

**MINISTRY OF EDUCATION OF TURKMENISTAN  
ACADEMY OF SCIENCES OF TURKMENISTAN**



**"SCIENCE, TECHNOLOGY AND  
DEVELOPMENT OF INNOVATIVE  
TECHNOLOGIES", DEDICATED TO THE  
30TH ANNIVERSARY OF INDEPENDENCE OF  
TURKMENISTAN**

**International Scientific Conference**

**P R O G R A M M E**

**June 12-13, 2021**

**Ashgabat – 2021**

**Dear Mr/Ms \_\_\_\_\_!**

We would like to invite you to participate in the online International Scientific Conference "Science, Technology and Development of Innovative Technologies", dedicated to the 30th anniversary of Independence of Turkmenistan, which will be held according to the Decree of the President of Turkmenistan in Ashgabat on June 12-13, 2021.

**ORGANIZING COMMITTEE**

**AGENDA OF THE INTERNATIONAL SCIENTIFIC  
CONFERENCE "SCIENCE, TECHNOLOGY AND  
DEVELOPMENT OF INNOVATIVE TECHNOLOGIES",  
DEDICATED TO THE 30TH ANNIVERSARY OF  
INDEPENDENCE OF TURKMENISTAN**

**Ashgabat, June 12-13, 2021**

*(Scientific Conference is held in online format)*

**June 12**

**09:00 – 10:00** Visiting the exhibition of innovative technologies at the venue

**10:00 – 10:20** Opening ceremony of the Scientific Conference  
**Congratulatory address of Esteemed President of Turkmenistan Gurbanguly Berdimuhamedov to the participants of the online International Scientific Conference "Science, Technology and Development of Innovative Technologies", dedicated to the 30th anniversary of Independence of Turkmenistan**

**10:20 – 13:00** Plenary Meeting of the Scientific Conference

**13:00 – 14:00** Awards ceremony of the winners of the scientific competition amongst the youth of Turkmenistan

*Venue:* Oguz Han Engineering and Technology University of Turkmenistan

**June 13**

**09:00 – 13:00** Sections of the Scientific

Conference **13:00 – 14:00** Break

- 14:00 – 15:30** Sections of the Scientific Conference
- 16:00 – 18:00** The awarding ceremony of the winners of the research competition among young scientists  
*Venue:* Magtymguly Turkmen State University  
Related High Educational Institutions and Center of Technologies
- 16:00 – 17:30** Closing session of the Scientific Conference  
**Address of the participants of the online International Scientific Conference "Science, Technology and Development of Innovative Technologies", dedicated to the 30th anniversary of Independence of Turkmenistan to the Esteemed President of Turkmenistan Gurbanguly Berdimuhamedov**  
*Venue:* Oguz Han Engineering and Technology University of Turkmenistan

# PROGRAMME

## INTERNATIONAL SCIENTIFIC CONFERENCE "SCIENCE, TECHNOLOGY AND DEVELOPMENT OF INNOVATIVE TECHNOLOGIES" DEDICATED TO THE 30TH ANNIVERSARY OF INDEPENDENCE OF TURKMENISTAN

### PLENARY MEETING

June 12-13, 2021

*Venue:* Oguz Han Engineering and Technology  
University of Turkmenistan

- 1. Murat Zhurinov** (Kazakhstan)  
President of the National Academy of Sciences of the Republic of Kazakhstan, academician  
The role of science in modern society
- 2. Isa Habibbeyli** (Azerbaijan)  
Vice President of the National Academy of Sciences of Azerbaijan, academician  
Azerbaijan-Turkmen scientific and literary relations: from common roots to modern development
- 3. Kiyong Ko** (Korea)  
The Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT) of the Regional Institute of Economic and Social Commission for Asia and the Pacific (ESCAP), Ph.D  
UN SDG Goals and Frontier ICT Technologies for Sustainable Development

4. **Si Hongjun** (Japan)  
Chief Researcher, Seismological Research Institute Inc,  
Ph.D, professor  
Ground motion estimation in Ashgabat city during the  
scenario earthquakes
5. **Behrooz Abtahi** (Iran)  
Director of the Iranian National Institute for Oceanography  
and Atmospheric Science, Ph.D, professor  
Plastic and microplastic pollution as a rising ecological  
threat in the Caspian Sea
6. **Wang Xuanbin** (China)  
Director of the “Hubei Key Laboratory of Wudang  
Local Chinese Medicine Research, Hubei University of  
Medicine, China”. Ph.D  
Polygoni Multiflori on hepatocellular carcinoma: a folk  
drug and new effects
7. **Sergey Chizhik** (Belarus)  
First Deputy Chairman of the Presidium of the National  
Academy of Sciences of Belarus, academician  
Innovative potential of the National Academy of Sciences  
of Belarus at the present stage
8. **Robert Janz** (Netherlands)  
Professor at the University of Groningen  
Supporting science collaboration in the 21st century
9. **Iskandar Mirabdullayev** (Uzbekistan)  
Professor of the Tashkent State Agrarian University  
Artemia of the Aral Sea – 25 years of research, 10 years  
of fishing for a new type of biological resources for  
Uzbekistan

- 10. Hanno Schaumburg (Germany)**  
Professor at the Hamburg University of Technology  
Green Hydrogen Energy
- 11. Jacek Gajewski (Poland)**  
International Project Coordinator, Cyber LAB Principal  
Investigator of the National Center for Nuclear Research,  
Ph.D, professor  
Testing cybersecurity of Industrial Control Systems and  
Programmable Logic Controllers
- 12. Andrey Zaitsev (Russian Federation)**  
General Director "Azart" Ltd (resident of the Skolkovo  
Innovation Center)  
Innovative rotary vane internal combustion engine
- 13. Dr. Tao Zhan (UNESCO IITE)**  
Director, UNESCO Institute for Information Technologies  
in Education (UNESCO IITE)  
Technology reshaping education: opportunities and  
challenges

## SECTION I

### NANOTECHNOLOGY, CHEMICAL TECHNOLOGIES, THE STUDY OF NEW MATERIALS, POWER ENGINEERING AND ENGINEERING SCIENCES

**Venue:** Yagshygeldi Kakayev International University  
of Oil and Gas

**Chairman of section:** **Rahmanguly Esedulayev** (Head of Division  
of Physics and Mathematics, Chemical and  
Geological Sciences of AST)

**Vice-Chairman of section:** **Ovezov Muhammetrahym** (Vice Rector  
for Scientific Work of Yagshygeldi Kakayev  
International University of Oil and Gas)

**Secretary:** **Atayev Patshaguly** (Head of Departments  
Yagshygeldi Kakayev International University  
of Oil and Gas)

1. **Koichi Hasegawa** (Japan), **Sergey Abaseyev**  
(Turkmenistan)

Assessment of earthquake parameters in Ashgabat city  
during the scenario earthquakes

2. **Takaho Kita** (Japan), **Amandurdy Hojayev**  
(Turkmenistan)

$V_{s_{30}}$  parameter estimation based on PS-logging  
measurements

3. **Chengcheng Tian** (China)

A new trick for an old support: stabilizing gold  
nanoparticles and single atoms on  $\text{LaFeO}_3$  perovskite for  
 $\text{CO}_2$  oxidation



4. **Su Zhang** (China)  
Advanced carbon materials from coal reconstruction
5. **Chunshan Li** (China)  
High-value petroleum utilization technologies
6. **Dr. Zahid Ali Ghazi** (Pakistan)  
Li-doped microporous polymers/graphene nanocomposite for advanced Li metal batteries
7. **Telman Aliyev, Tofik Babayev, Nailya Musaeva, Rauf Kadymov, Ana Mamedova** (Azerbaijan)  
Intelligent NOISE control technologies for initiation of accidents on railways in seismic regions
8. **Nailya Musaeva, Telman Aliyev, Bahruz Gazyzadeh** (Azerbaijan)  
Early monitoring technologies of the most dangerous zones of bridge structures using a higher-order model
9. **Ali Abbasov, Gambar Guluyev, Telman Aliyev, Fakhrad Pashayev** (Azerbaijan)  
Intelligent seismo-acoustic earthquake preparation alarm system
10. **Jamshed Kurbonov, Ksontura Ksolturayev** (Uzbekistan)  
Determination of the dielectric properties of wheat and wheat flour
11. **Najibullohi Ruzi** (Tajikistan)  
Experimental calculation and selection of the type and structure of the dam with a low-permeable anti-filtration barrier in the form of a screen
12. **Holov Holmakhmad** (Tajikistan)  
Flotation of antimony-mercury-goldbearing ores in the lower horizons of the Dzhizhikrut deposit

- 13. Hikmet Ibragimov, Sara Melikli, Zenfira Ibragimova, Rena Akhmedova** (Azerbaijan)  
Catalyst Ni- $\gamma$ -Al<sub>2</sub>O<sub>3</sub> for the synthesis of nanocarbon by decomposition of natural gas
- 14. Arif Heydarov, Chingiz Qashqai, Gulnar Alyshanli** (Republic of Azerbaijan) Innovation of Azerbaijani scientists in "alunit-kaolinite technology"
- 15. Lusine Harutyunyan** (Armenia), **Vladimer Tsitsishvili, Nanuli Dolaberidze, Nato Mirdzveli, Manana Nijaradze, Zurab Amiridze** (Georgia), **Nagima Dzhakipbekova** (Kazakhstan)  
Natural zeolites of Armenia, Georgia and Kazakhstan in solving the problem of water purification and disinfection
- 16. Alexey Trukhanov** (Belarus)  
Technology of creation of electric energy accumulation systems
- 17. Alexey Kapansky** (Belarus)  
Increasing the energy efficiency of water canals by reducing technological water consumptions
- 18. Ibrahim Güneş** (Turkey)  
Design of 300 kW electric vehicle charging station
- 19. Vladislav Lutsenko, Tatiana Golubenko, Olga Lutsenko** (Ukraine)  
Influence on the mechanical properties of the degree of alloying of chromomolybdens-containing rolled steel
- 20. Giorgi Tsintskaladze, Tinatin Sharashenidze, Teimuraz Kordzakhia, Marine Zautashvili, Manana Burjanadze, Giorgi Antia, Nina Mumladze** (Georgia)  
Long-acting complex zeolite fertilizer obtained by nanotechnology

21. **Iamze Beshkenadze, Maia Gogaladze, Nazibrola Klarjeishvili, Vakhtang Gabunia** (Georgia)  
Synthesis and research of chromium chelates
22. **Vladimer Tsitsishvili, Nanuli Dolaberidze, Manana Nijaradze, Nato Mirdzveli, Zurab Amiridze, Giorgi Tsintskaladze, Vakhtang Gabunia, Bela Khutsishvili** (Georgia)  
Properties and application of natural clinoptilolite
23. **Natela Khetsuriani, Elza Topuria, Irina Mchedlishvili, Madlena Chkhaidze** (Georgia)  
Individual composition of crystalline components of Georgian petroleum
24. **Rahmanguly Esedulayev, Hajymuhammed Geldiyev**  
Development of a method for purification of natural gas from hydrogen sulfur in the process of the development of low-sulfur deposits using physical and chemical absorbers
25. **Yolly Myradov, Begli Atayev**  
Problems in designing asphalt concrete coverings and methods for eliminatiing these
26. **Tachmyrat Oremedov**  
Peculiarities of the porousconcrete in construction
27. **Muhammetnazar Eminov, Hasan Sharipov**  
Protection of Ashgabat city from mud stream
28. **Parahat Orazov**  
Treatment of exhaust gases at wet process cement plants using the Venturi scrubber
29. **Aynur Gochakova, Guljeren Tagieva**  
Technical specifications of road-building materials in accordance with engineering and technical conditions

- 30. Berdishukur Jumayev**  
Diffraction and diffraction extremums of light
- 31. Jumagylych Mammedov, Umbar Amandurdyev**  
Main aspects of complex approaches to implementation of innovation technologies in the railway sector
- 32. Govher Allamuradova, Esger Annahanov**  
Obtaining sulfur additives on the basis of sulfur formed during natural gas purification
- 33. Nurmet Hojaberdiyev, Gulbahar Allanazarova**  
Urgency of fresh underground waters under the channel of lenses in Dashoguz velayat
- 34. Vepa Shohumov, Serdar Amanliyev**  
Heat balance of rectification columns
- 35. Myrat Bayramklychev**  
Features of the composition of natural gas and gas condensate deposit of Dovletabat
- 36. Irina Luryeva**  
Analysis of technologies for neutralizing hydrogen sulfur by natural absorbers
- 37. Parahat Muhammedov**  
Features of the development of the Malay field
- 38. Chary Paytykov, Selim Paytykov**  
Oil and gas potential of the South-Caspian basin at the present stage of geological and geophysical research
- 39. Selim Paytykov**  
The relevance of improving the methods of processing gas-dynamic researches of wells
- 40. Bayrammyrat Pirniyazov**  
Ways of identification of sulfurless gas deposits in the transition zone of sandstone substitution

41. **Batyr Taganov**  
Problems for justification of well design in fields with a large floor of gas content and complex gas composition
42. **Ogulsheker Esedulayeva**  
Results of the conducted gas hydrodynamic studies of wells in the Gazlydepe field at stationary modes
43. **Ishanmuhammet Handovletov, Myrat Durdyev**  
Nanotubes – safe storage of hydrogen
44. **Muhamed Kerimi (Turkmenistan), Nikolay Sidnyaev (Russia)**  
Justification of the need for studying the joint propagation of quasiparticles in a solid-state structure
45. **Gulnazik Saparmyradova**  
Heated air temperature distribution calculation a in heating line
46. **Muhammetrahym Ovezov, Arslan Geldimyradov**  
Effect of hydrocarbons  $C_5-C_7$  on the absorption of acid gases
47. **Arslan Geldimyradov**  
Main directions of organization of underground gas storage in Turkmenistan
48. **Serdar Agaliyev, Seyilbay Sopiye**  
Optimal composition of sulfur concrete for use in the oil and gas industry
49. **Batyr Mammedov, Gadam Garayev**  
Implementation of nanotechnology achievements to increase production well efficiency
50. **Mekan Artykov**  
Risks in the oil and gas industry
51. **Aman Garahanov, Muhammet Gapurov**  
Geological-tectonical condition and the macroseismic effect of an earthquake

- 52. Rahat Nepesov, Hajymuhamet Geldiyev**  
Automation of designing the process of operation of gaslift wells
- 53. Rahmanguly Esedulaev, Ereshbai Azimov**  
The method of pumping high-viscosity oil and paraffin oil from pipelines
- 54. Robert Mirzin, Enesh Charyeva**  
Ways to organize manual input of large amounts of data
- 55. Amandurdy Hojayeov, Arzygul Shyhnepesova**  
Preliminary results of the study of soil properties in the area “Taze zaman – 1”
- 56. Lyudmila Karseva, Sergey Izyumov**  
Methods of seismic monitoring to determine the degree of seismic hazard in the territory of Turkmenistan
- 57. Tatyana Panfilova**  
Relationship of the geodynamic activity of the fault and quantitative characteristic of anomalies
- 58. Emil Esenov**  
Conditions of building the airport terminal complex in Turkmenabat
- 59. Dovletberdi Elyasov**  
Hydrocarbon geology of Neogene deposits in the south of the West Turkmen Depression and coastal waters
- 60. Yazberdi Byashimov, Maya Shahkuliyea**  
Influence of pelitic matter on the reservoir-filtration characteristics of the Nebitlige reservoir
- 61. Maysa Melyaeva**  
Gyzylgum trough – new gas-condensate-oil region of Western Turkmenistan

- 62. Gurtmyrat Motukov, Nurmhammet Gurbanmammedov**  
Properties of solving multipoint task for parabolic equations
- 63. Nurmhammet Gurbanmammedov**  
Characteristics of solving multipoint task for nonlinear hyperbolic equation
- 64. Aydyn Ahmedov**  
Mass-spectrometric analysis of oxyacid obtained by oxidation of naphthene hydrocarbon concentrates
- 65. Gochmyrad Amannazarow**  
A new way to produce high quality bitumen from paraffinic oil
- 66. Maysa Annaorazova, Novryz Amankulyyev**  
Technology for extracting “bio-emulsion” from “calcareous algae” grown by combination of alternative energy sources
- 67. Lyudmila Atamalova, Amangul Arabalieva**  
Study of the acidification process of high-iodine water in order to increase the degree of iodine extraction
- 68. Patshaguly Atayev, Palivan Rejepov**  
Enrichments of oxygen by the method of adsorptions
- 69. Jennet Atayeva**  
Bactericidal and fungicidal compounds - new compounds based on iodinated fatty acids
- 70. Hallymyrat Ataev, Maya Rejepova**  
Associated and formation waters of oil and gas fields in Western Turkmenistan and prospects for their use
- 71. Magtymguly Resulgulyev, Meylis Babayev**  
Methods of obtaining industrial products from waste of chemical production

- 72. Leyla Berkeliyeva, Ogulnabat Atayeva**  
Treatment of waste waters from building sites
- 73. Oraz Charyyev**  
Possibilities of obtaining lithium chloride from industrial waters concentrated in natural conditions
- 74. Dayanchmyrat Chopanov, Patshaguly Atayev**  
Pipes installations of sulfur concrete mixtures and preference
- 75. Dayanchmyrat Chopanov**  
Advantages of polymeric sulfur in sulfur concrete
- 76. Gulalek Durdyveva, Ravshen Ovezov**  
Local mineral raw material additives and their effect on the quality of cement
- 77. Durdymyrat Gadamov, Jennet Atayeva**  
Synthesis of biological active substances based on fatty acids and iodine
- 78. Arslan Geldimyradov, Muhammetrahym Ovezov**  
Technological prospects for the use of sulfur concrete
- 79. Tatyana Gichkalova, Dovletgeldi Orazgulyev**  
Methods for preventing corrosion in pipelines
- 80. Mahym Gubyeva, Agamyrat Saparov**  
Obtaining road bitumen and sulfur based composite materials
- 81. Irina Gurtliyeva, Myratdurdy Keymirov**  
Possibilities of gossipol resin using as a corrosion inhibitor of metals in carbon dioxide and hidrogen sulphide environments
- 82. Aziz Hangeldiyev, Myratdurdy Keymirov**  
Production of tehncial mixed coagulant from spent catalist of a millisecond catalitic cracking (MSCC)



- 83. Nazik Hudayberdiyeva, Didar Annagulyyev**  
Efficiency of various toxic gas emission neutralizers in sulfur concrete technology
- 84. Akjagul Ishanova**  
Main objectives in the protection of gas equipment from corrosion
- 85. Sona Kerimova**  
Prospects of hexene-1 production in Turkmenistan
- 86. Myratdurdy Keymirov**  
Targeted de-asphalting of acid tar to obtain optimal raw materials for production
- 87. Merdan Atabayev, Chary Kuliyeu**  
Collector-drainage waters of the Amyderya and their effective use
- 88. Gurbandurdy Mawyyev, Bagtyyar Garayev**  
Investigation of the hydrocarbon composition and properties of liquid cracking products in polymer production
- 89. Dovletgeldi Movlamov, Shaja Ayliyev**  
Drilling fluids based on celestine materials
- 90. Meretmuhammet Hudayberdyev, Hudayberdi Muhammedov**  
Technology of getting two products from silkworm throughout the year by combining alternative sources of energy
- 91. Kakamyrat Muhammetmyradov, Ishandurdy Meretliyev**  
Waste water disposal technology using alternative energy sources
- 92. Bayramgozel Muradova, Toyli Muradov**  
Chemical composition of oils refining at the Seydi refinery

- 93. Rejepnur Nurberdiyev, Alty Aydogdyev**  
Local raw materials based cement production
- 94. Gulli Orazdurdyeva**  
Obtaining 1-aminocyclic acids
- 95. Halmyrat Orunbayev**  
Synthesis of carbon nanotubes by gas-phase chemical deposition
- 96. Patma Nurjanova**  
Analysis of physical-chemical properties of the pyrolysis residue
- 97. Gurbandurdy Pirmedow**  
Lithium and sodium and their biologic activity
- 98. Azat Seytjanov**  
Possibilities of using local raw materials in production
- 99. Tatyana Shiriyeva**  
Distribution of aromatic carbohydrates in condensate fractions of north-eastern and south-eastern natural gas fields
- 100. Perhat Soltanmyradov, Bayram Hudayberdiyev**  
Scientific basis for obtaining magnesium oxide and heat-resistant magnesite bricks from natural raw materials of Turkmenistan
- 101. Parahat Shovkedov**  
Qualitative and quantitative analysis of trace elements in bakery products by inductively coupled plasma mass spectrometry
- 102. Yazpolat Keriyev**  
Obtaining nitrogen-humic fertilizers based on urea and oxidized brown coal

- 103. Hojanepes Evzhanov, Oguljema Begmyradova**  
Chemical method of neutralization of acidity of the waste water from iodine-bromine production
- 104. Mamajan Shukurova**  
Obtaining pectin from cotton waste
- 105. Sapa Nurberdyev**  
Fractional composition of oil in Kamyshlyja oil-field
- 106. Pena Chopanov**  
Efficient technology for production of biogas and high quality organic waste
- 107. Tumar Kakabayeva**  
Reliability and capacity of road surfaces in Turkmenistan conditions
- 108. Mahri Hojamova, Govher Melebaeva**  
Photosensitivity spectrum of nanostructured Ni-n-GaAs Schottky barriers
- 109. Daulbay Melebaev, Guljahan Orazova**  
Photosensitivity of Au-Ga<sub>2</sub>O<sub>3</sub>(Fe)-n-GaP nanostructures in ultraviolet spectral region
- 110. Shabike Gurbanova, Merdan Rustamov**  
Direct current tercolation mechanism in nanostructured Au-n-Si diode structures
- 111. Larisa Agayeva**  
Construction in the stably developing country of the world
- 112. Rovshen Seyitliev, Larisa Agaeva**  
Urgency of establishing engineering and seismometric networks in Turkmenistan
- 113. Agajuma Zakirov, Genlik Bekova**  
Dynamic properties of collapsible soils in earthquake-prone areas

- 114. Dovran Agajanov, Bayramgeldi Gurbandurdyev**  
Significance of marketing methods in power engineering
- 115. Atajan Hojalyyev, Muhammetaman Saryyev**  
Advantages of steam-gas turbine power plants operating in compatible cycle
- 116. Arslan Janmyradov, Isgender Atdayev**  
Reduction in the loss of warm water supplied to heating systems.
- 117. Aganiyaz Jumayev**  
Farthest mini and micro networks of the energy supply system
- 118. Bayram Jumayev**  
Calculation of energy supplied to heat living houses
- 119. Eziz Magtymov, Iskender Ashirov**  
The importance of learning the basic use of unconventional and renewable energy sources in higher education institutions
- 120. Ogulgozel Muhammedova, Ayjema Muhammedova**  
Conducting scientific research of climatic conditions at wind power plants
- 121. Serdar Nazarov**  
Innovative solutions in accumulating solar and wind energy
- 122. Oguloraz Saparlyeva, Nazar Ataev**  
Comparison of the possibility of using biogas from different organic waste
- 123. Kakageldi Saryev, Jumanazar Batmanov**  
Development of greenhouse heating technology based on the use of local resources

- 124. Kakageldi Saryyev**  
Combined system of solar photoelectric and wind power stations
- 125. Begench Tirkishov, Shabasan Berdiyev**  
Scientific technical analysis of increasing operation capacity of gas turbine installation in weather conditions of Turkmenistan
- 126. Guncha Annayeva**  
Geodetic substantiation of the “Ak oylar” building in Turkmenistan
- 127. Sapargeldi Danatarov, Nurbibi Danatarova**  
Thermal scheme and calculations of combined gas-turbine installations
- 128. Hydyr Sapparliyev**  
Analysis of the horizontal (lateral) diffraction
- 129. Meretdurdy Gurbanyazov, Annasahat Novruzhanov**  
Choice of the method of desalinating collectors water
- 130. Muhammedowez Gurbannyazov, Nasiba Charykulyyeva**  
Technology of fabricating and determining the characteristics of a perovskite solar cell
- 131. Maral Annaberdiyeva, Daulbay Melebayev**  
Photoelectrical characteristics of the Au-n-GaP Shottky photodiodes
- 132. Kakageldi Annagulyyev**  
Consideration of the feasibility of using photovoltaic plants to supply electricity to communication stations, located in a remote area from the electrical system
- 133. Guvanch Agajanov, Ahal Gurbanyazov**  
Problem of hydrate formation in gas pipelines

- 134. Ahal Gurbanyazov, Ayna Chopanova**  
Accumulation system for solar installation regenerating saturated amines
- 135. Sergey Abaseev, Arzygul Shyhnepesova**  
An innovative method for the study of the deep structures in the crust and the uppermost mantle of the earth, based on the regional seismic stations network 3-c observations of the teleseismic events
- 136. Svetlana Ahmedova, Lyudmila Kartseva**  
Seismic regime in the Bojnur earthquake focal zone
- 137. Ejegul Annagulyeva**  
Importance of international cooperation in enhancing the efficiency of research works in the field of seismology
- 138. Umida Hojayeva, Ejegul Annagulyeva**  
Preliminary results of the study of soil properties in the area “Taze zaman – 2”
- 139. Oksana Ladeyshchikova, Alexander Ataev**  
Combined magnetic surveys for identification and study of earthquake precursors in the Kopetdag seismically active region
- 140. Lyudmila Bezmenova**  
Intensity of seismic impacts of tangible earthquakes in Turkmenistan
- 141. Bayrammyrat Atamanov, Orazmuhammet Gurbanyazov**  
System of providing buildings with natural lighting
- 142. Orazmuhammet Gurbanyazov, Serdar Nazarov**  
Increasing the reliability of energy supply of solar units
- 143. Nuryagdy Nazarov**  
Investigation of the structural perfection of the epitaxial layers of GaP and GaAs on silicon substrates

## SECTION II

### BIOTECHNOLOGY, MOLECULAR BIOLOGY, AGRICULTURE, ECOLOGY AND GENETICS

*Venue:* Center of Technology of the Academy of Sciences of Turkmenistan

*Venue:* Center of Technologies

*Chairperson* **Altyn Rahmanova** (Turkmenistan)

*of section:*

*Vice Chairman* **Saparmyradov Ashyrmuhammed** (Agricultural

*of section:* Sciences Department Head, AST)

*Secretary:* **Atayeva Ayna** (Laboratory Head, Technology Center of AST)

1. **Suping Guo, Jindong Wang, Lin Bi** (China)  
Collection, isolation and evaluation of special mushroom resources
2. **Khalil Raza, Manzoor Hussain Soomro** (Pakistan)  
Greening growth: how it can deliver sustainable development in the ECO region?
3. **Anicet Agossa Batcho, Sameera Hassan, Fatima Batool, Muhammad Bilal Sarwar, Bushra Rashid** (Pakistan)  
Heat shock protein gene induces heat stress tolerance in transgenic cotton (*Gossypium hirsutum*)
4. **Muhammad Shafique, Abida Shehzadi, Ahmad Ali Shahid** (Pakistan)  
Development of 21-plex for the simultaneous detection of autosomal, Y and X-chromosomal STRS

5. **Ahmad Ali Shahid, Saliha Bashir, Muhammad Shafique** (Pakistan)  
Phenotypic variations based on pigmented traits and iris features in Pakistani population
6. **Ahmad Ali Shahid; Naila Shahid; Ayesha latif; Saira Azam; Aneela Yasmeen; Tahir Rehman Samiullah; Amina Yaqoob; Muhammad Azam Ali; Ayesha Imran; Sana Shakoor; Ujala Nasir; Sara Ajmal; Rida Hameed; Sahar Sadaqat; Abdul Qayyum Rao** (Pakistan)  
Cotton fiber quality improvement through overexpression of fiber related traits
7. **Abdul Qayyum Rao, Naila Shahid, Ayesha Latif, Saira Azam, Aneela Yasmeen, Tahir Reman Samiullah, Amina Yaqoob, Muhammad Azam Ali, Sana Shakoor, Ayesha Imran, Ujala Nasir, Sara Ajmal, Sahar Sadaqat, Rida Hameed, Ahmad Ali Shahid** (Pakistan)  
Genome editing and genetic modification approaches for crop traits improvement
8. **Anvar Sherimbetov, Sanzhar Sherimbetov, Dilshod Ruzmetov, Bakhtiyor Adilov** (Uzbekistan)  
Study of phytopathogenic and endophytic fungi selected from plants growing on the drained bottom of the Aral Sea
9. **Kholov M. Sh., Jafari B., Khalikova M. Dzh., Karambakhshov Kh.Z., Saidov A.A., Samikhov Sh.R., Langer P., Safarov S.Sh.** (Tajikistan)  
Synthesis and inhibitory properties of new benzothiazolo[3,2-a] pyrimidin-4-ones
10. **Durna Babek kyzy Agamalieva** (Azerbaijan)  
Research of bactericide-inhibitor properties of alkylamine complexes obtained on the basis of succaric acid



11. **Zeynalov I.M., Makhmudova W.K., Pirieva E.G, Ibrahimova V.I.** (Azerbaijan)  
Climatogeographic patterns in the assessment of radiation safety in Azerbaijan
12. **Gatiba Hasanova, Atabek Jahangirov, Khanbala Rustamov** (Azerbaijan)  
Climate conditions and quality of bread wheat grain
13. **Nargiz Sultanova, Suman Mammadhasanova, Gara Fataliev** (Azerbaijan)  
Effect of meloidogyne SPP. nematodes on the level of malondialdehyde and photosynthetic pigments in potato plant
14. **Lyudmila Rukshan, Elena Novozhilova** (Belarus)  
Respiratory intensity and equilibrium moisture of pea seeds of Belarusian breeding
15. **Omar Lomtadze, Ketevan Ebravidze, Nunu Shalvashvili, Nino Lomtadze** (Georgia)  
New effective composition against animal ectoparasites
16. **Egor Lebedko** (Russian Federation)  
Innovative and investment solutions in the technology of production of premium "marble" beef in the Bryansk region
17. **Natalia Bezborodova, Olga Sokolova, Veronika Kozhukhovskaya** (Russian Federation)  
Distribution of genetic markers of antibiotic resistance of the microbiota of reproductive tract and mammary gland of cows with inflammation

- 18. Noreen Aslam, Muhammad Sameeullah, Songul Gurel, Ekrem Gurel (Turkey)**  
Selenium accumulation in tissues of selenium treated rice (*Oryza sativa* L. indica) and the expression pattern of sulfate transporter genes
- 19. Christian Welscher (Germany), Karryeva Shirin (Turkmenistan)**  
Central Asian desert initiative – conservation and sustainable use of cold winter deserts of Central Asia (Turan)
- 20. Azat Bazarov, Maya Lollekova**  
Isolation of biologically active substances from underground organs of licorice (*Glycyrrhiza glabra* L.)
- 21. Akjagul Berdiyeva, Dovletmyrat Porrykov**  
Perspectives of using pigment containing plants in the food industry in Turkmenistan
- 22. Aynur Gochakova, Annamuhmet Saparberdiyev**  
Method of protecting populated areas in foothills from flooding
- 23. Hoshgeldi Agakishiev**  
Triticale selection in Turkmenistan
- 24. Gulbahar Ahmetyarova, Nasyrova Oguljennet**  
Obtaining products based on the processing of organic production waste
- 25. Mahrijemal Allamyradova**  
Results of spent selection works to breed salty stable varieties of wheat
- 26. Rejepnur Nurov, Kadyr Amanov**  
Scientific study of the influence of ecologically pure organomineral fertilizers on soil fertility

- 27. Maral Amanova**  
Ecological and morpho-physiological adaptation of birds to arid conditions
- 28. Tagan Annagulyev**  
Student science in the competition of young scientists
- 29. Toylymammet Annamammedov, Yolbars Bayramov**  
Special features of epizootology of babesiasis, eumitosis and their mixed forms in sheeps
- 30. Charymyrat Arazov, Merdan Tayev**  
Study of biological properties of anthrax vaccine strains
- 31. Gulistan Arazova**  
New “Hasylyly” (“High-yield”) variety of winter barley
- 32. Serdar Ashyrov, Ayyt Annayev**  
Loosening of heavy soils by mechanical and biological ways in the conditions of Turkmenistan
- 33. Myrat Atajanov, Emil Esenov**  
Dynamics of the Caspian Sea level and seismic activity
- 34. Nury Atamyradov, Maya Hekimova**  
Reforestation in the Kopetdag foothills
- 35. Halmuhammet Ataev**  
Influence of construction works on the desert ecosystem
- 36. Ayna Ataeva**  
Distribution of micromycetes in the soil of the “Batko” variety wheat’s near-root zone during its germination
- 37. Eziz Babanazarov, Saparmyrat Mukymov**  
Use of fruits and vegetables with healing properties in sausage production
- 38. Aman Babayev**  
Landscape studies in the development of an integrated coastal zone management plan

- 39. Myrat Allakov, Tylla Babayeva**  
Application of geoinformation systems in agriculture of Turkmenistan
- 40. Merdan Bayramov**  
The role of sulfur in feeding plants
- 41. Dovletmurad Berdimyradov, Enejan Ataeva**  
ELS cotton selection
- 42. Dovlet Berdiyev, Hojanazar Orazov, Govher Kadyrova**  
Biological method for organic waste disposal
- 43. Akmuhammet Chapau**  
Improvement of cottonseed production is a call of the times
- 44. Guvanch Chorliev, Myahriban Rasulova**  
Cluster approach to development of the agro-industrial complex
- 45. Muhammetgeldi Chopanov, Begench Oraztaganov**  
Technology for generating wasteless alternative energy and ecologically pure fertilizer
- 46. Bayrammurad Durdiyev**  
Technology for restoration of saline agricultural landscapes by means of methods of phytoreclamation
- 47. Rovshen Durdyev**  
Scientific test results on artificial breeding of Murghab pheasant (*Phasianus colchicus principialis*)
- 48. Magtymguly Durikov, Eziz Perdaev**  
Importance of studying the soil water regime in agricultural fields
- 49. Aynabat Garahanova**  
Scientific basis of seed breeding
- 50. Tore Garlyyev, Begench Garayev**  
Ability of Akhalteke horses to preserve, spread and reflect the sun rays, depending on the color

- 51. Myrat Garyagdiyev, Nury Atajanov**  
The importance of using water-saving technologies in cultivation of sugar beet
- 52. Lyudmila Kulmammedova**  
Biological activity of micromycetes in the Kopetdag foothill plain
- 53. Guljamal Kurbanmamedova, Guvanchmyrat Atakhanov**  
Tugay forests of Amudarya
- 54. Rahym Gurbanov, Aimirat Hezretov**  
High-yield cotton variety Akhal-6
- 55. Gychmyrat Gurdov**  
Raising chickens
- 56. Myahri Gurdova**  
Utilization of discharge waters in arable farming in Gyaurs flowing into the main drain of the Turkmen lake “Altyn asyr”
- 57. Shatlyk Guvalyev, Dayanch Ashirov**  
Role of entrepreneurship in development of the agricultural industry
- 58. Bezirgen Hallyev**  
Long-term storage of fruits
- 59. Mekan Hayidov, Bayramguych Mamedov**  
Role of medical products in animal husbandry
- 60. Akjemal Hojakova**  
Wool productivity and quality of wool in the linear breeding of Arvana camels
- 61. Serdar Hudaynazarov, Atajan Shamyradov**  
Significance of digital mapping of cultivated areas and their remote monitoring for the purpose of yield enhancement

62. **Muhammet Ibragimov, Serdar Myratdurdydyev**  
Application of paravertebral, perineal and translumbar procaine block in case of cow mastitis
63. **Jumanazar Ishankuliyev, Yazmyrat Ilamanov**  
Changes in air temperature and precipitation in Kopetdag and Karakum
64. **Kakabay Annaniyazov, Anastasia Japbarova**  
Use of vegetation indexes in long-distance computation
65. **Eziz Hankuliev, Gulnabat Jumamyradova**  
Importance of aquatic plants in the biosphere
66. **Rejep Karadurdyev**  
Plantain and Alhagi leaf extract
67. **Shirin Karryyeva**  
The Nagoya protocol on genetic resources
68. **Pirli Kepbanov, Maral Sahatova, Gulnabat Jumamuradova**  
Alkaline and succulent deserts at the Caspian seaside
69. **Komek Komekov, Hasan Sharipov**  
Justification of eco-friendly technology at treatment of potable water in the conditions of Turkmenistan
70. **Chemen Kuliyeva**  
Features of acoustic signaling francolin
71. **Kuvvat Kurbanov, Babageldi Kurbanov**  
Features of drip irrigation in the conditions of Northern Turkmenistan
72. **Meret Meredov, Ogulshirin Haydarova**  
Photodiods based on GaSb/GaAlAsSb Heterostructures for the near-infrared spectral range
73. **Hurma Muhammetgulyeva**  
Synthesis of cotton primers using phosphoramidite method

- 74. Yagmyr Myratberdiyev**  
Method of road systems protection from the movement of sands
- 75. Valentina Nasibyants**  
Prospects for using solar energy at stocking forages
- 76. Gurbanbibi Nepesova, Sultan Weysov**  
Evaluation of the dynamics of sand motions in the Western Turkmenistan
- 77. Mahym Nepesova**  
Biotechnological cultivation of the plant *Malacocarpus crithmifolius retz.c.a.mey*
- 78. Mikhail Nikolayev, Nikolai Nikolayev**  
Grouping NDVI boundaries to distinguish vegetation cover in the coastal zone of the Caspian Sea
- 79. Nurberdi Nurberdiev, Orazmyrat Pirnazarov**  
The influence of temperature and speed of wind to the formation of droughts and dustiness in the Karakum Desert
- 80. Ogulbossan Ashyrova**  
Used grades of ELS cotton and recombinogenesis
- 81. Batyr Orazgylyjov**  
Innovative cotton sowing method
- 82. Gylychmyrat Orazmuhammedov, Rahymgeldi Amansahedov, Arzuvmyrat Tejenov**  
Dynamics of the accumulation of microorganisms in the air of houses depending on the time of the preventive interruption
- 83. Hojanazar Orazov, Dovlet Berdiyev**  
Hiratake mushroom – prospects for growing in Turkmenistan
- 84. Ejegul Ovezgeldieva, Parahat Allabaev**  
*Peganum harmala* – analysis of the microflora of a medicinal plant

- 85. Kadyr Ovezov, Diyar Yhtyyarov**  
Methods of rational use of mudflow waters in the mountainous regions of Turkmenistan for development of agriculture
- 86. Aysoltan Ovezova, Syahra Temekova**  
“Green” technologies in water resources management
- 87. Myratgeldi Paschikov**  
Grapes storage technology
- 88. Ogulnabat Rahmanova, Maral Sahatova**  
New locations of ferns in Turkmenistan
- 89. Ayna Rejepova, Ovezgeldi Artykov**  
Color and hereditary characteristics of the Akhalteke breed racehorses
- 90. Serdar Rozyev, Hamdam Rajabov**  
Remote Earth Sensing data and the monitoring of irrigated lands
- 91. Shihmurad Baymuradov, Gurbandurdy Novruzov**  
Diallel crossings in selection of cotton plant
- 92. Ashyrmuhammed Saparmyradov, Arslan Rejepov**  
Improved soil irrigation method for cultivation of pomegranate seedling
- 93. Sahymuhammet Saparmyradov**  
Biological method of preparation for sowing cotton seeds
- 94. Surayjemal Saparova**  
Species diversity of ticks found in green fields
- 95. Suray Sultanova, Merdan Nobatov**  
Features of feeding turkeys
- 96. Govher Shyhgulyyeva**  
Analysis of some essential oil-bearing plants of the Lamiaceae Lindl. family found in Turkmenistan



- 97. Dovlet Taganov, Muhammet Tanrygulyev**  
Main results with drip irrigation of cotton
- 98. Bossantach Taganova**  
Mulberry cultivation
- 99. Guljemał Taylakova**  
Wheat selection and seeding in Turkmenistan
- 100. Bayramgul Toylyyeva, Gapurjan Hamrayev**  
Learning sandy areas of Western Turkmenistan
- 101. Ashyr Yollybayev**  
Physiological features of salt resistance of agricultural crops
- 102. Halapberdi Yusupov**  
Elite seeds – bountiful harvest
- 103. Alla Ostapenko, Saida Agaeva, Azat Bazarow**  
Estimation of accumulation of biologically active substances by plants in flora of Turkmenistan

## SECTION III

### INFORMATION AND COMMUNICATION SYSTEMS, COMPUTER TECHNOLOGIES

*Venue:* Institute of Telecommunications and Informatics of Turkmenistan

*Chairman of section:* **Seyitnepesov Chary** (Professor Assistant of the Institute of Telecommunications and Informatics of Turkmenistan)

*Vice Chairperson of section:* **Ashyrmuhammedova Jeren** (Director Deputy of the Center of Technology of AST)

*Secretary:* **Hallyeva M.** (Senior Lecturer at the Institute of Telecommunications and Informatics of Turkmenistan)

1. **Qiang Li** (China)  
Cooperative Edge caching
2. **Shakhnoz Samieva, Asadova Sitora** (Uzbekistan)  
Role of women in the development of science and innovation in Uzbekistan
3. **Aminagha Sadigov** (Azerbaijan)  
Formulation of a problem of operational and organizational control
4. **Leonid Fainzilberg, Vladimir Gritsenko** (Ukraine)  
Intelligent information technologies of digital medicine
5. **Gulnara Shalagina, Sergey Shalagin** (Russian Federation)  
Infocommunication technologies and anthropic identity: interdisciplinary research in the context of the information society

6. **F.T. Ziganshina, R.G. Vakhitova** (Russian Federation)  
Information technology in distance learning discipline  
"Engineering graphics"
7. **Victor Maksimov, Yuri Samofalov** (Russian Federation)  
Development of electronic educational resources in  
the Moodle system to improve the quality of technical  
education
8. **Alexander Bogdanov** (Russian Federation), **Ishanberdi Hallyev** (Turkmenistan), **Kamil Gilfanov** (Russian Federation)  
The impact of the fourth industrial revolution on  
automation in the energy
9. **Nikolay Khlebnikov, Ilya Obabkov, Vasilisa Krokhina, Mikhail Shestеров, Ilya Kuklin** (Russian Federation)  
Digitalization of project training methods in IT fields
10. **Igor Ivshin, Alsu Galyautdinova, Oleg Vladimirov, Marat Nizamiev** (Russian Federation)  
Intelligent system for monitoring and express analysis of  
main equipment of transformer substation 35/6 (10) kV
11. **Kira Kerimi** (Russian Federation)  
Intercultural communication and friendly environment  
in context quality of tourist services
12. **Zakharov A.V., Shayakhmetov U.Sh., Nedoseko I.V., Khamidullin A.R.** (Russian Federation)  
Quantum theory and sintering technologies
13. **Vladimir Parkhomenko, Alina Parkhomenko** (Ukraine)  
Relationship of the categories "information" and  
"knowledge" with the energy-material basis of modern  
development

14. **Viktor Yanushkevich** (Belarus)  
Methods for searching and delineating of hydrocarbons
15. **Alexandr Sychov** (Belarus)  
Modeling the consumption of electric reactive power in the compensation devices
16. **Charyyar Ashyralyev** (Turkey)  
Source identification problem for parabolic equation with nonlocal and second kind boundary conditions
17. **Abhishek Dutta, Marco A. Ramírez-Argáez** (Turkey)  
Modeling of an industrial electrostatic desalting unit using computational fluid dynamics
18. **Allaberen Ashyralyev** (Turkey)  
Boundedness of functions of positive operators
19. **Bayrammyrat Atamanov, Yenish Yazlyev**  
Automated system for preparation of practice documentation in higher educational institutions
20. **Chary Seyitnepesov, Guvanch Allamyradov**  
Satellite communication systems
21. **Allaberdy Ashirov**  
Changes in temperature during motion of a viscous-plastic liquid in a cylindrical pipe
22. **Jeren Ashyrmuhammedova**  
Numerical solution to the filtration equation in a three-dimensional porous medium
23. **Maksat Churiyev, Maksat Hydyrov**  
Method of teaching in the field of cyber security
24. **Aydogdy Saparmuradov, Orazgozel Jumayeva**  
Acoustic secrets of Turkmen dutar
25. **Guvanch Akyev, Annamuhammet Bagshyev**  
Assessment of information security risks in telecommunication networks

26. **Durdy Atayev**  
Choosing the most optimal route of distribution of goods from a manufacturing enterprise
27. **Yazmyrat Akyyev, Gulalek Akyyeva**  
Role of interdisciplinary connection in teaching geometry
28. **Myahri Annameredova**  
Thematic interpretation of the soil cover based on remote sensing data
29. **Saparmurad Maslov, Rejep Nyязov**  
Formation of radio signals by frequency conversion
30. **Ogelnur Bashimova**  
Features of the implementation of an electronic document management system at enterprises
31. **Guychgeldy Amanov**  
Particularities of preparation engineering-technical personnel
32. **Bayramalyyewa Ejegul, Anna Atamyradow**  
Turkmenhowayollary reaches a new level
33. **Merdan Atayev, Jumadurdy Sapargeldiyev**  
Methods of study of numerical functions
34. **Jeren Badyrova**  
Motivation in learning English
35. **Kabe Charyyeva**  
Teaching symmetry by connecting to the coordinate plane
36. **Jemshit Churiyev**  
Issue on modifying software for digital technologies
37. **Mekan Esenov**  
Direction of training engineers and personnel
38. **Yagmyrguly Garovov**  
Teacher skills in the digital learning environment

39. **Maral Geldiyeva, Dunyagozel Charyeva**  
Development of online applications for pharmacies
40. **Chary Hamrayev, Gulshat Bekmuradova**  
Methods of determining the difficulty level of geometrical problems to be proved
41. **Mahym Meredova, Hydyr Babaev**  
Checking the compressed air quality of auxiliary compressors used in the gas turbine installations
42. **Arslan Amanov**  
Features of modern web architecture
43. **Annadurdy Chariyev, Gadam Shemsetdinov**  
The application of the theory of simplexes
44. **Nurmyrat Gurbanliyev**  
Development of automation methods in agriculture
45. **Beshimbay Haydarov, Gadam Amanov**  
Importance of textual exercises in developing the economical knowledge of students
46. **Merdan Orazberdiyev**  
Lyame coefficients
47. **Chemen Vekilova**  
Features of teaching English to future logistics engineers
48. **Serdar Agaev, Arslan Nobatov**  
Impact of digital reforms on development of small and medium-sized businesses
49. **Guvanch Allamuradov, Chary Seitnepesov**  
Some problems of electromagnetic compatibility of modern mobile radio systems
50. **Aynabat Amanova**  
Improving the reliability of digital data transmission in the local network by coding method

- 51. Orazgozel Jumayeva, Bagul Atayeva**  
Identification of random processes on the basis of establishing their adaptive models
- 52. Hajymammet Nyrgyzgeldiyev**  
Efficient use of Turkmenistan's airspace and improving the quality of flight safety
- 53. Vladislav Orazov, Nurguly Tagandurdyev**  
Applying the Wigner transformation to analyze subtle radar signals
- 54. Ayna Ovezova, Annagozel Repova**  
Software complex for evaluating performance of computer technologies
- 55. Mirjan Sharipov**  
Increase in the efficiency of working excavator with a grafer
- 56. Hesel Yazhanova, Anvar Muzafarov**  
Optimal technologies of management models

## SECTION IV

### MODERN MEDICINE AND TECHNOLOGIES FOR THE PRODUCTION OF MEDICINES

*Venue:* Myrat Garryev State Medical University of Turkmenistan

*Chairperson of section:* **Tachmuammedova Aybolek** (Vice Rector for Scientific Work, Myrat Garryev State Medical University of Turkmenistan)

*Vice Chairman of section:* **Elyasov Mammetberdi** (Medical Sciences Department Head, AST)

*Secretary:* **Halidova Ayjemal** (Chief Specialist at the Department of Postgraduate Studies of Myrat Garryev State Medical University of Turkmenistan)

1. **Fuyong Jiao** (China)  
Multicenter clinical study of 156 children with Kawasaki disease during COVID-19
2. **Jun Wang** (China)  
Use of active ingredients of natural products for therapy of children with developmental disorders
3. **Muhammad Usman Ashraf, Samia Afzal, Muhammad Idrees, Safee Ullah Chaudhary, Muhammad Shahid, Iram Amin** (Pakistan)  
Evaluation of CRISPR/CAS13A-based targeting of hepatitis C virus RNA as a programmable antiviral strategy in mammalian cells



4. **Naila Shahid, Abdul Qayyum Rao, Ayesha Latif, Saira Azam, Aneela Yasmeen, Tahir Reman Samiullah, Amina Yaqoob, Muhammad Azam Ali, Sana Shakoor, Ayesha Imran, Ujala Nasir, Sara Ajmal, Sahar Sadaqat, Rida Hameed, Ahmad Ali Shahid (Pakistan)**  
Development of plant-based vaccine against poultry diseases
5. **Olim Razzokov, Gulchekhira Vafakulova, Shirin Achilova, Elbek Rabbimov (Uzbekistan)**  
Creation and study of medicinal preparation "Bronchovalin" from vegetable raw materials
6. **Lojuvar Rustamova, Jamila Khudoyorova, Jovid Jamshedov, Mizhgona Sharofova, Bakhtiyor Ishov, Massoud Mirshahi (Tajikistan)**  
Impact of high altitude on cancer incidence in Tajikistan
7. **Koba Amirkhanashvili, Nani Zhorzholiani, Zaza Molodinashvili, Lasha Khmaladze, Tinatin Sharashenidze (Georgia)**  
Pharmaceutical preparations as ligands in coordination chemistry
8. **Luba Eprikashvili, Teimuraz Kordzakhia, Marine Zautashvili, Nino Pirtskhalava, Maia Dzagania, Imeda Rubashvili (Georgia)**  
Influence of nano-modification of natural mordenite on the sorption of some pharmaceutical pollutants
9. **Arazdordi Toumadje, Veronica Porterfield, Chien Li, Peilin Chen, Daniel Bowers, Linda Langman, Katherine Schiermeyer, Kenneth L. Brayman (USA)**  
Induced pluripotent stem cell for enhancement of regenerative medicine

- 10. Rakhman Tashchiyev** (Ukraine)  
New direction in breast cancer treatment
- 11. Alexander Cheylyakh, Yan Cheylyakh** (Ukraine)  
Intellectual biomedical materials of present and future
- 12. Natalia Vetyutneva, Nadezhda Ovsyankina** (Russian Federation)  
Application of a risk-oriented approach in the process of storing thermolable drugs in pharmaceutical organizations
- 13. Andrey Kaprin, Sergey Ivanov, Peter Shegay, Valeriy Stepanenko** (Russian Federation)  
Research and application of the phenomenon of radiation-induced stimulated luminescence in oncoradiology and radiation safety: results of interdisciplinary and international cooperation
- 14. Sezer Okay** (Turkey)  
Development of peptide-based vaccines
- 15. Begench Rejepov**  
Surgical treatment of necrotizing neonatal enterocolitis
- 16. Maral Sahatova**  
Medicinal and ornamental varieties of astragalus in the Greater Balhan
- 17. Nargiza Taganova, Maya Berdiyeva**  
Determining the clinical effectiveness of drug treatment in the recovery of patients' health in the early post stroke period
- 18. Aknur Yalkabova, Pirguly Yalkapov**  
Statistical analysis of hospital incidence with endogenous uveitis and digital analytics
- 19. Shemshat Shihiyeva**  
Causal factors of infertility

- 20. Sulgun Rahimova, Aysere Charyyeva**  
The quality and safety of products from polymers and other synthetic materials intended for contact with food
- 21. Lachin Yaranova**  
Study of the biochemical properties of microorganisms of the genus *Haemophilus* using two-phase nutrient media
- 22. Mive Amangulyyeva, Ogulsheker Annagylyjova**  
Causes of polyhydramnios in multiple pregnancies
- 23. Mive Amangulyyeva, Baharabat Seyradova**  
Condition of children born by mothers with habitual fetal loss syndrome on the background of hypertensive disorders
- 24. Berdymurat Orazberdiyev, Rozigeldy Nazarov**  
A new method of treatment of femoral bone fracture in children
- 25. Altymuhamed Annaev**  
Clinical importance of laboratory tests in diagnosing necrotizing enterocolitis in babies
- 26. Ogulgerek Kakabayeva, Maya Annanurova, Mahriban Arslanova**  
The state of water exchange in children with bronchial asthma in dynamics
- 27. Galina Muradova, Yunus Annayev, Dinmuhammet Doliyev**  
G482S polymorphism of the PPARGC1A gene in athletes of Turkmenistan
- 28. Aman Geldiyev**  
Characteristics of lymphocytic infiltrates in case of pigmented villonodular synovitis (PVNS)
- 29. Guljahan Orazova, Serdar Mammetyazov**  
Prospects of application of the medical plant hypericum in liver surgery

- 30. Perhat Ovezklychev, Irina Vysotina**  
Effectiveness of leukocyte- and platelet-rich plasma (L-PRP) in treatment of experimental bacterial keratitis
- 31 Perhat Ovezklychev, Mavy Yagmyrova, Guljahan Orazova, Guljahan Palvanova**  
Performance analysis of leukocyte- and platelet-rich plasma at simulation of bacterial keratitis
- 32. Aynabat Seyitmedova, Gulnabat Toshchiyeva, Rahmanali Atajanov, Enejan Gurbanova**  
Frequency and characteristics of infection of cervix uteri with human papilloma virus (HPV)
- 33. Akmyrat Gylychdurdyev, Bayrammammed Tegelekov**  
Significance of povinodin solution in the treatment of burn injuries
- 34. Jeren Atayeva, Ogulgerek Ismailova**  
Scientific ethnomedical aspects pteridoflora of the Kopetdag
- 35. Rejepmyrat Alyyev, Mammetberdi Elyasov**  
One-year results of coronary artery stenting in elderly patients
- 36. Begench Annayev, Orazgylych Orazgylyjov, Maya Ovezgylyjova**  
Frequency of metabolic syndrome and its components in patients with arterial hypertension
- 37. Batyrmuhammet Amanseidov, Maysa Gurbanova, Kumush Deryayeva**  
Assessment of the state of the autonomic nervous system and heart rate variability in patients with arterial hypertension with ventricular extrasystoles

- 38. Begench Annayev, Lacyn Hudayberdiyeva, Babamyrat Abdullayev**  
Particularities of myocardial infarction clinical course among patients with diabetes
- 39. Hojanepes Jumaev, Mammeterberdi Elyasov**  
The state of the coronary arteries in different variants of the course of coronary heart disease
- 40. Aynabat Chapau, Sheker Orazmammedova, Sahra Tekayeva**  
Clinical and anamnestic particularities of the patients suffering from arterial hypertension along with chronic obstructive pulmonary disease
- 41. Mive Berdimuradova, Gulruh Atayeva, Yanyl Gujukbaeva**  
Colposcopy in the diagnostics of neck of womb, vagina and vulva diseases
- 42. Annamyrat Annamammedov, Maksat Bekeshov**  
Methods for improving treatment methods for sarcomas of soft tissue
- 43. Mekan Ballakov, Ogulshat Kurbanova**  
Distribution and treatment of retinoblastoma in children in Turkmenistan
- 44. Gyzylgul Bedirova, Jennet Hajyeva**  
Importance of neoadjuvant polychemotherapy at the locally-invasive ovarian cancer
- 45. Mive Berdimuradova, Serdar Hajiyeve, Chary Batyrov**  
Importance of neoadjuvant chemotherapy in case of malignant neoplasms of the mammary glands
- 46. Myrat Muhammedov, Setdar Atayev**  
Modern approaches to the treatment of malignant neoplasms of the throat

- 47. Jennet Nazarova**  
The treatment results of patients with Hodgkin's lymphoma depending on the morphological type of the disease
- 48. Dovlet Jumayev, Rovach Durdulykov**  
Methods to prevent post-surgical cardio-esophageal cancer treatment and improve treatment
- 49. Serdar Hajiye, Chary Batyrov**  
Results of neoadjuvant chemotherapy and targeted therapy for HER-2/neu positive mammary gland malignant neoplasms in Turkmenistan
- 50. Ayjema Orazaliyeva, Perhat Ovezklychev, Gulnabat Toshchiyeva, Jahan Lamanova**  
Analysis of mastocytes (mast cells) of cornea in case of septic keratitis
- 51. Muhamet Ergeshov**  
Combined risk factors causing non-communicable diseases and their complications
- 52. Babaguly Jumayev**  
Use of camel chal in the treatment of lung diseases
- 53. Rahat Nazarov, Aysere Charyyeva**  
Disease of eczema in the area of the drying out of the Aral Sea
- 54. Rahat Nazarov, Serdar Bayrammuhammedov, Gozel Kekilova, Kemal Gudratullayev, Ogulmaysa Kakabayeva, Natalya Rejebova**  
Problems of the Aral Sea region and its impact on etiopathogenetic factors of allergic dermatoses in Turkmenistan
- 55. Suray Abdyeva**  
Role of innovative technologies in diagnostics of morphostructural changes in myopia

- 56. Akmuhammet Alchekov, Sahid Annanepesov, Shirmyrat Kichiyev**  
Radicality of surgical operations in malignant brain tumors
- 57. Hojammet Jumayev, Berdimyrat Amanov, Ovadan Armedova**  
Frequency of toothjawed anomalies in children with chronic catarrhal gingivitis
- 58 Tachguly Toyguliev, Jahan Dovletova, Shohrat Annadov**  
Morphometric changes in higher myopia
- 59. Annamurad Allaberdiyev, Mahri Beknepesova**  
Modern view on diagnostics and treatment of patients with bronchial asthma
- 60. Aybibi Chariyeva**  
Features of functions of left ventricle in elderly patients with isolated systolic arterial hypertension
- 61. Maya Durdyeva, Aysere Charyyeva**  
Features of the use of camel's chal (a drink made from fermented camel milk) in the prevention of alimentary diseases
- 62. Garabeg Goshaev, Gulbahar Geldieva**  
Value of early bougienage in the prevention of cicatricial esophageal stenosis in children
- 63. Bayram Hojakulyyev, Rovshen Charyyev**  
The effectiveness of St. John's wort extract in the treatment of patients with comorbid afferent disorders in acute coronary syndrome
- 64. Bayram Hojakulyyev, Tirkish Annanepesov**  
Change in the concentration of Interleukin-6 in patients with coronary heart disease and chronic heart failure, depending on the type of left ventricular hypertrophy and pressure in the pulmonary artery

- 65. Sahetbike Ovezova, Guljemile Miriyeva**  
Study of the hypertensive effect of licorice root in patients with primary arterial hypotension
- 66. Gulbahar Muhammetmyradova, Eteri Tsereteli**  
Results of medicinal therapy of nonproliferative diabetic retinopathy
- 67. Perhat Ovezklychev**  
Plasma therapy complex treatment of keratitis
- 68. Gozel Ovezova, Ogulbagt Tangiyeva**  
Use of the licorice medicinal plant growing in Turkmenistan in the practice of the therapist
- 69. Yakup Ovlyaguliev, Mekan Sahetnyyazov**  
Values of tear fluid crystalloscopy in the prognosis of post-traumatic complications in penetrating eye injuries
- 70. Svetlana Pleskanovskaya, Guljahan Ataeva, Bibi Kulieva**  
Some trace elements in a decoction of licorice (*Glycyrrhiza glabra*) and immunomodulatory drugs
- 71. Sahid Annanepesov, Oraz Rahimov**  
Results of surgical treatment of herniated disc (spinal hernia) in newborn children
- 72. Altyn Rejepova, Ogulbagt Annamammedova**  
Organization of high-tech ophthalmic care for premature children
- 73. Resul Elyasov, Altyn Rejepova**  
Clinical features and treatment of demodekosis eyes in children
- 74. Tachmyrat Garayev, Deryaguly Rzayev**  
Proportion of chronic otitis and their local complications
- 75. Tylla Tanryberdiyeva, Shemshat Amandurdyeva**  
Importanc of modernizin in medical education



- 76. Ayjema! Taylakova, Ogulgeldi Annayeva**  
Basics of innovative training
- 77. Ayjema! Orazaliyeva, Aman Geldiyev, Gulnabat Toshchiyeva**  
Anatomical basics of atypical transformation of the epithelial cells of cervix uteri in case of myoma
- 78. Jeren Amanova, Gozel Ovezova**  
Experience in implementing a digital educational environment in a medical university
- 79. Govher Bayramova**  
Differential diagnosis and treatment of vertigo in neurological practice
- 80. Allaberdi Saparov, Charyarguly Mammetgulyev**  
Technology of proper nutrition for cycling athletes
- 81. Hydyr Nunnaev, Allaberdi Saparov**  
Analyse of wrestler athletes' PWS-170 and Harvard step-test indicators
- 82. Orazmurad Esenov, Merdan Mazakov**  
Features of training activities to increase jumping skills of basketball players
- 83. Ogulnur Atajanova, Vepa Ovezmammedov**  
Sponsorship in the field of sport
- 84. Kakageldi Charyev, Jennet Hanova**  
Special speed and power loads for tennis players
- 85. Allamurat Gochov**  
Scientific bases of natural health activities in preschool children
- 86. Amanbibi Gylyjova, Myahrijema! Mommyeva**  
Development of the science of sport psychology and its role in sports competitions

- 87. Jennet Hanova**  
Distinctive features of training enhancement of table tennis players
- 88. Dovranmyrat Myradov, Merdan Ilmyradov**  
Features of manifestation of the basic physical qualities of athletes in volleyball
- 89. Ogulbeg Ovezova, Shamurat Karatayev**  
Ecological policy – the problems of social environment
- 90. Gurbanmyrat Sahedov, Hydyrguly Tatov**  
Special physical training of athletes aged 16-18, who go in for combat sports
- 91. Shirmyrat Soyunov, Enejan Borjakova**  
Innovative methods of endurance development
- 92. Yagmur Shyhnazarov, Jumadurdy Sopyyev**  
Ways to improve endurance and strength of cyclists
- 93. Begench Hannyev, Mammedberdi Charyyev**  
Influence of infections on recurrence of urolithiasis and methods of their prevention
- 94. Begench Hannyev, Mamedberdy Charyyev**  
Possibilities of extracorporeal wave lithotripsy of stones of the lower part of the urethra
- 95. Begench Hannyev, Mamedberdy Charyyev**  
Indications and contraindications for extracorporeal shock wave lithotripsy in the treatment of kidney disease

## SECTION V

### INNOVATIVE ECONOMY

*Venue:* Turkmen State Institute of Economics and Management

*Chairperson* **Fatma Hashem** (Egypt),

*of section:* **Nargozel Myratnazarova** (Turkmenistan)

*Vice* **Atayev Araznury** (Department Head

*Chairman of* Economic Sciences, AST)

*section:*

*Secretary:* **Kerimberdiyeva Shemshat** (of the Educational Department Head Turkmen State Institute of Economics and Management)

1. **Khatamjon Kholdarov** (Uzbekistan)

Rational feeding goats as the basis for increasing the profitability of the industry

2. **Rakhima Kurbanova, Jamshed Kurbanov** (Uzbekistan)

Formation of synergetic "effect" in food processing technology

3. **Mamlakat Makhkamova, Gulchekhra Allaeva** (Uzbekistan)

Development of the digital economy in the Republic of Uzbekistan

4. **Hujayor Shennayev** (Uzbekistan)

Development of insurance activities in Uzbekistan

5. **Galina Rudchenko, Ekaterina Vezhnovets, Kirill Gerasenko** (Belarus)  
Optimization of energy supply of businesses on the basis of application of distributed energy generation
6. **Alexander Khmelev, Angelina Khmeleva, Vladimir Potapov** (Belarus)  
Frequency methods of setting the dynamic parameters of the piezotransformer
7. **Oksana Semernia** (Ukraine)  
Modern problems in economics, ecology, society
8. **Inna Kulish** (Ukraine)  
Forest fires: economy and ecology
9. **Vadim Ratynsky** (Ukraine)  
Internet as a driving force of marketing research development in the world economy
10. **Tatiana Bodnarchuk** (Ukraine)  
Dynamics of scientific research of Ukraine as a development factor of innovative economy
11. **Alexey Parkhomenko, Gleb Parkhomenko** (Ukraine)  
Essence as a systemic-creative life of a man in harmony with the laws of nature
12. **Sergey Dyrin** (Russian Federation)  
Attitude to foreign investment in the economy of the Republic of Tatarstan: experience of content analysis
13. **Anatoly Makarov, Rais Nazipov** (Russian Federation)  
To the digital economy concept: a dialectic of opportunities and risks

- 14. Anton Karamyshev** (Russian Federation)  
System approach to economy and management of large industrial enterprises
- 15. D.K. Seleznev, I. V. Yusupova** (Russian Federation)  
E-trading as a factor of growth in the digital segment of the economy Republic of Tatarstan
- 16. Natalia Ermakova** (Russian Federation)  
About transformation of the accountant profession in the digital economy
- 17. Romualdo Marrazzo, Fabrizio Vazzana** (Italy)  
Analysis of accidents and good inspection practices for the management of ageing of industrial plants
- 18. Hojamyrat Geldimyradov**  
Diversification of economy as relevant need of the time
- 19. Muhammetgeldi Serdarov**  
Modern development of the theory of urban economy
- 20. Oguljamal Geldymammedova**  
Importance of increase in export potential of Turkmenistan
- 21. Araznury Atayev**  
Some issues of improving the socio-economic development analysis methodology
- 22. Bayramdurdy Taiharov**  
Banking operations on a scientific basis
- 23. Gozel Akyniyazowa**  
Application of input - output tables in the analysis and forecasting of socio-economic development
- 24. Orazberdi Ataev**  
Role of management accounting in management decision-making

25. **Gulmet Penayev**  
Socio-economic achievements in transport policy
26. **Jeren Hanaeva, Muhammedaly Orazmyradov**  
Modern approach to training personnel in information and communications technologies at secondary vocational schools
27. **Kakageldy Hummeyer**  
Digital economy in the social sector
28. **Pena Ashyrov**  
Role of the light industry in the economy of Turkmenistan
29. **Atajan Ataev**  
UN Sustainable Development Goals – guarantee of sustainable economic growth in Turkmenistan
30. **Irina Sukh**  
Evaluation of the multiplicative effect of investment
31. **Aknur Kochumova, Kerimberdi Seyitliev**  
Insurance services system development trends in Turkmenistan
32. **Gadam Tachmuhammedov, Arslan Chariyarov**  
Scientific bases of analysis of social and economic development of Turkmenistan
33. **Dovletmyrat Ishangulyyev**  
Determining goods delivery time
34. **Gadam Kerimov**  
Bank loans for private sector – guarantee of the economic growth
35. **Ayjeren Abdyrahmanova**  
Forming ecologically clean production market mechanism in Turkmenistan

- 36. Akjema! Burunova**  
The place of securities in increasing economic activity in the country
- 37. Hajimurat Pirmuhamedov**  
World and national experience in the formation of the "electronic government" system
- 38. Ogultach Soyunova**  
Possibilities of implementation of digital systems in agriculture
- 39. Sulgun Taganova**  
Advantages of electronic documentation
- 40. Merjen Amanova, Aynur Tuvakova**  
Value of digital economy in development of financial literacy of the population
- 41. Gultach Annamammedova, Annadursun Yegenova**  
Importance of foreign trade in providing a stable economy in the country
- 42. Jennet Astakova, Gulshirin Jepbarova**  
Development of digital services in the national banking system
- 43. Eziznazar Beknazarov, Ruslan Jumaev**  
"e-Government": theory and opportunities
- 44. Orazmuhammet Kakabayev, Serdar Rahmanov**  
Role of innovative banking services in the national bank system
- 45. Bahar Annagurbanova**  
Organization of digital type logistics systems
- 46. Shirin Akynyazova**  
Optimization of transportation by railway

47. **Yusup Myradov**  
Benefit from optimization of logistic processes in reducing transport expenses
48. **Aylar Ussayeva**  
Digitalization in the economic sectors
49. **Nurgeldi Yagmyrov**  
Factors affecting the transport services market
50. **Gulshat Almazova, Geldimurat Geldimuradov**  
Economic and mathematical models under uncertainty
51. **Shemshat Saparova**  
Priority areas of state support for small and medium businesses in independent Turkmenistan
52. **Bayrammammed Arbabov**  
Innovation methods of evaluating the investment projects effectiveness
53. **Dovletgeldi Balliyev**  
Innovative activities in the agricultural processing industry of Turkmenistan
54. **Dunyagozel Hayytova**  
Microcredits: foreign experience and national principles
55. **Azat Karyagdyev**  
Importance of economical incentives in renewable energy development
56. **Dovlet Nazarov**  
Issues of digitalization of the insurance system in innovative development of Turkmenistan
57. **Bibi Hojamgulyyeva, Rahym Charyyev**  
Importance of a master's degree program in the educational system of Turkmenistan



- 58. Ogultach Balliyeva, Serdar Divanov**  
Main threats for economic security in the field of foreign economic activity
- 59. Annasoltan Berdieva, Aknur Ataeva**  
Innovative changes in Turkmenistan during the years of independence
- 60. Aylar Hojanepesova**  
Role of science in development of the international economic relations
- 61. Pirmuhammet Ekaev**  
Scientific reforms in social sphere
- 62. Abdykerim Muhanov**  
Innovative activities in the market economy
- 63. Yarsahet Orazmammedov, Maysa Annaeva**  
Enhancement of the system of national accounts of Turkmenistan
- 64. Gulbahar Kakalyeva**  
Competitive advantages in the marketing activities of the enterprise
- 65. Govher Orazova**  
The importance of improving the financial culture in young people
- 66. Babamurad Taganov**  
Improvement of the enterprise structure is a condition for successful development and modernization
- 67. Maral Mammedova, Pirguly Hydyrguliyev**  
Issues and challenges of occupational retraining of personnel

- 68. Kerim Dovletov, Aybolek Komekova**  
Progress of science, technology and innovative technologies
- 69. Annagul Nazarova**  
Monetary and crediting system's effect on social and economic development of Turkmenistan
- 70. Jennet Atayeva, Maral Ovezova**  
Formation of the effective innovative policy in Turkmenistan
- 71. Aynazar Aynazarov, Dayanchmyrat Pyotdiev**  
The world practice of technologies transfer
- 72. Ejegul Orazova**  
Program development within sustainable development goals in Turkmenistan
- 73. Berdiyar Ereshov, Suleyman Tayliev**  
Importance of cluster model in development of the private sector
- 74. Merdan Arashev**  
Cost-effectiveness of international sports tournaments
- 75. Sohbet Vekilov**  
Innovative reforms in science and education
- 76. Muhammetberdi Yazlyyev, Arslan Matkarimov**  
Main trends in of the digital economy in our country
- 77. Maya Rahmanova**  
Essence and goals of the social policy
- 78. Parcha Gylychdurdyeva, Bahar Soyegova**  
Scientific and educational sector on the course of development

- 79. Myrat Akmammedow**  
Diversification of the economy in Turkmenistan
- 80. Begench Meredov**  
Matters relating to ensuring the economic security of the enterprise
- 81. Gulshat Vasova**  
Development of the chemical industry in Turkmenistan on the basis of public-private partnership
- 82. Aykamar Malikgulyeva**  
Assessment of socio-economic consequences of adoption of technical regulations in Turkmenistan
- 83. Aknabat Artykova, Shirin Annaeva**  
Big data technology potential in analysis and forecasting applied in different areas
- 84. Mahri Berdieva, Aknabat Dovletova**  
The legal framework of bank guarantees in Turkmenistan
- 85. Ejegyz Garayeva**  
Digital system in trade
- 86. Bahtiyar Gurbansahedov**  
Scientific analysis of the concept of a modern payment system
- 87. Shirin Hudayberenova**  
Role and significance of mandatory economic standards of the Central Bank of Turkmenistan in the activities of credit institutions
- 88. Annageldy Saryev, Mekan Orazgylyjov**  
Role of marketplaces in development of small and medium-sized entrepreneurship in our country

**89. Guncha Taganova**

Role of the banking system in raising the level of financial literacy of the population

**90. Tavus Atajanova, Akmammet Mammedov**

Possibilities of development of venture entrepreneurship in tourism

**91. Shirin Orazmamedova, Yanl Mamedova**

Methods in modeling and forecasting socio-economic processes

## SECTION VI

### HUMANITIES

*Venue:* Magtymguly Turkmen State University

**Chairman of section:** **Nurberdiev Nurberdi** (Vice Rector for Scientific Work, Magtymguly Turkmen State University)

**Vice Chairman of section:** **Tuvakov Myrat** (Department Head Philological, Historical and Pedagogical, AST)

**Secretary:** **Gurbanova Oguljeren** (Deputy Dean of the Faculty of English Language and Literature, Magtymguly Turkmen State University)

1. **Zhainagul Kadyrkulova** (Kyrgyzstan)  
Carpet weaving as a traditional kind of decorative applied art in culture of the peoples of Central Asia (on the example of Turkmenistan and Kyrgyzstan)
2. **Kadyrkul Karabukayev** (Kyrgyzstan)  
Spiritual and ecological values in the process of formation of ecological culture
3. **Eldar Rustamov** (Kazakstan)  
Ramsar regional initiative as an instrument of international cooperation
4. **Natalia Rytova** (Belarus)  
The influence of the canonical right on the formation of gender stereotypes in the XVI–XVII centuries

5. **Oksana Tour** (Ukraine)  
Dialogue as the most important condition of forming communicative competence of Turkmen students in the Ukrainian spoken environment
6. **Marina Andrazashvili, Natalia Basilaya** (Georgia)  
The color range of synestet writers and its language expression
7. **Valentina Abashina** (Russian Federation)  
Modern information technologies in the development of mathematical concepts by preschool children
8. **Tatiana Bochkareva** (Russian Federation)  
New literacy in pedagogical education
9. **Galiya Ldokova** (Russian Federation)  
Restoration culture of relationship of the future teacher
10. **Guzel Nasibullova** (Russian Federation)  
Translation of mythological vocabulary from the English to Russian languages
11. **Konstantin Bezukladnikov, Boris Kruse** (Russian Federation)  
Integration of the international bachelor's technologies into the educational space of the CIS countries
12. **Aksana Filippova** (Russian Federation)  
Modern technologies of speech development in preschool children
13. **Sergey Smirnov** (Russian Federation)  
Environmental prospects of the scientific and technological revolution
14. **Tatiana Nesterova, Valentina Remizova** (Russian Federation)  
Motivational support for the teaching process

15. **Natalia Abramovskikh** (Russian Federation)  
Formation of the image of the teacher of the first grade students in the framework of the discipline "Introduction to the profession"
16. **Liya Lashkova** (Russian Federation)  
Development of the communicative potential of future teachers in the conditions of the digital educational environment
17. **Yegor Gromov** (Russian Federation)  
The influence of cultural relations between the Volga region and Central Asia on the formation of Tatar philosophical thought in the 18-19 centuries
18. **Svetlana Zyryanova** (Russian Federation)  
Informatization of music education in preschool organization
19. **Vera Sinebryukhova** (Russian Federation)  
Organization of educational and research activities of future teachers of elementary classes in the field of primary general mathematical education
20. **Evgeniya Shants** (Russian Federation)  
Development of activity and initiative in preschool children: moral aspect
21. **Muhammad Maghaminiya** (Turkey)  
Ibni Haldun's ideas about trade law
22. **Jennet Ovekova**  
Legal framework for legislative activity of the national parliament of Turkmenistan
23. **Kerimguly Geldiyev**  
Economic results of developing the digital logistics in the smart city
24. **Bayrammyrat Hajimammedov**  
Modern methods of developing the education system

25. **Yagmyr Nuryyev**  
Constitutional principles and the development of a system of humanitarian values
26. **Baba Zahirov**  
Impact of digital information technologies on development of legal statistics
27. **Govher Geldyeva, Kadyr Amandurdyev**  
Strategies of the world states and Turkmenistan in building the information society
28. **Shemshat Atajanova**  
Gender equality as a national development priority
29. **Jumamyrat Gurbanov**  
Legal support for the digital economy and constitutional principles
30. **Merdanmyrat Kurrayev**  
Ways of development of the legal framework for energy supply
31. **Gulzar Ashyrova**  
Development of the legislation of Turkmenistan concerning specially protected natural areas
32. **Danatar Murzayev**  
The role of digital technologies and scientific achievements in providing legality
33. **Arslan Mammeterazow**  
Arbitration agreement in the international commercial contractual relations
34. **Bayramgul Orazdurdyeva**  
Development of legislation of Turkmenistan on education in accordance with digital technologies and science
35. **Maksat Hudayberdiyev, Baky Nurmuhammedov**  
Legal framework of the youth policy



36. **Nurmuhamet Halymov, Selbi Nurgeldiyeva**  
Role of entrepreneurship in the Constitution of the country
37. **Oguljamal Esenova**  
The role of science and education in the formation of the spiritual foundation of the civil society in Turkmenistan
38. **Oguljeren Suhanberdiyeva, Jumagul Orayeva**  
Constitutional law and peculiarity of elections for Halk Maslahaty of the National Assembly of Turkmenistan
39. **Handurdy Handurdyev, Chary Rahmanov**  
Organizational-legal aspects of consumers' rights protection
40. **Kakamyrat Altyyev**  
Legal regulation of the licensed activity in digital economy
41. **Guvanch Ballyev**  
Development of the legislation in the field of public health services in Turkmenistan
42. **Amangeldi Baygeldiev**  
On the way of establishing comprehensively developed society
43. **Lachin Hudayberdiyeva**  
Moral principles of a state servant
44. **Jemile Hommayeva**  
Improvement of the judicial system over the years of independence in Turkmenistan
45. **Yazmurat Kulayev**  
Early stages of legislation in Turkmenistan
46. **Beshim Rahmanov**  
Upgrading ecological culture of tourism employees

47. **Ilmet Hanmedov**  
Improvement of the constitutional framework of the parliament
48. **Parahat Durdiev**  
Development of a theory of object of crime in criminal law of Turkmenistan
49. **Annajahan Batyrova, Babajan Gochmyradov**  
Legal framework for digital services
50. **Jumamuhammet Annamammedov, Gochmyrat Myradov**  
Advantages of digital banking services
51. **Durdy Amanov**  
International legal status of refugees and their protection
52. **Dovran Abdyrasulov**  
Methodology of professional thinking development in military higher education institutions
53. **Narhal Achilova**  
Didactic requirements to textbooks for primary classes
54. **Olga Adykova**  
Bones discovered at the monuments of the Serakhs oasis
55. **Maya Agayeva**  
Ways of translation of Turkmen proverbs about language and word into Russian
56. **Bahargul Akmammedova**  
Application of interactive whiteboards in learning Persian-Turkmen thematic conversational forms with postpositions
57. **Mohammedkuli Altiev**  
Cultural reforms in Turkmenistan in the 20-30s of the 20th century

- 58. Shasenem Amadova**  
Importance of the literary heritage of Magtymguly
- 59. Guvanchmyrat Amangeldiev**  
Folk art is a steadfast pillar of national culture
- 60. Rasul Amangeldiyev, Gulnabat Atayeva**  
Music as a symbol of peace
- 61. Hangeldi Amangeldiev**  
Basic law on the protection of human and civil rights
- 62. Kakabay Amanmyradov**  
Mevlana Ruhi Yaziri – scientist and poet
- 63. Maral Annagulyeva, Aynur Rozyeva**  
The principles of peace and trust in the epic "Gorkut ata"
- 64. Serdar Annamedov**  
Legal status of neutrality of Turkmenistan
- 65. Gulyalek Annanepesova**  
Terminology of bagshi's performing art
- 66. Ogulshirin Annanepesova**  
Image of Magtymguly Pyragy in folk legends
- 67. Mati Annanurov**  
Philosophic problems in the work by Magtymguly Pyragy
- 68. Myrat Annanurov**  
Organization of self-study of cadets at the military higher educational institutions
- 69. Jeren Atabayeva**  
Serial verb construction as an artistic techniques in the poetry of Halil Kuliev
- 70. Maya Atajanova**  
Synonymic relations of idioms on the notion of “air/howa” in the contrastive analysis (on the examples of the Turkmen and English languages)

71. **Bahar Atanyyazova**  
Matter relating to history of studying the past tense of the verb in the Persian language
72. **Nargul Atashova**  
Peace-loving policy of Seljuk ruler Ala ad-din Kayqubad I
73. **Danatar Atayev**  
By Ibn Khallikan – priceless source of study of the history of the Turkmen people
74. **Kemal Atayev**  
The English travellers of 1840s about the Turkmen way of life
75. **Yazmuhammet Atayev**  
Issues of studying the archival lexicon of the Turkmen language
76. **Annadursun Atayeva**  
Paleobotanic residual revealed at the monument of Paryzdepe
77. **Amandursun Atayeva**  
Digital educational resources in forming students' ecological training
78. **Dursunjemal Babalyeva**  
“Science is a pearl that priceless”
79. **Durli Ballyeva**  
Commitments of Turkmenistan under the international humanitarian law
80. **Bayram Basarov**  
Using reference signals in the assimilation of knowledge
81. **Ejegul Bashimova, Yazgul Akiyeva**  
The role of English in the business environment
82. **Kakajan Bayramov**  
Importance of Turkmen ethnographic science

- 83. Chemen Bayriyeva**  
Basic principles of contrastive analysis of simple predicate expressed by the present tense in Turkmen and English
- 84. Ahmet Begchiyev**  
Ways of formation of sports terms
- 85. Aman Behranov**  
Defense walls of Paryzdepe
- 86. Jeren Bekiyeva, Mahrijemal Bekjayeva**  
Celadon ceramics
- 87. Tahir Berdiev**  
Use of support symbols in the management of the game activity of children
- 88. Gurbanmyrat Boppyev**  
Turkmen and Turkish words related to kinship
- 89. Bostan Chakanova**  
Cultural relations between neutral Turkmenistan and Russia
- 90. Guncha Charyyeva**  
Turkmenistan's regional and international initiatives in creating transport transit
- 91. Dunyagozel Cherkezova**  
The “Traditions of Turkmen statehood” is at the core of national education
- 92. Hezretguly Durdyev**  
From the history of grammatical structure study of the Turkmen language
- 93. Serdar Durdyev**  
World languages are the basis of the international relations

- 94. Sapargeldi Durdyev, Tylla Mammedova**  
The use of digital educational resources in educating the young generation on the principles of a healthy lifestyle
- 95. Altyn Durdyeva**  
Special characteristics of the address message
- 96. Orazpolat Ekaev**  
Trace of the Oguzs on the Great Silk Road
- 97. Annajemal Esenova**  
Historical roots of the Turkmen “ak oy” and its constructive features
- 98. Allaberdi Gapurov, Guljan Nazarova**  
Role of the book by our President “Neutral Turkmenistan” in worldpeace and consent strengthening
- 99. Saparmyrat Garatayev**  
Peace and truth as the main way for strengthening the foreign policy of Turkmenistan
- 100. Atamyrat Garayev**  
Philosophical explanation of science in Gurbanguly Berdimuhamedov’s book “Spiritual world of the Turkmen”
- 101. Ogulnur Geldimyradova**  
Turkmen folk creativity in the novel by Esteemed President Gurbanguly Berdimuhamedov “Good name is imperishable”
- 102. Rejepmuhamet Geldiyev**  
Etymological study of the word
- 103. Lachyn Geldiyeva**  
Equivalence problem in translation of newspaper articles
- 104. Govher Gelenova**  
Role of international cooperation in training young personnel

- 105. Ogulnabat Gochova**  
Vowel lengthening in two-syllable words in the Turkmen language
- 106. Rahmanberdi Godarov**  
Hasan Nissari and his work «Muzekir and akhbab»
- 107. Rahmanberdi Goklenov**  
Intertextuality and precedence in the language of the newspaper
- 108. Guljemal Gummanova**  
Yusup Balasagunly's «Kutadgu bilik» - spiritual wealth of the Turkmen peoples
- 109. Gulshat Gundogdyeva**  
Comparative phraseological units in the Turkmen and Persian languages
- 110. Guychmyrat Gurbandurdyev**  
Music and principles of peace
- 111. Gurbanberdi Gurbangeldyev**  
Geographical names appeared in the years of independence
- 112. Jumamurad Gurbangeldyev**  
Fundamental principles of the foreign policy in the Great Seljuk Empire
- 113. Nurnabat Gurbangulyeva, Gozel Allakova**  
Artistic function of the four seasons in the works by Magtymguly
- 114. Guncha Gurbannazarova**  
Synonyms as expressive means in the works by Magtymguly (contrastive analysis based on the translations into the Arabic language)
- 115. Merjen Gurbannazarova**  
Role of international legal instruments on the rights of the child

- 116. Merjen Gurbanazarova**  
The ways of using digital educational technologies at Chinese lessons
- 117. Aly Kurbanov, Lyudmila Kurbanova**  
The role of technical aids at the lessons of foreign languages
- 118. Han-Durdy Kurbanov**  
Social structure of the Turkmens in the 12th-14th centuries
- 119. Aygul Gurbanova**  
Description of a moral beauty in creative work by Magtymguly
- 120. Jamilya Gurbanova**  
Classification of genres of turkmen folk music
- 121. Gurbangul Guzuchyyeva**  
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