

Conference schedule

15 September, Monday

08:00–09:00	Registration
09:00–09:30	Opening ceremony
09:30–11:00	Plenary reports – I
11:00–11:20	Coffee break
11:20–13:00	Session reports – I
13:00–14:30	Lunch
14:30–16:10	Session reports – II
16:10–16:30	Coffee break
16:30–18:10	Session reports – III
19:00–22:00	Conference dinner

16 September, Tuesday

09:30–11:00	Plenary reports – II
11:00–11:20	Coffee break
11:20–11:50	Plenary reports – II
11:50–13:10	Session reports – IV
13:10–14:30	Lunch
14:30–16:10	Session reports - V
16:10–16:30	Coffee break
16:30–17:30	Poster reports
17:30–18:00	Closing ceremony

17 September, Wednesday - Excursion day

09:00–13:00	Technical tour to the INP facilities
14:00–16:00	Cultural tour to the Central State Museum RK

Conference program

15 September, Monday

08:00-09:00	Registration
09:00-09:30	Opening
Plenary reports – I.	
09:30-10:00	Application of nuclear physics technologies of INP for research in the field of cultural heritage Nazarov Kuanysh (<i>Institute of Nuclear Physics, Atomic Energy Agency, Almaty, Kazakhstan</i>)
10:00-10:30	The experience of using neutron methods of the JINR LNP in the study of cultural heritage sites Belushkin Alexander (<i>Joint Institute for Nuclear Research, Dubna, Russia</i>)
10:30-11:00	How natural science research affects the selection of conservation methods: on the example of the tomb door of Khoja Ahmed Yasavi Altynbekov Krym (<i>Scientific Restoration Laboratory "Ostrov Krym", Almaty, Kazakhstan</i>)
11:00-11:20	Coffee break
Sectional reports-I.	
11:20-11:40	Scientific Insights into Iron Age Steppe Goldsmithing technologies Amir Saltanat (<i>British Museum, London, UK</i>)
11:20-11:40	Possibilities of neutron methods at the IBR-2 pulsed high-flow reactor for analyzing the structural features of archaeological materials Kichanov Sergei (<i>Joint Institute for Nuclear Research, Dubna, Russia</i>)
12:00-12:20	From archeology to genetics: an interdisciplinary approach to the study of the Saka population of Issyk-Kul Abdykanova Aida (<i>American University of Central Asia, Bishkek, Kyrgyzstan</i>)
12:20-12:40	Experience of analytical research of materials of the Dzhetyasar archaeological culture Mednikova Mariia (<i>Institute of Archeology of the Russian Academy of Sciences</i>)
12:40-13:00	Methods of studying ceramics in archeology Kaliyeva Zhanargul (<i>Margulan Institute of Archeology</i>)
13:10-14:30	Lunch
Sectional reports-II.	
14:30-14:50	The role of micro-impurities in determining the original color of reborn copper pigments in the 14th-century Cathedral of the Nativity of the Virgin of the Snetogorsky Monastery (Pskov,

	Russia) Dmitriev Andrey/ Filippova Olga (<i>Joint Institute for Nuclear Research, Dubna, Russia</i>)
14:50-15:10	New paints to the old canvas: research methods of natural sciences of archaeological materials from the ancient ground burial ground Volna 1, Tamansky Peninsula (Russian Science Foundation No. 23-18-00196) Saprykina Irina (<i>Institute of Archeology of the Russian Academy of Sciences</i>)
15:10-15:30	Natural science methods in zooarchaeology Shagirbayev Mambet (<i>Margulan Institute of Archeology</i>)
15:30-15:50	Study of carbonate layers on artifacts of the Republic of Kazakhstan for dating by electron paramagnetic resonance method Seredavina Tatyana (<i>Institute of Physics and Technology, Satpayev University</i>)
15:50-16:10	Study of the elemental composition of modern coins by INAA and RFA methods for modeling archeometallurgical studies Silachev Igor (<i>Institute of Nuclear Physics, Atomic Energy Agency, Almaty, Kazakhstan</i>)
16:10-16:30	Coffee break
Sectional reports-III.	
16:30-16:50	Neutron tomography study of finds from the Uzundara fortress using neutron tomography Ismatov Normamat (<i>Institute of Nuclear Physics of the Academy of Sciences of the Republic of Uzbekistan</i>)
16:50-17:10	Anthropology at the Intersection of Sciences: biological and cultural dimensions Zhanuzak Ramazan (<i>Margulan Institute of Archaeology</i>)
17:10-17:30	Chemical composition and origin of vessel glass from ancient monuments of the Northern Black Sea region of the end of the VI century BC-I century AD (based on the materials of the collection of the State Historical Museum) Rumiantseva Olga (<i>Institute of Archeology of the Russian Academy of Sciences</i>)
17:30-17:50	Ancient glassmaking of Uzbekistan in interdisciplinary studies Murodova Durdonakhon (<i>National Center of Archeology of the Academy of Sciences of the Republic of Uzbekistan</i>)
17:50-18:10	Mountain agriculture and irrigation: results and prospects for settlements study in Altai mountains Konstantinov Nikita (<i>Al-Farabi Kazakh National University</i>)
19:00-22:00	Welcome dinner

16 September, Tuesday	
Plenary reports-II.	
09:30-10:00	Nuclear physics studies of archaeological sites at the Institute of Nuclear Physics of the Academy of Sciences of the Republic of Uzbekistan Tashmetov Mannab (<i>Institute of Nuclear Physics of the Academy of Sciences of the Republic of Uzbekistan</i>)
10:00 – 10:30	Scientific achievements of the A. H. Margulan Institute of Archaeology: results and prospects Kasenova Asemgul Daurenovna (<i>Margulan Institute of Archaeology</i>)
10:30 – 11:00	Current status and prospects of muonographic studies of archaeological sites and cultural heritage sites Polukhina Natalia (<i>National University of Science and Technology MISIS, Russia</i>)
11:00-11:20	Coffee break
11:20-11:50	Application of isotope geochronology to determine the regions of origin of rock material Khotylev Alexey (<i>Lomonosov Moscow State University</i>)
Sectional reports-IV.	
11:50-12:10	Elemental and X-ray structural analysis of ceramics of the Bronze Age settlement Dongal in Central Kazakhstan Silachev Igor (<i>Institute of Nuclear Physics, Atomic Energy Agency, Almaty, Kazakhstan</i>)
12:10-12:30	X-ray fluorescence method for the study of metal objects of horse equipment of the Saka period Bessetayev Bauyrzhan (<i>Al-Farabi Kazakh National University</i>)
12:30-12:50	Ceramic finds of the Shubarat-1 monument (2023-2024) and the experience of using neutron-tomography to study them Dubyagina Ekaterina (<i>Margulan Institute of Archeology, Almaty</i>)
12:50-13:10	Results of conservation and restoration work on artefacts from the Tortoba burial ground Vishnyakova-Bizyayeva Yelizaveta (<i>Margulan Institute of Archeology</i>)
13:10-14:30	Lunch
Sectional reports-V.	
14:30-14:50	Study of archaeological artifacts from the archaeological collection of the Central State Museum of the Republic of Kazakhstan Myakisheva Olga (<i>Central State Museum of the Republic of Kazakhstan</i>)
14:50-15:10	Raman spectroscopy and chemometric methods in the study of the aging processes of ancient icon boards Mikhailova Anna

	<i>(Semenov Institute of Chemical Physics, Russian Academy of Sciences)</i>
15:10-15:30	X-ray microtomography for anthropology and Archeology: experience in developing hardware and software solutions Avakyan Artem <i>(PRODIS.NDT, Russia)</i>
15:30-15:50	Reconstruction of conditions in the port water area of Fanagoria (Taman peninsula) in the interval of V century BC - IV century AD Mayorov Alexander <i>(Lomonosov Moscow State University)</i>
15:50-16:10	X-ray fluorescence spectrometry of valuable artifacts of the Museum of History of Uzbekistan Yarmatov Bakhrom <i>(Institute of Nuclear Physics, Academy of Sciences of the Republic of Uzbekistan)</i>
16:10-16:30	Coffee break
16:30-17:30	Poster reports
17:30-18:00	Closing ceremony

17 September, Wednesday - Excursion day

09:00-13:00	Technical tour to INP facilities
14:00-16:00	Cultural tour to the Central State Museum of the Republic of Kazakhstan

Poster reports

- 1 **Baumann M.** MCT internal traceology: fresh or dry? A case study of mousterian bone retouchers
- 2 **Khaligzada A.Sh.** Determination of the electrical parameters of the gas thin film
- 3 **Saydullaev B.** The INAA and ICP-MS and track analysis of the bone finds and some problems with radiogenic dating
- 4 **Abdurakhimov B.** Neutron imaging facility at the WWR-SM reactor: non-destructive studies of cultural heritage objects of Uzbekistan
- 5 **Myrzabekova E.** Imax – compact x-ray microtomography kit for observing materials
- 6 **Smirnova V.** Investigation of mass ceramics from the excavations of the Volna-1 urban burial ground
- 7 **Smat A.** An analysis of the pore distribution in ceramic vessels from the Akterek burial archeological site using neutron tomography data
- 8 **Kenessarin M.** Application of neutron radiography and tomography for non-destructive analysis of archaeological objects at the titan facility
- 9 **Shegebayev N.** Neutron imaging investigation of metal archaeological artifacts from the Eleke Sazy site
- 10 **Zhomartova A.Zh.** Neutron tomography, diffraction, and spectroscopic methods: investigating the structural features of ceramic and metal cultural heritage artefacts (Kazakhstan, Romania)
- 11 **Yerlankyzy Zh.** Production of biogas from food waste and study of the efficiency of its combustion
- 12 **Yergashov A.** Application of Radiation Capture Neutron Resonance Analysis (NRCA) in archaeology
- 13 **Saparova A.** Non-invasive structural analysis of ceramic fragments from ancient Kazakh tribes
- 14 **Bakirov B.A.** The method of neutron tomography in the study of archaeological finds Volna 1
- 15 **Rafikov A.** Investigation of silicon compensation and overcompensation features when alloying with rhodium