

Program of the
VII International School-Conference
"Advanced Multicomponent ("High-Entropy")
Materials" dedicated to the 100th anniversary
of Yuri Aleksandrovich Skakov

October 06-10, 2025

Belgorod State National Research University
National University of Science and Technology «MISIS»
State Marine Technical University
Russian Academy of Sciences
Russian Science Foundation
National Strategic Project «Decade of Science and Technology»



Moscow, Leninsky Prospekt, 4,
National University of Science and Technology «MISIS»

Co-chairmen of the conference

Filonov M.R.	Vice-Rector for Science and Innovation of the National University of Science and Technology «MISIS»
Salishchev G.A.	Head of the Laboratory of Bulk Nanostructured Materials, Professor of the Department of Materials Science and Nanotechnology of Belgorod State National Research University

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Astafurova E.G.	Institute of Strength Physics and Materials Science RAS
Grigorovich K.V.	A.A. Baikov Institute of Metallurgy and Materials Science RAS
Ilyushchenko A.F.	Institute of Powder Metallurgy named after Academician O.V. Roman
Kablov E.N.	Association of the State Research Center Nauka
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Mileiko S.T.	Yu.A. Osipyan Institute of Solid State Physics of the RAS
Rempel A.A.	Academician N.A. Vatolina Ural Branch of the Russian Academy of Sciences
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Turichin G.A.	Saint Petersburg State Marine Technical University

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WORKING SCHEDULE

06.10.2025 MONDAY

(Time: GMT+3)

(Leninsky Prospekt, 4. Building B, hall, 2nd floor)

14:00-16:00 Registration

16:00-17:00 Visit To The Department And Exhibition Dedicated To Skakov

17:00 Coffee Break

07.10.2025 TUESDAY

(Time: GMT+3)

9:30-13:00 REGISTRATION
(Building G, Leninsky Prospekt, 6)

10:00-10:10

Opening. Welcome speech
Filonov M.R., Salishchev G.A.
(Building G, Assembly Hall)

10:10-11:30

Plenary reports
(Building G, Assembly Hall)

11:30-12:00 Coffee Break

12:00-13:15
report - 25 minutes

Keynote presentations
(Building G, Assembly Hall)

13:15-13:30

Photographing of participants

13:30-14:30 Lunch

14:30-16:00
report - 15 minutes

Oral presentations by section:
– Multicomponent structural and functional materials (Building B, B536)
– Multi-Component Coatings (Building B, Nano-Hall)
– Metallic Biomaterials (Building B, Small Living Room)

16:00-16:30 Coffee Break

16:30-18:00
report - 15 minutes

Oral presentations by section:
– Multicomponent structural and functional materials (Building B, B536)
– Multi-Component Coatings (Building B, Nano-Hall)
– Composite Materials (Building B, Small Living Room)

15:00-18:00
report - 5 minutes

Poster session
(Building B, Hall Of The Palace Of Culture)

08.10.2025 WEDNESDAY

(Time: GMT+3)

09:00-11:05
report - 25 minutes

Keynote presentations
(Building B, B536)

11:05-11:35 Coffee Break

11:35-13:40
report - 25 minutes

Keynote presentations
(Building B, B536)

13:40-14:45 Lunch

14:45-16:00
report - 15 minutes

Oral presentations by section:
– Metallic Biomaterials (Building B, B536)
– Multicomponent structural and functional materials (Building B, Nano-Hall)
– Methods Of Obtaining And Processing (Building B, Small Living Room)

16:00-16:30 Coffee Break

16:30-18:00

Oral presentations by section:

report - 15 minutes	– Magnetic Materials (Building B, B536) – Multicomponent structural and functional materials (Building B, Nano-Hall) – Multi-Component Coatings (Building B, Small Living Room)
15:00-18:00 report - 5 minutes	<u>Poster session</u> (Building B, Hall Of The Palace Of Culture)
09.10.2025 THURSDAY (Time: GMT+3)	
09:00-11:05 report - 25 minutes	<u>Keynote presentations</u> (Building B, B536)
11:05-11:35 Coffee Break	
11:35-13:40 report - 25 minutes	<u>Keynote presentations</u> (Building B, B536)
13:40-14:45 Lunch	
14:45-16:00 report -15 minutes	Oral presentations by section: – Materials for Hydrogen Energy (Building B, B536) – Additive Manufacturing (Building B, Nano-Hall) – Composite Materials (Building B, Small Living Room)
16:15-16:45 Coffee Break	
16:45-17:45 report - 15 minutes	Oral presentations by section: – Theoretical and Computational Prediction (Building B, B536) – Electrochemistry Of Multicomponent Materials (Building B, Nano-Hall) – Composite Materials (Building B, Small Living Room)
15:00-18:00 report - 5 minutes	POSTER SESSION (Building B, Hall Of The Palace Of Culture)
18:30 Banquet	
10.10.2025 FRIDAY (Time: GMT+3)	
09:00-10:15	<u>Keynote presentations</u> (Building B, B536)
10:15-11:45	Oral presentations by section
11:45 Closing Ceremony Awarding Of The Best Oral and Poster Presentations Of Young Scientists (Building B, B536)	

YURI ALEXANDROVICH SKAKOV

October 24, 1925 – March 30, 2009



Yuri Aleksandrovich Skakov was born in Khabarovsk on October 24, 1925. His mother, Natalya Tikhonovna, a mathematics teacher, worked at the school for over 40 years. Aleksandr Ivanovich Skakov, Yuri Aleksandrovich's father, was a distinguished metallurgist, Doctor of Engineering Sciences, a specialist in rail steel, and the author of a unique monograph, "The Quality of Rails". He was a highly talented scientist, a laureate of the Stalin Prize, the most prestigious award in the Soviet Union. Alexander Ivanovich worked for many years at the Scientific Research Institute of Railway Transport, where the A.I. Skakov Laboratory still exists.

Yuri Alexandrovich Skakov spent his childhood in the Voronezh region, in the village of Rozhdestvenskoye, where his mother, Natalya Tikhonovna, was born, and in the city of Borisoglebsk, his father's birthplace. The Great Patriotic War found Yuri Alexandrovich as a 15-year-old Moscow schoolboy. The Institute of Railway Transport, where his father worked, was evacuated to Tashkent. There, Yury Skakov graduated from high school and entered the Leningrad Polytechnic Institute, which was being evacuated. In 1943, upon returning to Moscow, he transferred to the second year of the Moscow Steel Institute, graduating with honors in 1947 in the Department of Metallurgy and Heat Treatment of Steel. In his thesis, student Yu. Skakov established a new scientific fact: the isothermal formation of martensite in CrVMn steel. As the best student, he was offered admission to graduate school. His supervisor was Academician N.T. Gudtsov. The topic of the dissertation is a study of the structure of iron-nickel-aluminum alloys for permanent magnets and, as Yu.A. Skakov writes in his abstract, "due to the extremely thin, very slowly coagulating decay structures, the use of electron-optical magnifications became necessary".

In 1948, the first electron microscopy laboratory at a university was established at the Department of Metal Science and Heat Treatment at the Moscow Institute of Metallurgy. Its leading specialists were Yu. A. Skakov and L. M. Utevsky. They assembled an electron microscope from parts manufactured by Siemens before the war. Yu. A. Skakov was then tasked with mastering one of the first Soviet microscopes. The use of diffraction electron microscopy enabled him to brilliantly solve the problems posed in his PhD dissertation: elucidating the structure of high-coercivity alloys and the mechanism of structural transformations. Establishing

the relationship between structural transformations and changes in magnetic properties was fundamental for the further development of hard magnetic materials for permanent magnets. Solving this problem was also crucial for progress in understanding the nature of the high-coercivity state.

Yu. A. Skakov began teaching in 1950. He was the first in a USSR university to develop a course, "Electron Microscopy of Metals," which he taught in the Department of Radiography and Metal Physics throughout his years of teaching at the institute. In addition to lectures, back in the 1950s he developed a laboratory practical course, and in 1963, in collaboration with S.S. Gorelik and L.N. Rastorguev, a fundamental textbook, "X-ray and Electron-Optical Analysis," was prepared for publication. This textbook summarized and systematized the experience of the electron microscopy laboratory and the methodological developments of the Department of X-ray Diffraction and Physics of Metals. This unique book has been reprinted several times (the last edition was in 2004), without losing its relevance. It has served, and continues to serve, many generations of students, graduate students, and scientists specializing in metal physics. Another fundamental lecture course, to which Yu. A. Skakov made a significant contribution, was called "Physics of Metals." It subsequently became the basis for the textbook "Physics of Metals," co-authored by Yu. A. Skakov and his teacher, the distinguished scientist Ya. S. Umansky; this textbook was awarded the State Prize.

Yu. A. Skakov's doctoral dissertation was devoted to the study of the role of crystal structure defects in the aging processes of alloys. He devoted 20 years of his scientific career to this area of science. From 1970 to 1991, Professor Yu. A. Skakov headed the Department of Radiography and Physics of Metals.

Yuri Alexandrovich was a true scientific innovator. As a true scientist, he was not only not intimidated by, but, on the contrary, drawn to everything new and unknown. Thus, he began studying the amorphous state of metals. The main result of this research was the identification of the primary criterion for a metallic alloy's susceptibility to amorphization. The next stage of his work was the study of phase states arising during solid-phase reactions under mechanochemical synthesis conditions, with the goal of creating high-strength industrial materials.

Yu. A. Skakov's special achievements include the organization and management of research laboratories. In 1948, together with L. M. Utevsky, he established the first electron microscopy laboratory at a university, and in 1978, the interdepartmental laboratory of amorphous metal alloys. Yu. A. Skakov was among the organizers of many scientific conferences and meetings. He was the first in our country to organize the All-Union Conference "Problems of Research into the Structure and Properties of Amorphous Alloys".

One of Yuri Skakov's main character traits was his extraordinary goodwill to people and active kindness. He was selfless both in science and in life. He was undoubtedly a man of high spirit.

Yuri Skakov's entire life was connected with the Moscow Institute of Steel and Alloys. His employment record contains only one entry – that of his work at MISiS.

06.10.2025 MONDAY (Time: GMT+3) (Leninsky Prospekt, 4. Building B, hall, 2nd floor) 14:00-16:00 Registration 16:00-17:00 VISIT To The Department And Exhibition Dedicated To Skakov 17:00 Coffee Break			
07.10.2025 TUESDAY (Time: GMT+3)			
9:30-13:00 REGISTRATION (Building G, Leninsky Prospekt, 6)			
10:00	Opening. Welcome speech Filonov M.R., Salishchev G.A. (Assembly Hall In Building G)		
Chairman: Filonov M.R., Salishchev G.A.			
10:10	Salikhov S.V.	Yu. A. Skakov: Life Milestones	National University of Science and Technology «MISIS», Moscow, Russian Federation
10:30	<u>Kaloshkin S.D.</u>	What Is The Entropy Of "High-Entropy Alloys"?	National University of Science and Technology «MISIS», Moscow, Russian Federation
11:00	<u>Salishchev G.A.</u>	Multicomponent Equiatomic Alloys: Structure And Properties	Belgorod State University, Belgorod, Russian Federation
11:30-12:00 Coffee Break			
Chairman: Kaloshkin S.D., Levashov E.A.			
12:00	<u>Tarasov B.P.</u>	Hydrogen Embrittlement Of Multi-Component Alloys And Hydrogen Materials Science	Federal Research Center of Problems of Chemical Physics and Medicinal Chemistry of Russian Academy of Sciences, Chernogolovka, Russian Federation
12:25	<u>Rogachev A.S.</u>	Self-Propagating High Temperature Synthesis Of Multi-Principal Component Cermets	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka Russian Federation
12:50	<u>Yurchenko N.Yu.</u>	Refractory Complex Concentrated Alloys: When New Design Philosophy Meets Old Challenges	State Marine Technical University, St. Petersburg, Russian Federation
13:15 Photographing of participants			
13:30-14:30 Lunch			
Chairman: Rogachev A.S., Yurchenko N.Yu.			
Multicomponent structural and functional materials (Building B, B536)			
14:30	<u>Uporov S.A.</u>	Excellent Strain Gauge Sensitivity In Refractory High Entropy Alloys: Intrinsic Nature And Functionality	Vatolin Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russian Federation
14:45	<u>Korobov Yu. S.</u>	Effect Of Alloying Additives And Annealing Treatment On Haracteristics Of High-Entropy AlCoCrFeNi-Based Alloys	M.N. Mikheev Institute of Metal Physics of Ural Branch of Russian Academy of Sciences, Yekaterinburg, Russian Federation
15:00	<u>Zherebtsov S. V.</u>	Fatigue behaviour of a laser beam welded CoCrFeNiMn-type high entropy alloy	State Marine Technical University, St. Petersburg, Russian Federation

15:15	<u>Sidorov V. E.</u>	Physical Properties And Crystallization Behavior Of FeNiBNb, FeNiBSiNb And CoFeSiBNb Multicomponent Alloys	Ural State Pedagogical University, Yekaterinburg, Russian Federation
15:30	<u>Tkachev E. S.</u>	Microstructural Stability And Yield Strength Evolution In A Low-Nitrogen, High-Boron 12%Cr–3%Co Steel During Long-Term Aging	Belgorod State University, Belgorod, Russian Federation
15:45	<u>Sanin V.V.</u>	Development And Improvement Of Raw Metal (Rm/Rem) Production Technologies For Smelting Or Synthesizing Hea Alloys: From Research To Implementation	Sazhin Giredmet JSC, Moscow, Russian Federation
<i>Chairman: Trofimov E. A., Kulmetyeva V.B.</i>			
Multi-Component Coatings (Building B, Nano-Hall)			
14:30	<u>Mariappan Anandkumar</u>	Phase Evolution And Thermal Properties Of High-Entropy Pyrochlore Oxides For Thermal Barrier Coatings	South Ural State University, Chelyabinsk, Russian Federation
14:45	<u>Ghyngazov S.A.</u>	Electron Beam Synthesis Of High-Entropy Ceramics (Y _{0.2} Yb _{0.2} Lu _{0.2} Eu _{0.2} Er _{0.2}) ₃ Al ₅ O ₁₂	Tomsk Polytechnic University, Tomsk, Russian Federation
15:00	<u>Zorin I. V.</u>	Formation Of A Composite Structure During Surfacing Of Heat- And Wear-Resistant Alloys Based On Iron And Nickel	Volgograd State Technical University, Volgograd, Russian Federation
15:15	<u>Pochetukha V. V.</u>	Electrocorundum Particles After Electroexplosive Spraying And Electron Beam Treatment	Siberian State Industrial University, Novokuznetsk, Russian Federation
15:30	<u>Savina Ya.N.</u>	Selection Of The Optimal Architecture Of A High-Entropy Coating Of The TiZrVCrAl System On Titanium Alloy With A Coarse-Grained And Ultrafine-Grained Structure	Ufa University of Science and Technology, Ufa, Russian Federation
15:45	<u>Zamulaeva E. I.</u>	Advanced Protective Coatings Produced With HfSi ₂ –HfB ₂ –MoSi ₂ Electrodes By Combined Pulsed Electrospark And Magnetron Sputtering Techniques	National University of Science and Technology «MISIS», Moscow, Russian Federation
<i>Chairman: Sheremetyev V.A., Komarov V. S.</i>			
Metallic Biomaterials (Small Living Room)			
14:30	<u>Komarov V. S.</u>	Dynamic Processes Of Structure And Properties Formation In TiNi Shape Memory Alloys	National University of Science and Technology «MISIS», Moscow, Russian Federation/ Baikov Institute of Metallurgy and Materials Science, RAS, Moscow, Russian Federation
14:45	<u>Mousavian S.M.H.</u>	Features Of Corrosion Behavior Of The System "Bioresorbable Magnesium Alloy – PEO/PEF Coating" For Preventing Peri-Implant Gas Accumulation (Piga)	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:00	<u>Derkach M. A.</u>	Influence Of Various Methods Of Severe Plastic Deformation On The Structure And Properties Of Biocompatible Titanium Shape Memory Alloys Of The Ti–Zr–Nb(–Sn) System	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:15	<u>Lukashevich K. E.</u>	Influence Of Four-Caliber Longitudinal Rolling On The Structure And Properties Of A Metastable Superelastic Ti–Zr–Nb Alloy For Transpedicular Spine Fixation Rods	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:30	<u>Martynenko N. S.</u>	Effect Of Rare Earth Metals And Rotary Swaging On The Mechanical And Corrosion Behavior Of Medical Magnesium Alloys	A.A. Baikov Institute of Metallurgy and Materials Science of the Russian Academy of Sciences,

			Moscow, Russian Federation
16:00-16:30 Coffee Break			
<i>Chairman: Zherebtsov S. V., Martynenko N.S.</i>			
Multicomponent structural and functional materials (Building B, B536)			
16:30	<u>Rusanov B. A.</u>	Density, Electrical Resistivity And Magnetic Susceptibility Of AlNiCoCuZr High-Entropy Alloys At High Temperatures	Ural State Pedagogical University, Yekaterinburg, Russian Federation
16:45	<u>Korneeva E. A.</u>	Swift Heavy Ion Induced Microstructural Changes In Oxide Dispersion Strengthened High-Entropy Alloys	Joint Institute for Nuclear Research, Dubna, Moscow region, Russian Federation
17:00	<u>Luchin A. V.</u>	Temperature Dependence Of Mechanical Properties And Deformation Behavior In Nitrogen-Alloyed FeMnCoCr(N) Multicomponent Alloys	Institute of Strength Physics and Materials Science of Siberian Branch of Russian Academy of Sciences, Tomsk, Russian Federation
17:15	<u>Fomin Yu.D.</u>	The Glass Transition In Monoatomic Systems: A Case Of Structural Dilution Or Two-State Competition?	Vereshchagin Institute of High Pressure Physics, Russian Academy of Sciences, Troitsk, Moscow, Russian Federation
17:30	<u>Fedoraev I. I.</u>	Mechanisms Of Decomposition Of FCC Cobalt Solid Solution In The Four-Component System Co-Ti-Ta-Re	Lomonosov Moscow State University, Moscow, Russian Federation
17:45	<u>Barannikova S. A.</u>	Effects Of Macroscopic Heterogeneity Of Plastic Deformation In Multi-Component Alloys	Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russian Federation
<i>Chairman: Ghyngazov S.A., Pochetukha V. V.</i>			
Multi-Component Coatings (Building B, Nano-Hall)			
16:30	<u>Kulmetyeva V.B.</u>	High-Entropy Rare Earth Zirconates – Promising Materials For Thermal Barrier Coatings	Perm National Research Polytechnic University, Perm, Russian Federation
16:45	<u>Novikov V. Yu.</u>	Influence Of The Non-Metallic Component Type And Deposition Parameters On The Structure, Mechanical Properties, And Oxidation Resistance Of Multicomponent (AlCrNbSiTi)X Coatings (X = N, C, CN)	Belgorod State University, Belgorod, Russian Federation
17:00	<u>Petrovskaya K.V.</u>	Production Of Oxidation-Resistant High-Temperature Coatings On A Carbon-Graphite Substrate By Spark Plasma Sintering	National University of Science and Technology «MISIS», Moscow, Russian Federation
17:15	<u>Plesovskikh A. Yu.</u>	Formation Of Wear-Resistant Surface Structure Of Oil And Gas Equipment Parts By Applying Wc Coating By Cold Thermal Spray	Orenburg State University, Orenburg, Russian Federation
17:30	<u>Abramov N.N.</u>	Influence Of Electron Beam Welding Parameters On The Quality And Properties Of Welded Joints Of Molybdenum-Rhenium Alloy	National University of Science and Technology «MISIS», Moscow, Russian Federation
17:45	<u>Khasenova R. S.</u>	Influence Of Powder Particle Morphology On Formation Of Al/Cnt Composite Coatings Fabricated By Ball Impact Treatment In Planetary Mills	JSC «NIKIMT-Atomstroy»
<i>Chairman: Mileiko S.T., Stepashkin A.A.</i>			
Composite Materials (Small Living Room)			

16:30	<u>Volodko S. S.</u>	Calcium-Carbothermic Process For Synthesis High-Entropy Carbide Powders	National University of Science and Technology «MISIS», Moscow Russian Federation
16:45	<u>Pisarev S. M.</u>	Titanium Matrix Composites Reinforced With (W,Ti,Ta)C Medium-Entropy Ceramic Via Combined High-Energy Ball Milling And Spark Plasma Sintering	Far Eastern Federal University, Vladivostok, Russian Federation
17:00	<u>Ponomareva E. A.</u>	Nickel Matrix Composites Reinforced With (W,Ti,Ta)C Medium-Entropy Ceramics Obtained Via Spark Plasma Sintering	Far Eastern Federal University, Vladivostok, Russian Federation
17:15	<u>Petukhov I. D.</u>	Carbon-Fibre/Titanium-Matrix Composite: Making, Strength – Fracture Toughness And High Temperature Properties	Osipyan Institute of Solid State Physics Russian Academy of Sciences, Chernogolovka, Moscow Region, Russian Federation
17:30	<u>Shibakov I. A.</u>	Influence Of Scandium Oxide And Lutetium Oxide On Phase Formation In Silicon Nitride–Based SHS Composite Powders	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka Russian Federation
17:45	<u>Korolev V. V.</u>	Self-Propagating High-Temperature Synthesis And Hot-Press Consolidation Of Eutectic (Hf,Ta)B₂–(Hf,Ta)C Solid-Solution Ceramics	National University of Science and Technology «MISIS», Moscow, Russian Federation

08.10.2025 WEDNESDAY

(Time: GMT+3)

(Building B, B536)

Chairmen: Resnina N. N., Zhevnenko S. N.

9:00	<u>Mileiko S. T.</u>	Fibre Reinforced Metal Matrix Composites	Osipyan Institute of Solid State Physics Russian Academy of Sciences, Chernogolovka, Moscow Region, Russian Federation
09:25	<u>Astafurova E. G.</u>	Thermoelastic FCC-HCP-FCC Martensitic Transformations In Boron- And Silicum- Alloyed Co35Ni5Cr20Fe20Mn20-Based Alloy	Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russian Federation
09:50	<u>Lakshmi Narayan R.</u>	Combining Strain-Assisted Nanoprecipitation With Nanotwins To Enhance Strength Of Laser Additively Manufactured High-Entropy Alloys	Indian Institute of Technology Delhi, New Delhi, India
10:15	<u>Kuzmin E. V.</u>	Investigation Of The Effect Of Ultrasound Exposure During Explosion Welding Of Layered Titanium-Aluminum Composite Material	Volgograd State Technical University, Volgograd, Russian Federation
10:40	<u>Trofimov E. A.</u>	New Compositions Development And Study Of High-Entropy Oxides A2B2O7	South Ural State University, Chelyabinsk, Russian Federation

11:05-11:35 Coffee break

Chairmen: Kuzmin E. V., Astafurova E. G.

11:35	<u>Ryltsev R. E.</u>	Machine Learning Interatomic Potentials For The mDiscovery And Design Of Multicomponent Alloys	Vatolin Institute of Metallurgy, UB RAS, Ekaterinburg, Russian Federation
12:00	<u>Shchelkachev N. M.</u>	Transfer Learning For Predicting The Dynamics Of Complex Atomic Ensembles	Vereshchagin Institute of High Pressure Physics, Russian Academy of Sciences, Troitsk, Moscow, Russian Federation
12:25	<u>Pervikov A. V.</u>	Nanosized Multicomponent Metallic Materials Obtained By Joint Exploding Wires: Synthesis, Structure, Catalytic Properties	Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russian Federation
12:50	<u>Fedoseeva A. E.</u>	Microstructural Aspects Of Improved Creep Resistance Of High-Chromium Steels	Belgorod State University, Belgorod, Russian Federation
13:15	<u>Belov N. A.</u>	Effect Of Calcium On Structure And Mechanical Properties Of Aluminum Sheet Alloys Containing 6 Wt.%Cu And 2 Wt.%Mn	National University of Science and Technology «MISIS», Moscow, Russian Federation

13:40-14:45 Lunch

Chairman: Savchenko A. G., Shchetinin I.V.

**Magnetic Materials
(Building B, B536)**

14:45	<u>Savchenko E. S.</u>	Effect Of Processing Method On The Phase Composition And Magnetic Properties Of The Alloy (Fe,Co) ₂ B	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:00	<u>Lysenko E. N.</u>	Structure And Electromagnetic Properties Of Lithium-Zinc Ferrites Manufactured By Additive Method	Tomsk Polytechnic University, Tomsk, Russian Federation
15:15	<u>Menushenkov V.P.</u>	Structure And Magnetic Properties Of Alloys Obtained By Mechanical Synthesis Of A Mixture Of Fe, Co And Bn Powders	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:30	<u>Gorshenkov M. V.</u>	Obtaining A Hard Magnetic Phase τ -MnAl By Calcium Hydride Reduction	National University of Science and Technology «MISIS», Moscow, Russian Federation

15:45	<u>Peskova O.L.</u>	Effect Of Magnetic Hardening In Hexagonal Ferrites SrFe _{12-x} ZrxO ₁₉	National University of Science and Technology «MISIS», Moscow, Russian Federation
Chairman: Belov N. A., Trofimov E. A.			
Multicomponent structural and functional materials (Building B, Nano-Hall)			
14:45	<u>Russkikh A. S.</u>	Synthesis Of HEA From A Mixture Of Oxides TiO ₂ , Nb ₂ O ₅ , V ₂ O ₅ AND ZrO ₂	Vatolin Institute of Metallurgy of the Ural Branch of the RAS, Ekaterinburg, Russian Federation
15:00	<u>Chuchkov A. A.</u>	Study Of Intermetallic Phase Formation In The Ni-Al-Ti System Using Powder Metallurgy And FDM Printing Methods	A. A. Baikov Institute of Metallurgy and Materials Science, RAS, Moscow, Russian Federation
15:15	<u>Nesterova E. D.</u>	The Influence Of Aluminum Content In The "5me" System On The Ability To Synthesize Composite Powders And To Deposit Microplasma Sprayed Coatings Based On Them	NRC «Kurchatov Institute» - CRISM «Prometey», St. Peterburg, Russian Federation
15:30	<u>Akopyan T.K.</u>	Increasing The Heat-Resistance Of Al-Cu-Mn-Zr Based Alloys By Forming The Θ' -Phase And Mn-Containing Dispersoids	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:45	<u>Ganeev A.V.</u>	Atomic-Scale Insights Into Microstructure Evolution And Solute Distribution In Severely Deformed (CoCrFeMnNi) _{98.9} C _{1.1} Cantor Alloy	Ufa University of Science and Technology, Ufa, Russian Federation
Chairman: Krokhavev A.V., Zorin I. V.			
Multi-Component Coatings (Small Living Room)			
14:45	<u>Shlyarova Yu. A.</u>	Structure And Properties Of The «Coating/Substrate» System Formed By The Plasma Method And Subject To Pulsed Electron Beam Irradiation	Siberian State Industrial University, Novokuznetsk, Russian Federation
15:00	<u>Astafurov S. V.</u>	Influence Of Surface Ion-Plasma Nitriding On Microstructure And Phase Composition Of High-Entropy Alloy Co ₂₀ Cr ₂₀ Fe ₂₀ Mn ₂₀ Ni ₂₀	Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russian Federation
15:15	<u>Zavarzina E. P.</u>	The Effect Of Short-Pulse Laser On Ni ₂₉ Fe ₂₉ Mo ₂₀ Cu ₁₃ Co ₉ Coating Deposited On Steel Substrate	M.N. Mikheev Institute of Metal Physics of Ural Branch of Russian Academy of Sciences, Yekaterinburg, Russian Federation
15:30	<u>Grishin P. N.</u>	Decorative Anticorrosive Plasma-Electrolytic Coatings On Aluminum Alloys	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:45	<u>Bastrikov R. M.</u>	Formation Of A Single-Phase Solid Solution In Compositions With $\Delta S_{mix} \geq 1.5r$ Based On ZrO ₂	Ural Federal University named after the First President of Russia B.N. Yeltsin ₁ , Yekaterinburg, Russian Federation
16:00-16:30 Coffee break			
Chairman: Sheremetev V.A., Teplyakova T. O.			
Metallic Biomaterials (Building B, B536)			
16:30	<u>Teplyakova T. O.</u>	Modification Of The Surface Of Superelastic Titanium	National University of Science and Technology «MISIS», Moscow, Russian Federation
16:45	<u>Sadykova Yu. A.</u>	Influence Of Rotary Forging On The Structure, Phase Composition, Mechanical Properties, And Electrochemical Behavior Of Biodegradable Fe-30Mn-5Si Alloy	National University of Science and Technology «MISIS», Moscow, Russian Federation

17:00	<u>Kamerilova A. A.</u>	The Influence Of Drawing Regimes On The Microstructure And Performance Properties Of Mg-Zn-Y-Mn Alloy Rods	National University of Science and Technology «MISIS», Moscow, Russian Federation
17:15	<u>Vostrikov N. F.</u>	Improving The Technology Of Producing Porous Materials From Titanium Alloys For Manufacturing Custom Implants	National University of Science and Technology «MISIS», Moscow, Russian Federation
17:30	<u>Yanetskaya A. S.</u>	Methods Of Formation And Prediction Of Properties Of Highly Porous Ceramic Materials From Alumosilicate Powders	Belarusian National Technical University, Minsk, Republic of Belarus
17:45	<u>Tagirov D. V.</u>	Biomedical Composites Based On TiNbZr Alloy Reinforced With Borides	Belgorod State University, Belgorod, Russian Federation
Chairman: Rogachev S.O., Korobov Yu. S.			
Multicomponent structural and functional materials (Building B, Nano-Hall)			
16:30	<u>Mishunina E. S.</u>	Structure, Mechanical Properties, And Oxidation Behaviour Of Refractory NbTiZrSi Complex Concentrated Alloys	Belgorod State University, Belgorod, Russian Federation
16:45	<u>Zaitsev A. A.</u>	Diamond Containing Composites With CoCrCuFeNi And CoCrFeNiTi High Entropy Alloys Used As Binders: Studies And Application	National University of Science and Technology «MISIS», Moscow, Russian Federation
17:00	<u>Fedotov A. D.</u>	Study Of The Effect Of Boron On The Structure And Properties Of High-Entry Alloy CoCrCuFeNi	National University of Science and Technology «MISIS», Moscow, Russian Federation
17:15	<u>Sokolovsky V. S.</u>	Evolution Of Microstructure In Two- And Three-Phase B- Solidifying Gamma-Titanium Aluminide Alloys With Heterogeneous Structure During Heat Treatment	Belgorod State University, Belgorod, Russian Federation
17:30	<u>Semenyuk A.O.</u>	Structure And Mechanical Properties Of FCC Alloys In The Co-Cr-Fe-Ni-Mn System	Belgorod State University, Belgorod, Russian Federation
17:45	<u>Trofimova M.E.</u>	The Superelasticity And The Martensitic Transformations During Mechanical Cycling Of Ti40.7Hf9.5Ni39.8Cu10 Shape Memory Thin Ribbon	Saint-Petersburg State University, Saint-Petersburg, Russian Federation
Chairman: Loginov P. A., Suvorova V.S.			
Methods Of Obtaining And Processing (Small Living Room)			
16:30	<u>Panov D.O.</u>	New Strategy To Overcome Strength-Ductility/Impact Toughness Trade-Off In Austenitic Alloys Via Large-Scale Gradient Structuring	Belgorod State University, Belgorod, Russian Federation
16:45	<u>Naumov S.V.</u>	Laser Beam Welding Dissimilar Alloys Using High-Entropy Interlayer	Belgorod State University, Belgorod, Russian Federation
17:00	<u>Ivannikov A. Yu.</u>	Fabrication, Morphology, And Properties Of Powders Of Equiatomic Co-Fe-Cr-Mo-W Alloy	A.A.Baikov Institute of Metallurgy and Materials Science, Russian Academy of Sciences, Moscow, Russian Federation
17:15	<u>Kharlamov V. O.</u>	Study Of Patterns Of Formation Of Structures In The Junction Zone Between Metals With Different Types Of Interaction During Explosion Welding	Volgograd State Technical University, Volgograd, Russian Federation
17:30	<u>Chernikov D.R.</u>	Formation Of A Metastable Ti2Fe Phase During Explosive Pressing Of Titanium And Iron Powder Mixtures	Volgograd State Technical University, Volgograd, Russian Federation
17:45	<u>Berezin M.A.</u>	Optimization Of Mechanical Alloying For The Development Of High-Strength Powder High-Entropy Alloys In The CoCrFeNiTi System	National University of Science and Technology «MISIS», Moscow, Russian Federation

09.10.2025 THURSDAY
(Time: GMT+3)
(Building B, B536)

Chairmen: Ryltsev R. E., Raab G. I.

09:00	<u>Kudiyarov V. N.</u>	Development Of Special Complex For Studying The Characteristics Of Hydrogen Interaction With Metal-Hydride Alloys And Composites	National Research Tomsk Polytechnic University, Tomsk, Russian Federation
09:25	<u>Resnina N. N.</u>	High-Entropy NiTi-Based Shape Memory Alloys	Saint-Petersburg State University, Saint-Petersburg, Russian Federation
09:50	Savchenko A. G.	Physical Materials Science Of The Hard Magnetic Materials. A Review Of The Current State	National University of Science and Technology «MISIS», Moscow, Russian Federation
10:15	<u>Sanin V. N.</u>	A New Class Of Oxide-Fiber/HEA Metal Matrix Composites Based On Refractory Metals For Ultra-High-Temperature Applications. Production, Structure, And Some Characteristics	A.G. Merzhanov Institute of Structural Macrokinetics and Problems of Materials Science of the Russian Academy of Sciences. Chernogolovka, Moscow Region, Russian Federation
10:40	<u>Bazaleeva K. O.</u>	Nickel-Based Metal Matrix Composite Coatings Reinforced With Carbides	Peoples' Friendship University of Russia named after Patrice Lumumba, Moscow, Russian Federation

11:05-11:35 Coffee break

Chairmen: Savchenko A. G., Bazaleeva K. O.

11:35	<u>Zhevnenko S. N.</u>	Materials Science In A Drop	National University of Science and Technology «MISIS», Moscow, Russian Federation
12:00	<u>Loginov P. A.</u>	Multicomponent Heat-Resistant Titanium Alloys Produced By Powder Metallurgy Methods: Structural Features, Deformation And Oxidation Mechanisms	National University of Science and Technology «MISIS», Moscow, Russian Federation
12:25	<u>Yudin S. N.</u>	New Multi-Component Alloys For Non-Evaporable Getters	National University of Science and Technology «MISIS», Moscow, Russian Federation
12:50	<u>Alymov M. I.</u>	SHS AlN Powders With Low Oxygen Impurity Content	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Moscow Region, Russian Federation
13:15	<u>Dergachev A.I., Milovzorov N.G.</u>	Modern Equipment for the Analysis of Materials, Substances, and Products	INSCAN LLC

13:45-14:45 Lunch

Chairmen: Klyamkin S. N., Yudin S. N.

Materials for Hydrogen Energy
(Building B, B536)

14:45	<u>Zadorozhny V. Yu.</u>	Effect Of Mechanical Activation On The Durability Of Metal Hydride Bulk Materials	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:00	<u>Lushnikov S. A.</u>	Hydride Phases Based On Titanium-Molybdenum Alloys Alloyed With Other d - Metals	Lomonosov Moscow State University, Moscow, Russian Federation
15:15	<u>Krokhalev A.V.</u>	The Effect Of Increased Titanium Content On The Phase Composition And Hydrogen Capacity Of Ti-Fe System Materials	Volgograd State Technical University, Volgograd, Russian Federation
15:30	<u>Svezhentseva A.Yu.</u>	The Effect Of Different Electroconductive Additives On Metal Hydride Electrode Properties	National research university "MPEI", Moscow, Russian Federation

15:45	<u>Murashkina T. L.</u>	Structural And Phase State And Sorption Characteristics Of Ti-V-Cr Based High-Entropy Alloys	National Research Tomsk Polytechnic University, Tomsk, Russian Federation
16:00	<u>Gusev K. S.</u>	High-Entropy Alloys Based On Group V Metals As Hydrogen-Permeable Membranes: X-Ray Diffraction Analysis And Mechanical Properties	National Research Tomsk Polytechnic University, Tomsk, Russian Federation
<i>Chairman: Chernishikhin S.V, Akopyan T.K.</i>			
Additive Manufacturing (Building B, Nano Room)			
14:45	<u>Stepanov N. D.</u>	Gradient Materials From Dissimilar Ni-Based Superalloys: Tool For Rapid Alloy Development	State Marine Technical University, St. Petersburg, Russian Federation
15:00	<u>Parshin N. V.</u>	Application Of Cavitation Treatment And Vibratory Finishing For Additively Manufactured Parts	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:15			
15:30	<u>Tvorogov A. I.</u>	Effect Of Dynamical Chemical Etching On Macrostructure And Fatigue Strength Of Porous Titanium Alloy Structures Fabricated By Selective Laser Melting	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:45	<u>Ponkratova Yu. Yu.</u>	Study Of The Influence Of Selective Laser Melting Modes On The Structure And Mechanical Characteristics Of Al-Ce-Fe-Ni-Zr Alloy	Peoples' Friendship University of Russia named after Patrice Lumumba, Moscow, Russian Federation
16:00	<u>Krasanov I. V.</u>	Structure And Properties Of A Refractory Ti-Nb-Zr Complex Concentrated Alloy Obtained By Laser Directed Energy Deposition	State Marine Technical University, St. Petersburg, Russian Federation
<i>Chairman: Sanin V.N., Stepashkin A.A.</i>			
Composite Materials (Small Living Room)			
14:45	<u>Eryomina M. A.</u>	Mechanocomposites Of M1-M2-C Systems (M1=Ti, Nb; M2=Cu, Fe, Ni, Cr, Co, Al, Si): Production And Properties	Udmurt Federal Research Center UB RAS, Izhevsk, Russian Federation
15:00	<u>Sidenko A.A.</u>	SHS Of Near-Eutectic Compositions Based On Multi-Component Solid Solutions (Zr,Hf,Ta,Nb)B ₂ - (Zr,Hf,Ta,Nb)C	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:15	<u>Suvorova V. S.</u>	Multicomponent Ultra-High Temperature Carbonitrides: Effect Of Nitrogen And Incorporating An Additional Refractory Metal On Mechanical Properties And Oxidation Behavior	National University of Science and Technology «MISIS», Moscow, Russian Federation
15:30	<u>Zuiko I. S.</u>	Deformation Behavior Of Aluminum Matrix Composite Producing By Friction Stir Processing	Belgorod State University, Belgorod, Russian Federation
15:45	<u>Slautin O. V.</u>	Formation Of The Structure Of Multilayer Metal- Intermetallic Composites	Volgograd State Technical University, Volgograd, Russian Federation
16:00	<u>Ozerov M. S.</u>	Structure And Properties Of Metal-Matrix Composites Based On Two-Phase Ti-13Nb-13Zr And Ti-18Nb-8Zr Alloys Reinforced With Borides	Belgorod State University, Belgorod, Russian Federation
16:15-16:45 Coffee break			
<i>Chairman: Ryltsev R. E., Shchelkachev N. M.</i>			
Theoretical and Computational Prediction (Building B, B536)			
16:45	<u>Klimenko D. N.</u>	2618A Aluminum Alloy Composition Modification For Enhanced Weldability Via Calphad Modeling	State Marine Technical University, St. Petersburg, Russian Federation

17:00	<u>Chizhko O. G.</u>	Mers-Data Is The Database For Thermodynamic Properties Of Oxide Compounds And The Software For Computation Of High Temperature Corrosion	CALPHAD Scholarship, Cherkessk, Russian Federation
17:15	<u>Valiulin V. E.</u>	Searching For Eutectic Points In Multicomponent Alloys Through The Lens Of Artificial Intelligence	Vereshchagin Institute of High Pressure Physics, Russian Academy of Sciences, Troitsk, Moscow, Russian Federation
17:30	<u>Pais Pereda J. J.</u>	Thermomechanical Behavior And Heterostructure Design Of Al-Cr-Fe-Co-Ni-Cu High-Entropy Alloys	National University of Science and Technology «MISIS», Moscow, Russian Federation
Chairman: Bautin V.A., Mousavian S.M.H.			
Electrochemistry Of Multicomponent Materials (Building B, Nano Room)			
16:45	<u>Vorkel V. A.</u>	Characteristics Of Surface Film On CoCrFeNiMo _{0.4} High-Entropy Alloy In An Acidic Chloride Electrolyte Containing Hydrogen Peroxide	Frumkin Institute of Physical Chemistry and Electrochemistry Russian Academy of Science, Moscow, Russian Federation
17:00	<u>Rytov R. A.</u>	Measurement Of Weak Magnetic Fields Created By Corrosion Of Multi- Component Alloys Using The Example Of A Magnesium Alloy Of The Mg-Zn-Ga-Y System	Pushkov Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, Russian Federation
17:15	<u>Akaahimbe A. S.</u>	High-Entropy La(FeCuMnMgTi)O ₃ Nanoparticles As Heterogeneous Catalyst For CO ₂ Electroreduction Reaction	South Ural State University, Chelyabinsk, Russian Federation
17:30	<u>Romazeva K.A.</u>	Catalysts Based On SHS-HEA In The Pyrolysis Process Of Methane	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka Russian Federation
Chairman: Slautin O. V., Moskovskikh D.O.			
Composite Materials (Small Living Room)			
16:45	<u>Lembikov A. O.</u>	Development Of Medium-Entropy Ceramic Reinforced Iron- Matrix Composites Via High-Energy Ball Milling And Spark Plasma Sintering For High-Performance Tool Applications	Far Eastern Federal University, Vladivostok, Russian Federation
17:00	<u>Abzalov N. I.</u>	Combustion Synthesis Of Tic- High Entropy Alloy CoCrFeNiMn Composites From Granular Mixtures	Merzhanov Institute of Structural Macrokinetics and Materials Science, Russian Academy of Sciences, Chernogolovka, Russian Federation
17:15	<u>Kochetov N. A.</u>	SHS In The (5Ti+3Si)+ X(Fe+Co+Cr+Ni+Al) System. Influence Of Mechanical Activation, Clamping Of Samples And Metal Binder Content	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka Russian Federation
17:30	<u>Patsera E. I.</u>	Production Of High-Entropy Silicides (Mo _{0.2} Zr _{0.2} Hf _{0.2} Ta _{0.2} Nb _{0.2})Si ₂ Using Hemp And SHS Technologies	National University of Science and Technology «MISIS», Moscow, Russian Federation
18:30 Banquet (Building B, Academic Hall)			

10.10.2025 FRIDAY

(Time: GMT+3)

(Building B, B536)

Chairmen: Kudiyarov V. N., Zadorozhny V. Yu.

09:00	<u>Klyamkin S. N.</u>	Thermochemical Assessment Of Hydrogen Storage Performance Of Multicomponent Hydride-Forming Alloys	Lomonosov Moscow State University, Moscow, Russian Federation
09:25	<u>Raab G. I.</u>	Transformation Of Structure And Properties Of Cu-11Sn Alloy Subjected To Asymmetrical Rolling	Nosov Magnitogorsk State Technical University, Magnitogorsk, Russian Federation
09:50	<u>Betzofen S. Ya.</u>	Study Of Heterogeneity Of Solid Solution Texture And Intermetallic Phases In Al-Cu-Li Alloy	Moscow Aviation Institute, Moscow, Russian Federation
10:15	<u>Korol A. A.</u>	Single-Phase Multicomponent Alloys For Hydrogen Storage	National University of Science and Technology «MISIS», Moscow, Russian Federation
10:30	<u>Siurin A.O.</u>	Investigation Of The Corrosion Properties Of High-Entropy Ti-Co, Ti-Co-Re, And Ti-Co-Ta Alloys	Lomonosov Moscow State University, Moscow, Russian Federation
10:45	Volkova E.A.	Structure And Magnetic Properties Of Fe-Co Alloys, Processed By High-Energy Ball Milling	National University of Science and Technology «MISIS» , Moscow, Russian Federation
11:00	<u>Naumova E. A.</u>	Hypereutectic Alloy Al-8Ca-2Mn-1Ni-0.3Fe-0.3Zr, Obtained By Casting In An Electromagnetic Crystallizer	National University of Science and Technology «MISIS» , Moscow, Russian Federation
11:15	<u>Ageev M.I.</u>	Promising Powder Heat-Resistant Nickel Alloys: Structure, Properties, Application	National University of Science and Technology «MISIS» , Moscow, Russian Federation
11:30	<u>Voropaeva O.O.</u>	Anticorrosion Plasma-Electrolytic Coatings On Casting Magnesium Alloys	National University of Science and Technology «MISIS», Moscow, Russian Federation

11:45 Closing Ceremony

Awarding Of The Best Oral and Poster Presentations Of Young Scientists

(Building B, B536)

07.10.2025 TUESDAY
15:00-18:00 POSTER SESSION
(Building B, Hall Of The Palace Of Culture. 2nd Floor)
Duration Of The Report: 5 Minutes

Chairmen: Astafurova E. G., Fedoseeva A. E., Ivannikov A. Yu.

1.	<u>Voropaeva E.A.</u>	Microstructure And Mechanical Properties Of Boride-Reinforced Dual-Phase Ti-13Nb-13Zr Metal-Matrix Composites	Belgorod State University, Belgorod, Russian Federation
2.	<u>Zhilina M. A.</u>	Structure And Mechanicalproperties Of Refractory Nb-Rich Complex Concentrated Alloys	State Marine Technical University, St. Petersburg, Russian Federation
3.	<u>Kokina K. A.</u>	Influence Of Substrate Material On The Catalytic Properties Of High-Entropy Oxides (CrFeCoNiMn)3O4 System For The CO2 Hydrogenation Reaction	National University of Science and Technology «MISIS», Moscow, Russian Federation
4.	<u>Mirontsov V. V.</u>	New Refractory Complex Concentrated Alloys With Ultra-High Strength At 1200°C	State Marine Technical University, St. Petersburg, Russian Federation
5.	<u>Dolzhenko A. S.</u>	Creep Behavior Of Advanced 12% Cr-3% Co Steel With Low N And High B Contents At Various Elevated Temperatures	Belgorod State University, Belgorod, Russian Federation
6.	<u>Nozdracheva E. I.</u>	Structure, Mechanical Properties, And Oxidation Resistance Of Lightweight Al-Cr-Ti-Fe Complex Concentrated Alloys	Belgorod State University, Belgorod, Russian Federation
7.	<u>Sharma A.</u>	Thermomechanical Relaxation And Aging Dynamics In La₅₅Al₂₅Co₂₀ Metallic Glass	School of Mechanics, Civil Engineering and Architecture, Northwestern Polytechnical University, Xi'an, China
8.	<u>Voropaeva E.A.</u>	Comparative Study Of The Structure And Cryogenic Properties Of A Multicomponent Fe-Co-Ni-Cr-C Alloy Fabricated By Conventional And Additive Manufacturing Methods	Belgorod State University, Belgorod, Russian Federation
9.	<u>Rulenkov A. D.</u>	Multifunctional Protective Al₂O₃-Al Coatings	Belarusian National Technical University, Minsk, Republic of Belarus
10.	<u>Matulyak A. I.</u>	Obtaining Coatings On A C/C–SiC Composite From Powder Compositions In The MoSi₂–HfSi₂–SiB₄ System	Moscow Aviation Institute, Moscow, Russian Federation
11.	<u>Baklushina I. V.</u>	Transformation Of The Structure And Properties Of The Transition Zone Between The Plasma Coating Of High-Speed Steel M9u And The Substrate During High-Intensity Electron Beam Processing Report Title	Siberian State Industrial University, Novokuznetsk, Russian Federation
12.	<u>Chertova A.D.</u>	Structure And Properties Of Functional Thin Films Deposited By Magnetron Sputtering Of A Target Based On (MoTaNbZrHf)Si₂ High-Entropy Silicide	National University of Science and Technology «MISIS» , Moscow, Russian Federation
13.	<u>Mishin P.I.</u>	Submicron Vaterite-Biopolymer Hybrid Particles	Lomonosov Moscow State University, Moscow, Russian Federation
14.	<u>Aradeib A.O.</u>	Structure And Microhardness Of MoNbTaTiZr Coatings Obtained By Magnetron Sputtering	National Research Nuclear University MEPhI, Moscow, Russian Federation
15.	<u>Hanna S. A.</u>	High Entropy Oxide Catalysts With Perovskite And Fluorite Structure For Ethanol Reforming	Novosibirsk State University, Novosibirsk, Russian Federation
16.	<u>Efimova M. E.</u>	Synthesis And Study Of New High-Entropy Oxides With The Pyrochlore Structure And Heterovalent Composition Of Multicomponent Sublattices	South Ural State University, Chelyabinsk, Russian Federation
17.	<u>Efimova M. E.</u>	Elucidating The Effect Of Grain Refinement And Crystallographic Texture On Electrochemical Properties Of Cost-Effective Fe₄₀Ti₂₅Cr₂₅Mo₅Al₅ High-Entropy Alloy	South Ural State University, Chelyabinsk, Russian Federation
18.	<u>Yarushina D. V.</u>	New High-Entropy Fluorides With The Fluorite Structure	South Ural State University, Chelyabinsk, Russian Federation

19.	<u>Tapero M.K.</u>	Multicomponent High-Strength Tetragonal Solid Solutions Based On Zirconium Dioxide	National University of Science and Technology «MISIS», Moscow, Russian Federation
20.	<u>Petrikova E.A.</u>	Research Of The High-Entropy Alloy Nitride Films Growth Process By Synchrotron Radiation Methods	Institute of High Current Electronics, Tomsk, Russian Federation
21.	<u>Khoroshavtseva N.V.</u>	Phase Stability Of Entropy-Stabilized Perovskite-Like Oxides Of The Composition LaMO_3, Where $M = \text{B}_{0.2} + \text{B}^*_{0.2} + \text{B}^{**}_{0.2} + \text{B}^{***}_{0.2} + \text{B}^{****}_{0.2}$: Influence Of B-Sublattice Composition On Phase Formation	Ural Federal University named after the First President of Russia B.N. Yeltsin1, Yekaterinburg, Russian Federation
22.	<u>Anzhigatova E. D.</u>	Hydrogen Interaction With Composite Material Based On Titanium-Iron Metal Hydride Alloy And Abs Polymer	Tomsk Polytechnic University, Tomsk, Russian Federation
23.	<u>Kurbatkina V.V.</u>	Self-Propagating High-Temperature Synthesis Of High-Entropy Diborides With Different Transition Metal Contents In The Solid Solution $(\text{Hf}, \text{Ta}, \text{Zr}, \text{V}, \text{Nb})\text{B}_2$	National University of Science and Technology «MISIS», Moscow, Russian Federation
24.	<u>Yurchenko N.Yu.</u>	Designing Refractory Complex Concentrated Alloys With Balanced Strength And Ductility	State Marine Technical University, St. Petersburg, Russian Federation
25.	<u>Klimova M.V.</u>	Features Of Microstructure Formation And Mechanical Properties Of Low-Carbon Steel Produced By Waam	State Marine Technical University, St. Petersburg, Russian Federation
26.	<u>Sheremetev V. A.</u>	Development Of Personalized Porous Orthopedic Implants Using Biocompatible Titanium Alloys	National University of Science and Technology «MISIS», Moscow, Russian Federation
27.	<u>Zakharov E. O.</u>	Synthesis, Structural Assessment And Photocatalytic Activity Of Eu- And Gd-Substituted BiVO_4	Ural Federal University named after the First President of Russia B.N. Yeltsin1, Yekaterinburg, Russian Federation
28.	<u>Kiseleva S. K.</u>	Prospects For The Development Of Electroplating Technology Ni-SiC Metal-Matrix Composite	Technopark of Aviation Technologies, Ufa, Russian Federation
08.10.2025 WEDNESDAY 15:00-18:00 POSTER SESSION (Building B, Hall Of The Palace Of Culture. 2nd Floor) Duration Of The Report: 5 Minutes			
<i>Chairmen: Sanin V.N., Shchelkachev N. M., Astafurov S.V.</i>			
1.	<u>Malygina K. D., Putilova E.A.</u>	Evolution Of Magnetic Properties In High-Entropy CoCrFeNiAl_x Alloys With Changing Annealing Temperature And Phase Composition	Institute of Engineering Science, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, Russian Federation
2.	<u>Chueva T.R.</u>	The Temperature-Time Stability Of Functional Properties Co-Alloy Amorphous Microwire	A.A. Baikov Institute of Metallurgy and Materials Science RAS, Moscow, Russian Federation
3.	<u>Kovalenko D.A.</u>	Crystallization Kinetics Of REM-Sc-Al-Co High-Entropy Bulk Metallic Glasses	Vatolin Institute of Metallurgy, UB RAS, Ekaterinburg, Russian Federation
4.	<u>Mogilnikova L.D.</u>	Phase Transformations In The Synthesis Process Of Strontium Hexaferrite $\text{SrFe}_{12}\text{O}_{19}$ By The Sol-Gel Method	National University of Science and Technology «MISIS», Moscow, Russian Federation
5.	<u>Ovchinnikova A. E.</u>	Investigation Of Ti-Based Alloy Composites Produced By High Pressure Torsion	National University of Science and Technology «MISIS», Moscow, Russian Federation
6.	<u>Gorbenko A. D.</u>	Effect Of Silver Addition On Mechanical Properties Of $\text{Ti}_{(51-X)}\text{Zr}_{38}\text{Nb}_{11}\text{Ag}_x$ Alloys	A.A. Baikov Institute of Metallurgy and Materials Science RAS, Moscow, Russian Federation
7.	<u>Karelin R. D.</u>	Production Of Rods And Sheets From TiNiHf Alloy With High-Temperature Shape Memory Effect	A.A. Baikov Institute of Metallurgy and Materials Science RAS, Moscow, Russian Federation

8.	<u>Bobozhanov A.R.</u>	Direct Experimental Observation Of The Motion Of Grinding Balls And Mechanical Alloying Of Metallic Powders In A Planetary Mill	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Russian Federation
9.	<u>Panov D.O.</u>	Effect Of Diffusion Welding Parameters And Subsequent Heat Treatment On Structure And Mechanical Properties Of Ti2AlNb-Alloy Joints	Belgorod State University, Belgorod, Russian Federation
10.	<u>Sokolovsky V. S.</u>	Evolution Of Microstructure And Mechanical Properties Of A Of Tib-Reinforced Ti-6.5Al-2Zr-1Mo-1V Composite During Hot Rolling	Belgorod State University, Belgorod, Russian Federation
11.	<u>Drobyshev V. K.</u>	Study Of Mechanical Properties Of Multi-Component Alloy Co₄₀Cr₁₂Ni₄₀Mn₆Nb₂ Produced By Vacuum Induction Remelting	Siberian State Industrial University, Novokuznetsk, Russian Federation
12.	<u>Tkachev E.S.</u>	Evolution Of Microstructure And Mechanical Properties In Low-Alloy 0.33C-1.8Si Steel During Tempering At 350°C	Belgorod State University, Belgorod, Russian Federation
13.	<u>Grishel O. V.</u>	Activation Of Sintering Of Dispersions (Powders, Fibers) Based On Aluminosilicates By Boron Compounds	Belarusian National Technical University, Minsk, Republic of Belarus
14.	<u>Buylova M.A.</u>	Features Of Structural Phase Transitions In Ta₂Pd₃Se₈ And Ta₂Ni₃Se₈ Nanostructures	Moscow Institute of Physics and Technology, Moscow, Russian Federation
15.	<u>Malakhova Yu.V.</u>	Microstructure Of Austenitic Steel Sheets Welded Joints Produced By Friction Stir Welding	Belgorod State University, Belgorod, Russian Federation
16.	<u>Gazizova M. Yu.</u>	The Effect Of Thermomechanical Treatment On The Corrosion Resistance Of An Al-Cu-Mg-Li-Ag-Zn Alloy	Belgorod State University, Belgorod, Russian Federation
17.	<u>Vlasov D.Yu.</u>	Technological Features Of Laser Cladding Of Composite Coatings Based On Inconel 625/Wc Alloy	National University of Science and Technology «MISIS», Moscow, Russian Federation
18.	<u>Simakov A.M.</u>	Martensitic Transformation In Fe-Co-BN Alloys Obtained By High-Energy Grinding	National University of Science and Technology «MISIS», Moscow, Russian Federation
19.	<u>Shchetinin I.V.</u>	Effect of Doping on Structure and Functional Properties of SrFe_{12-x}In_xO₁₉ Hexaferrite Nanoparticles for Biomedical Applications	National University of Science and Technology «MISIS», Moscow, Russian Federation
20.	<u>Bezudnyi A.V.</u>	Metal Hydride Technology For Thermal Energy Storage	1Joint Institute for High Temperatures RAS, Moscow, Russian Federation
21.	<u>Berezhnenko D.V.</u>	Metal Hydride Technology For Hydrogen Purification	National research university "MPEI", Moscow, Russian Federation
22.	<u>Karavaev D.V.</u>	Study Of Carbon Forms In Steelmaking Slags	National University of Science and Technology «MISIS», Moscow, Russian Federation
23.	<u>Nikitin N.Yu.</u>	Modeling Of The Stress-Strain State Unidirectional Composite Materials: Carbon Fiber-Polysulfone	National University of Science and Technology «MISIS», Moscow, Russian Federation
24.	<u>Ibrahim M.</u>	Biocompatible Electrospun PVA/Al₂O₃ Nanofibers For Hemostatic Wound Dressings	National University of Science and Technology «MISIS», Moscow, Russian Federation
25.	<u>Alsaeva O.S.</u>	Influence Of Quenching Modes On Mechanical Stability Of The Beta- Phase In Vt16 Titanium Alloy	Moscow Aviation Institute, Moscow, Russian Federation
26.	<u>Nafikov R.K.</u>	The Role Of Interstitial Elements On The Mechanical Properties And Strengthening Mechanisms Of A CoCrFeMnNi High-Entropy Alloy After High-Pressure Torsion	Ufa University of Science and Technology, Ufa, Russian Federation
27.	<u>Shaysultanov D.G.</u>	Microstructure And Mechanical Properties Of Gradient Medium-Entropy Alloy Produced Via Laser Direct Energy Deposition	State Marine Technical University, St. Petersburg, Russian Federation

28.	<u>Rogachev S.O.</u>	Hardening Response To Aging And Severe Plastic Deformation Processes In Copper-20 PCT Nickel-20 PCT Manganese Alloy	National University of Science and Technology «MISIS» , Moscow, Russian Federation
09.10.2025 THURSDAY 15:00-18:00 POSTER SESSION (Building B, Hall Of The Palace Of Culture. 2nd Floor) Duration Of The Report: 5 Minutes			
<i>Chairmen: Stepanov N. D., Panov D.O., Naumov S.V.</i>			
1.	<u>Kenzhiev A.</u>	Study Of The Composite MgH₂-NanoNi-CNTs Synthesis Parameters Influence On Hydrogen Sorption And Desorption Properties	National Research Tomsk Polytechnic University, Tomsk, Russian Federation
2.	<u>Kurdyumov N.E.</u>	Study Of Hydrogen Properties Of Titanium-Iron Metal Hydride Alloy With Partial Substitution Of Iron With Chromium	Tomsk Polytechnic University, Tomsk, Russian Federation
3.	<u>Elman R.R.</u>	Effect Of Nano-Nickel And Carbon Nanotubes Addition On Hydrogen Storage Properties Of Magnesium Hydride	Tomsk Polytechnic University, Tomsk, Russian Federation
4.	<u>Telnoy K.O.</u>	New Ternary Lanthanum Halides La(Pd,Ga)₂ And La₃Pd₅Ga	Lomonosov Moscow State University, Moscow, Russian Federation
5.	<u>Dorofeeva V.A.</u>	Investigation Of Amorphous Magnesium-Based Metallic Alloys Before And After Hydrogenation	National University of Science and Technology «MISIS» , Moscow, Russian Federation
6.	<u>Fomin Yu.D.</u>	Crystal Structure Of Kob-Andersen Mixture: Genetic Algorithms Vs Spontaneous Crystallization	Vereshchagin Institute of High Pressure Physics, Russian Academy of Sciences, Troitsk, Moscow, Russian Federation
7.	<u>Rusanov B. A.</u>	Effect Of Overheating On Structure Of FeNiBSiNb Rapidly Quenched Multicomponent Alloy	Ural State Pedagogical University, Yekaterinburg, Russian Federation
8.	<u>Shahin R.</u>	Activated Carbon From Cotton Waste For Supercapacitor Applications	National University of Science and Technology «MISIS» , Moscow, Russian Federation
9.	<u>Kvartalnov D.V.</u>	The “4simplex” Platform For Predicting Phase Equilibria And Decomposition Kinetics Of Solid Solutions In Multicomponent Systems (Using The Co-Ti-Ta-Re System)	Lomonosov Moscow State University, Moscow, Russian Federation
10.	<u>Terentyeva D.V.</u>	Impact Of Nanoscale Al, Cr, And Ni Additives On Hydrogen Desorption From The (001) And (110) Surfaces Of MgH₂	National Research Tomsk Polytechnic University, Tomsk, Russian Federation
11.	<u>Terentyeva D.V.</u>	Effect Of Ni And C Additives On Hydrogen Desorption From The (110) Surface Of MgH₂	National Research Tomsk Polytechnic University, Tomsk, Russian Federation
12.	<u>Abzalov D.I.</u>	Self-Propagation High-Temperature Synthesis Of MgAlON Using KClO₄ As An Exothermic Additive	Merzhanov Institute of Structural Macrokinetics and Materials Science, Russian Academy of Sciences, Chernogolovka, Russian Federation
13.	<u>Samodurova M.N.</u>	Application Of Additive Technologies In The Synthesis Of High-Entropy Compounds And Coating Based On Them	South Ural State University, Chelyabinsk, Russian Federation
14.	<u>Mukanov S. K.</u>	Tribological Behavior Of Advanced Ultrafine-Grained Heterophase Ceramic Composites	National University of Science and Technology «MISIS» , Moscow, Russian Federation
15.	<u>Kochura E.G.</u>	Laser Directed Energy Deposition Of A Refractory NbTaV Complex Concentrated Alloy Using Elemental Powders: Microstructure And Mechanical Properties	State Marine Technical University, St. Petersburg, Russian Federation

16.	<u>Astakhov I. I.</u>	Development Of Nickel-Based Superalloys For Additive Manufacturing	State Marine Technical University, St. Petersburg, Russian Federation
17.	<u>Zuiko I. S.</u>	Effect Of Aging On The Phase Composition Of Al-Cu-Li Alloy	Belgorod State University, Belgorod, Russian Federation
18.	<u>Starodubova M.S.</u>	Influence Of The Ultrasonic Assistance During Wire Arc Additive Manufacturing On The Grain Size In Thin Wall	Saint-Petersburg State University, Saint-Petersburg, Russian Federation
19.	<u>Kuzminova Yu. O.</u>	Effect Of High-Pressure Torsion And Heat Treatments On The Microstructure Of Additively Manufactured CrFeCoNi(Al) Alloys	CIC nanoGUNE, Donostia-San Sebastián, Spain
20.	<u>Bodrov E.G.</u>	Carbide Particles Formation In Melts Based On High-Entropy Alloys: Modeling And Experimental Study	South Ural State University, Chelyabinsk, Russian Federation
21.	<u>Ge Ch.</u>	Research On Preparation And Properties Of Sialon And Humic Acid Mineral Fertilizer Based On Coal Gangue Self-Propagating High-Temperature Synthesis (SHS)	University of Science and Technology Beijing, China
22.	<u>Han L. , Lv F.</u>	Research On Preparation And Properties Of Sialon And Humic Acid Mineral Fertilizer Based On Coal Gangue Self-Propagating High-Temperature Synthesis (SHS)	University of Science and Technology Beijing, China
23.	<u>Sonar T.M.</u>	Dissimilar Welding Of Martensitic Steel And Austenitic Stainless Steel Via Activated Flux Gas Tungsten Arc Welding With Eutectic High Entropy Alloy Interlayer	South Ural State University, Chelyabinsk, Russian Federation
24.	<u>Zhang Yu.</u>	Enhancing rheology and mechanical properties of DLP 3D -printed Si3N4 materials via composition optimization and gas -pressure sintering	University of Science and Technology Beijing, China
25.	<u>Klopotov A.A.</u>	Evolution Of The Structural State Of The High-Entropy Alloy TiNbZrTaHfCu_x	Tomsk State University of Architecture and Building, Tomsk, Russian Federation
26.	<u>Dudova N. R.</u>	On The Effect Of High Tempering Temperature On The Creep Rupture Strength Of A 10%Cr Steel	Belgorod State University, Belgorod, Russian Federation