12 July, Tuesday (Samara time UTC +4)

10.00-10.20 Opening and Welcome Remarks

Session 1.1
Chair: Vladimir V. Gubernov (P.N. Lebedev Physical Institute of RAS, Moscow)

10.20-11.00 Nickolay N.Smirnov (Moscow M.V.Lomonosov State University, FSC "Scientific Research Institute for System Analysis of Russian Academy of Sciences", Moscow) *(Invited)*
Ignition, combustion and detonation onset in non-uniform dispersed fuel-air mixtures

11.00-11.20 Denis A. Knyazkov, A.V. Cherepanov, I.E. Gerasimov, T.A. Bolshova, V.G. Kiselev, A.G. Shmakov (Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia) *(Invited)*
Positive ion chemistry in flames: mass-spectrometric and kinetic modeling study

11.20-11.40 Coffee Break

Session 1.2
Chair: Andrey G. Shmakov (Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novoibirsk)

11.40-12.00 Vitaly D. Kobtsev[1], D.N. Kozlov[1,2], S.A. Kostritsa[1], S.N. Orlov[1,2], V.V. Smirnov[1,2], S.Yu. Volkov[1,2] ([1] Central Institute of Aviation Motors, [2] Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia)
Simultaneous determination of time and length scales of local temperature fluctuations in a turbulent flame by using coherent anti-Stokes Raman spectroscopy

12.00-12.20 Artëm Dmitriev[1,2], K. Osipova[1,2], I. Gerasimov[2], D. Knyazkov[1,2], A. Shmakov[1,2] ([1] Voevodsky Institute of Chemical Kinetics and Combustion, [2]Novosibirsk State University, Novosibirsk, Russia)
Molecular beam mass spectrometric study of the laminar flame structure of ethyl levulinate

12.20-12.40 Vladimir Kislov, Yu. Tsvetkova, A. Zaichenko, M. Tsvetkov, E. Salgansky, E. Pilipenko, M. Salganskaya, D. Podlesniy (Institute of Problems of Chemical Physics, Chernogolovka, Russia)
The effect of the addition of solid calcium-based sorbents on the absorption of sulfur during the thermal disposal of car tires

12.40-13.00 Anastasiia Krikunova, D. Lunin (Joint Institute for High Temperatures of the Russian Academy of Sciences, Moscow, Russia)
Stability of premixed methane-air swirled flame

13.00-13.20 K.O. Aiyyzhya, E.V. Barmina, V.D. Kobtsev, D.N. Kozlov, Sergey A. Kostritsa, S.N. Orlov, S.Yu. Volkov, A.M. Saveliev, V.V. Smirnov, G.A. Shafeev (Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia)
CARS and chemiluminescence diagnostics of a diffusion flame of boron nanoparticles in isopropanol with oxygen

13.20-14.50 LUNCH

Session 1.3
Chair: Andrey V. Kolobov (P.N. Lebedev Physical Institute of RAS, Moscow)

14.50-15.10 Denis P. Porfiriev[1,2], A.M. Mebel[3], V.N. Azyazov[1] ([1] Lebedev Physical Institute, Samara Branch, [2]Samara National Research University, Samara, Russia, [3]Florida International University, Miami, Florida, USA) *(invited)*
Decomposition of 1-propenol: theoretical investigation

15.10-15.30 Elena Mikhalchenko, V. Nikitin, (Federal Science Center "Scientific Research Institute for System Analysis of Russian Academy of Sciences", Moscow)
Numerical simulation of a rotating detonation wave engine for various concentrations of combustible mixture

15.30-15.50 Valeriy Nikitin, E. Mikhalchenko (Federal Science Center "Scientific Research Institute for System Analysis of Russian Academy of Sciences", Moscow)
Using an unsaturated hydrocarbon as mitigator of developed detonation in hydrogen/syngas/air

15.50-16.10 Sergey Zambalov (Tomsk Scientific Center SB RAS)
Numerical simulation of syngas combustion in rotary engine

16.10-16.30 Vitaly G. Kiselev,[1,2,3] K.A. Monogarov,[3] N.V. Muravyev,[3] A.N. Pivkina[1,2] ([1] Institute of Chemical Kinetics and Combustion SB RAS, [2] Novosibirsk State University, Novosibirsk, Russia, [3]Semenov Federal Research Center for Chemical Physics RAS, Moscow, Russia)
Modern Predictive Quantum Chemical Calculations for Thermochemistry and Decomposition Kinetics
of Energetic Materials

16.30-16.50 Coffee Break

Session 1.4
Chair: Denis P. Porfiriev (Samara National Research University, Lebedev Physical Institute of RAS, Samara Branch, Samara)

16.50-17.10 Igor Yakovlev (Tomsk Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Tomsk, Russia)
Pore-scale numerical simulation of flame stabilization in two-layer porous burner

17.10-17.30 Y. Titova, Alsy Minekhanova, A. Amosov, D. Maidan, G. Belova (Samara State Technical University, Samara, Russia)
Preparation of highly dispersed ceramic nitride-carbide composition Si_3N_4–TiC by SHS method using halide salt and sodium azide

17.30-17.50 Olga Gaidukova[1], S. Misyura[2], P. Strizhak[1] ([1] National Research Tomsk Polytechnic University, Tomsk, Russia, [2] Kutateladze Institute of Thermophysics, Novosibirsk, Russia)
Study of the gas hydrate combustion initiation initial stage

17.50-18.10 Galina S. Belova, Yu.V. Titova, A.P. Amosov, D.A. Maidan, I.A. Uvarova (Samara State Technical University, Samara, Russia)
Exploring the possibility of synthesis of Si_3N_4-SiC highly dispersed ceramic nitride-carbide composition during combustion in Si–NaN_3–$(NH_4)_2SiF_6$–C system

13 July, Wednesday (Samara time UTC +4)

Session 2.1
Chair**:** Valery N. Azyazov (Lebedev Physical Institute of RAS, Samara Branch, Samara)

9.30-10.10 Vladimir I. Feldman (Lomonosov Moscow State University, Moscow, Russia)
Modeling of cold astrochemical processes through matrix isolation: extremely hot chemistry at extremely low temperatures

10.10-10.50 Anton I. Vasyunin[1], A. Punanova[1], M. Murga[2], G. Fedoseev[1], V. Krushinsky[1], M. Kiskin[1], N. Satonkin[1], V. Sokolova[1], ([1]Ural Feferal Institute, Chelyabinsk, [2]Institute of Astronomy of the RAS, Moscow, Russia)
Mechanisms of the formation of organic matter in protostellar objects

10.50-11.10 Dmitri Z. Wiebe (Institute of Astronomy of the RAS, Moscow, Russia)
Carbon dust life cycle in the Universe

11.10-11.30 Coffee Break

Session 2.2.
Chair: Vladimir I. Feldman (Lomonosov Moscow State University, Moscow)

11.30-11.50 Iakov A. Medvedkov[1,2], G.I. Tolstov[2], O.V. Kuznetsov[1], M.M. Evseev[1], V.N. Azyazov[1,2], ([1]Lebedev Physical Institute, Samara, Russia, [2]Samara university, Samara, Russia)
Launch of a new molecular beam machine

11.50-12.10 Maria Murga[1,2], D. Wiebe[1] ([1] Institute of astronomy of Russian academy of sciences, [2]Lomonosov State University, Moscow, Russia)
Relationship between polycyclic aromatic hydrocarbons, graphenes and fullerenes in the interstellar medium

12.10-12.30 Timur A. Labutin[1], A.S. Zakuskin[1], S.M. Zaytsev[1], A.A. Berezhnoy[2], A.M. Popov[1], E.A. Bormotova[1], A.V. Stolyarov[1] ([1]Department of Chemistry, Lomonosov Moscow State University**,** [2]Sternberg Astronomical Institute, Lomonosov Moscow State University, Moscow, Russia)
In search of equilibrium in laser-produced cloud: role of pressure, chemical quenching, and plasma expansion

12.30-12.50 Aleksandr Zakuskin, B. Beglaryan, A.M. Popov, T.A. Labutin (Lomonosov Moscow State University, Moscow, Russia)
Formation of CaO in laser plasma studied by emission and fluorescence spectroscopy

12.50-13.10 Vlad Krasnoukhov[1,2], M. Zagidullin[1], I. Zavershinskii[2] ([1]Lebedev Physical Institute, Samara Branch, [2] Samara National Research University, Samara, Russia)
Formation of two-ring PAHs in circumstellar envelopes of asymptotic giant-branch stars

13.10-14.50 LUNCH

Session 2.3
Chair: Dmitri Z. Wiebe (Institute of Astronomy of the RAS, Moscow)

14.50-15.10 A. Moroshkina[1], V. Mislavskii[1], Vladimir Gubernov[1], V. Bykov[2], U. Maas[2] ([1]P.N. Lebedev Physical Institute of Russian Academy of Sciences, Moscow, Russia, [2]Karlsruhe Institute of Technology, Karlsruhe, Germany) *Invited*
Investigation of diffusive-thermal oscillations of the burner stabilized CH_4-H_2-air flames

15.10-15.30 Vladimir Mislavskii, Vladimir Gubernov (P.N. Lebedev Physical Institute of Russian Academy of Sciences, Moscow, Russia)
Quenching rate constants of the nitrogen molecule

15.30-15.50 Eugene Salgansky[1], K. Borovik[1,2], S. Fetsov[1,2], N. Lutsenko[1,3], L. Yanovskiy[1,4] ([1]Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, [2]Far Eastern Federal University, [3]Institute of Automation and Control Processes, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok, [4] Moscow Aviation Institute, Moscow, Russia)
Modeling of gasification of complex solid porous polymer in low-temperature gas generator for high-speed flying vehicle

15.50-16.10 Iakov M. Karandashev, M.Yu. Malsagov, E.V. Mikhalchenko, V.F. Nikitin (Federal Science Center «Scientific Research Institute for System Analysis of Russian Academy of Sciences», Moscow, Russia)
Modeling the dynamics of hydrogen combustion using the neural network UNET

16.10-16.30 Aleksandr S. Semenikhin, A.S. Savchenkova, D.V. Idrisov, V.M. Anisimov, O.V. Kolomzarov, S.S. Matveev, I.V. Chechet, S.G. Matveev (Samara National Research University, Samara, Russia)
Hydrogen abstraction from o-xylene: A theoretical study

16.30-16.50 Coffee Break

17.00-19. 00 Poster Session

P1. Anastasia Moroshkina, V. Gubernov, V. Mislavskii (P.N. Lebedev Physical Institute of Russian Academy of Sciences, Moscow, Russia)
Measurement of activation energy of combustion of methane-air mixture using the thin-fiber pyrometry method

P2. N. Bystrov, A. Emelianov, A. Eremin, Pavel Yatsenko (Joint Institute for High Temperatures of the Russian Academy of Sciences, Moscow, Russia)
ARAS-study of the interaction of pentanol isomers with oxygen behind shock waves

P3. A. Drakon, A. Eremin, Mayya Korshunova, E. Mikheyeva (Joint Institute for High Temperatures of the Russian Academy of Sciences, Moscow, Russia**)**
Soot formation during ethylene pyrolysis with biofuels

P4. A.V. Drakon[1], A.V. Eremin[1], E.V. Gurentsov[1], E.S. Khodyko[1,2] and Roman N. Kolotushkin[1] ([1]Joint Institute for High Temperatures of the Russian Academy of Sciences, [2] Bauman Moscow State Technical University, Moscow, Russia)
Optical properties of soot formed under different conditions. Application to the effects of soot on climate

P5. Vladimir M. Kislov, Yu.Yu. Tsvetkova, A. Yu. Zaichenko, M.V. Tsvetkov, M.V. Salganskaya, D.N. Podlesniy, E.A. Salgansky (Institute of Problems of Chemical Physics of Russian Academy of Sciences, Chernogolovka, Russia)
Thermodynamic assessment of the absorption of acid gases by calcium-based sorbents during the gasification of solid fuels

P6. Vladimir Kislov, A. Zaichenko, M. Tsvetkov, M. Salganskaya, Y. Tsvetkova, E. Pilipenko (Institute of Problems of Chemical Physics RAS, Chernogolovka, Russia)
The influence of the particle size of the gasified material on the absorption of sulfur during filtration combustion sulfur coal with marble

P7. Alexey Chichinin (Institute of Chemical Kinetics and Combustion, Siberian Branch RAS, Novosibirsk, Russia)
Potentials and energies of atoms and molecules inside C60 cage

P8. N. Smirnov[1], Valery Nikitin[1], E. Mikhalchenko[1], S. Park[2] ([1] Federal Science Center "Scientific Research Institute for System Analysis of Russian Academy of Sciences", Moscow, Russia [2]Korea Aerospace University, Goyang, Republic of Korea)
Investigation of a detonation chamber for possible use in perspective aerospace propulsion systems

P9. Lyuben Stamov, V. Tyurenkova, E. Mikhalchenko (Federal Science Center Scientific Research Institute for System Analysis of Russian Academy of Sciences, Moscow, Russia)
Numerical simulation of combustion processes in combustion chamber of hybrid solid fuel engine

P10. V.F. Nikitin[1,2], V.V. Tyurenkova [1,2], Maria N. Smirnova [1,2] ([1]Federal Science Center Scientific Research Institute for System Analysis of Russian Academy of Sciences, [2]Moscow M.V. Lomonosov State University Moscow, Russia)
Burning of two-phase fuel droplets in weightlessness

P11. Anna Ghildina [1], A. Mebel[2], V. Azyazov[1,3] ([1]Samara National Research University, Russia, [2]Florida International University, USA, [3]Lebedev Physical Institute, Samara, Russia)
Tri phenyl phosphate decomposition through the reaction with H, CH_3, OH radicals

P12. Anna S. Savchenkova[1], A.S. Semenikhin[1], I.V. Chechet[1], V.Y. Abrashkin[1], M.Y. Anisimov[1], S.G. Matveev[1], A.A. Konnov[2], A.M. Mebel[3] ([1] Samara National Research University, Samara, Russia, [2] Lund University, Lund, Sweden,[3] Florida International University, USA)
C_3H_2 oxidation by molecular oxygen: a theoretical study

P13. Vlad Krasnoukhov[1,2], M. Zagidullin[2], A. Mebel[3] ([1] Lebedev Physical Institute, Samara Branch, [2] Samara National Research University, Samara, Russia, [3]Florida International University, Miami, Florida, USA)
Indenyl radical self-reaction study

P14. Aleksandr S. Semenikhin, K.D. Tsapenkov, S.S. Novichkova, A.D. Popov, M.M. Hernandez, D.V. Idrisov, I.A. Zubrilin, S.S. Matveev, I.V. Chechet, S.G. Matveev (Samara National Research University, Samara, Russia)
Choice of a kerosene surrogate for prediction of the emission of carcinogenic polycyclic aromatic hydrocarbons

P15. N. Bystrov, A. Emelianov, A. Eremin, Pavel Yatsenko (Joint Institute for High Temperatures of the Russian Academy of Sciences, Moscow, Russia)
Experimental study and quantum-chemical calculation of C_3H_7I initial dissociation kinetics and its thermodynamic properties in a wide temperature range

P16. Aleksei Torbin[1,2], A. Chernyshov[1], P. Mikheyev[1] ([1]Lebedev Physical Institute, Samara Branch, [2] Samara National Research University, Samara, Russia)
NO_2 production in a dielectric barrier discharge in air-CH_4 mixtures

P 17. N. Khvatov[1], Aleksei Torbin[1,2], I. Medvedkov[1,2] ([1]Lebedev Physical Institute, Samara Branch, [2] Samara National Research University, Samara, Russia)
Threshold intensities for laser spark in pure O_2, N_2 and CH_4

P 18. Galina Nyashina, Pavel Strizhak (Heat and Mass Transfer Laboratory, National Research Tomsk Polytechnic University, Tomsk, Russia)
Pyrolysis of mixed and slurry fuels

P19. Kristina K. Paushkina, D.O. Glushkov, A.G. Nigay, A.O. Pleshko (National Research Tomsk Polytechnic University, Tomsk, Russia)
Micro-explosive dispersion of gel fuel composition ignited in a high-temperature air medium

P 20. Vitaly D. Kobtsev[1,2], D.N. Kozlov[2,1], S.A. Kostritsa[1,2], V.V. Smirnov[2,1], S.A. Torokhov[1], S.Yu. Volkov[2,1] ([1] Central Institute of Aviation Motors, [2] Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia)
Ignition dynamics of H2/CO/air mixture after photodissociation of O2 molecules by a UV laser pulse

P 21. Vladislav A. Novikov[1], A.P. Amosov[1], E.M. Kachkin[1], N.A. Kryukov[1], A.A. Titov[1] (Samara State Technical University, Samara, Russia)
Combustion modes during the synthesis of ZnO from aqueous solutions of zinc nitrate with various fuels

P 22. A.D. Rybakov, Alfia R. Luts, A.P. Amosov (Samara State Technical University, Samara, Russia**)**
Influence of carbon forms on the synthesis of highly dispersed titanium carbide by combustion in aluminum melt

P 23. Evgeny I. Latukhin, A.P. Amosov, E.R. Umerov, V.A. Novikov (Samara State Technical University, Samara, Russia)
Combustion of Ti-Si-C powder system with infiltration by molten copper

P 24. Emil R. Umerov, A.P. Amosov, E.I. Latukhin (Samara State Technical University, Samara, Russia)
Combustion synthesis of Ti_3SiC_2 skeleton with infiltration by tin melt

P 25. Vladislav Knestyapin, Igor Zavershinsky (Samara National Research University)
Numerical simulation of a swirling flow of water vapor with aluminum micro- and nanoparticles and a heating source

P 26. Pavel Pivovarov[1], A. Mebel[2], V. Azyazov[1,3]([1]Samara National Research University, Russia, [2]Florida International University, USA, [3]Lebedev Physical Institute, Samara, Russia)
Fluorene formation in the reaction of phenyl and benzyl radicals theoretical study

P 27. Vladislav M. Anisimov[1], M.Y. Anisimov[1], N.I. Gurakov[1], O.V. Kolomzarov[1], A.S. Semenikhin[1], D.V. Radin[1], N.I. Fokin[2], D.S. Tarasov[2], A.A. Ivanovskii[2], N.O. Simin[2] ([1] Samara National Research University, Samara, Russia, [2] JSC Power Machines, St. Petersburg, Russia)
The Influence of Hydrogen Addition on the Combustor Thermal State

P 28. Nikita I. Gurakov, O.V. Kolomzarov, I.A. Zubrilin, D.V. Idrisov, A.S. Semenikhin, V.M. Anisimov, V.Y. Abrashkin, S.S. Matveev, S.G. Matveev (Samara National Research University, Samara, Russia)
Simulation of CO emission in the small-sized combustion chamber with liquid fuel injected by pressure swirl atomizer

P 29. Nikita I. Gurakov, S.S. Novichkova, V.M. Anisimov, A.S. Semenikhin, A.S. Savchenkova, S.S. Matveev, S.G. Matveev, N.O. Simin, A.A. Ivanovsky, D.S. Tarasov ([1] Samara National Research University, Samara, Russia, [2] JSC Power Machines, St. Petersburg, Russia)
Experimental-numerical investigation of hydrogen-methane combustion in model power plant combustion chamber

P 30. Danila V. Radin[1], S.S. Matveev[1], A.D. Popov[1], D.S. Tarasov[2], N.O. Simin[2], G.M. Makaryants[1], A.I. Safin[1], M.Yu. Anisimov[1] ([1] Samara National Research University, Samara, Russia, [2] JSC Power Machines, St. Petersburg, Russia)
Experimental study of the effect of hydrogen addition to fuel on combustion instability

P 31. Sergey S. Matveev[1], N.I. Gurakov[1], D.V. Idrisov[1], S.S. Novichkova[1], A.S. Savchenkova[1], D.S. Tarasov[2], N.I. Fokin[2], A.A. Ivanovskii[2] ([1] Samara National Research University, Samara, Russia, [2] JSC Power Machines, St. Petersburg, Russia)
Review of advances in the field of methane-hydrogen mixtures application in industrial gas turbines

P 32. Oleg V. Kolomzarov[1], V.Y. Abrashkin[1], N.I. Gurakov[1], D.V. Idrisov[1], A.S. Semenikhin[1], A.S. Savchenkova[1], D.V. Radin[1], I.V. Chechet[1], N.I. Fokin[2], N.O. Simin[2] ([1] Samara National Research University, Samara, [2] JSC Power Machines, St. Petersburg, Russia)
Experience in carrying out experimental studies for a dual-circuit burner using methane-hydrogen mixtures

P 33. Dmitry V. Idrisov[1], N.I. Gurakov[1], O.V. Kolomzarov[1], I.V. Chechet[1], V.M. Anisimov[1], S.S. Matveev[1], S.G. Matveev[1], N.I. Fokin[2], D.S. Tarasov[2], A.A. Ivanovskii[2], N.O. Simin[2] ([1] Samara National Research University, Samara, [2] JSC Power Machines, St. Petersburg, Russia)
Experimental and numerical study of lean flame blow-out during methane-hydrogen mixture combustion with a different hydrogen addition

P 34. Andrey V. Cherepanov[1,2], D.A. Knyazkov[1,2], V.G. Kiselev[1,2], I.E. Gerasimov[1], A.G. Shmakov[1,2] ([1]Voevodsky Institute of Chemical Kinetics and Combustion, [2]Novosibirsk State University, Novosibirsk, Russia)
Study of cation chemistry in ethylene flames

P 35. Lubov I. Krikunova[1,2], A.A. Nikolayev[1,2], D.P. Porfirev[1,2], A.M. Mebel[3] ([1] Lebedev Physical Institute, Samara, [2] Samara National Research University, Samara, Russia; [3]Florida International University, USA)
Potential energy surfaces for the Reaction of the Methylidyne Radical (CH $X^2\Pi$) with the Propionitrile C_2H_5CN ($X^1\sum^+$) Molecule

P 36. Mikhail Evseev, V. Azyazov (Lebedev Physical Institute, Samara, Russia)
Gas phase synthesis of [5]-helicene

P37. Oleg Kuznetsov, Valeriy Azyazov (Lebedev Physical Institute, Samara, Russia)
Formation mechanism of 1- and 2-propanols in reaction CO and C_2H_5

P 38. Kh.R Karimov, I.A. Saidov (Samarkand State University, Samarkand, Uzbekistan)
Thermodynamics of swelling of polymeric sorbents in aqueous solutions

P 39. A.V. Mokshin (Kazan Federal University, Kazan, Russia**)**
Alkai Plasmas: from equation of state to thermodynamics characteristics

14 July, Thursday (Samara time UTC +4)

Session 3.1
Chair: Nicolay N. Smirnov (Lomonosov State University, FSC "Scientific Research Institute for System Analysis of Russian Academy of Sciences", Moscow)

9.30-10.10 Andrey Shamkov[1], A**.**Mebel[2], O**.**Korobeinichev[1], D**.**Porfiriev[3], K**.** Osipova[1], I**.** Gerasimov[1], D**.** Knyazkov[1], B**.** Yang[4] ([1] Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia, [2]Florida International University, Florida, USA, [3] Samara National Research University, Samara, Russia, [4] Tsinghua University, Beijing, China)
Invited
Experimental and theoretical study of the kinetics and mechanism of thermal decomposition of triphenyl phosphate in inert media

10.10-10.50 M. Kuznetsov V. Gubernov, Andrey Kolobov, (P.N. Lebedev Physical Institute of Russian Academy of Sciences, Moscow, Russian Federation) *Invited*
Influence of heat loss on the stability of oscillatory modes in combustion wave propagation

10.50-11.10 Coffee Break

Session 3.2
Chair: Denis A. Knyazkov (Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk)

11.10-11.30 Denis Kasymov[1,2], M. Agafontsev[1,2], V. Perminov[1], V. Reyno[2], K. Orlov[1], E. Golubnichii[1], P. Martynov[1,2] ([1] National Research Tomsk State University, [2] Zuev Institute of Atmospheric Optics SB RAS, Tomsk, Russia)
Experimental study of the combustion process on the surface of wood construction materials

11.30-11.50 Andrey Ponomarev, Dmitriy Sharaborin (Institute of Thermophysics SB RAS, Novosibirsk, Russia)
Experimental and numerical study of monodisperse ethanol mist combustion

11.50-12.10 Tatyana A. Bolshova, A.G. Shmakov, I.E. Gerasimov, O.P. Korobeinichev, (Voevodsky Institute of Chemical Kinetics and Combustion, Novosibirsk, Russia)
Combustion of a polymethyl methacrylate sphere in air

12.10-12.30 G. Nyashina, Dmitrii Antonov, P. Strizhak (Heat and Mass Transfer Laboratory, National Research Tomsk Polytechnic University, Tomsk, Russia)
Micro-explosive droplet fragmentation of promising biofuels

12.30-12.50 M.E. Shiryaev [1], A.V. Sysa [2], R.M. Ryazanov [2], D.G. Gromov [1], Egor A. Lebedev [1,2] ([1]National Research University of Electronic Technology – MIET, [2] Scientific-Manufacturing Complex "Technological Centre"Zelenograd, Moscow Russia)
Adjustment of the combustion mode in CuO/Al multilayer thermite materials

12.50-14.40 LUNCH

15 July, Friday (Samara time UTC +4)

Session 4.1 (online)
Chair: Marsel V. Zagidullin (Lebedev Physical Institute of RAS, Samara Branch, Samara)

9.30-10.10 Viatcheslav V. Bykov[1], Andrey Koksharov[2] **(**[1] Karlsruhe Institute of Technology, Institute of Technical Thermodynamics, Karlsruhe, Germany, [2] German Aerospace Center (DLR), Stuttgart, Germany) *(Invited)* ***online***
Efficient quasi-spectral numerical method to integrate chemical master equation

10.10-10.30 Ivan Antonov[1,2], S.Venkataramanababu[2], B. Odom[2], H. Guo[3], A. Li[4] ([1]Lebedev Physical Institute, Samara Branch, [2]Northwestern University, USA, [3]University of New-Mexico, USA, [4]Northwest University, China) ***online***
Dynamic rotational effect in reaction of SiO+ super rotors with H2

10.30-10.50 Pavel V. Zasimov, E.V. Sanochkina, V.I. Feldman (Department of Chemistry, Lomonosov Moscow State University, Moscow, Russia) ***online***
Radiation-induced transformations of acetaldehyde molecules at cryogenic temperatures: a matrix isolation study

10.50-11.10 Nina Volkova[1], A. Kazakov[1], A. Nabatova[1], A. Zholudev[1], M. Kislov[1], I. Averkov[1], D. Dashko[2], D. Lempert[1], L. Yanovsky[1,3] ([1]Institute of Problems of Chemical Physics of RAS, Chernogolovka, Moscow Region, Russia, [2]Special Design and Technological Bureau SDCB "Technolog", Saint Petersburg, Russia, [3]Moscow Aviation Institute, Moscow, Russia) ***online***
Physico-chemical characteristics of energy condensed compositions based on polynitrogen heterocyclic compounds, poly-2-methyl-5-vinyltetrazole and SKI-3 rubber

11.10-11.30 Valeriy Perminov, K. Sysolov (Tomsk Polytechnic University, Tomsk, Russia) ***online***
Mathematical modeling of surface fire initiation and spread

11.30-11.50 Coffee Break

Session 4.2
Chair: Anna S. Savchenkova (Samara National Research University, Samara)

11.50-12.10 Ksenia Osipova [1,2], A. Dmitriev[1,2], O. Korobeinichev[1], A. Shmakov[1,2] ([1]Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, [2] Novosibirsk State University, Novosibirsk, Russia)
The flame structure of ammonia/ hydrogen/ oxygen/ argon blends at 4 and 6 atm

12.10-12.30 Margarita Gorn[1,2], K. Monogarov[3], I. Dalinger[4], N. Muravyev[3], V. Kiselev,[1,2] ([1]Novosibirsk State University, [2]Voevodsky Institute of Chemical Kinetics and Combustion Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia, [3]Semenov Federal Research Center for Chemical Physics, Russian Academy of Sciences, [4]Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Moscow, Russia)
Thermal Decomposition of Dinitropyrazoles: New Insights from Predictive Electronic Structure Theory and Thermal Analysis

12.30-12.50 Dmitriy O. Glushkov, A.G. Nigay, K.K. Paushkina, A.O. Pleshko (National Research Tomsk Polytechnic University, Tomsk, Russia)
Influence of gel fuels composition on ignition and combustion characteristics under radiant heating

12.50-14.30 LUNCH

Session 4.3
Chair: Valery N. Azyazov (Lebedev Physical Institute, Samara Branch)

14.30-14.50 Ksenia Vershinina, D. Romanov, V. Dorokhov, P. Strizhak **(**National Research Tomsk Polytechnic University, Tomsk, Russia)
Characteristics of ignition and combustion of fuel blends based on coal slime

14.50-15.10 A. Moloknov[1,2], Leonid Yanovsky[1,2], N. Varlamova[1], G. Tarasov[1,2], A. Kazakov[1], N. Plishkin[1], T. Bakalchuk[3] ([1] Institute of Problems of Chemical Physics of RAS, Academician Semenov, Chernogolovka, Moscow region, Russia, [2] National Research University "Moscow Power Engineering Institute", [3] SBEI of Moscow "School No. 1533 "LIT", Moscow, Russia)
Assessment of coke deposits during heating of hydrocarbon fuel under dynamic and static conditions

15. 10-15.30 Anatoliy Nikolayev[1,2], V. Azyazov[1,2], A. Mebel[1,3] ([1] Lebedev Physical Institute, Samara Branch, [2] Samara National Research University, Samara, Russia,[3] Florida International University, Miami, Florida, USA)
Transformation of acetone into 1-propen-2-ol in the ice phase

15.30-15.40 Closing remarks