

BAKU STATE UNIVERSITY



1st INTERNATIONAL SCIENTIFIC CONFERENCE

SUSTAINABLE FUTURE:
INTEGRATED DEVELOPMENT OF
EARTH SCIENCES AND ECOLOGY

PROGRAMME

December 23 – 24, 2025
BAKU, AZERBAIJAN



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Head of the Department of General and
Historical Geology, BSU, Azerbaijan

Saleh Nagiyev

Head of the Department of Azerbaijan
Geography and Geography Teaching
methods, BSU, Azerbaijan

| | |
|-----------------------|--|
| Tursynkul Bazarbayeva | Head of UNESCO Department on Sustainable Development, Associate professor of Kazakh National University Al-Farabi, Kazakhstan |
| Irada Aliyeva | Head of the Department of Hydrometeorology, BSU, Azerbaijan |
| Narmina Sadigova | Head of the Department Bioecology, BSU, Azerbaijan |
| Ramiz Ahlimanov | Head of the Department Physical Geography, BSU, Azerbaijan |
| Bahram Aliyev | Professor of the Azerbaijan University of Architecture and Construction, Azerbaijan |
| Shovgisafa Goychaysky | Professor of the Department of Geographical Ecology, BSU, Azerbaijan |
| Luca Di Palma | Professor of the Department of the Materials and Environment of the La Sapienza University, Italy |
| Mustafa Kumral | Professor of the Department of the Geological Engineering of the Istanbul Technical University, Türkiye |
| Lev Eppelbaum | Professor of the Department of the Geophysics of the Tel-Aviv University, Israel |
| Ekrem Tushat | Professor of the Department of Cartography Engineering, Konya Technical University, Türkiye |
| Veacheslav Mazare | Associate professor of the Department of Soil Science of Agricultural Sciences and Veterinary Medicine, Banats University, Romania |
| Ilhomjon Musayev | Associate professor of Tashkent Institute of Irrigation and Mechanization Engineers, Uzbekistan |

December 23, Tuesday

OPENING CEREMONY

Main Academic Building, 3rd Floor, Main Hall

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|--------------------|-------------------------------|
| 09:00-10:00 | Registration |
| 10:00-11:30 | Opening Ceremony/ Group Photo |
| 11:30-12:00 | Coffee Break / Poster session |

PLENARY SESSION

Chairperson: Sevinj Hajiyeva (Azerbaijan)

Academic Building III, 1st Floor, Round Hall

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| 12:00 – 12:20 | High-sulfidation to skarn transition: XRD-based mineralogical characterization of the Gilar Polymetallic System, Gedabek Contract Area Arzuman Rizvanoglu <i>Azerbaijan International Mining Company, Azerbaijan</i> |
| 12:20 – 12:40 | Importance of establishing a near real-time regional ionosphere model Muzaffer Kahveci <i>Konya Technical University, Türkiye</i> |
| 12:40 – 13:00 | Why soil health is important for maintaining resilient ecosystems and sustainable development Karl-Heinz Feger <i>TUD Dresden University of Technology, Germany</i> |
| 13:00 – 14:00 | Lunch |

December 23, Tuesday

KEYNOTE SPEAKER'S SESSION

Chairpersons: Chingiz Ismayilov (Azerbaijan)
Gaukhar Bishimbayeva (Kazakhstan)

Academic Building III, 1st Floor, Round Hall

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| 14:00 – 14:15 | Reuse of drainage flow for local irrigation Aytan Sariyeva <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i> |
| 14:15 – 14:30 | Lithogeochemical evolution and metallogenetic framework of the Gedabek high-sulfidation Au–Cu–Ag system Sabuhi Mammadov <i>Azerbaijan International Mining Company, Azerbaijan</i> |
| 14:30 – 14:45 | Improving the quality of drilling-blasting works in the open method development of the IV and VI areas of the Gedabek gold-copper deposit Vahid Hamzayev <i>Azerbaijan State Oil and Industry University, Azerbaijan</i> |
| 14:45 – 15:00 | Geographical analysis of development oil industry in Sudan using the experience of Azerbaijan Chingiz Ismayilov <i>Baku State University, Azerbaijan</i> |
| 15:00 – 15:30 | Coffee Break |

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| 15:30 – 15:45 | <p>Investigation of the effect of global geoid model results at different patch directions and grid intervals in geoid determination using the DFHRS approach; the case of Konya</p> <p>Ekrem Tusat <i>Konya Technical University, Türkiye</i></p> |
| 15:45 – 16:00 | <p>Infrastructure of interactive provision of cosmogeospatial data: new perspectives for geoinformation systems</p> <p>Ilgar Musayev <i>Institute of Military Scientific Research of the National Defense University, Azerbaijan</i></p> |
| 16:00 – 16:15 | <p>Assessment of soil pollution in the west Kazakhstan region by toxic chemical substances as a result of industrial activity</p> <p>Tursynkul Bazarbayeva <i>Al-Farabi Kazakh National University, Kazakhstan</i></p> |
| 16:15 – 16:30 | <p>Monitoring shoreline variability and coastal ecosystem changes in the southwestern Caspian region</p> <p>Turkan Mamishova <i>Baku State University, Azerbaijan</i></p> |
| 16:30 – 16:45 | <p>Remote sensing assessment of urban heat islands and their environmental impacts (on the example of Shirvan city)</p> <p>Shahnaz Amanova <i>Baku State University, Azerbaijan</i></p> |
| 16:45 – 17:00 | <p>Conservation and propagation of <i>Pyrus</i> L. species in the greater Caucasus: integrating biodiversity strategies with “Green Economy” principles</p> <p>Sabina Jafarzadeh <i>Karabakh University, Azerbaijan</i></p> |

December 24, Wednesday

PARALLEL SESSIONS

Session 1-1: Green chemistry, green education, green economy and sustainable development

Chairpersons: Sevinj Hajiyeva (Azerbaijan)
Tursynkul Bazarbayeva (Kazakhstan)

Academic Building II, 10th Floor, Student Development Centre

10:00 – 10:10 **Assesment of the state green plantings in the antropogenic environment condition (on the example of the centtral park of Aksu city)**

**Zarina Sergazinova¹, Nazymgul Akimbekova¹,
Tunzala Babayeva², Vusala Agayeva³**

¹*Toraighyrov University, Kazakhstan*

²*Sumgait State University, Azerbaijan*

³*Baku State University, Azerbaijan*

10:10 – 10:20 **Azerbaijan's emerging green hydrogen policy: strategic measures, capacity scenarios, and future outlook**

**Parvana Safarova, Elman Shirinov
Mingachevir State University, Azerbaijan**

10:20 – 10:30 **Catalyst-free synthesis of dichlordiazadienes from aryl hydrazones: mechanistic features, green chemistry advantages, and alternative approaches**

**Peri Huseynova
Nakhchivan State University, Azerbaijan**

10:30 – 10:40 **Green and blue transformation policy in sustainable development**

**Yusif Bayramov
Baku State University, Azerbaijan**

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| 10:40 – 10:50 | <p>Safeguarding wild <i>Pyrus</i> L. genetic resources in the Greater Caucasus: implications for biodiversity conservation and sustainable use running title</p> <p>Sabina Jafarzadeh¹, Elman Iskender², Bahar Mammadova³</p> <p>¹<i>Karabakh University, Azerbaijan</i> ²<i>Institute of Microbiology, Azerbaijan</i> ³<i>Institute of Ecology of the National Aerospace Agency, Azerbaijan</i></p> |
| 10:50 – 11:00 | <p>Development of a sorption-spectroscopic method for the determination of Co(II) ions</p> <p>Aziza Matekeyeva¹, Ruzmetov Uchkun¹, Tarana Aliyeva², Naila Jafarova²</p> <p>¹<i>Tashkent State Technical University named after Islam Karimov, Uzbekistan</i> ²<i>Baku State University, Azerbaijan</i></p> |
| 11:00 – 11:10 | <p>Chemical composition indicators of patato tuber based on dry matter content</p> <p>Nihat Karimov¹, Zaur Aghamaliyev²</p> <p>¹<i>Azerbaijan State Oil and Industry University, Azerbaijan</i> ²<i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p> |
| 11:10 – 11:20 | <p>Green education and lifelong learning: pathways to sustainable development</p> <p>Nigar Maharramova <i>Mingachevir State University, Azerbaijan</i></p> |
| 11:20 – 11:30 | <p>Green education and sustainable learning</p> <p>Aytaj Aliyeva, Tamilla Karimova <i>Odlar Yurdu University, Azerbaijan</i></p> |
| 11:30 – 12:00 | <p>Coffee Break</p> |

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| 12:00 – 12:10 | <p>Green finance: sustainable investments and green bonds</p> <p>Aytan Nadirova <i>Mingachevir State University, Azerbaijan</i></p> |
| 12:10 – 12:20 | <p>The role of digital technologies and green economy in fostering strong and inclusive communities: assessing the challenges ahead for sustainable growth</p> <p>Gulnaz Ismayilova <i>Mingachevir State University, Azerbaijan</i></p> |
| 12:20 – 12:30 | <p>Impact of green innovation potential on sustainable economic development</p> <p>Aytakin Afandiyeva, Gulnar Gurbanova <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i></p> |
| 12:30 – 12:40 | <p>Implementing the circular economy model: strategies for minimizing waste and increasing resource efficiency</p> <p>Kanan Abbasov <i>Mingachevir State University, Azerbaijan</i></p> |
| 12:40 – 12:50 | <p>Innovative water-saving technology – application of hydrogels</p> <p>Subhana Shahmaliyeva <i>Water and Amelioration Scientific Research Institute, Azerbaijan</i></p> |
| 12:50 – 13:00 | <p>Long-term tangible assets as the basis of green investments: accounting perspective</p> <p>Hafiza Hajiyeva, Firuza Mammadova <i>Azerbaijan State Agricultural University, Azerbaijan</i></p> |
| 13:00 – 14:00 | <p>Lunch</p> |

14:00 – 14:10 The foundations and directions of modern ecolinguistics: language as an ecological system

Gulnara Gurbanova

Mingachevir State University, Azerbaijan

14:10 – 14:20 Study of Cd (II) ion sorption and development of a method for its detection

Mekhrinigor Mukhammadiyeva¹,

Maftuna Qarshiboyeva¹, Uchkun Ruzmetov¹,

Tarana Aliyeva², Naila Jafarova²

¹*National University of Uzbekistan, Uzbekistan*

²*Baku State University, Azerbaijan*

14:20 – 14:30 Potential of using green energy in Azerbaijan

Mahluga Yusifova, Shams Alizade

Baku State University, Azerbaijan

14:30 – 14:40 Production of composite phase change material (PCM) from waste LDPE and pomegranate peel derived materials

Atakan Ural, Mahmut Ozturk, Zerrin Gunkaya,

Aysun Ozkan, Mufide Banar

Eskişehir Technical University, Türkiye

14:40 – 14:50 Reconcentration of some metal ions using cloud point extraction and ultrasonic nebulizer inductively coupled plasma optical emission spectrometry (ICP-OES)

Ali Huseyinli, Sevinj Hajiyeva

Baku State University, Azerbaijan

14:50 – 15:00 Sustainability in emerging universities: lessons from physics, health, and environmental integration in Pakistan's Thal region

Saeed Ahmad

Thal University Bhakkar, Pakistan

15:00 – 15:10 Sustainable recovery of critical elements from secondary industrial sources

**Gaukhar Bishimbayeva¹, Rustem Sharipov¹,
Karlygash Bulenova², Zaken Iskakov²,
Aidana Myrzabekova¹, Saule Nurmakova¹,
Magzum Sadykov^{1,3}, Amantay Dalbanbay¹,
Yernur Omarbekov²**

*¹Kazakh National Research Technical University,
Kazakhstan*

²Institute of High Technologies LLP, Kazakhstan

³“Angstrem” LPP, Kazakhstan

15:20 – 15:30 The emerald pathway: advanced green economy models and their strategic role in shaping global sustainable development

Javidan Hazizade

*Azerbaijan State University of Economics Zagatala
Branch, Azerbaijan*

December 24, Wednesday

PARALLEL SESSIONS

Session 1-2: The impact of climate change on the environment

**Chairpersons: Mahluga Yusifova (Azerbaijan)
Bayan Tusupova (Kazakhstan)**

Academic Building II, Room № 603

10:00 – 10:10 Ecological and geographical foundations of environmental protection

Shovgi Goychayski
Baku State University, Azerbaijan

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| 10:10 – 10:20 | Assessment of the impact of industrial and manufacturing sectors on population settlement in city of Ganja |
| | Khanlar Mustafayev <i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i> |
| 10:20 – 10:30 | Comparative analysis of waste management systems based on countries' levels of economic development |
| | Gunel Piraliyeva <i>State Agency of Azerbaijan Automobile Roads, Azerbaijan</i> |
| 10:30 – 10:40 | Dietary exposure to naturally occurring radionuclides and toxic heavy metals in essential staple foods |
| | Nargiz Sultanova, Rahil Bagirov, Jala Mahmudova, Aysha Abbasli <i>Azerbaijan State Oil and Industry University, Azerbaijan</i> |
| 10:40 – 10:50 | A brief analysis of the ecological situation of the Republic of Azerbaijan |
| | Mehman Mehbaliyev <i>Baku State University, Azerbaijan</i> |
| 10:50 – 11:00 | Ecological problems caused by the mining industry and their investigation using GIS technology |
| | Magsad Gojamanov, İlhamı Garibova <i>Baku State University, Azerbaijan</i> |
| 11:00 – 11:10 | Farm resilience and management models in the context of global climate change |
| | Gunay Abbasova, Seymour Mestaliyev <i>Azerbaijan State Agricultural University, Azerbaijan</i> |

11:10 – 11:20 From air to fuel: economic feasibility of CO₂-TO-DME VIA heat-integrated processes

Ali Orujzada¹, Mirza Aslanli²,

Ramazan Mammadov¹

¹*Odlar Yurdu University, Azerbaijan*

²*Independent Researcher, Azerbaijan*

11:20 – 11:30 Industrial waste impact on the ecosystem along the Caspian coast: a case study of Baku bay

Turkan Shefaqetli

Baku State University, Azerbaijan

11:30 – 12:00 Coffee Break

12:00 – 12:10 Influence of reaction time and nitrogen doping on carbon quantum dots synthesized from biomass waste

Mohammad Qaddeh Ahmadi, Zerrin Gunkaya,

Aysun Ozkan, Mufide Banar

Eskişehir Technical University, Türkiye

12:10 – 12:20 Investigation of solar-powered desalination systems for reuse of water resources in the oil industry

Ali Jafarov

National Aerospace Agency, Azerbaijan

12:20 – 12:30 Main factors affecting the condition of the classified forests of Faya, Mali

Adama Togola

University Delta-C de Bamako, Mali

12:30 – 12:40 Major environmental problems of protected areas in the Jalal-Abad region of Kyrgyzstan

Tamara Torobekova, Aizhan Toktomatova

Kyrgyz National University named after J.Balasagyna, Kyrgyzstan

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| 12:40 – 12:50 | <p>Pomegranate waste derived bio-oil production using two different thermal methods</p> |
| | <p>Pikakhanim Ahlimanova, Mahmut Ozturk, Zerrin Gunkaya, Aysun Ozkan, Mufide Banar <i>Eskişehir Technical University, Türkiye</i></p> |
| 12:50 – 13:00 | <p>Hydrogen storage powered water generation as an innovative solution for sustainable energy and environmental development</p> |
| | <p>Tri Julia Wulandari <i>Erciyes University, Türkiye</i></p> |
| 13:00 – 14:00 | <p>Lunch</p> |
| 14:00 – 14:10 | <p>The ecological environment at the crossroads of Europe and Asia</p> |
| | <p>Leyli Abdullayeva <i>Academy of Public Administration under the President of the Republic of Azerbaijan, Azerbaijan</i></p> |
| 14:10 – 14:20 | <p>The impact of climate variability on the development dynamics of species belonging to the genus <i>Camellia</i> L.</p> |
| | <p>Shabnam Ashrafova, Gulay Mustafayeva, Sevinj Yusifova <i>"Dendrology Garden" Public Legal Entity, Azerbaijan</i></p> |
| 14:20 – 14:30 | <p>Ways to reduce environmental problems in the sustainable development of the transport system in Azerbaijan</p> |
| | <p>Sahila Allahverdiyeva <i>Baku State University, Azerbaijan</i></p> |

December 24, Wednesday

PARALLEL SESSIONS

Session 1-3: Fertility, agroecological problems and rational use of land

**Chairpersons: Shahnaz Amanova (Azerbaijan)
Gulzhanat Mukanova (Kazakhstan)**

Academic Building II, Room № 709

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| 10:00 – 10:10 | Anthropogenic impact on soil quality and practical solutions for mitigating agroecological risks Rufana Zahidzada <i>Mingachevir State University, Azerbaijan</i> |
| 10:10 – 10:20 | Transformation of micromycete biota in urban ecosystems and its role as an ecological indicator Gumru Balakhanova <i>Azerbaijan State Pedagogical University, Azerbaijan</i> |
| 10:20 – 10:30 | Developing the Fertilizer Potential of Biochar Produced from the Sewage Sludge Amil Ibadov <i>Hacettepe University, Türkiye</i> |
| 10:30 – 10:40 | Ecological assessment of technogenic pollution of the soil cover in Almaty city Gulzanat Mukanova, Tursynkul Bazarbayeva, Zulfiya Tukenova, Bayan Tussupova, Batirgeld Shimshikov <i>Al-Farabi Kazakh National University, Kazakhstan</i> |
| 10:40 – 10:50 | Ecological risks of insecticides Turan Allahverdieva-Asgarova <i>Azerbaijan State Agricultural University, Azerbaijan</i> |

10:50 – 11:00 Feasibility of reclaiming salinized soils in azerbaijan using plant species

Umud Gasimov

*Water and Amelioration Scientific Research Institute,
Azerbaijan*

11:00 – 11:10 Humus status of soils in Uzbekistan and its variation by soil type and soil-formation

**Tulkin Ortikov¹, Usmonbek Shodmanov²,
Bobur Shoniyofov³, Dilrabo Erkayeva⁴**

¹*Samarkand State University, Uzbekistan*

²*Fergana State University, Uzbekistan*

³*Samarkand Institute of Agroinnovation and Research, Uzbekistan*

⁴*Samarkand Agrochemical Analytical Center, Uzbekistan*

11:10 – 11:20 Impact of irrigation erosion on tea plant productivity in pseudopodzolized yellow soils

Ulker Akbarova

Lankaran State University, Azerbaijan

11:20 – 11:30 Impact of the hydrographic network of the Nakhchivan Autonomous Republic on the development of agrocenoses

Leyla Ibrahimova

Nakhchivan State University, Azerbaijan

11:30 – 12:00 Coffee Break

12:00 – 12:10 Impact of viral infection on photosynthetic performance and chloroplast stress signaling in higher plants

**Nargiz Sultanova, Laman Dadashova,
Alsu Dadashova, Narmin Dadashova**

*Azerbaijan State Oil and Industry University,
Azerbaijan*

12:10 – 12:20 **Investigation of the distribution of saline soils in the Gobustan-Absheron physical-geographical region using remote sensing**

Gunel Hasanova

Institute of Geography named after acad. H.Aliyev, Azerbaijan

12:20 – 12:30 **The classification and fertility of south-west Romanian soils**

Veaceslav Mazare, Romina Mazare, Casiana Mihut, Anișoara Duma-Copcea, Aurelia Mihut

University of Life Science "King Mihai I" from Timișoara, Romania

12:30 – 12:40 **Mechanisms for preserving the biological diversity of planet Earth and prospects for ensuring sustainable development of the existential chain of being**

Tarana Yusibova, Vusala Mustafayeva, Aysel Bayramova, Gulmira Mammadova

Mingachevir State University, Azerbaijan

12:40 – 12:50 **Regional characteristics and acrophysical importance of the granulometric composition of soils**

Gunel Musayeva

Research Institute of Crop Husbandry, Azerbaijan

12:50 – 13:00 **Fundamentals of the eco-ethical concept of Azerbaijan**

Garib Mammadov, Akif Aghbabali, Gunel Heydarzada

Baku State University, Azerbaijan

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| 13:00 – 14:00 | Lunch |
| 14:00 – 14:10 | Research of applicability of limit values for polycyclic aromatic hydrocarbons (pahs) in soil Ali Huseyinli <i>Baku State University, Azerbaijan</i> |
| 14:10 – 14:20 | Secondary metabolites and their biological activities from endophytic bacteria <i>Bacillus halotolerans</i> XJB-35 associated with <i>Baccharoides anthelmintica</i> Nigora Rustamova, Jakhongir Movlanov <i>University of Geological Sciences, Uzbekistan</i> |
| 14:20 – 14:30 | Soil pollution and productivity losses in agricultural ecosystems Sevda Jafarova <i>Ganja State University, Azerbaijan</i> |
| 14:30 – 14:40 | Sustainable land development and project performance analysis in the Mugan irrigated zone Arzu Hasanova <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i> |
| 14:40 – 14:50 | The impact of the natural and geographical environment on agriculture in the Nakhchivan economic region Ismat Hasanov <i>Nakhchivan State University, Azerbaijan</i> |

December 24, Wednesday

PARALLEL SESSIONS

Session 2-1: Minerals, petrology, geochemistry and mineralogy

**Chairpersons: Nazim Imamverdiyev (Azerbaijan)
Jakhongir Movlanov (Uzbekistan)**

Academic Building II, Room № 418

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| 10:00 – 10:10 | Careful approach to the assessment and development of mineral deposits Nizami Jafarov¹, Tarlan Jafarov² ¹ <i>«Asbestos Geological Exploration Enterprise» LLP, Kazakhstan</i> ² <i>Kazakh-British Technical University, Kazakhstan</i> |
| 10:10 – 10:20 | Geological, geophysical, and geochemical foundations of the formation of the Goshgardag ore-magmatic system (Lesser Caucasus, Azerbaijan) Mamoy Mansurov <i>Baku State University, Azerbaijan</i> |
| 10:20 – 10:30 | Evaluation of the Factors and Characteristics Controlling the Formation of the Aytym Au Mineralization (Bukantau Mountains, Uzbekistan) Lochinbek Abdullayev¹, Jakhongir Movlanov² ¹ <i>Institute of Geology and Geophysics, Uzbekistan</i> ² <i>University of Geological Sciences, Uzbekistan</i> |
| 10:30 – 10:40 | On new minerals discovered in the Upper Cretaceous volcanic rocks of the Vandam zone Rauf Karimov, Solmaz Velizadeh, Azer Amirov, Tellar Gadirova, Elnur Musayev <i>Institute of Geology and Geophysics, Azerbaijan</i> |

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| 10:40 – 10:50 | <p>Genetic modeling of the interaction between primary and placer gold-bearing systems in the Garabagh ore field</p> <p>Tarana Tahmazova <i>Baku State University, Azerbaijan</i></p> |
| 10:50 – 11:00 | <p>The role of geodynamic conditions in the formation of picrites of the Talysh zone</p> <p>Farrukh Sariyev <i>Institute of Geology and Geophysics, Azerbaijan</i></p> |
| 11:00 – 11:10 | <p>Prospects for exploration and forecasting of non-ferrous metal deposits in the Agdam anticlinorium (Lesser Caucasus, Azerbaijan)</p> <p>Mamoy Mansurov, Bahadir Galandarov, Ruslan Shamiyev, Aygun Mammadova <i>Baku State University, Azerbaijan</i></p> |
| 11:10 – 11:20 | <p>Application of aerospace methods in studying the localization conditions of pyrite formation mineralization in the Gadabay ore region</p> <p>Tarana Mammadova, Ruslan Shamiyev, Aygun Mammadova <i>Baku State University, Azerbaijan</i></p> |
| 11:20 – 11:30 | <p>Application of waste-free technology in the open-pit mining of the Gadabay copper-gold deposit</p> <p>Anvar Hajiyev <i>Azerbaijan International Mining Company, Azerbaijan</i></p> |
| 11:30 – 12:00 | <p>Coffee Break</p> |
| 12:00 – 12:10 | <p>Cationic and anionic ordering in tetrahedral and octahedral sheets of the phlogopite nanostructure of talysh alkaline ultrabasic complex (Azerbaijan)</p> <p>Afet Shirinova <i>Baku State University, Azerbaijan</i></p> |

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| 12:10 – 12:20 | <p>Modern approaches to assessing tungsten raw material potential in Uzbekistan: databases, statistical metallogenetic analysis, and prognostic criteria</p> <p>Jakhongir Movlanov¹, Farrukh Rakhmatullayev², Mirzabobir Mirzaahmedov¹</p> <p>¹<i>University of Geological Sciences, Uzbekistan</i> ²<i>Institute of Mineral Resources, Uzbekistan</i></p> |
| 12:20 – 12:30 | <p>Deep-Seated Cu-Zn-Au Mineralization and Underground Development Strategy of the Zafar Deposit, Gedabek Contract Area</p> <p>Javid Ibrahimov, Anar Valiyev, Mehman Talibov, Shakir Gadimov, Hikmat Rustamli, Aydin Bayramov, Sabuhi Mammadov</p> <p><i>Azerbaijan International Mining Company, Azerbaijan</i></p> |
| 12:30 – 12:40 | <p>Clarification of the crystal structure of xonotlite and crystal chemistry of Ca- and TR- silicates with condensed Si-O radicals</p> <p>Afet Shirinova</p> <p><i>Baku State University, Azerbaijan</i></p> |
| 12:40 – 12:50 | <p>Comprehensive study of the geochemical and mineralogical characteristics of the Daghkasaman and Chovdar gold deposits</p> <p>Mirhuseyn Agarahimov, Jalal Asgarov</p> <p><i>Institute of Geology and Geophysics, Azerbaijan</i></p> |
| 12:50 – 13:00 | <p>Geological and structural conditions of the standard gold deposits of the Auminzatau-Beltau ore district</p> <p>Akram Goipov, Jakhongir Movlanov</p> <p><i>University of Geological Sciences, Uzbekistan</i></p> |
| 13:00 – 14:00 | <p>Lunch</p> |

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| 14:00 – 14:10 | <p>Geochemistry of the Trachybasalt-Trachy andesibasalt-fonolite formation rocks</p> <p>Murad Musazadeh <i>Institute of Geology and Geophysics, Azerbaijan</i></p> |
| 14:10 – 14:20 | <p>Gold content of the Bashgishlag barite-polymetallic deposit</p> <p>Aygun Ismayilova <i>Baku State University, Azerbaijan</i></p> |
| 14:20 – 14:30 | <p>Clarification of the crystal structure of vesuvian and crystal chemistry of TO_4-containing large-cation oxides</p> <p>Afet Shirinova <i>Baku State University, Azerbaijan</i></p> |
| 14:30 – 14:40 | <p>X-ray and thermographic studies of Azerbaijani heulandites</p> <p>Ulviyya Yuzbashova, Karim Rahimov <i>Baku State University, Azerbaijan</i></p> |
| 14:40 – 14:50 | <p>Mineralogical and geochemical peculiarities of the Gudurdagh copper-pyrrhotite occurrence</p> <p>Aygun Mammadova <i>Baku State University, Azerbaijan</i></p> |
| 14:50 – 15:00 | <p>Mineralogical and granulometric criteria for the diagnosis and prognosis of placer deposits (using the Zod deposit, Azerbaijan as an example)</p> <p>Tarana Tahmazova <i>Baku State University, Azerbaijan</i></p> |
| 15:00 – 15:10 | <p>Spatial relationship of dykes with gold mineralization</p> <p>Zhala Mardanova, Bahram Suleymanov, Humay Azizova <i>Baku State University, Azerbaijan</i></p> |

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| 15:10 – 15:20 | <p>Features of the distribution of main ore components in the three-dimensional space of the Filizchay deposit (Greater Caucasus)</p> <p>Nigar Sattarzade <i>Baku State University, Azerbaijan</i></p> |
| 15:20 – 15:30 | <p>Geological structure of kaolin deposits of the northeastern part of the Lesser Caucasus (on the example of the Kotandagh deposit)</p> <p>Aygun Ismaylova <i>Baku State University, Azerbaijan</i></p> |
| 15:30 – 16:00 | <p>Coffee Break</p> |
| 16:00 – 16:10 | <p>Stages and Improvement Opportunities of Land Reclamation at Gedabey Gold-Copper Mine</p> <p>Jamila Akbarova <i>Azerbaijan International Mining Company, Azerbaijan</i></p> |
| 16:10 – 16:20 | <p>Implementation of rational use of hydrocarbon resources through geological-mathematical models</p> <p>Seymur Teymurlu <i>Dashkasan Iron Ore, Azerbaijan</i></p> |
| 16:20 – 16:30 | <p>Types of ores of the Kasmali occurrences (Balakan-Zagatala ore district)</p> <p>Aygun Mammadova <i>Baku State University, Azerbaijan</i></p> |
| 16:30 – 16:40 | <p>Typomorphic features of ore minerals of porphyry copper deposits in the northeastern Lesser Caucasus</p> <p>Nuraddin Abbasov, Ilgar Guliyev, Adnan Aliyev <i>Baku State University, Azerbaijan</i></p> |
| 16:40 – 16:50 | <p>The role of advanced techniques in the finalization of hydrocarbon resource development</p> <p>Seymur Abulfat <i>Dashkasan Iron Ore, Azerbaijan</i></p> |

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| 16:50 – 17:00 | Temperature regime of deposit formation based on homogenization of inclusions and isotopic analysis of sulfide sulfides |
| | Zhala Mardanova <i>Baku State University, Azerbaijan</i> |
| 17:00 – 17:10 | Geochemical characteristics of the “Damirli” porphyry copper deposit |
| | Nahid Mammadov, Afet Shirinova, Aygun Mammadova <i>Baku State University, Azerbaijan</i> |
| 17:10 – 17:20 | The role of ore-controlling factors in the placement of gold mineralization in the Agduzdag ore field |
| | Tarana Mammadova <i>Baku State University, Azerbaijan</i> |

December 24, Wednesday

PARALLEL SESSIONS

Session 2-2: Hydrogeology, melioration, seismology and geological-geophysical research

**Chairpersons: Bahadir Galandarov (Azerbaijan)
Avaz Mammadov (Azerbaijan)**

Academic Building II, Room № 219

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| 10:00 – 10:10 | Tectono-magmatic and metallogenic evolution of the Ordubad Porphyry-Cluster, Nakhchivan, Azerbaijan Anar Valiyev, Rustam Abdullayev, Babak Mammadaliyev, Shakir Gadimov, Javid Ibrahimov, Sabuhi Mammadov <i>Azerbaijan International Mining Company, Azerbaijan</i> |
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| 10:10 – 10:20 | Lithofacial features lower pliocene sediments South Caspian Basin Farrukh Hasanov <i>Baku State University, Azerbaijan</i> |
| 10:20 – 10:30 | Integrated management of water resources and prevention of water scarcity in Azerbaijan: challenges and sustainable solutions Sevda Valiyeva <i>Azerbaijan University of Architecture and Construction</i> <i>Baku, Azerbaijan</i> |
| 10:30 – 10:40 | Assessment of the hydrogeological conditions of reclaimed areas Bahadir Qalandarov, Alakbar Mirzayev, Gunay Huseynova <i>Baku State University, Azerbaijan</i> |
| 10:40 – 10:50 | Dynamics of groundwater in the Shirvan plain and its impact on the meliorative status of soils Aslan Hajihev, Rahima Shakharova <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i> |
| 10:50 – 11:00 | Distribution peculiarities of heavy metals (Cr, Co, Ni, Cu, Zn, Pb) in mountain-forest brown soils of the mid-mountain landscape of the Vovelachay-Gusarchay rivers Ilgar Guliyev <i>Baku State University, Azerbaijan</i> |
| 11:00 – 11:10 | Groundwater reserves, resources, and their categorization according to the level of exploration Chingiz Gulammammadov, Rehile Mehtiyeva, Sevda Orujova <i>Water and Irrigation Scientific Research Institute, Azerbaijan</i> |

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| | <p>11:10 – 11:20 Azerbaijan's water supply amid climate variability: challenges and solutions</p> <p>Sevda Valiyeva <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i></p> |
| <p>11:20 – 11:30</p> | <p>Lithology and reservoir properties of the productive series sediments in the Pirallahi Island Area</p> <p>Gizqayit Abbasova¹, Mohammad Orucov¹, Sevinj Farajova², Sabira Naghizade¹ ¹<i>Azerbaijan State Oil and Industry University, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p> |
| <p>11:30 – 12:00</p> | <p>Coffee Break</p> |
| <p>12:00 – 12:10</p> | <p>Prospects for using Karabakh's thermal waters as a renewable energy source</p> <p>Allahverdi Tagiyev¹, Turana Tagizada² ¹<i>Azerbaijan State Oil and Industry University, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p> |
| <p>12:10 – 12:20</p> | <p>Lithostratigraphy of the productive series sediments of the South Caspian</p> <p>Rubaba Rustamova <i>Baku State University, Azerbaijan</i></p> |
| <p>12:20 – 12:30</p> | <p>Technological and ecological aspects of mining engineering exploitation of the Gadabay Copper-Gold Deposit</p> <p>Khayal Guliyev <i>Azerbaijan International Mining Company, Azerbaijan</i></p> |
| <p>12:30 – 12:40</p> | <p>Removal of Heavy Metal Contaminants from Industrial Wastewater Using Modified Baker's Yeast</p> <p>Murad Imamverdizada, Rima Guliyeva <i>Baku Higher Oil School, Azerbaijan</i></p> |

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| 12:40 – 12:50 | <p>Geoecological assessment of ecosystems on the southern slope of the Greater Caucasus based on biogeochemical characteristics</p> <p>Turkan Amiraslanova <i>Baku State University, Azerbaijan</i></p> |
| 12:50 – 13:00 | <p>Investigation of the ameliorative condition of the Karabakh lowland</p> <p>Sevda Valiyeva, Saniya Bayramova <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i></p> |
| 13:00 – 14:00 | <p>Lunch</p> |
| 14:00 – 14:10 | <p>Technogenic impact of the Velvelechay-Takhtakorpu Water Canal on engineering-geological conditions</p> <p>Turana Sadıqova¹, Safarbey Alakbarli² ¹<i>Baku State University, Azerbaijan</i> ²<i>Institute of Geology and Geophysics, Azerbaijan</i></p> |
| 14:10 – 14:20 | <p>Sr-Nd isotopic-geochemical characteristics and origin of the upper pliocene-quaternary postcollision volcanism in the Lesser Caucasus (Azerbaijan)</p> <p>Nazim Imamverdiyev¹, Anar Valiyev² ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan International Mining Company, Azerbaijan</i></p> |
| 14:20 – 14:30 | <p>The impact of climate change on Azerbaijan's water basins</p> <p>Sevda Valiyeva, Aybaniz Hajiyeva <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i></p> |
| 14:30 – 14:40 | <p>Features of local gravity-magnetic anomalies above oil deposits in the Middle Kura Depression</p> <p>Vagif Gadirov <i>Baku State University, Azerbaijan</i></p> |

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| 14:40 – 14:50 | <p>A Robust ML-Mw conversion and machine-learning based seismic characterization in Southeastern Anatolia</p> <p>Mirhasan Hasanli, Gülten Polat <i>Yeditepe University, Türkiye</i></p> |
| 14:50 – 15:00 | <p>Assessment of geothermal energy of Pliocene complex in the Absheron peninsula, Azerbaijan</p> <p>Aygun Mammadova <i>Baku State University, Azerbaijan</i></p> |
| 15:00 – 15:10 | <p>A comprehensive hybrid framework integrating mathematical signal enhancement and deep neural networks for advanced seismic waveform classification</p> <p>Milana Karimova¹, Aydin Bayramov², Nadir Aslanov³ ¹<i>Azerbaijan-French University, Azerbaijan</i> ²<i>Azerbaijan International Mining Company, Azerbaijan</i> ³<i>Dashkasan Iron Ore LLC, Azerbaijan</i></p> |
| 15:10 – 15:20 | <p>Geodynamic and ore-forming features of the demirli deposit within the Lök-Qarabağ metallogenetic belt</p> <p>Anar Valiyev, Stephen Westhead, Vusal Amirkhanov, Atabay Nushravanov, Eldar Maharramov, Tural Sariyev <i>Azerbaijan International Mining Company, Azerbaijan</i></p> |
| 15:20 – 15:30 | <p>The role of geodynamic conditions in the formation of picrites of the Talysh zone</p> <p>Farrukh Sariyev <i>Institute of Geology and Geophysics, Azerbaijan</i></p> |
| 15:30 – 16:00 | <p>Coffee Break</p> |

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| 16:00 – 16:10 | <p>Horizontal movements of the earth's crust in the Lesser Caucasus region based on paleomagnetic data from Jurassic formations (Azerbaijan)</p> <p>Zohrab Novruzov, Tahmina Garayeva, Arzu Bagirova, Narmin Alimammadzadeh <i>Institute of Geology and Geophysics, Azerbaijan</i></p> |
| 16:10 – 16:20 | <p>Integration of geological, geophysical, geochemical and aerospace methods in metallogenetic studies</p> <p>Zaki Valiyev¹, Adilakhanum Babayeva², Tarana Mammadova², Nigar Alizada¹ ¹<i>Institute of Geology and Geophysics, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p> |
| 16:20 – 16:30 | <p>Application of aerospace methods in studying the localization conditions of pyrite formation mineralization in the Gadabay ore region</p> <p>Tarana Mammadova, Ruslan Shamiyev, Aygun Mammadova <i>Baku State University, Azerbaijan</i></p> |
| 16:30 – 16:40 | <p>Petrographic characteristics and reservoir properties of PS-RS rocks</p> <p>Afshan Huseynova <i>Baku State University, Azerbaijan</i></p> |
| 16:40 – 16:50 | <p>Modern research methods used in the exploration of buried ore bodies</p> <p>Fuad Huseynov, Elfag Mammadov <i>AzerGold CJSC, Azerbaijan</i></p> |
| 16:50 – 17:00 | <p>Rock magnetism of the Aghjakend depression of the Kazakh-Agburun subzone (Azerbaijan)</p> <p>Tahmina Garayeva¹, Zohrab Novruzov¹, Zabita Mehdiyeva¹, Adilekhanim Babayeva², Seidshah Mehreliyev¹ ¹<i>Institute of Geology and Geophysics, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p> |

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| 17:00 – 17:10 | The role of advanced techniques in the finalization of hydrocarbon resource development |
| | Seymur Teymurlu <i>Dashkasan Iron Ore, Azerbaijan</i> |
| 17:10 – 17:20 | Search for oil and gas traps associated with buried volcanic formations of the Middle Kura Depression of Azerbaijan using gravity and magnetic data |
| | Vagif Gadirov <i>Baku State University, Azerbaijan</i> |

December 24, Wednesday

PARALLEL SESSIONS

Session 3-1: Climate change, water resources and landscape transformation

Chairpersons: Irada Aliyeva (Azerbaijan)
Muzaffer Kahveci (Türkiye)

Academic Building II, Room № 303

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| 10:00 – 10:10 | Estimation of sedimentation flow: a case study for Alijanchay river in Azerbaijan |
| | Farda Imanov¹, Elchin Aliyev², Irada Aliyeva¹, Anar Nuriyev¹ ¹ <i>Baku State University, Azerbaijan</i> |
| | ² <i>Central Laboratory of the Azerbaijan State Water Resources Agency, Azerbaijan</i> |
| 10:10 – 10:20 | Modern environmental conditions and efficient use of land and water resources in the Talas region of Kyrgyzstan |
| | Aizat Akimova <i>Kyrgyz National University named after J.Balasagyna, Kyrgyzstan</i> |

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| 10:20 – 10:30 | <p>Distribution of solar radiation and utilization potential of sunshine hours in the territory of the Eastern Zangezur region</p> <p>Sheker Mammadova¹, Faig Abdurahmanov¹, Nasiba Hajiyeva², Hayat Shekiliyeva¹</p> <p>¹<i>Baku State University, Azerbaijan</i> ²<i>Ganja State University, Azerbaijan</i></p> |
| 10:30 – 10:40 | <p>Comprehensive assessment of the impact of global climate change on farm organization and sustainable development</p> <p>Ayten Sariyeva¹, Bahadir Galandarov², Ilqar Guliyev², Alakbar Mirzayev²</p> <p>¹<i>Azerbaijan University of Architecture and Construction, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p> |
| 10:40 – 10:50 | <p>Integrating green education in universities: a case study of youth-led sustainability initiatives at Baku State University</p> <p>Asiman Ilyasov, Mirhuseyn Taghiyev <i>Baku State University, Azerbaijan</i></p> |
| 10:50 – 11:00 | <p>Problems of sustainable development of the Guba-Khachmaz economic region and efficient management of waste generated in the area</p> <p>Nariman Pashayev¹, Yusif Bayramov²</p> <p>¹<i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p> |
| 11:00 – 11:10 | <p>Modern requirements for improving the quality monitoring system for water sources and water supply in Azerbaijan</p> <p>Hamlet Fatdayev¹, Sadaqat Musayeva²</p> <p>¹<i>Water and Amelioration Scientific Research Institute, Azerbaijan</i> ²<i>Azerbaijan University of Languages, Azerbaijan</i></p> |

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| | <p>11:10 – 11:20 Main geoecological factors of geomorphological systems of the Azerbaijan part of the Greater Caucasus</p> <p>Mehman Mehbaliyev¹, Ilham Mardanov²</p> <p>¹<i>Baku State University, Azerbaijan</i></p> <p>²<i>Sumgayit State University, Azerbaijan</i></p> |
| | <p>11:20 – 11:30 Environmental condition and rational use of Water Resources in the Eastern Part of the Chui region of Kyrgyzstan</p> <p>Asel Mambetalieva, Ulan Zhamynchiev, Malika Saparova</p> <p><i>Kyrgyz National University named after J.Balasagyna, Kyrgyzstan</i></p> |
| | <p>11:30 – 12:00 Coffee Break</p> |
| | <p>12:00 – 12:10 Assessment of new water sources for sustainable water supply in the absence of hydrological data (The Case of Shusha City)</p> <p>Mirzakhan Mansimov¹, Matanat Musayeva², Sevil Guliyeva³, Aytan Guliyeva⁴</p> <p>¹<i>"Iqlim Ltd" LLC Research and consulting company, Azerbaijan</i></p> <p>²<i>Sumgayit State University, Azerbaijan</i></p> <p>³<i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i></p> <p>⁴<i>Baku State University, Azerbaijan</i></p> |
| | <p>12:10 – 12:20 Assessment of environmental impacts in mountain geosystems using gis technologies</p> <p>Latifa Kazimova</p> <p><i>Azerbaijan State Oil and Industry University, Azerbaijan</i></p> |
| | <p>12:20 – 12:30 Integration of digital technologies in geography education: requirements of the new curriculum and teacher practices</p> <p>Sahil Galandarov, Li Ping, Aytan Baghirova</p> <p><i>Shaanxi Normal University, China</i></p> |

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| 12:30 – 12:40 | <p>Developing a green campus framework: integrating technology and behavioral strategies for sustainable higher education</p> <p>Fatma Aliyeva, Mahsati Aliyeva <i>Mingachevir State University, Azerbaijan</i></p> |
| 12:40 – 12:50 | <p>Comprehensive assessment of the impact of natural hazards on road infrastructure and management strategies in the Shaki-Zagatala economic region</p> <p>Yelmar Mammadov <i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i></p> |
| 12:50 – 13:00 | <p>The influence of natural and anthropogenic factors on the formation of landscape complexes in the Kura depression</p> <p>Laman Hasanaliyeva <i>Baku State University, Azerbaijan</i></p> |
| 13:00 – 14:00 | <p>Lunch</p> |
| 14:00 – 14:10 | <p>Sustainability of water management systems and risk modelling in the Kura-Araz lowland</p> <p>Sabina Maharramova <i>Azerbaijan University of Architecture and Construction, Azerbaijan</i></p> |
| 14:10 – 14:20 | <p>Research in the field of transformation of natural landscapes of mountain territories</p> <p>Nazrin Huseynli <i>Lankaran State University, Azerbaijan</i></p> |
| 14:20 – 14:30 | <p>Assessment of the impact of global climate change on the flow dynamics of the Kura river basin</p> <p>Zakir Ramazanli <i>Scientific Research Institute of Water and Melioration, Azerbaijan</i></p> |

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| 14:30 – 14:40 | Assessment of solar energy potential in the Sheki-Zagatala zone Shabnam Islamova¹, Natavan Veliyeva², Gulgun Israfilova² ¹ <i>Baku State University, Azerbaijan</i> ² <i>Mingachevir State University, Azerbaijan</i> |
| 14:40 – 14:50 | Analyzing the academic and professional effects of physics and engineering education Gunel Baxshiyeva¹, Yegana Bakirova² ¹ <i>Mingachevir State University, Azerbaijan</i> ² <i>Baku Istanbul Lyceum, Azerbaijan</i> |
| 14:50 – 15:00 | Application potential of water-saving irrigation technologies and prospects under Azerbaijani conditions Aslan Hajiев, Tunzala Rzayeva <i>Azerbaijan University of Architecture and Engineering, Azerbaijan</i> |
| 15:00 – 15:10 | Alternative energy sources' economic potential: in the Context of Azerbaijan's new energy strategy Nurana Abbasova-Zeynalova <i>Mingachevir State University, Azerbaijan</i> |
| 15:10 – 15:20 | The impact of global climate change on the environment and sustainable development Samiyya Babazadeh <i>Ministry of Ecology and Natural Resources "AZE LAB MMC", Azerbaijan</i> |
| 15:20 – 15:30 | Assessment of the development of hazardous landslide processes along the Pirgulu-Damirchi highway in the Shamakhi district Rashad Khalilov <i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i> |

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| 15:30 – 16:00 | Coffee Break |
| 16:00 – 16:10 | The relationship between climate change and global warming |
| | <p>Maya Zeynalova <i>Baku State University, Azerbaijan</i></p> |
| 16:10 – 16:20 | Water supply based on renewable energy: solar desalination and high-efficiency sprinkler irrigation |
| | <p>Ravan Jafarli <i>Baku State University, Azerbaijan</i></p> |

December 24, Wednesday

PARALLEL SESSIONS

Session 3-2: Creation of geospatial data infrastructure, geographic information systems, problems of urbanization and tourism

**Chairpersons: Chingiz Ismayilov (Azerbaijan)
Ekrem Tuşat (Türkiye)**

Academic Building II, Room № 307

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| 10:00 – 10:10 | Assessment of ecological risk in Gubadli and Zangilan districts based on digital elevation model analysis and hydrological modeling in a gis environment |
| | <p>Tofiq Suleymanov¹, Khosiyat Ismatova², Salima Jafarli¹</p> <p>¹<i>National Aerospace Agency, Azerbaijan</i> ²<i>National Aviation Academy, Azerbaijan</i></p> |
| 10:10 – 10:20 | Geographic analysis of the development of |

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| | <p>digitalization, cybercrime and cybersecurity</p> <p>Chingiz Ismayilov <i>Baku State University, Azerbaijan</i></p> |
| 10:20 – 10:30 | <p>Investigation of the accuracy of kriging methods in temprature data modelling: a case study in Konya, Karaman, Aksaray and Nigde region</p> <p>Edmond Jonuzı¹, Emre Ayso², Ekrem Tuşat³, Muzaffer Kahveci³, Hüseyin Zahit Selvi¹</p> <p>¹<i>Necmettin Erbakan University, Türkiye</i> ²<i>Nigde Ömer Halisdemir University, Türkiye</i> ³<i>Konya Technical University, Türkiye</i></p> |
| 10:30 – 10:40 | <p>Assessment of the impact of imaging geometry and surface optical properties on methane emission quantification from Sentinel-2 data: libRadtran-based simulation study</p> <p>German Krauklit¹, Kamala Aghayeva²</p> <p>¹<i>National Aerospace Agency, Azerbaijan</i> ²<i>Azerbaijan State Oil and Industry University, Azerbaijan</i></p> |
| 10:40 – 10:50 | <p>Geographical approach in urban ecology and sustainable studies</p> <p>Arife Karadağ <i>İzmir Katip Çelebi University, Türkiye</i></p> |
| 10:50 – 11:00 | <p>On the issue of the political geography of the city of Baku</p> <p>Aydin Ibrahimov¹, Seyali Mustafayeva²</p> <p>¹<i>Baku State University, Azerbaijan</i> ²<i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i></p> |
| 11:00 – 11:10 | <p>The travels of explorers and the Nobels to Azerbaijan</p> <p>Chingiz Abdullayev <i>Baku Slavic University, Azerbaijan</i></p> |

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| 11:10 – 11:20 | <p>Cartographic illustration of energy sources</p> <p>Abdusali Suyunov¹, Shukhrat Suyunov¹, Kamolat Khakimova², Saidakbar Khamzayev¹, Abdusaid Abdusalomov¹, Muhammad Shodmonkulov¹</p> <p>¹<i>Samarkand State University of Architecture and Construction, Uzbekistan</i></p> <p>²<i>Fergana State University of Technology, Uzbekistan</i></p> |
| 11:20 – 11:30 | <p>High-resolution remote sensing unmasks qanats in Gobustan</p> <p>Olga Khabarova¹, Lev Eppelbaum²</p> <p>¹<i>University of Luxembourg, Luxembourg</i></p> <p>²<i>Tel Aviv University, Israel</i></p> |
| 11:30 – 12:00 | <p>Coffee Break</p> |
| 12:00 – 12:10 | <p>Base stations for differential GPS</p> <p>Ilkhomjon Musaev, Utkir Islomov</p> <p><i>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan</i></p> |
| 12:10 – 12:20 | <p>Development of ecological tourism in Kyrgyzstan</p> <p>Raushan Osmonbekova, Aizhan Osmonbekova</p> <p><i>Kyrgyz National University named after J.Balasagyna, Kyrgyzstan</i></p> |
| 12:20 – 12:30 | <p>Accuracy analysis of geodetics measurement schemes for relative deformations</p> <p>Magsad Gojamanov¹, Safail Verdiyev²</p> <p>¹<i>Baku State University, Azerbaijan</i></p> <p>²<i>Azerbaijan University of Architecture and Construction, Azerbaijan</i></p> |
| 12:30 – 12:40 | <p>Space photography and uses</p> <p>Utkir Islomov, Ilkhomjon Musaev</p> <p><i>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan</i></p> |

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| 12:40 – 12:50 | <p>Digital transformation in soil research: geospatial infrastructure and aero-space research</p> <p>Afgan Huseynov¹, Aygun Babayeva², Sadaqet Adigozalova², Araz Gasymov¹, Mehman Mehdiyev³</p> <p>¹<i>Azerbaijan State Agricultural University, Azerbaijan</i> ²<i>Institute of Agrarian Problems, Azerbaijan</i> ³<i>Ganja State Agricultural College, Azerbaijan</i></p> |
| 12:50 – 13:00 | <p>Cemeteries as urban ecosystems: a thematic and theoretical evaluation of visitor behaviors</p> <p>Meryem Hayır Kanat <i>Yildiz Technical University, Türkiye</i></p> |
| 13:00 – 14:00 | <p>Lunch</p> |
| 14:00 – 14:10 | <p>GIS-based analysis of the impact of soil cover on rainwater infiltration and surface runoff in the Aghdam region</p> <p>Kamina Agayeva, Vasif Babayev, Narmin Asadzada <i>Water and Amelioration Scientific Research Institute, Azerbaijan</i></p> |
| 14:10 – 14:20 | <p>Urgent tasks of mapping the ecological condition of irrigated lands in the Zarafshan valley under climate change conditions</p> <p>Ilkhomjon Musaev, Rustam Oymatov <i>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan</i></p> |
| 14:20 – 14:30 | <p>Modern status and prospects of health tourism of the Republic of Azerbaijan</p> <p>Gulshan Sultanova, Khumar Khanim Dadashova <i>Baku State University, Azerbaijan</i></p> |
| 14:30 – 14:40 | <p>Updating and compilation methods of thematic maps based on aerospace materials</p> <p>Mubariz Orujov, Ilhama Garibova <i>Baku State University, Azerbaijan</i></p> |

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| 14:40 – 14:50 | <p>The impact of geopolitical conflicts on the tourism industry of the South Caucasus</p> <p>Asif Aliyev <i>Baku State University, Azerbaijan</i></p> |
| 14:50 – 15:00 | <p>Mathematical modelling of the impact of Caspian sea level fluctuations on groundwater and ecological problems in the coastal zone of the Absheron peninsula</p> <p>Babek Sultanov¹, Farid Gadirly², Gulnar Hajiyeva³ ¹<i>Institute of Geology and Geophysics, Azerbaijan</i> ²<i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i> ³<i>Baku State University, Azerbaijan</i></p> |
| 15:00 – 15:10 | <p>The impact of religious pluralism on cultural heritage tourism</p> <p>Lamiya Khalilova <i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i></p> |
| 15:10 – 15:20 | <p>Comparative ecological indicators of landscapes vegetation in Azerbaijan arid zones</p> <p>Aygun Ismayilova <i>Baku State University, Azerbaijan</i></p> |
| 15:20 – 15:30 | <p>GIS-based assessment of the eco-geomorphological condition and change tendencies of the Agzibirchala lagoon lake</p> <p>Gunay Abbasova <i>Water and Amelioration Scientific Research Institute, Azerbaijan</i></p> |
| 15:30 – 16:00 | <p>Coffee Break</p> |
| 16:00 – 16:10 | <p>Creation of geospatial data infrastructure, digital mapping and aerospace research methods</p> <p>Mirtalib Mammadli, Tamilla Karimova <i>Odlar Yurdu University, Azerbaijan</i></p> |

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|---------------|--|
| 16:10 – 16:20 | <p>Satellite (aerospace) data application in the monitoring of water resources: use in hydrogeological studies and irrigation system management</p> <p>Hasan Gurbanli, Tamilla Karimova <i>Odlar Yurdu University, Azerbaijan</i></p> |
| 16:20 – 16:30 | <p>IsoBuffer: a topographically adaptive multi-hazard variable-width buffer framework for risk corridors along major oil pipelines in Azerbaijan</p> <p>Aslan Babakhanov <i>Institute of Geography named after acad. H.Aliyev, Azerbaijan</i></p> |
| 16:30 – 16:40 | <p>Structural changes in drug consumption in the Republic of Azerbaijan</p> <p>Goshgar Mammadov <i>Baku State University, Azerbaijan</i></p> |
| 16:40 – 16:50 | <p>Spatial organization and sustainable development perspectives of fruit growing in the Guba-Khachmaz economic region</p> <p>Eltaj Jabiyev¹, Sahil Galandarov² ¹<i>Baku State University, Azerbaijan</i> ²<i>Shaanxi Normal University, China</i></p> |
| 16:50 – 17:00 | <p>The strategic significance and implementation mechanisms of the Singapore free economic zone model for Azerbaijan</p> <p>Fidan Ahmadova <i>Baku State University, Azerbaijan</i></p> |

December 23, Tuesday

POSTER SESSION

11:30-12:00

Academic Building III, 1st Floor

1. Changes in the geochemical parameters of groundwater in the seismoactive zones of Azerbaijan in relation to seismic events

**Avaz Mammadov¹, Sabina Kazimova²,
Aybaniz Karamova², Simara Mammadzada²**

¹*Baku State University, Azerbaijan*

²*Republican Seismic Survey Center, Azerbaijan*

2. Analysis of stress-deformation conditions in lithosphere of Caucasus (Azerbaijan)

Elnara Akhmadova

Baku State University, Azerbaijan

3. New scheme of oil and gas geological zoning of the Dzheyrankechmez depression

Sudaba Aliyeva, Fikret Dunyamaliev

Azerbaijan State Oil and Industry University, Azerbaijan

4. Seismicity of Gadabay ore region

Savalan Dadashov

Ministry of Ecology and Natural Resources, Azerbaijan

5. Seismically active zones of the Azerbaijani part of the Greater Caucasus

Sariyya Mirzayeva, Adnan Aliyev

Baku State University, Azerbaijan

6. **Structure and evolution of the upper jurassic complex in the South-Eastern Caucasus (Azerbaijan)**

Zabita Mehdiyeva, Tahmina Garayeva

Institute of Geology and Geophysics, Azerbaijan

7. **Epithermal Au-Ag mineralization in the Vejnalı Deposit: alteration zoning, fluid pathways, and exploration implications**

Anar Valiyev, Vusal Amirkhanov, Atabay Nushravanov,

Javid Ibrahimov, Sabuhi Mammadov, Tamkin Huseynov

Azerbaijan International Mining Company, Azerbaijan

8. **Temperature gradient and heat flow on the geothermal areas in Absheron Peninsula**

Aygun Mammadova

Baku State University, Azerbaijan

9. **Groundwater regime of the Shirvan steppe in the Republic of Azerbaijan**

Chingiz Gulammammadov

Water and Irrigation Scientific Research Institute, Azerbaijan

10. **Results of thermomagnetic analysis of the Shahbuz section (Paleogene, Nakhchivan)**

Arzu Baghirova

Institute of Geology and Geophysics, Azerbaijan

11. **Paleomagnetic properties of Upper Eocene rocks in the Talysh structural zone**

Adilekhanim Babayeva¹, Tahmina Garayeva²

¹*Baku State University, Azerbaijan*

²*Institute of Geology and Geophysics, Azerbaijan*

12. Structural Controls and Hydrothermal Mineralisation in the Gosha High-Sulfidation Epithermal System

Anar Valiyev, Elchin Aliyev, Eldar Maharramov, Tural Sariyev, Samir Mursalov, Rashad Asgarov, Nader Abbaszadeh, Tamkin Huseynov

Azerbaijan International Mining Company, Azerbaijan

13. Seismic exploration on the prediction of oil and gas fields

Ali Novruzov, Konul Guluzade, Azad Azadzade

Baku State University, Azerbaijan

14. A study of the electrical properties of iron hydroxides under high temperature and pressure conditions

Avaz Mammadov

Baku State University, Azerbaijan

15. Genesis of mineral deposits of the Chiragdara ore field

Nurana Ahmadova

Baku State University, Azerbaijan

16. Multi-Scale Geophysical Exploration Across AIMC Contract Areas: Integrated Magnetometry, IP/Resistivity, AEM and Structural Modelling for Porphyry-Epithermal Targeting

Anar Valiyev, Nader Abbaszadeh, Samir Mursalov,

Javid Ibrahimov, Sabuhi Mammadov, Aydin Bayramov

Azerbaijan International Mining Company, Azerbaijan

17. Typomorphic features of pyrites from porphyry copper deposits in the northeastern part of the Lesser Caucasus

Nuraddin Abbasov, Ilgar Guliyev, Adnan Aliyev

Baku State University, Azerbaijan

18. Distinguishing between natural and man-made seismicity

Gurban Yetirmishli¹, Avaz Mammadov², Saida Ismayilova¹, Shirin Islamova¹

¹Republican Seismic Survey Center, Azerbaijan

²Baku State University, Azerbaijan

19. Modern Seismogeodynamics of the Lesser Caucasus

**Sabina Kazimova, Gulnar Guseinzade, Arzu Mammadova,
Senem Mekhtiyeva, Turan Yusifova**
Republican Seismic Survey Center, Azerbaijan

20. About tectonic features of Miocene sediments of South-Eastern Gobustan

Gizgayit Abbasova¹, Sevinj Farajova²

¹*Azerbaijan State Oil and Industry University, Azerbaijan*

²*Baku State University, Azerbaijan*

21. On the oil and gas prospects of the Maikop sediments of the Yevlakh-Aghjabadi depression

Vagif Gurbanov¹, Mirravan Manaflı²

¹*Azerbaijan State Oil and Industry University, Azerbaijan*

²*Baku State University, Azerbaijan*

22. Geological and geophysical studies of the Paleogene-Mesozoic deposits of the Pre-Caspian-Guba region in connection with oil and gas potential

Sudaba Aliyeva

Azerbaijan State Oil and Industry University, Azerbaijan

23. Comparative Analysis of the Geological and Mineralization Features of the Zod Gold Deposit with International Analogues

Huriyya Azayeva

Ministry of Ecology and Natural Resources, Azerbaijan

24. Main prediction terms of oil and gas deposits based on refracted waves

Ali Novruzov, Aygun Mammadova, Bahram Suleymanov

Baku State University, Azerbaijan

25. Geological Characteristics and Formation Features of the Agyokhush Group of Deposits (Dashkesan Ore District)

Nazim Imamverdiyev, Sultan Jafarov

Baku State University, Azerbaijan

26. X-ray investigation of mesolites occurring in the mountainous Talysh Area

Ulviiya Yuzbashova, Karim Rahimov, Jabrail Mirzai
Baku State University, Azerbaijan

27. Some issues of fauna and ecology related to the geological development of the Azerbaijani part of the Greater Caucasus in the early Jurassic

Shakir Balammadov, Aladdin Mamedalizade
Baku State University, Azerbaijan

28. Prospects of rare elements distributed in minerals of stratiform deposits located in the southern slope of the Greater Caucasus

Nigar Sattarzade¹, Vahid Hamzayev²

¹*Baku State University, Azerbaijan*

²*Azerbaijan State Oil and Industry University, Azerbaijan*

29. Integrated Petrographic and Mineralogical Characteristics of Major AIMC Contract Areas: Implications for Porphyry-Epithermal System Evolution in the Lesser Caucasus

**Anar Valiyev, Samaya Hasanova, Gunduz Kazimov,
Dinara Abdurazakova,**

Arzuman Rizvanoglu

Azerbaijan International Mining Company, Azerbaijan

30. The role of diagenetic processes in the change of the hard skeleton of the Late Cretaceous invertebrates (belemnites, brachiopods, echinids) of the Lesser Caucasus

**Aladdin Mamedalizade¹, Shafaq Bayramova²,
Shakir Balammadov¹, Lala Ahmadova¹**

¹*Baku State University, Azerbaijan*

²*Institute of Geology and Geophysics, Azerbaijan*

31. Ecogeographical characteristics of the Gizilaghaj National Park of Azerbaijan

Sona Osmanova, Liu Zixuan
Baku State University, Azerbaijan

32. The role of biological reclamation in the restoration of disturbed geosystems of the north-eastern part of the Lesser Caucasus (within Azerbaijan)

Zuleykhə Eyyubova
Baku State University, Azerbaijan

33. Ecogeographical assessment of Azerbaijan's mud volcanoes: landscape dynamics and geopark development potential

Tahir Yunuslu, Akif Aghbabali
Baku State University, Azerbaijan

34. Research on the ecochemical composition of "zinc oxide" waste received from Baku Steel melting plant based on XRF analysis

Naila Jafarova
Baku State University, Azerbaijan

35. Comparative analysis of environmental conditions of the Shirvan National Park with other analogous areas

Shovgi Goychayski, Khayala Elipenahova
Baku State University, Azerbaijan

36. Efficient land use, agricultural productivity, and agro-ecological challenges

Gunel Hamidova, Tamilla Karimova
Odalar Yurdu University, Azerbaijan

37. Investigation of manganese in natural water sources

Ayten Samedova
Baku State University, Azerbaijan

38. Tourism and recreational resources of the Sheki-Zagatala economic region

Maya Zeynalova, Narmin Handamzade
Baku State University, Azerbaijan

39. Ecotourism as a tool for sustainable tourism

Sakina Zulfuqarova

Baku State University, Azerbaijan

40. Regulation of nitrogen metabolism in soybean under field conditions by trichoderma micromycetes and their synergy with rhizobium

Surayya Ismayilova, Aladdin Gadimov

Azerbaijan State Agricultural University, Azerbaijan

41. Dynamics of Agricultural Soil Indicators in the Masalli District

Shabnam Alizade

Baku State University, Azerbaijan

42. The role of reverse osmosis and electrodialysis technologies in soil reclamation: treatment of saline waters and normalization of soil conditions

Narmin Guliyeva

Water and Amelioration Scientific Research Institute, Azerbaijan

43. Cooperation of the Republic of Azerbaijan with foreign countries and international organizations in the field of green energy

Shahla Khalafova

Baku State University, Azerbaijan

44. Ecological investigation of the impact of forest-vegetation cover dynamics on bare soil (lepidolite mineral) exposures in the study area using spaceborne remote sensing technologies

Akif Aghbabali, Valida Mammadaliyeva, Numuna Naghiyeva

Baku State University, Azerbaijan

45. Evaluation of the breeding value of barley genotypes introduced from icarda under the rainfed conditions of Gobustan

Aysel Labazanova

Resesarch Institute of Crop Husbandry, Azerbaijan

46. **Analysis of soil indicators and biomass in summer pastures of Guba region using remote sensing methods**

Goshgar Mammadov, Emil Poladov

Baku State University, Azerbaijan

47. **Continuous education for a green future**

Sevda Iskenderova

Baku State University, Azerbaijan

48. **Sustainable future: integrated development of earth and ecological sciences**

Nuray Agazada, Tamilla Karimova

Odlar Yurdu University, Azerbaijan

49. **Green raw materials for 3D bioprinting in the food industry**

Khadija Valiyeva

Baku State University, Azerbaijan

50. **Ways to increase agricultural land productivity in the Ismailli district**

Hayat Shakiliyeva

Baku State University, Azerbaijan

51. **Ecological assessment of the impact of the aerosol optical depth (AOD) index on forest-vegetation cover (NDVI) and hydrological conditions (MNDWI) in the Hakari River basin using geospatial technologies**

Valida Mammadaliyeva¹, Gunel Heydarzada¹,

Vusala Nasirova²

¹*Baku State University, Azerbaijan*

²*Research Institute of Aerospace Informatics, Azerbaijan*

52. **Integrating cloud point extraction and ICP-OES: an ecologically safe approach in analytical chemistry**

Fidan Yolchiyeva

Baku State University, Azerbaijan

53. The role of Gizilaghaj National Park in biodiversity conservation

Akif Aghbabali, Ramil Hasanov

Baku State University, Azerbaijan

54. The impact of environmental disasters caused by armed conflicts in Garabagh on climate change

Sona Osmanova

Baku State University, Azerbaijan

55. Assessment of the ecological sustainability and agroecological advantages of various substrates for greenhouse vegetable cultivation

Sara Sadigli

Baku State University, Azerbaijan

56. The influence of different growing seasons on the baking quality of cereals: a study of four soft wheat varieties

Leyla Hasanova

Research Institute of Crop Husbandry, Azerbaijan

57. Impacts of hazardous atmospheric events on the agricultural sector

Ilaha Ibrahimova

Ministry of Ecology and Natural Resources, Azerbaijan

58. Challenges and ways to improve food resilience in the face of climate change in Azerbaijan

Mirsultan Ismailov

Baku State University, Azerbaijan

59. A study on the demographic patterns of the Karabakh economic region of the Republic of Azerbaijan

Saleh Naghiyev, Chingiz Galandarov, Imran Bayramov

Baku State University, Azerbaijan

60. **Analysis of the current population of the Republic of Azerbaijan and its development dynamics**

Gabil Samadov

Baku State University, Azerbaijan

61. **Analysis of the spread of diseases in rural settlements of the Gusar District**

Samir Ahmadov, Raziye Talibova

Baku State University, Azerbaijan

62. **Classification and development of cultural monuments of local, national, and global significance in Azerbaijan**

Gunay Musayeva

Baku State University, Azerbaijan

63. **Ecological tourism as a new direction in tourism**

Nargiz Chandirli, Rena Umudova

Baku State University, Azerbaijan

64. **Investigation of drying processes in *Pinus Eldarica Medw.* using the plant photosynthesis meter 3051C device**

Samira Baghirova, Leyla Javadova, Lala Nasirli,

Arzu Akhundova, Jamala Agayeva, Lala Jalilova

"Dendrology Garden" public legal entity, Azerbaijan

65. **Geographical names of turkish origin in Russia**

Elkhan Nuriyev

Baku State University, Azerbaijan

66. **Is real ecological tourism possible? An assessment of ecotourism resources and practices (using the example of Lankaran-Astara economic region)**

Abdulla Rzayev

Institute of Geography named after acad. H.Aliyev, Azerbaijan

67. Modern condition and prospects of development world ecotourism

Gunel Valiyeva

Baku State University, Azerbaijan

68. Structure, dynamics and current state of agrolandscapes and urban complexes (Guba-Khachmaz region)

Rashad Sadullayev

Baku State University, Azerbaijan

69. The geography of geopolitical corridors: spaces of interaction and competition

Irada Ahmadova

Baku State University, Azerbaijan

70. Urbanization and migration: assessment of ecological stress factors in urban areas and the role of migration in regional development

Shafa Abiyeva, Tamilla Karimova

Odlar Yurdu University, Azerbaijan

71. Anthropogenic impacts on the morphodynamics of river valleys on the southern slope of the Greater Caucasus

Shafiga Humbatova, Aygun Azizova

Baku State University, Azerbaijan

72. The role of natural and cultural heritage in international tourism

Gulnara Jafarova, Lala Jafarli

Baku State University, Azerbaijan

73. Common directions of geography and astrophysics sciences

Magsad Gojamanov, Ahmed Hasanov

Baku State University, Azerbaijan

74. **Geographical analysis of the impact of climate change on cotton farming in Imishli district**

Vugar Karimli, Siraj Abdulazimli
Baku State University, Azerbaijan

75. **The level of urbanization in cities located downstream of the Kura River**

Elnur Nagiyev
Baku State University, Azerbaijan

76. **Application of cartographic-information methods in the study of landscape components for various purposes**

Ramiz Ahlimanov, Nurana Afandiyeva
Baku State University, Azerbaijan

77. **Contemporary scanning technologies and their role in remote sensing of the earth**

Afqan Talibov, Irina Verpatova
Baku State University, Azerbaijan

78. **Development of modern geodetic support and monitoring methods for marine hydraulic structures.**

Faig Valizada
Baku State University, Azerbaijan

79. **Prospects for implementing the triple helix model in the Guba-Khachmaz economic region**

Husein Huseinov
Baku State University, Azerbaijan

80. **Socio-economic development dynamics of the Guba-Khachmaz economic region: potential and prospects**

Elvira Huseynova
Baku State University, Azerbaijan

81. Identifying significant precipitation trends in Azerbaijan using mann-kendall test: assessing local climate change manifestations

Tamerlan Mehdiyev, Asgar Mammadov

Baku State University, Azerbaijan

82. Characterization of factors influencing the transformation of forest landscapes on the north-eastern slope of the Lesser Caucasus

Shafiga Humbatova, Sabina Aliyeva

Baku State University, Azerbaijan

83. Analysis of the dissolution of the surface of the mountain-forest belt of the Greater Caucasus under the influence of various factors

Ilham Mardanov¹, Mehman Mehbaliyev²

¹*Sumgayit State University, Azerbaijan*

²*Baku State University, Azerbaijan*

84. The importance of aerospace research methods

Mubariz Orujov, Leylan Huseynli

Baku State University, Azerbaijan

85. Hydrological basin ranking based on drainage morphometry using geospatial technologies: a case study of the Kurmukchay watershed

Nurlan Azizli

Baku State University, Azerbaijan

86. Main scientific issues of space geodesy

Magsad Gojamanov¹, Alishir Ismayilov²

¹*Baku State University, Azerbaijan*

²*Azerbaijan University of Architecture and Construction, Azerbaijan*

87. 1D and 2D modeling for integrated interpretation of electromagnetic data of Perikishkul, Azerbaijan

Avaz Mammadov

Baku State University

88. Climatic characteristics of the Absheron peninsula and their role in soil formation processes on the peninsula

Chingiz Qalandarov

Baku State University, Azerbaijan
