the RAS), N. I. Nachapkin (Institute of Geophysics Ural Branch the RAS), V. Yu. Osipov (Institute of Geophysics Ural Branch the RAS), \*L. A. Muravyev (Institute of Geophysics Ural Branch the RAS, Ural Federal University)
- (18365 oral) The Application Of Spatial Analysis And GIS Modeling At The Stage Of Solving The Reverse Problem In Mathematical Modeling Of Geofiltration \*O. Koshliakov, O. Dyniak, I. Koshliakova (Taras Shevchenko National University of Kyiv)
- (18391 oral) 3D geological modeling for mineral resource assessment of the Galeshchynske iron ore deposit, Ukraine **O. Ivanik**, \***D. Vasiukhina** (*Taras Shevchenko National University of Kyiv*)
- (18450 oral) Modeling of the potential fields transformants for the ring structure Illinetska \*Y. I. Dubovenko, O. A. Chorna (Institute of Geophysics by S. I. Subbotin NAS of Ukraine), M. P. Kuzminets (National Transport University)
- (18456 oral) Seismic velocity gradient stratification of the mantle at Ukrainian Shield \*Y. I. Dubovenko, L. A. Shumlianska (Institute of Geophysics by S. I. Subbotin NAS of Ukraine), M. P. Kuzminets (National Transport University)
- (18509 poster) Factoring of radioactive properties and composition of sedimentary rocks of Runovschyna Area for the purposes of lithological and facial subdivision R. M. Bukatyuk (Institute of Geology, Taras Shevchenko National University of Kyiv), S. A. Vyzhva, O. V. Shabatura, V. I. Onyshchuk, I. I. Onyshchuk (Institute of Geology, Taras Shevchenko National University of Kyiv)
- (18500 oral) Structural analogies and homologues of the West Mediterranean and circum-Black Sea regions tectonic tailoring: Re-evaluating the uniform tectonic development model \*A. Kitchka (SE NaukaNaftogaz, Naftogaz Group, Ukraine), A. Tyshchenko (Institute of Geology, Taras Shevchenko National University of Kyiv, Ukraine, SE NaukaNaftogaz, Naftogaz Group, Ukraine), P. Kuzmenko (Institute of Geology, Taras Shevchenko National University of Kyiv, Ukraine, SE NaukaNaftogaz, Naftogaz Group, Ukraine)





# O6 Mathematical Methods and Computer Technologies in Geophysics and Geology

- (17272 oral) Estimation of low frequency phase velocity dispersion in weak contrast periodic media \*Yu. Roganov (Tesseral Technologies Inc., Ukraine), A. Stovas (NTNU, Trondheim), V. Roganov (Glushkov Institute of Cybernetics, Ukraine)
- (17436 oral) New methods to determine basic probability assignment and data fusion in Hyperspectral Image Classification \*M. I. Alpert (National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Department-FICT, Ukraine), S. I. Alpert ("Scientific Centre for Aerospace Research of the Earth of the Institute of Geological Science of the National Academy of Sciences of Ukraine")
- (17450 oral) Anisotropy parameters for monoclinic media \*A. Stovas (NTNU, Norway), Y. Roganov (Tesseral, Ukraine), V. Roganov (Glushkov Institute, Ukraine)
- (17491 oral) Modeling of pushing processes in anisotropic low permeable oil reservoirs \*M. V. Lubkov (Poltava Gravimetrical Observatory of NASU), O. O. Zaharchuk (National University "Poltavska Politehnika of Yuriy Kondratyk")
- (17495 oral) Modeling of pushing processes in anisotropic low permeable gas reservoirs **M. V. Lubkov** (*Poltava Gravimetrical Observatory of NASU*)
- (17637 poster) Use of mathematical methods to determine the ichnofossils species composition \*A. Sh. Mienasova, M. D. Krochak (Taras Shevchenko National University of Kyiv, Ukraine)
- (17656 oral) A seasonal dependence of the earthquake number in the Earth crust \*A. Kazantsev, L. Kazantseva (Kyiv National Taras Shevchenko University)
- (17830 poster) Electrometry effective inverse problem solving method **M. L. Myrontsov** (Institute of Telecommunications and Global Information Space, National Academy of Sciences of Ukraine)
- (17831 poster) Lateral logging sounding and lateral logging complex effective inverse problem solving method **M. L. Myrontsov** (Institute of Telecommunications and Global Information Space, National Academy of Sciences of Ukraine)
- (17966 poster) Solving the three-dimensional linear magnetometry problem on GPU \*E. N. Akimova (Ural Federal University and Krasovskii Institute of Mathematics and Mechanics of UrB RAS), V. E. Misilov (Ural Federal University and Krasovskii Institute of Mathematics and Mechanics of UrB RAS), V. O. Miftakhov (Ural Federal University)
- (17967 poster) Simulation of Water Filtration in a Geothermal Doublet M. Yu. Filimonov (Ural Federal University and Krasovskii Institute of Mathematics and Mechanics of UrB RAS), \*E. N. Akimova (Ural Federal University and Krasovskii Institute of Mathematics and Mechanics of UrB RAS), V. E. Misilov (Ural Federal University and Krasovskii Institute of Mathematics and Mechanics of UrB RAS), N. A. Vaganova (Ural Federal University and Krasovskii Institute of Mathematics and Mechanics of UrB RAS)





- (18009 oral) Formation regularities of liquid body of Dombrovsky quarry \*Y. Malkova (Taras Shevchenko National University of Kyiv), V. Dolin, Y. Yakovlev (State Institution "Institute of Environmental Geochemistry of NAS of Ukraine")
- (18062 oral) An Approach for Anomaly Detection in GPR Data using Machine Learning Techniques \*M. Ozkan-Okay, R. Samet (Ankara University), S. Stirenko (National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute")
- (18087 poster) Software for calculating X-ray fluorescence fluxes of chemical elements from individual microcrystals of accessory minerals. \*A. Bunkevich, A. Andreev, E. Meshcheryakova, S. Shnyukov (Taras Shevchenko National University of Kyiv)
- (18089 poster) Modeling of the riverside groundwater intakes exploitation taking into account of the stream flow changes \*S. V. Telyma (Institute of hydromechanics, NAS of Ukraine), O. S. Voloshkina (Kyiv national university of construction and architecture), YU. O. Bereznytska (Kyiv national university of construction and architecture), V. M. Efimenko (National Taras Shevchenko University of Kyiv)
- (18141 poster) Transformation of a spherically symmetric model of Earth's mass one-dimensional distribution PREM to a hydrostatic state **M. M. Fys**, **A. L. Tserklevych**, \***B. B. Dzhuman** (Lviv Polytechnic National University, Lviv, Ukraine)
- (18162 poster) The evolution of dilatant inclusion by the analogy with the geometric application of the Ricci flow \*V. A. Pyankov, A. L. Rublev (Institute of Geophysics, Ural Branch of RAS)
- (18185 poster) Construction of the Earth's crust rheological boundaries based on a complex solution of inverse problems of magnetometry and gravimetry \*V. A. Pyankov (Institute of Geophysics, Ural Branch of RAS), A. L. Rublev (Institute of Geophysics, Ural Branch of RAS)
- (18188 oral) Digital field geology \*I. M. Bubniak (Institute of Geodesy National University Lviv Polytechnic), A. M. Bubniak (Consulting Geologist), O. D. Gavrilenko (D. Serikbayev East-Kazakhstan State Technical University)
- (18214 oral) A Methodology to Complete and Visualize the GPR Data \*R. Samet, M. Ozkan-Okay (Ankara University), O. P. Markovskyi (National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute")
- (18246 poster) Petrophysical determination model of the collector points by the gamma-gammadensity results and gamma-spectrometric methods Y. M. Femyak, V. V. Fedoriv, \*R. O. Marynchak (Ivano-Frankivsk National Technical University of Oil and Gas)
- (18288 oral) Analysis of Elastic Symmetry and Anisotropy of Crystalline shales of the Pishchanska iron-ore structure **I. M. Bezrodna** (*Taras Shevchenko National University of Kyiv*), **D. A. Bezrodnyi** (*Taras Shevchenko National University of Kyiv*), \*V. V. Svystov (*Taras Shevchenko National University of Kyiv*), A. P. Gozhyk (*Taras Shevchenko National University of Kyiv*)
- (18360 poster) Modeling of stationary radon transfer in a layered geological media to determine the transmission distance of emanating \*O. V. Shabatura (Institute of Geology, of Taras





Shevchenko National University of Kyiv), **O. V. Nozhenko** (Institute of Environment Geochemistry NAS of Ukraine), **A. I. Yakimchyk** (Institute of Geophysics by S. I. Subbotin name, Kyiv, Ukraine)

(18379 - oral) The method of 3-D dataset statistical simulation with «cubic» correlation function on Rivne NPP example \*Z. \Vyzhva, V. Demidov (Taras Shevchenko National University of Kyiv), A. Vyzhva (SE "Naykanafto-gaz")

(18385 - poster) Seismic site effects evaluation of the Yagotin compressor station (Ukraine) \*Yu. Semenova, A. Kendzera (S. I. Subbotin Institute of Geophysics, National Academy of Sciences of Ukraine), -

(18415 - oral) Reservoirs Type Classification Using Hydraulic Flow Units Approach With An Application To Pivnichno-Korobochkynska Area (Dnipro-Donetsk Depression) \*O. Petrokushyn, V. Antoniuk (Taras Shevchenko National University of Kyiv)

### **07** Remote Sensing in Geosciences

(17376 - poster) Study of spatiotemporal variations of summer land surface temperature in Kyiv, Ukraine using Landsat time series \*D. Svidzinska, N. Korohoda (Taras Shevchenko National University of Kyiv)

(17471 - oral) Application of visible and long-wave infrared satellite data for hydrocarbon deposits prospecting \*S. I. Golubov, M. S. Lubskyi (State Institution "Scientific Centre for Aerospace Research of the Earth of the Institute of Geological Science of the National Academy of Sciences of Ukraine)

(17505 - oral) Springs as indicator of geotectonic disturbances \*R. L. Kravchynskyi (Carpathian National Natural Park), V. K. Khilchevskyi (Taras Shevchenko National University of Kyiv), M. V. Korchemlyuk (Carpathian National Natural Park), M. R. Zabokrytska (Lesya Ukrainka Eastern European National University), L. V. Plichko (Taras Shevchenko National University of Kyiv)

(17493 - poster) A GIS and WUDAPT based mapping of the local climate zones in Ukrainian cities \*O. Shevchenko, M. Matviienko, S. Snizhko (Taras Shevchenko National University of Kyiv, Department of Meteorology and Climatology)

(17521 - oral) Assessment of changes a number of surface water bodies within the sub-basin of the Desna River using remote sensing materials \*L. V. Plichko, V. I. Zatserkovnyi (Taras Shevchenko National University of Kyiv, Institute of Geology), V. K. Khilchevskyi (Taras Shevchenko National University of Kyiv), Marina Mizernaya, Amralinova Bakytzhan (D. Serikbayev East Kazakhstan state technical university)

(17657 - oral) Exogenic Processes' Remote Monitoring of Kanivske Reservoir's Right Bank \*O. A. Mykolaenko (Taras Shevchenko National University of Kyiv), P. V. Zhyrnov (State Enterprise "Scientific Research and Design Urban Development Institute"), O. V. Tomchenko (State





- institution "Scientific center for aerospace researches of the Earth of IGS NAS of Ukraine"), **I. O. Pidlisetska** (Taras Shevchenko National University of Kyiv)
- (17672 oral) Three-dimensional model of the Kocheriv section of the western part of the Ukrainian Shield **V. Ilyenko** (*Institute of Geophysics NAS of Ukraine*)
- (17822 poster) The use of GIS in the morphological analysis of pistes **S. Bortnyk**, **N. Pohorilchuk**, **O. Kovtoniuk**, \***N. Korohoda** (Taras Shevchenko National University of Kyiv, Ukraine)
- (18190 oral) Lineaments analysis of the Dniester area (between Bakota and Novodnistrovsk) \*A. M. Bubniak (Consulting Geologist), I. M. Bubniak (Institute of Geodesy National University Lviv Polytechnic), A. I. Zyhar (JSC Ukrhydroenergo)
- (18192 poster) The new approach to forecasting areas with oil and gas prospects by classification method **O. V. Titarenko**, **O. V. Sedlerova**, \***A. A. Andreiev** (Scientific Centre for Aerospace Research of the Earth National Academy of Sciences of Ukraine)
- (18210 poster) New experimental data on deep melts of the West Antarctic rift system separate segments V. Soloviev, V. Bakhmutov, I. Korchagin (Institute of Geophysics of NAS of Ukraine), N. Yakymchuk (Institute of Applied Problems of Ecology, Geophysics and Geochemistry)
- (18289 poster) Comparison of the new gravity field model XGM2019e with other modern global models of the gravitational field for the Magadan region I. M. Hasanov (NEISRI Far Eastern Branch of RAS, North-Eastern State University), \*L. A. Muravyev (Institute of Geophysics Ural Branch the RAS, Ural Federal University)
- (18290 poster) Identification of the largest impact structures in modern global datasets of geophysical fields **L. A. Muravyev\*** (Ural Federal University, Institute of Geophysics Ural Branch of RAS)
- (18387 oral) Geoinformation systems in monitoring studies of environmental pollution factors in the areas of municipal solid waste landfills \*O. T. Azimov (Scientific Centre for Aerospace Research of the Earth IGS of NASU), O. V. Shevchuk (Institute of Telecommunications and Global Information Space of NASU), -
- (18384 oral) Computer detection of the Earth's crust blocks using satellite image lineaments \*S. L. Nikulin, K. L. Sergieieva, O. V. Korobko (National Technical University Dnipro Polytechnic)
- (17646 oral) Application of frequency-resonance technology of satellite images and photographs processing for the hydrogen accumulations searching M. Yakymchuk (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), \*I. N. Korchagin (Institute of Geophysics, NAS of Ukraine)
- (17647 oral) Application of mobile frequency-resonance methods of satellite images and photo images processing for water accumulations searching \*M. Yakymchuk (Institute of Applied Problems of Ecology, Geophysics and Geochemistry), I. N. Korchagin (Institute of Geophysics, NAS of Ukraine)





### Data mining and decision support systems

- (18263 poster) GIS modeling of the territory and water area of protected areas O. V. Omelchuk (Institute of Geology Taras Shevchenko National University), I. V. Kuraieva, \*A. O. Splodytel (Semenenko Institute of Geochemistry, Mineralogy and Ore Formation of NAS of Ukraine)
- (18277 oral) Geographic Information and Cyber-Physical Systems in Oil and Gas Industry: Benefits, Problems and Integration Prospects **O. Rogach**, \***O. Pidchosa**, **P. Dziuba** (Institute of International Relations, Taras Shevchenko National University of Kyiv)
- (18414 poster) Comparative analysis of the annual runoff distribution of the left-bank and right-bank tributaries of the Siverskyi Donets River Basin \*H. Bolbot (Ukrainian Hydrometeorological Institute), V. Grebin (Taras Shevchenko National University of Kyiv)
- (17253 poster) Valuation of the impact of urbanization on the geoecological problems of the megapolis \*D. P. Romanukha, V. I. Zatserkovnyi (Institute of Geology of Taras Shevchenko National University of Kyiv), P. A. Savkov, I. V. Pampukha, I. K Syniavska (Military Institute of National University of Kyiv)
- (17377 poster) Study of structural-tectonic discreteness of abrasion-landslide bench in a segment of Odesa coastline \*T. V. Kozlova, E. A. Cherkez, V. I. Medinets, Ye. I. Gazyetov, S. M. Snihirov, S. V. Medinets (Odesa National I. I. Mechnikov University)
- (17531 oral) Distribution of heavy metals in potable groundwater of Dnieper-Donetsk artesian basin northwestern slope (as an example of Kyiv groundwater deposit) \*T. O. Koshliakova, I. V. Kuraieva (M. P. Semenenko Institute of geochemistry, mineralogy and ore formation of the National Academy of sciences of Ukraine, Ukraine), O. Ye. Koshliakov (Institute of Geology of Taras Shevchenko National University of Kyiv, Ukraine)

# O9 Geoinformation support monitoring of hazardous natural and anthropogenic processes

- (17553 oral) Forecasting temperature behavior of soil in gas field exploitation areas M. M. Prykhodko, L. Y. Poberezhny, D. V. Kukhtar, V. V. Romaniuk, I. L. Bodnaruk, \*A. V. Muliar (Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine)
- (17630 oral) Geodetic monitoring of the protective dam of the Lviv MSW landfill after reconstruction \*I. Savchyn, V. Lozynskyi, Yu. Petryk, Kh. Marusazh (Lviv Polytechnic National University)
- (17711 oral) Integration of geophysical, soil science and geospatial methods in the study of eroded soil **O. Kruglov** (Institute for Soil Science and Agrochemistry Research named after O. N. Sokolovsky), \*O. Menshov (Taras Shevchenko National University of Kyiv), M. Miroshnychenko, M. Shevchenko (Institute for Soil Science and Agrochemistry Research named after O. N. Sokolovsky)





- (17844 poster) Monitoring of the change in the area of the Malyn Landfill on the basis of various space images taken at different times \*L. Dyachenko (Taras Shevchenko National University of Kyiv), M. Kovalchuk (Institute of Geological Sciences Academy of Sciences of Ukraine), I. Baysarovych (Taras Shevchenko National University of Kyiv)
- (17882 poster) Theory and realization of dynamic correlation method for environmental safety evaluation **V. Okhariev** (Institute of Telecommunications and Global Information Space, NASU)
- (17888 poster) Monitoring System of Land Resources Pollution by Oil \*V. Okhariev, T. Trysnyuk, Y. Holovan (Institute of Telecommunications and Global Information Space, NASU)
- (17892 poster) Ground Deformation Mapping of Solotvyno Mine Area Using Radar Data and GIS O. Trofymchuk, \*Y. Anpilova, Y. Yakovliev (Institute of Telecommunications and Global Information Space of NASU), I. Zinkiv (Mykola Lysenko Lviv National Music Academy)
- (17894 poster) Landscape and Geological Factors of Water and Ecological Conditions Technogenesis of Donbas at the Post-Mining Stage \*Y. Anpilova, Y. Yakovliev, I. Drozdovych (Institute of Telecommunications and Global Information Space of NASU)
- (18017 oral) Integration of magnetic and hydrogeological studies for landslides and soil erosion assessment. Case study from area Lake Glinka (Kyiv, Ukraine) \*O. Menshov, O. Shevchenko, O. Andreeva (Taras Shevchenko National University of Kyiv)
- (18075 poster) The role of household activity in the context of studying the formation of groundwater in Tatarbunary \*O. Miedviedieva (Institute of Water Problems and Reclamation National Agrarian Academy of Sciences of Ukraine, Ukraine), O. Dyniak (Taras Shevchenko National University of Kyiv, Institute of Geology, Ukraine)
- (18134 oral) Leading role of Dombrowski quarry as the source of groundwater contamination **S. M. Bagriy**, **E. D. Kuzmenko**, \***U. O. Dzoba**, **L. I. Davybida** (Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk)
- (18165 poster) Spatial correlation function of the mean annual water runoff of the river of Ukraine \*S. O. Moskalenko (Taras Shevchenko National University of Kyiv, Ukraine), L. V. Malytska (Ukrainian hydrometeorological institute, Kyiv, Ukraine)
- (18226 poster) Use open GIS technologies to determine hydropower potential for lowland rivers on the example of Ukrainian part of Pripyat basin \*V. Korniienko, O. Obodovskyi, O. Pochaievets, O. Lukianets, O. Kryvets, N. Korohoda (Taras Shevchenko National University of Kyiv)
- (18340 oral) Use of GPTS technology in geoinformation security for sustainable development of megacities \*Yu. A. Bogdanov, S. I., Prokopenko, Xin Chen (Hebei DSF-GEOS Technology Co., Ltd, China)
- (18356 poster) Application of geophysical methods in the study of karst S. Vyzhva, \*V. Onyshchuk, I. Onyshchuk, M. Reva, O. Shabatura (Taras Shevchenko National University of Kyiv)





(18359 - oral) Local forecast of landslide hazards: case study from Kyiv region **O. Ivanik**, **O. Shabatura**, **R. Homenko**, \***K. Hadiatska**, **D. Kravchenko** (Institute of Geology, Taras Shevchenko National University of Kyiv)

(18380 - oral) Spatial morphometric analysis of digital elevation model in landscape research L. F. Bilous

(18388 - oral) Ecological and geochemical study of the state of soil deposits in the impact areas of municipal solid waste landfills \*O. T. Azimov (Scientific Centre for Aerospace Research of the Earth IGS of NASU), O. M. Trofymchuk (Institute of Telecommunications and Global Information Space of NASU), I. V. Kuraeva (M. P. Semenenko Institute of Geochemistry, Mineralogy and Ore Formation of NASU), K. S. Zlobina (M. P. Semenenko Institute of Geochemistry, Mineralogy and Ore Formation of NASU), S. P. Karmazinenko (Institute of Geography of NASU), Ye. M. Dorofey (Scientific Centre for Aerospace Research of the Earth IGS of NASU)

(18400 - poster) Application of A Remote Sensing in Monitoring of Erosion Processes \*K. A. Lukyanchuk, I. P. Kovalchuk (National University of Life and Environmental Sciences of Ukraine), O. M. Pidkova (Kyiv National Taras Shevchenko University)

### 11 Students programme

(17576 - poster) On the study of geological characteristics of underground gas storage objects \*V. M. Maniuk, N. V. Dubei, I. R. Mykhailiv, A. P. Boiko (Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine)

(17610 - poster) Application of mathematical statistics methods in estimating the prospects of oil and gas content of local objects in Boryslav petroleum industry area \*V. Maniuk, M. Maniuk, O. Maniuk, M. Medvid (Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk)

(17661 - poster) Application of special petrophysical algorithms for select classes of reservoir rocks \*Y. Khomyn, M. Maniuk, V. Khomyn, O. Paliychuk, I. Piatkovska, O. Maniuk (Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk)

(17799 - poster) Information criteria for oil and gas content Boryslav-Pokutska area of the Precarpathian deflection \*R. Yaremak, G. Zhuchenko, V. Khomyn, G. Gorvanko, N. Goptarova (Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk, Ukraine), -

(17939 - poster) Factors affecting the value of oil and gas reserves in the bowels \*M. O. Karpenko, I. R. Mykhailiv, A. P. Boiko, N. V. Dubei (Ivano-Frankivsk National Technical University of Oil and Gas)

(18107 - poster) The results of the geological-gravitational modeling of the deep structure of the underthrust of the Ukrainian Carpathians by means of regional cross-section L. S. Monchak, S. G.





- Anikeiev, T. V. Zderka, \*N. P. Khovanets, A. V. Yarema, S. S. Kurovets (Ivano-Frankivsk national technical university of oil and gas)
- (18119 poster) Gas-geochemical predicting and system assessment of oil and gas prospects for the purpose of increasing exploration efficiency A. V. Yarema, T. V. Zderka, S. S. Kurovets, \*N. P. Khovanets (Ivano-Frankivsk national technical university of oil and gas)
- (18237 oral) Generalization of the estimated probabilities of excess the mean annual runoff of the Pripyat River basin within Ukraine **K. I. Sokolchuk** (*Taras Shevchenko National University of Kyiv*)
- (18351 oral) Influence evaluation of the regional hydrometeorological conditions on the development of landslides on the territory of Ukraine \*Yu. V. Heruk, I. V. Chepurnyi (Ivano-Frankivsk National Technical University of Oil and Gas)
- (18372 oral) Using modern web technologies to construct web portals of educational and scientific organization \*A. Tarnovetskyi, V. Demidov (Taras Shevchenko National University of Kyiv)
- (18421 oral) Analysis of a light pollution map for meteorite detection. The prospects of the development of a meteor network in Ukraine \*R. Bukatiuk (the University of Alberta)
- (18373 oral) Petroleum system analysis of Walrus area in the Deepwater US Gulf of Mexico \*Y. Tkachenko, V. Shabanov, A. Drozdova, V. Yemets, O. Prokopenko, I. Virshylo (Taras Shevchenko National University of Kyiv, Institute of Geology)
- (18422 oral) Patternrecognition in oil infrastructure with convolutional neural networks \*R. Okhrimchuk, I. Tishaev, V. Zatserkovnyi, O. Smorkalova (Taras Shevchenko National University of Kyiv)
- (18423 oral) Geoinformation toolkit for risk assessment of karst processes development I. Chepurnyi, V. Podholov, T. Chepurna, \*B. Karpinskyi (Ivano-Frankivsk National Technical University of Oil and Gas)