



ҚР ҒЫЛЫМ ЖӘНЕ ЖОҒАРЫ БІЛІМ МИНИСТРЛІГІ
МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РК
MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RK

11th INTERNATIONAL SEMINAR ON FLAME STRUCTURE (11 ISFS)

September 22–25, 2026
ALMATY, KAZAKHSTAN

PROGRAM

LETTER FROM THE CONFERENCE CHAIRS

WELCOME to the 11th International Seminar on Flame Structure (11ISFS)!

It is our great pleasure to welcome you to the 11th International Seminar on Flame Structure (11ISFS), which will take place from September 22 to 25, 2026, in Almaty, Kazakhstan.

The seminar continues a long-standing and distinguished tradition of scientific meetings dedicated to fundamental and applied research in combustion science. Since the first seminar on gas flame structure held in Novosibirsk in 1983, the Flame Structure Seminar series has become an important international forum for researchers working in the fields of combustion, chemical kinetics, flame dynamics, energetic materials, and advanced energy technologies.

The 11th ISFS is jointly organized by Al-Farabi Kazakh National University, the Institute of Combustion Problems of the Republic of Kazakhstan, the V.V. Voevodsky Institute of Chemical Kinetics and Combustion of the Siberian Branch of the Russian Academy of Sciences, and the S.S. Kutateladze Institute of Thermophysics of the Siberian Branch of the Russian Academy of Sciences. Bringing together leading scientists, engineers, and young researchers from around the world, the seminar aims to promote scientific exchange, strengthen international collaboration, and encourage new research initiatives in combustion science and related disciplines.

The scientific program will cover a broad spectrum of topics, including laminar and turbulent flames, detonation combustion, combustion chemistry, nonlinear combustion phenomena, alternative fuels, combustion-generated nanoparticles, fire safety, self-propagating high-temperature synthesis, filtration combustion, catalysis of combustion processes, and emerging technologies in combustion science. Particular attention will be devoted to recent advances in experimental and numerical methods for studying flame structure and combustion processes.

The program will feature plenary and oral lectures delivered by internationally recognized experts as well as oral and poster presentations highlighting the latest developments in both fundamental and applied combustion research. We are confident that the Seminar will provide a stimulating environment for scientific discussions, the exchange of ideas, and the establishment of new collaborations.

Almaty, the largest city of Kazakhstan, offers a unique combination of scientific tradition, cultural diversity, and natural beauty. Located at the foothills of the Trans-Ili Alatau mountains, the city provides an inspiring setting for scientific interaction and professional networking. We hope that participants will enjoy not only the scientific program but also the hospitality, culture, and scenic landscapes of Kazakhstan.

We sincerely thank all members of the Scientific Committee, Organizing Committee, invited speakers, partners, and sponsors whose support and dedication have made this Seminar possible. We are also grateful to all participants for their contribution to the success of this event.

We wish you a productive, inspiring, and enjoyable stay in Almaty and look forward to welcoming you to the 11th International Seminar on Flame Structure.

On behalf of the Organizing Committee,

Zulkhair A. Mansurov

Co-Chair, 11th International Seminar on Flame Structure

Andrey G. Shmakov

Co-Chair, 11th International Seminar on Flame Structure

Vladimir E. Zarko

Honorary Chair, 11th International Seminar on Flame Structure

Meruyert Nazhipkyzy

Scientific Secretary, 11th International Seminar on Flame Structure



Қазақстан Республикасы Ғылым және жоғары білім министрлігі
Министерство науки и высшего образования Республики Казахстан
The Ministry of Science and Higher Education of the Republic of Kazakhstan

ҚР ҒЖБМ ҒК Жану проблемалары институты
Институт проблем горения КН МНВО РК
The Institute of Combustion Problems CS MSHE RK

әл-Фараби атындағы Қазақ Ұлттық Университеті
Казакский национальный университет им. аль-Фараби
al-Farabi Kazakh National University

Жалын құрылымы жөніндегі 11-ші халықаралық семинардың (11ISFS)

БАҒДАРЛАМАСЫ

22–25 қыркүйек 2026 ж.

АЛМАТЫ, КАЗАҚСТАН

ПРОГРАММА

11-го Международного семинара по структуре пламени (11ISFS)

22–25 сентября 2026 г.

АЛМАТЫ, КАЗАХСТАН

11th International Seminar on Flame Structure (11ISFS)

PROGRAM

September 22–25, 2026

ALMATY, KAZAKHSTAN

ORGANIZING COMMITTEE

V.E. Zarko (Honorary Chair); Z.A. Mansurov (Co-Chair);
A.G. Shmakov (Co-Chair); M. Nazhipkyzy (Scientific Secretary)

SCIENTIFIC COMMITTEE

V.S. Arutyunov (Moscow, Russia), V.V. Azatyan (Moscow, Russia), S.V. Alekseenko (Novosibirsk, Russia), M.I. Alymov (Chernogolovka, Russia), Zh.S. Bakenov (Astana, Kazakhstan), V. Bykov (Karlsruhe, Germany), E.A. Salgansky (Chernogolovka, Russia), O. Odawara (Tokyo, Japan), Y. Sarbassov (Astana, Kazakhstan), P. Strizhak (Tomsk, Russia), A.B. Sivenkov (Moscow, Russia), A.S. Mukasyan (Notre Dame, USA), T. Faravelli (Milan, Italy), A.A. Vasiliev (Novosibirsk, Russia), S.M. Frolov (Moscow, Russia), A.I. Karpov (Izhevsk, Russia), V.S. Abrukov (Cheboksary, Russia), V.N. Azyazov (Samara, Russia), S.G. Matveev (Samara, Russia), A.V. Eremin (Moscow, Russia), A.D. Kiverin (Moscow, Russia), S.S. Minaev (Vladivostok, Russia), D.A. Knyazkov (Novosibirsk, Russia), D.M. Markovich (Novosibirsk, Russia), O.V. Sharypov (Novosibirsk, Russia), V.P. Sinditskii (Moscow, Russia), P.A. Strizhak (Tomsk, Russia), L.T. DeLuca (Milan, Italy), A. Gany (Haifa, Israel), R. Shen (Nanjing, China), W. Pang (Xi'an, China), R. Yang (Beijing, China), Liu Xuwen (Wuhan, China), Zang Xiaowei (Nanjing, China), D.A. Chinakhov (Novosibirsk, Russia), M. Hashami (Nika Zabul, Afghanistan), R.K. Nadirov (Almaty, Kazakhstan), A.K. Galeeva (Almaty, Kazakhstan), M.A. Dyusebayeva (Almaty, Kazakhstan), Ye.K. Ongarbayev (Almaty, Kazakhstan), G.Sh. Yarmukhamedova (Almaty, Kazakhstan), S.M. Fomenko (Almaty, Kazakhstan)

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TOPICS

- Laminar and turbulent, premixed and diffusion flames of gas systems
- Flames of energetic materials
- Nonlinear phenomena and flame propagation dynamics
- Detonation combustion
- Experimental and numerical methods for studying flame structure
- Chemical kinetics of reactions in combustion processes
- Flame inhibition and extinguishing, fire safety of materials
- Formation of soot, nanoparticles, and toxic compounds in flames
- Alternative fuels
- Self-propagating high-temperature synthesis
- Filtration combustion and micro-combustion
- Catalysis of combustion processes
- New technologies in combustion

The Seminar Program includes plenary, keynote, oral, and poster presentations. The working languages of the Seminar are Russian and English.

The time limits for presentations are as follows:

- Plenary presentation: 30 minutes
- Oral presentation: 20 minutes.

Instructions for Oral Presentations

Equipment Provided by the Conference Organizer

- Laptop computer (MS Windows operating system with MS PowerPoint and Adobe Acrobat Reader)
- Digital projectors and screens
- Laser pointers

Materials Provided by the Presenters

- MS PowerPoint or PDF files (files will be copied to the conference computer at the beginning of each session)
- Presentation slides and text in English

Duration of Each Presentation

- **Plenary Presentation:** 25 minutes for the presentation and 5 minutes for questions and answers (30 minutes total)
- **Regular Oral Presentation:** 15 minutes for the presentation and 5 minutes for questions and answers (20 minutes total)

Instructions for Poster Presentations

Equipment Provided by the Conference Organizer

- Poster stand

Materials Provided by the Presenters

- Posters

Technical Requirements for Posters:

- Portrait orientation, all text must be in English.
- The maximum poster size A0 (84.1 cm × 118.9 cm)
- Multi-sheet posters are not recommended.
- Ensure the poster is legible from a distance of 2-3 meters.
- Posters should be mounted on the designated stands after registration and remain on display throughout the Symposium.
- Poster presenters are expected to be available at their posters during the poster session on **24 September at 14:30.**

Selected Papers

Outstanding papers and posters will be evaluated by the Scientific Committee. Authors of the best presentations will be invited to submit extended versions of their papers to the *Eurasian Chemico-Technological Journal* (<https://ect-journal.kz>), subject to successful external peer review.

Dress Code: Please wear formal attire or national representative clothing.

Seminar Venue

Library of Al-Farabi Kazakh National University (4th Floor),
71 Al-Farabi Avenue, Almaty, Kazakhstan.

DAY 1: TUESDAY, SEPTEMBER 22, 2026

08.00-08.30	REGISTRATION: Al-Farabi Scientific Library, 4 th floor, Conference Hall
08.30-09.00	OPENING CEREMONY, 409 room
	Session 1: Plenary Session. Chairpersons: Ruiqi Shen, M.K. Atamanov
09.00-09.30	<u>V.E. Zarko</u> <i>Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia</i> Methods for Correct Evaluation of Kinetic Parameters of Condensed Phase Exothermic Reactions
09.30-10.00	<u>L. Zhang</u> <i>School of Materials Science and Engineering, Beijing Institute of Technology, Beijing</i> Multiscale Mechanochemical Dynamics of Energetic Solids under Extreme Conditions: Insights from Simulation and In Situ Diagnostics
10.00-10.30	<u>A.G. Shmakov</u> , K.N. Osipova, V.V. Matyushkov, A.A. Chernov, V.E. Olennikov <i>Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia</i> Oxidation and Combustion of Ammonia with Additives of Hydrocarbons and Oxygenates
10.30-11.00	<u>V.S. Arutyunov</u> , K.Ya. Troshin, A.A. Zakharov, A.A. Belyaev, A.V. Arutyunov, D.V. Maksimova, A.A. Blakhin <i>N.N. Semenov Federal Research Center for Chemical Physics, Russian Academy of Sciences, Moscow, Russia</i> Ignition of Gas-Air Mixtures in an Electric Field
11.00-11.30	Coffee Break
11.30-12.00	Pengcheng Huang, <u>Jiao Lei</u> , Naian Liu, Wei Gao, Linhe Zhang, Zhiran Tan, Xinyu Wang <i>University of Science and Technology of China, Hefei, Anhui, China</i> Experimental Study on Turbulent Buoyant Flames with Self-Induced Bottom Air Flow
12.00-12.30	<u>A. A. Shaklein</u> , A.I. Karpov <i>Udmurt Federal Research Center, UB RAS, Izhevsk, Russia</i> On a Numerical Method for Reacting Flows
12.30-13.00	<u>A.D. Kiverin</u> <i>Joint Institute for High Temperatures of Russian Academy of Sciences, Russia</i> On the Role of Gas-Dynamic Factors on the Development of Ignition and Combustion
13.00-14.30	Lunch
14.30-15.00	<u>V.A. Babuk</u> , N.L. Budniy, D.I. Kuklin, S.Y. Narizhny <i>Baltic State Technical University "VOENMEH" D.F. Ustinov, Saint Petersburg, Russia)</i> Combustion Mechanism of Paste-Like Propellants
15.00-15.30	I.S. Glukhov, <u>Yu.N. Shebeko</u> <i>All Russian Scientific Research Institute for Fire Protection, Moscow Region, Russia</i> Flammability Limits of Gaseous Mixtures at Reduced Pressures
15.30-16.00	<u>S.A. Rashkovskiy</u> , S.E. Yakush, M.M. Alexeev, O.Yu. Semenov <i>Ishlinsky Institute for Problems in Mechanics of the Russian Academy of Sciences, Moscow, Russia</i> Experimental Study and Statistical Modeling the Cellular Flame Propagation in a Diverging Hele-Shaw Channel
16.00-16.30	Coffee Break
16.30-17.00	<u>Ruiqi Shen</u> , Xiaodong Yu, Hongwei Gao, Churui Hu, Wei Zhang <i>Nanjing University of Science and Technology, Nanjing, China</i> Combustion Performance of Additive Manufacturing Al/ABS for Hybrid Rocket Engine
17.00-17.30	<u>A. Maznoy</u> , I. Yakovlev, A. Guschin, K. Larionov <i>Tomsk Scientific Center of the Siberian branch of the Russian Academy of Sciences, Tomsk, Russia</i> Application of Filtration Combustion in a Packed Bed within Radiant Tubes
17.40	Welcome Party (Institute of Combustion Problems, 172 Bogenbay Batyr Street)

DAY 2: WEDNESDAY, SEPTEMBER 23, 2026

	Session 2: Plenary Session. Chairpersons: B. Kaidar, A.G. Shmakov Plenary lecture, 409 room	
09.00-09.30	<u>S.M. Frolov</u> <i>Department of Combustion and Explosion, Federal Research Center for Chemical Physics of the Russian Academy of Sciences, Moscow, Russia</i> Soot Formation in Spherical Diffusion Flames <i>(based on the results of the Russian–American space experiment)</i>	
	ORAL SESSION	
	408 room. Chairperson: B. Kaidar	409 room. Chairperson: A.G. Shmakov
09.30-09.50	<u>O. Evdokimov</u> , A. Guryanov, R. Ivanov, S. Veretennikov <i>Soloviev Rybinsk State Aviation Technical University, Rybinsk, Russia</i> An Experimental Study of Ammonia, Methane and Ammonia-Methane Mixtures Combustion in Arrays of Bidirectional Swirling Jets	<u>Rui Sun</u> , Hanlin Zhang, Lei Zhang <i>School of Materials Science & Engineering, Beijing Institute of Technology, Beijing, China</i> Dynamic Response of TATB Cylinders under Laser Ignition
09.50-10.10	<u>R. Ivanov</u> , O. Evdokimov, A. Guryanov <i>Soloviev Rybinsk State Aviation Technical University, Rybinsk, Russia</i> An Experimental Study of Pure Ammonia Combustion in a Bidirectional Swirling Flow	<u>Y.A. Litvinenko</u> , V. V. Kozlov <i>Khrstianovich Institute of Theoretical and Applied Mechanics of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i> Laminar Turbulent Transition and Regimes of Combustion of Hydrogen Microjets
10.10-10.30	<u>A.A. Chernov</u> , V.S. Abrukov, D.A. Anufrieva, S.S. Kuzmin <i>Voevodsky Institute of Chemical Kinetics and Combustion, Novosibirsk, Russia</i> Estimation of the Flame Time Scale Based on a Sequential Neural Network	<u>S.M. Fomenko</u> , M.B Ismailov, S. Tolendiuly, H.T. Rakhym, R. Zhunusov <i>Institute of Combustion Problems, Almaty, Kazakhstan</i> Effect of Solid Components' Grain Size on the Combustion Characteristics of Composite Solid Propellants
10.30-10.50	<u>A.A. Dekterev</u> , Ar.A. Dekterev <i>Kutateladze Institute of Thermophysics of the SB RAS, Novosibirsk, Russia</i> Numerical Simulation of Methane Combustion in a Swirling Stream	M.V. Agafontsev, <u>D.P. Kasymov</u> , A.V. Lutsenko, P.S. Martynov, A.A. Staroseltseva, Yu.A. Loboda, V.V. Reyno, E.L. Loboda <i>Tomsk State University, Tomsk, Russia</i> Investigations on Thermodynamic Parameters and Flame Characteristics During Wildfire: Experimental Approach
10.50-11.10	<u>R.V. Tolstoguzov</u> , K.D. Lavronov, D.K. Sharaborin, V.M. Dulin <i>Kutateladze Institute of Thermophysics of the SB RAS, Novosibirsk, Russia</i> Effect of a Weak Transverse DC Electric Field on Premixed CH ₄ /NH ₃ /H ₂ –Air Bunsen Flames	<u>I.A. Yakovlev</u> , D.S. Astakhov, N.S. Pichugin, A.S. Maznoy <i>Tomsk Scientific Center of the SB RAS, Tomsk, Russia</i> Stabilization of Lean Hydrogen–Air Flames in Structured Porous Media

11.10-11.30	<u>A.V. Cherepanov</u>, V.G. Kiselev, S.A. Agarkin, A.A. Chernov, D.A. Knyazkov <i>Voevodsky Institute of Chemical Kinetics and Combustion, Russia</i> Positive and Negative Ion Chemistry in Premixed CH₄/H₂/O₂/Ar Flames	<u>M. Atamanov</u> <i>Institute of Combustion Problems, Almaty, Kazakhstan</i> Combustion and Thermal Decomposition Behavior of HAN-Based Carbonaceous Energetic Composites
11.30-12.00	Coffee Break	
12.00-12.20	<u>S.A. Agarkin</u>, A.V. Cherepanov, A.A. Chernov, D.A. Knyazkov <i>Voevodsky Institute of Chemical Kinetics and Combustion, Novosibirsk, Russia</i> Experimental and Theoretical Study of Cation Formation in Premixed Acetone and Butanone Flames	D. Chernenko, <u>I. Makarov</u>, M. Vinogradov, A. Smyslov <i>A.V. Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Moscow, Russia</i> Fire Resistance of Carbon Nonwoven Materials Based on Bast Precursors
12.20-12.40	<u>X. L. Wei</u>, T. Li, Y. H. Xiao <i>Jiaotong University, Xi'an, Shaanxi, China; State Key Laboratory of High-Temperature Gas Kinetics, Institute of Mechanics, Chinese Academy of Sciences, Beijing, China</i> The Effect of Ozone on the Liftoff of Coaxial Laminar Flame with Air Co-Flow	<u>A.I. Karpov</u>, G. Morar, A.A. Shaklein, E.V. Kleymenov <i>Udmurt Federal Research Center, Russian Academy of Science, Ural Branch, Russia</i> On the Numerical Approach for the Prediction of Turbulent Diffusion Flame Spread over Solid Fuel
12.40-13.00	<u>P.S. Kopylov</u>, S.N. Kopylov, I.A. Teterin <i>All Russian Research Institute for Fire Protection, Balashikha, Russia</i> Concentration Limits of Induced Oxidation of Fluorinated Hydrocarbons in Flames of Premixed Hydrogen – Air Mixtures	A.V. Drakon, A.V. Eremin, E.S. Khodyko, <u>R.N. Kolotushkin</u> <i>Joint Institute for High Temperatures of the RAS, Moscow, Russia</i> The Influence of DME Additives on Soot Formation in Premixed Hydrocarbon Flames by Mass-Spectrometry
13.00-14.30	Lunch	
14.30-14.50	<u>V.V. Matyushkov</u>, A.M. Dmitriev, T.A. Bolshova, A.A. Chernov, A.G. Shmakov <i>Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia</i> High-Temperature Oxidation of n-Decane as a Surrogate Fuels Component Studied by Molecular Beam Mass Spectrometry	<u>E.A. Sosnin</u>, S.A. Trubachev, I.V. Kulikov, A.A. Paletsky, A.A. Shcherbinina, A.G. Shmakov <i>Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia</i> Study of Flame Spread over Polymer Materials under the Influence of Radiant Heat Flux
14.50-15.10	<u>V.V. Lukashov</u>, A.V. Tupikin <i>S.S. Kutateladze Institute of Thermophysics, Novosibirsk, Russia</i> Spectral Characteristics of Flame Radiation under Flashback Conditions for Mixtures Based on Methane and Ammonia	<u>D.A. Chinakhov</u> <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> Influence of Gas Shielding Conditions on the Properties of Austenitic Steel Samples Deposited by Additive Electric ARC Method

15.10-15.30	<u>T.A. Bolshova</u>, D.A. Knyazkov, A.V. Cherepanov <i>Voevodsky Institute of Chemical Kinetics and Combustion, Novosibirsk, Russia</i> Numerical Study of Flame Perturbations by a Metal Probe in MBMS Experiments	Wen Sheng, Jingyi Li, Chengzhi Lu, Shanshan Shi, Bo Yu, Huaichun Zhou <i>China University of Mining and Technology, Xuzhou, China</i> Numerical Simulation and Operational Optimization of Low-Load Stable Combustion in a 1000 MW Ultra-Supercritical Coal-Fired Boiler
15.30-15.50	<u>B.T. Lesbayev</u>, M. Auelkhankyzy, Z.A. Mansurov <i>Institute of Combustion Problems, Almaty, Kazakhstan</i> The Effect of an Electric Field on the Formation of Soot and Fullerenes in Flames	S.S. Abdurakipov, <u>E.B. Butakov</u>, S.V. Alekseenko <i>Department of Physics, Novosibirsk State University, Novosibirsk, Russia</i> System for Diagnosis and Optimization of Combustion in Pulverized Coal Boilers Based on Artificial Intelligence Methods
15.50-16.20	Coffee Break	
16.20-16.40	<u>D.V. Smovzh</u>, M.S. Skirda, V.A. Andryshenko <i>Institute of Thermophysics of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i> Plasma Conversion of Methane into Nanocarbon and Hydrogen	<u>V. Bykov</u> <i>Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany</i> Heat Recuperation Phenomena in Burner-Stabilized Flames: Bridging High-Fidelity Model Diagnostics and Clean Combustion Technologies
16.40-17.00	<u>T.S. Lopatchenko</u>, A.R. Kerimkulova, Z.A. Mansurov <i>Institute of Combustion Problems, Satbayev University</i> Systematic Review of Factors Affecting the Adsorption Efficiency of Toxic Gases by Biomass-Derived Carbon Nanosorbents	<u>R.V. Fursenko</u>, V.A. Kosyakov, S.A. Trubachev <i>Institute of Theoretical and Applied Mechanics SB RAS, Novosibirsk, Russia</i> Comparison of Predictive Capabilities of Different Solid-Phase Pyrolysis Models for Polymer Combustion
17.00-17.20	<u>Hanlin Zhang</u>, Rui Sun, Lei Zhang <i>School of Materials Science & Engineering, Beijing Institute of Technology, Beijing, China</i> In Situ Synchrotron X-ray Phase-Contrast Imaging of Laser-Induced Combustion in Metalized Energetic Materials	<u>X. Liu</u>, J. Li* <i>Jiangnan University, Wuhan, China</i> Combustion Mechanisms and Flame Structure Evolution of Fluorinated Nano-Thermites with Minimal Condensed Phase Products
18.00	Banquet, Restaurant VERSAILLES	

DAY 3: THURSDAY, SEPTEMBER 24, 2026

	Session 3: Plenary Session. Chairpersons: V.E. Zarko, Z.A. Mansurov Plenary lectures, 409 room	
08.30-09.00	<u>X. Wang</u> , W.Y. Xing, Z. Gui, Y. Hu <i>University of Science and Technology of China, Hefei, China</i> New Technology of Fire Safety Polymeric Materials: Inorganic-Organic Hybrid Fire Retardants	
09.00-09.40	<u>S.V. Alekseenko (Invited Speaker)</u> <i>Kutateladze Institute of Thermophysics, Novosibirsk, Russia</i> Advanced Technologies for Firing and Processing of Organic Fuels	
09.40-10.10	Z.A. Mansurov , M.K. Atamanov, S. Tursunbek, Z. Korkembay, M. Auyelkhankyzy <i>Institute of Combustion Problems, Almaty, Kazakhstan</i> Advances in Carbon Nanomaterials for Combustion and Energy Applications	
10.10-10.40	<u>V.P. Sinditskii</u> , V.V. Serushkin, V.Yu. Egorshv <i>Mendeleev RChT University, Moscow, Russia</i> Determination of the Decomposition Kinetics of Energetic Materials in a Combustion Wave	
10.40-11.10	<u>A. Kaltayev</u> , Zh. Ualyiev, B. Asylbekov <i>Satbayev University, Almaty, Kazakhstan</i> 2D Simulation of Laminar Flame Propagation in a Closed Vessel with Obstacles	
11.10-11.40	Coffee Break	
11.40-12.10	<u>Michael Gozin</u> <i>Tel Aviv University, Tel Aviv, Israel</i> Electrically-Assisted Ignition of HAN-Based Gelled Propellants Containing Novel Borohydride Fuels	
12.10-12.40	<u>B. Kaidar</u> , Hongqi Nie and Qi-Long Yan <i>Institute of Combustion Problems, Farabi University, Almaty, Kazakhstan</i> Structural Control of Combustion Behavior in Aluminum-Based Metastable Intermixed Composites	
	408 room	409 room
	Chairperson: S.M. Frolov	Chairperson: V. Bykov
12.40-13.00	<u>I.A. Teterin</u> , S.N. Kopylov, P.S. Kopylov <i>All-Russian Research Institute for Fire Protection, Balashikha, Russia</i> Estimation of the Shock Wave Velocity During Detonation of LNG Vapors Mixed with Air in Open Space	<u>N.G. Prikhodko</u> , N.B. Rakhymzhan, A.B. Tolynbekov, A.A. Abdisattar, N.K. Saitova, M.A. Yeleuov, K. Askaruly <i>Institute of Combustion Problems, Almaty, Kazakhstan</i> Features of Graphene Synthesis in Hydrocarbon Flames on Nickel Current Collectors for Electrochemical Energy Storage Devices under Atmospheric Conditions
13.00-14.30	Lunch	
14.30-15.10	Poster session	
15.10-15.30	<u>E.B. Butakov</u> , A.V. Kuznetsov, A.R. Zuevich, T.S. Skripkina	<u>S.N. Kopylov</u> , I.R. Begishev, P.S. Kopylov, I.P. Eltyshv

	<i>Kutateladze Institute of Thermophysics, Novosibirsk, Russia</i> Technologies for the Utilization of Anthracite Coal Beneficiation Wastes in Power Engineering Based on Mechanochemical Preparation and Swirl Combustion	<i>All Russian Research Institute for Fire Protection, Balashikha, Russia</i> Double Criticality in the Photochlorination of Alkanes as a Result of Competition Between Chain Generation and Chain Termination in the Reacting Mixture
15.30-15.50	<u>M.S. Assad</u>, I.I. Chernuho, V.N. Pisarev <i>Luikov Heat and Mass Transfer Institute of the National Academy of Sciences of Belarus, Minsk, Republic of Belarus;</i> <i>Kazakh-British Technical University, Almaty, Republic of Kazakhstan</i> Deflagration-to-Detonation Transition in a Small-Sized Pulse Detonation Combustor	<u>I.A. Medvedkov</u>, O.V. Kuznetsov, M.M. Evseev, V.S. Krasnoukhov, I.O. Antonov, V.N. Azyazov <i>Samara University, Samara, Russian Federation</i> Reaction of Phenyl Radical with Acetylene and Oxygen in the Temperature Range of 800-1200 K. Experiment and Theory
15.50-16.20	Coffee Break	
16.20-16.40	Xiaowei Zang, <u>Ruiqi Shen</u> <i>Nanjing University of Science and Technology, Nanjing, China</i> Deep Learning-Based High-Speed Imaging Diagnostics for Regression Rate Measurement of Additive-Manufactured ABS Fuel Grains	<u>V.S. Abrukov</u>, D.A. Anufrieva, D.A. Sapyorov, S.S. Kuzmin <i>I.N. Ulyanov Chuvash State University, Cheboksary, Russia</i> Leveraging Neural Networks for Experimental and Computational Investigations of Combustion and Detonation Phenomena
16.40-17.00	<u>A.B. Artykbayeva</u>, B.S. Sadykov, A.S. Khairullina, A.E. Maten, A.E. Bakkara <i>Farabi University, Almaty, Kazakhstan</i> Effect of Modified Aluminum on the Combustion Characteristics of Composite Solid Rocket Propellants	<u>D.A. Anufrieva</u>, V.S. Abrukov, D.A. Sapyorov, S.S. Kuzmin <i>I.N. Ulyanov Chuvash State University, Cheboksary, Russia</i> Generalization of Experimental and Numerical Investigations Using “Simple” Neural Networks: Methodological “Nuances”
17.00-17.20	<u>R.G. Abdulkarimova</u> <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> Synthesis of Refractory Powders of the Borides of Titanium and Chromium in Combustion Mode	<u>Yerkebulan Mukhambet</u>, Dhawal Shah, Yerbol Sarbassov <i>Nazarbayev University, Astana, Kazakhstan</i> Evaluation of Carbon Monoxide Emissions During Oxy-Fuel Co-Combustion of High-Ash Coal and Biomass Waste in a Laboratory-Scale Bubbling Fluidized Bed Rig
17.20-17.40	<u>D.K. Sharaborin</u>, V. M. Dulin <i>Kutateladze Institute of Thermophysics of SB RAS, Novosibirsk, Russia</i> Experimental investigation of laminar and swirling methane flames using one- and two-dimensional Raman scattering diagnostics	<u>D. Zhumabayeva</u>, S. Al Kassar, A. Attili, F. Young, U. Ahmed, R.S. Cant <i>Cambridge Centre for Advanced Research and Education, Singapore</i> Entropy generation in laminar premixed flames
17.40-18.00	Closing ceremony - Awarding of sponsors	

DAY 4: FRIDAY, SEPTEMBER 25, 2026

09.30- 16.00	SIGHTSEEING “Oi-Qaragai Lesnaya Skazka” Mountain Resort
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POSTER SESSION

1. **Production of a Composite Material Containing Nanosized Cobalt Particles in a Flameless Combustion Wave of Cyclotrimethylenetrinitramine**
Mikhailov Yu. M., Aleshin V. V., Bakeshko A.V., Smirnov V.S.
2. **Low-Order Predictive Modelling of Hydrogen and Ammonia Combustors**
D'Alessio F., Su T., Le Boursicaud M., Zhumabayeva D., Mastorakos E.
3. **Production of Aluminium Diboride by Self-Propagating High-Temperature Synthesis and its Application in High-Energy Fuel Systems**
Aronov D.
4. **Получение строительной керамики на основе металлургических отходов методом CBC**
Балтабай А.А., Байракова О.С., Бийсенбаев М.А.
5. **Production of Building Ceramics Based on Ash and Slag Waste from Thermal Power Plants by the SHS Method**
Adilbayeva G.M., Bairakova O.S., Biisenbayev M.A.
6. **Chemical Stability of Industrial Explosives in Mining and Geological Conditions**
Aleshkova S., Pustovalov I., Nashauov T., Tulepov M.
7. **Thermal Conversion of Electrospun Lignin Fibers: Structure Evolution and Combustion-Related Aspects for Carbon Electrode Development**
Talgatkyzy A., Nazhipkyzy M., Otenov A., Nazhipov M.A., Fierro V.
8. **Influence of Injection Mode on Temperature Fields and Combustion Stability of Coal-Water Slurries**
Taskyn M., Mansurov Z.A., Topanov B.G., Azizov Z.M., Alekseenko S.V.
9. **Flame Structure and Combustion Characteristics of Coal–Water Mixtures**
Zhumatayev Y., Umbetkaliev K., Bykov V.
10. **Thermochemical Conversion of Orange and Cucumber Peel Waste into NiO-Modified Porous Carbon Electrodes for Supercapacitor Applications**
Seitkazinova A., Otenov A., Zhaparov A., Yeleuov M., Nazhipkyzy M., Lesbayev B.T., Kalybayeva A.K., Kadyrbek A., Mansurov Z.
11. **Synthesis and Investigation of the Physicomechanical Properties of Ni–Al and Fe–Al-Based Intermetallics by the SHS Method**
Allabergen A.K., Kudyarova Zh.B.
12. **Investigation of Alternative Oxidizers for the Development of Environmentally Friendly Pyrotechnic Compositions**

Nurypbay D.D., Kudyarova Zh.B.

13. **Investigation of the Combustion Characteristics of Aluminum-Based Energetic Materials in an Inert Atmosphere**

Iskakov A.N., Yuldashev N.K., Gabdrasheva Sh.E., Sadykov B.C., Bakkara A.E.

14. **Obtaining Nanomaterials from Polypropylene under Laser Irradiation**

Mukatay N.A., Kaimoldayev Zh.Zh, Lopatchenko, Kerimkulova A.R., Mansurov Z.A.

15. **Синтез наночастиц оксида олова (SnO₂) методом жидкофазного горения и его применение**

Токсамбаев А.М., Мансуров З.А.

16. **Synthesis and Comparative Analysis of Tungsten Oxide (WO₃) Nanoparticles Obtained by Sol-Gel and Solution Combustion Methods**

Ilyanov A.T., Mansurov Z.A.

17. **Halogen-Substituted Cu(salen) Complexes as High-Efficiency Catalysts for HMX Thermal Decomposition**

Shi L., Wu Y., Lu L.

18. **Inhibitory Effect of Activated Carbon on the Combustion of NaNO₃–Mg Gas-Generating Compositions**

Tursynbek S., Mansurov Z.A.

19. **Solution Combustion Synthesis of Co₃O₄-based PANI Nanocomposites for Room-Temperature CO and CH₄ Sensing**

Imash A., Smagulova G.T., Mansurov Z.A.

20. **Thermochemical Valorization of Tea Waste into Functional Carbon Materials: A Sustainable Approach for Water Purification and Circular Economy**

Yensep E., Nazhipkyzy M., Issanbekova A.T., Nurgain A., Zhaparov A.A., Serikbayev N.A.

21. **Porous Organic Polymer Materials for The Simultaneous Capture of CO₂ and Volatile Organic Compounds from Urban and Industrial Air**

Karatayeva U.A., Myrzagaliyev M.K.

23. **Catalytic Conversion of Hydrocarbons into Carbon Nanotubes: Formation Mechanisms and Process Parameters**

Kubaiden A.A., Kerimkulova A.R., Nazhipkyzy M.

24. **Hydrogen adsorption and spillover effects in nanoporous carbon materials for hydrogen combustion applications**

Yntymakkyzy D., Lesbayev B.T.

25. **Емкость двойного электрического слоя и адсорбция фенола на нанопористых углеродах из цитратов металлов: анализ связи структуры и свойств**

*Аяганов Ж., Захаров А., Алексан Г., Бийсенбаев М., Турлубекулы А., Нурпеисова А. ,
Бакенов Ж., Мансуров З., Нг Э., Павленко В.*

26. **Термохимия пиролиза цитратов металлов как метода солевого темплатирования для получения нанопористых углеродных материалов**

*Аяганов Ж., Захаров А., Алексан Г., Бийсенбаев М., Турлубекулы А., Нурпеисова А. ,
Бакенов Ж., Мансуров З., Нг Э., Павленко В.*

27. **Laser-induced carbon phase transformations and nanodiamond formation**

Ryskulbek B.

28. **Production of high-octane gasoline by processing n-alkanes over a zeolite-containing catalyst**

Medetkyzy Z., Omarova A.A.



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